The implementation of knowledge cafés as a technique for knowledge sharing

by

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ABSTRACT

Given the current knowledge economy, knowledge sharing has become a vital process in contributing to the success of any given organisation, whether academic or industry related. It is therefore essential for organisations to be aware of and to understand the various knowledge sharing techniques that exist. Consequently it is also relevant to acknowledge the potential contribution that knowledge sharing can make between peers, for educational purposes.

An in-depth literature review was conducted which focused on knowledge sharing, and the various concepts associated with knowledge sharing. A sequential mixed-methods research methodology was followed in order to contribute to the lack of literature pertaining specifically to knowledge cafés. A qualitative Delphi study was conducted to document the guidelines, criteria and potential contribution of knowledge cafés as a knowledge sharing application.

The main objective of this study was to evaluate the application of knowledge cafés as a technique for knowledge sharing. The quantitative component of the mixed-methods research was initiated by implementing three knowledge cafés using univariate quantitative data analysis on structured questionnaires to measure participant's views towards knowledge cafés as a knowledge sharing technique.

Essentially this study firstly gathered and documented information on knowledge cafés as a knowledge sharing technique and recommended that knowledge cafés can be used effectively as a technique for knowledge sharing, when appropriate criteria and guidelines are applied.

Keywords

Knowledge sharing, knowledge sharing techniques, knowledge café, Delphi technique

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Chapter 1

Introduction

1.1 Background to the research problem

“Successful knowledge transfer involves neither computers nor documents, but rather interactions between people” (Davenport, 1995: Internet). Davenport, in this statement, identifies interactions between people as the fundamental factor for successful knowledge sharing.

According to Sethumadhaven (2007: Internet), knowledge sharing, if implemented correctly, is a concept which offers enormous business opportunities for any organisation. He refers to four steps that need to be taken to ensure an effective knowledge sharing process. These include firstly, creating knowledge, which can be done by developing knowledge sharing platforms such as communities of practice. The second part of the cycle entails storing the knowledge received. This can be done through different methods, such as video recording the process of knowledge sharing, recording the process on tape or possibly interviewing some of the individuals who took part in the community’s discussions. Once the knowledge has been stored, a third step needs to be taken, where dissemination or transferring of knowledge to the relevant individuals within the organisation takes place. This knowledge transfer can be done through issuing a digital versatile disc (DVD) or by compiling documents (Sandrock, 2008: 34). Thereafter the knowledge received will be applied, in order to fulfil various work related tasks.

Sethumadhaven (2007: Internet) also identifies some of the benefits of knowledge sharing. Knowledge sharing:

- allows for the cultivation of innovation, simply by motivating employees to share their ideas;

- facilitates the process of understanding markets and customers;
- helps to develop better products and services;
- helps to build up core competencies of individuals within an organisation;
- improves customer service by ensuring enhanced response time to customer requests and needs; and
- boosts revenue by getting products and services to market faster.

Although knowledge sharing has many benefits, there are also barriers which often inhibit the process of knowledge sharing within organisations, if not managed properly. Skyrme (2008: Internet) identifies some of these barriers as follows:

- Knowledge is power: Although this is not a common reason, some employees in an organisation still hold a mentality that the more knowledge you possess, the more powerful you are, hence in a bid to retain power, individuals in an organisation often become unwilling to share their knowledge.
- Failure to realise how particular knowledge may be useful to others: Often individuals who generate knowledge to solve a problem they may be experiencing in a specific situation, do not realise that the very knowledge they possess may be useful to an individual facing the same problem at a later stage. The problem may even be in a different context, but the knowledge may still be useful.
- Lack of trust: Distrust is brought about by people fearing that the knowledge that they share may be applied out of context by the people with whom they choose to share it. Some even refuse to share because they feel that some people may use their knowledge without acknowledging them as a source.
- Lack of time: This barrier seems to be the most prominent; often organisations do not have the time to initiate knowledge sharing sessions, as deadlines have to be met.

Skyrme (2008: Internet), in his article titled “The 3C’s of knowledge sharing”, highlights some of the barriers to knowledge sharing which have been listed above. In the same

article he also mentions ways in which organisations can overcome these barriers. One of these ways is developing an organisational culture which promotes knowledge sharing as a norm. According to Rumizen (2002: 163), culture can be defined as "you, me and everyone else, essentially it is the way in which we choose to do things". Therefore various techniques, such as communities of practice and knowledge cafés, which promote knowledge sharing, are means by which a knowledge sharing culture can be achieved.

Knowledge cafés have been in existence since 2002, yet there is still very little literature associated with this relatively new technique of sharing knowledge (Gurteen, 2009: Internet). The literature that is available focuses largely on the use of knowledge cafés within the corporate realm. The challenge of this study will be to generate literature on knowledge cafés and to test and document the attitudes and perceptions of individuals, in both the corporate and academic sectors, concerning knowledge cafés as a technique for knowledge sharing.

1.2 Rationale and benefits from the research study

According to Gurteen (2009: Internet), "The old paradigm was 'knowledge is power'. Today it needs to be explicitly understood that 'sharing knowledge is power.'" Knowledge can be defined as "information which is placed in context in order to produce an actionable understanding" (Rumizen, 2002:6). It is generally argued that there are two types of knowledge, namely explicit knowledge and tacit knowledge. Explicit knowledge can be defined as knowledge that can be verbally communicated, written down or conveyed, whereas tacit knowledge is made up of elements such as physical skills, cognitive skills, subjective insights, intuition and experience that an individual possesses. Unlike explicit knowledge, tacit knowledge is difficult to formalise and therefore hard to articulate (Operational Research Society, 2003: Internet).

According to Chua (2003: 118), knowledge sharing is "the process by which individuals collectively and iteratively refine a thought, an idea or a suggestion in the light of experiences". It is important to note that the willingness of individuals to share plays a

large role in the process of knowledge sharing; therefore cultivating an attitude that promotes knowledge sharing is crucial, when knowledge sharing is the aim.

De Rossi (2009: Internet) elaborates that knowledge sharing is the future of all organisations, therefore it is important for organisations to develop and implement techniques that enhance knowledge sharing. In recent years some of the techniques that have been developed for sharing knowledge have incorporated both technology-assisted methods such as the use of intranets, as well as face-to-face methods that include, for example the development and formalisation of communities of practice.

In 2002 Gurteen exposed the corporate world to an alternative technique for sharing knowledge; this technique is called a knowledge café Gurteen (2009: Internet). A knowledge café is a process where a group of individuals with a similar problem or interest come together at a specific venue. Once there, these individuals are divided into small groups of about four or five. Once the groups have been created, a guest speaker talks for five to 30 minutes at most on a specific topic, ending off his or her presentation with an open-ended question, which will form the basis of the discussions to be held by each group.

The small group discussions usually last for 10-15 minutes each, before the individuals in the group are asked to rotate and form new groups to discuss the same topic (Knowledge@Singapore Management University 2008: Internet).

1.3 Research problem and research question

Thus far, there is little literature on knowledge cafés, and the literature that is available focuses on the use of knowledge cafés for the corporate world. However, Gurteen (2009: Internet) does state that knowledge cafés can be equally beneficial in the academic realm.

The main aim of this study is **to evaluate the application of knowledge cafés as a knowledge sharing technique.**

The following objectives are therefore identified:

- Objective one: To discuss knowledge sharing and to create an inventory of the major knowledge sharing techniques.
- Objective two: To implement a Delphi study in order to determine the criteria or guidelines for successfully implementing knowledge cafés.
- Objective three: To assess the attitudes and perceptions of individuals, both in the corporate world and academic world, concerning the implementation of knowledge cafés as a technique for knowledge sharing.

In order to address the stated aims and objectives the following research question was stated:

"How effective are knowledge cafés as a technique for knowledge sharing?"

The sub-questions that will be used to address the stated research problem are:

- How are knowledge cafés applied as a knowledge sharing technique?
- What are the criteria or guidelines used to implement knowledge cafés effectively?
- What are the attitudes and perceptions of individuals, in a corporate and academic setting, towards the use of knowledge cafés as a knowledge sharing technique?

Based on the objectives of this study, an appropriate research design and methodology were identified. The research design, methodology and the chapter outline of this study are subsequently discussed.

1.4 Research design and methodology

The research design is crucial to the success of any empirical research study; therefore careful attention was paid to selecting a design that would answer the stated research question/problem best. Although a detailed description of the research design and methods are provided in chapter 3 and 4 respectively this section serves as a guide to the main methodological approaches followed.

In terms of the nature of the research problem stated in Paragraph 1.3 the research process was developed as indicated in the research process framework in Figure 1.1.

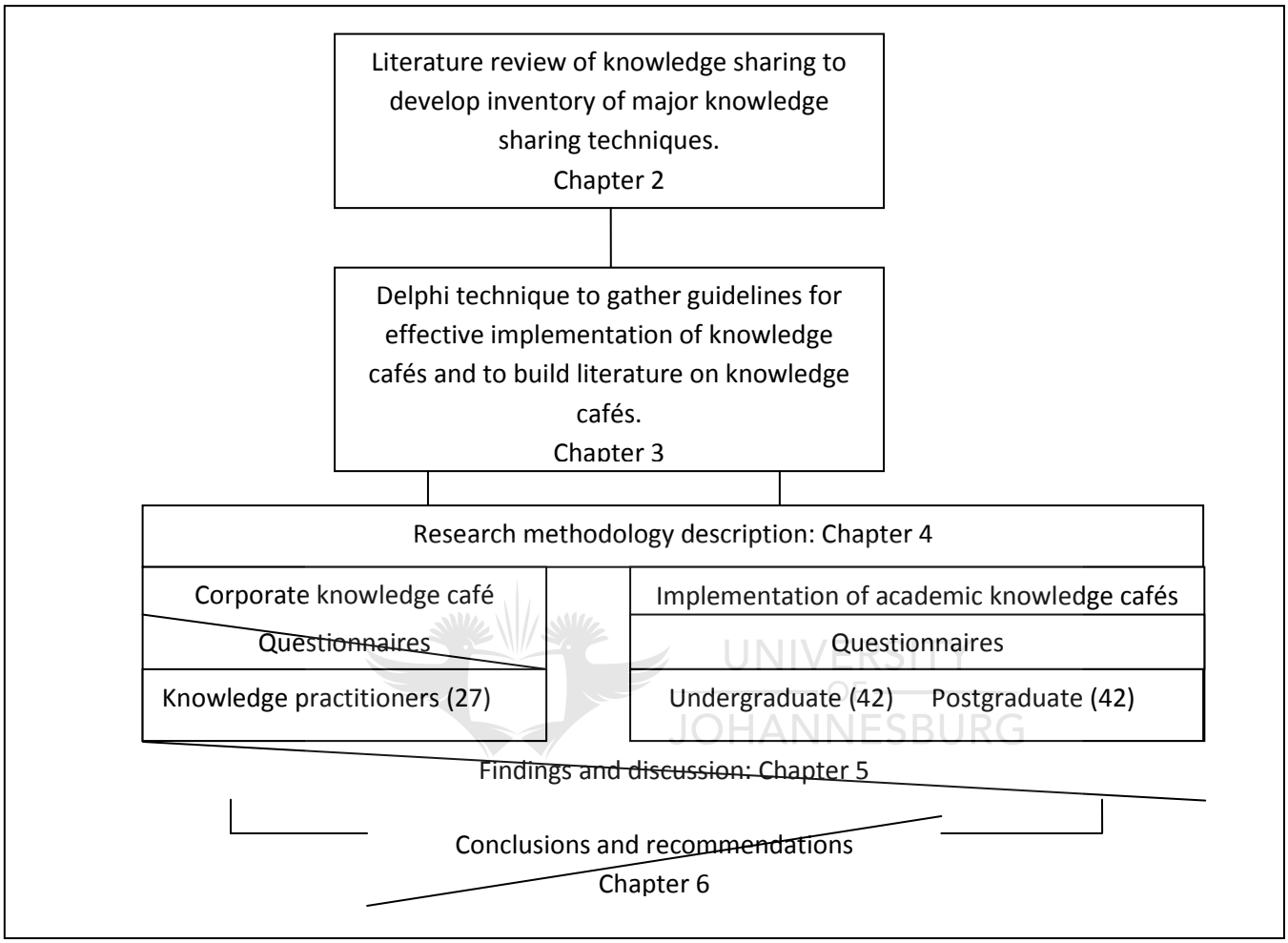

Figure 1.1: Research process framework (Source: Own research)

In order to initiate the research process a literature review was conducted to discuss the major knowledge sharing techniques that exist. In conducting the literature review it became evident that there was a lack of information associated with knowledge cafés as a knowledge sharing technique. Due to this fact it was then decided that a Delphi study would be implemented in order to gather information on knowledge café's, focusing largely on gathering information on the implementation of such a knowledge sharing technique.

This part of the research was then followed by the implementation of three separate knowledge cafés, one within the corporate domain and two within the academic realm. The academic cafés were implemented from a post-graduate student perspective as well as from an under-graduate perspective, in order to get a broader view of the attitudes and perspectives of students towards knowledge cafés as a technique for knowledge sharing. Data was collected at each of these knowledge cafés through carefully structured questionnaires, and then analysed in order to yield results.

Saunders, Lewis and Thornhill (2009: 151) rightly indicate that individual qualitative and quantitative procedures and techniques does not always exist in isolation. Due to the nature of the research process described in Figure 1.1 it is not possible to suggest that this research followed a mono method. Multiple methods were used as data collection and analysis employed both methods typical of qualitative and quantitative research choices. In terms of the multi-method a mixed methods approach was used seeing that both quantitative (questionnaires) and qualitative (Delphi) data collection techniques were used. A sequential mixed-method research best describes this study due to the sequential manner in which the qualitative data analysis was followed up with the implementation of the knowledge café. The data collected in the Delphi technique provided the guidelines according to which knowledge cafés are run, which is presently lacking in the literature. Further confirmation of the sequential mixed-methods research is found in the quantitative portion of the study collected during the knowledge cafés (Saunders *et al*; 2009: 153). The numeric data of the quantitative portion of the study was a univariate analysis resulting in frequency diagrams that reports the results.

Figure 1.2 offers clarity on the research choices made for this study.

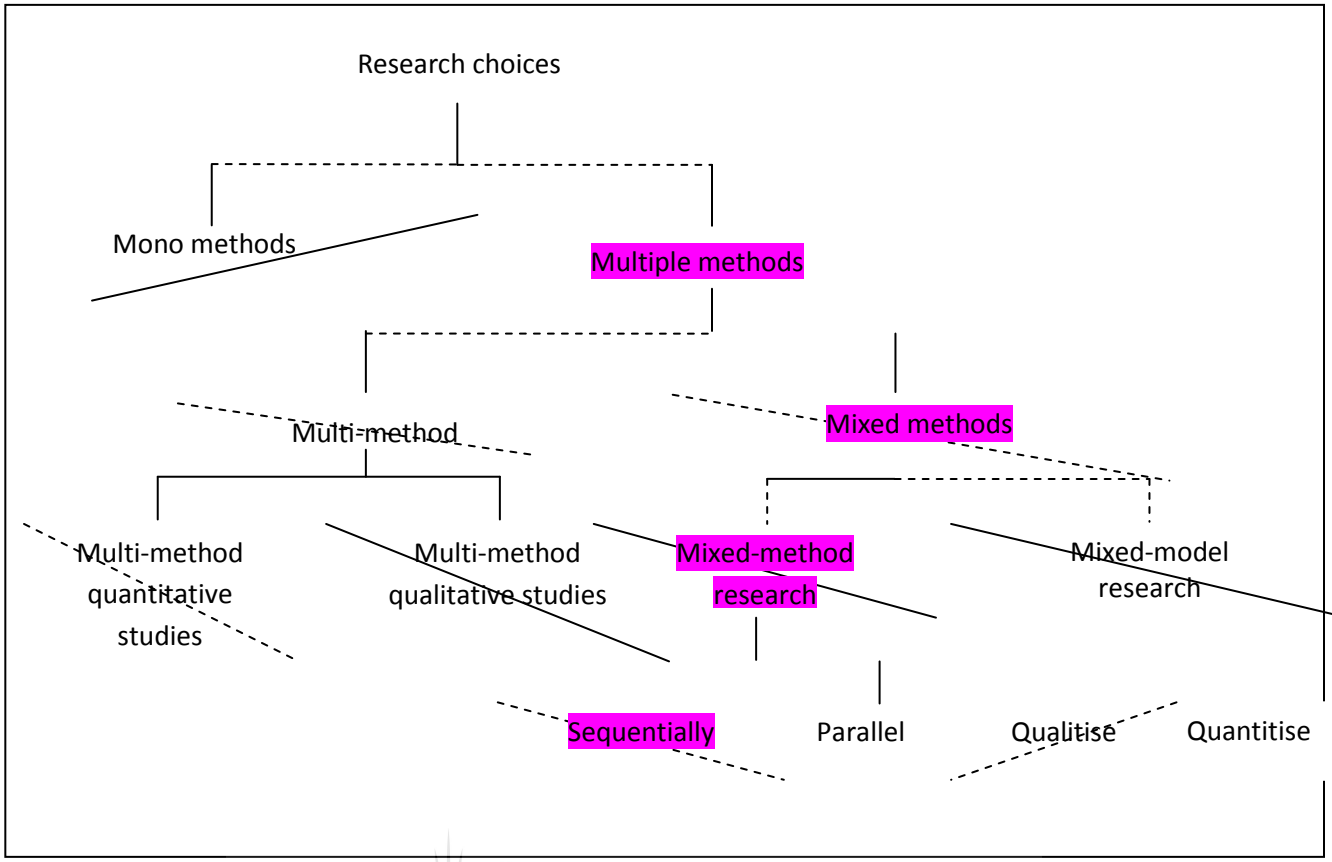

Figure 1.2: Research choices of the mixed methods research (adapted from Saunders *et al;* 2009: 152)

Chapter 3 offers greater detail concerning the qualitative data collection and analysis, and Chapter 4 describes the methods used regarding the quantitative data collection and analysis.

1.5 Limitations of the study

One of the major limitations of the study is the fact that knowledge cafés are an area of research which is fairly new, therefore there is limited literature available. The study focuses on knowledge cafés from a predominantly South African viewpoint; however, the Delphi technique endeavours to provide a global perspective. This study is restricted to implementing only one corporate knowledge café and two academic knowledge cafés, because of time constraints and the requirement to manage the scope of the study.

1.6 Ethical considerations

According to Mouton (2001: 239-245) there are various ethical issues to which a researcher should pay attention. He divides these issues into four categories which relate to professionalism, society, the subjects of science and the environment. A number of these ethical issues are relevant to this study:

- Objectivity and integrity: Remaining unbiased at all times is the mark of a successful researcher. With regard to this specific study, the researcher maintained objectivity by referring to different approaches for collecting data. These approaches include the use of the Delphi technique, interviews and questionnaires for validation and triangulation. In conjunction with using different approaches to data collection, the researcher also made sure that this study included respondents from different backgrounds in terms of experience; corporate and academic staff and tertiary students were all included in this study.

- Falsification of data: None of the data collected was altered in any way; the data was recorded, transcribed and reported from its original form. If the researcher wished to make comments on the data collected she would do so with reference to the data.

- Recording of data: All data collected was recorded and kept. When using the Delphi technique, all the data was saved and filed. The interviews and knowledge café observations were recorded with the permission of the participants and all questionnaires were filed.

- Rejection of plagiarism: All sources consulted were acknowledged.

- The right to anonymity, confidentiality and voluntary participation: Participation in the study was voluntary; no respondent was forced to participate. The anonymity of respondents taking part in the study was guaranteed.

- Informed consent: A letter of informed consent was drafted in order to orientate the participant about the study. Issues such as the benefits of this study were disclosed, as well as the facts that confidentiality and anonymity were to be maintained. It was also brought to the attention of the participants and respondents that no financial gain would result from the study.

1.7 Organisation of the investigation

The organisation of the research is purposefully aligned to the research process framework discussed in Paragraph 1.4.

Chapter 2 defines the key concepts of the study. The literature review involves a discussion on defining what knowledge sharing is, highlighting the different forms of knowledge sharing and differentiating knowledge cafés from other methods for sharing knowledge. Included in this literature review is also a discussion on the criteria/guidelines for implementing a knowledge café successfully. Due to the limited literature available on the effective use of knowledge cafés Chapter 2 concludes with positioning knowledge cafés in terms of it being a knowledge sharing technique.

Chapter 3 reports on the qualitative portion of the mixed model research design selected for this study. This chapter describes the approach that was used to implement the Delphi technique for the purpose of acquiring data that would not be attainable otherwise (Beech 1999: 261). The questions formulated for the Delphi study focus on identifying the guidelines, pre-conditions, advantages, obstacles, successes and alternative uses of knowledge cafés, as well as alternative forms of knowledge sharing that can be considered as equivalent to knowledge cafés.

Chapter 4 provides a detailed account of the research design and the methodology that was followed during the quantitative part of this study. Included in this chapter is a profile of the sample to be used. Creating a sample profile is necessary, in order to understand the nature of the results, which is discussed in Chapter 5. A detailed discussion of the philosophical paradigm, taking into account social systems theory and complexity theory, is included.

Chapter 5 reports on the findings from the data collected, reflecting the attitudes and perceptions of the respondents concerning knowledge cafés as a technique for knowledge sharing. The three knowledge cafés that were implemented consisted of three different sample groups, namely knowledge practitioners, tertiary students on post-graduate level and tertiary students on undergraduate level.

Chapter 6 gives a summary of the way in which the stated research problems were addressed, along with recommendations for future research based on the findings of the research that was executed.

Chapter 2

Knowledge sharing

2.1 Introduction

The theoretical groundwork is established as a foundation from which to conduct the empirical component. The literature review developed for this study is spread over three chapters, Chapter 2 being the first of the three, and focuses on the various components of the research problem, as well as the various variables that may possibly influence the outcome of the research.

“Some think the “knowledge turn” a matter of macro-historical change; citing Drucker, Bell, Arrow, Reich or Winter, they assert we have moved into an Information Age in which knowledge has become the organisation’s principal asset” (Spender & Scherer, 2007: 6).

As stated in the above quotation, knowledge is a very important aspect for any organisation, whether corporate or academic, the transfer or sharing of that knowledge even more so. Over the past decade industry has seen the birth of many techniques for knowledge sharing. One of the more recent techniques that has come about during this era of knowledge management is the knowledge café, which focuses on conversation as a means for knowledge sharing or transfer (Knowledge@Singapore Management University, 2008: Internet).

Knowledge is a very abstract concept. Its worth lies in the context in which it is shared, the manner in which it is shared, and the timeliness of the content. Therefore developing a culture of knowledge sharing is very important in order to ensure continuous sharing among individuals (Knowledge@Singapore Management University, 2008: Internet). There are numerous methods for sharing knowledge, and many organisations, whether academic or corporate, employ the use of a variety of methods to implement knowledge sharing. Often these methods are adapted to meet organisational needs.

The purpose of this chapter is to give an in-depth discussion on face-to-face methods for knowledge sharing, to identify the different techniques that are available for knowledge sharing and to highlight the knowledge café as one of the newer techniques available. In doing so, it is hoped that it will be possible to differentiate between the various methods available. This chapter will also attempt to discuss how the effectiveness of a knowledge sharing technique can be evaluated.

Prior to discussing the various methods for knowledge sharing it, was important to first define knowledge and then to reflect a theoretical framework which summarises the aspects that contribute to knowledge sharing as defined by this particular study (Figure 2.1).

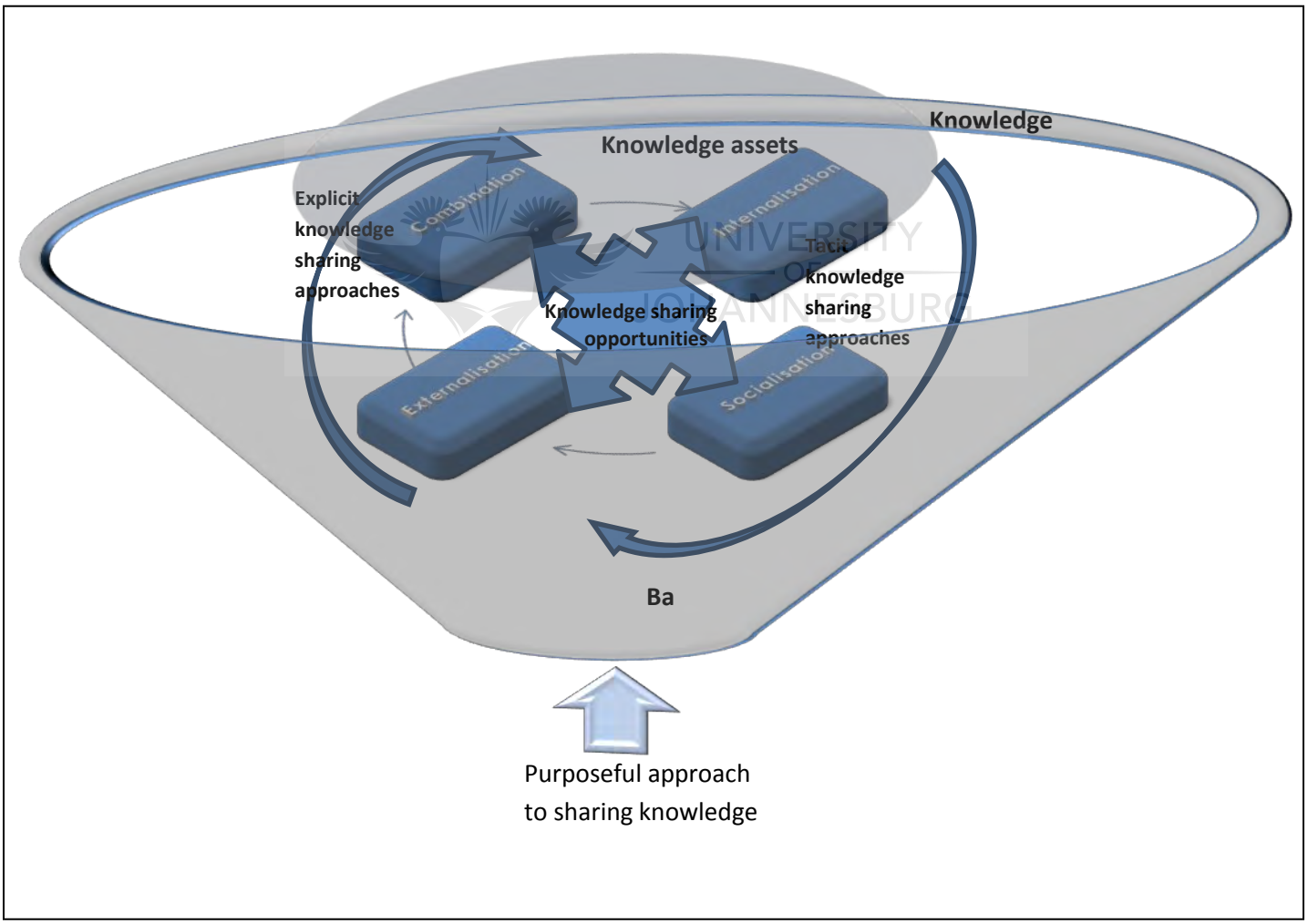

Figure 2.1: Theoretical framework: Aspects of knowledge creation (Source: Own research based on SECI model of Nonaka and Takeuchi 1995:62)

Figure 2.1 is a graphical representation of the core aspects that contribute to effective knowledge sharing. In order for knowledge to be created and effectively shared, there needs to be a collective context, which is created through *ba,* a Japanese concept that focuses on creating a shared view where information can be transformed into knowledge. Within *ba* knowledge conversion takes place; this knowledge conversion comes about through Nonaka and Takeuchi's (1995: 62) SECI model, which depicts how knowledge is converted from tacit to explicit and vice versa through aspects such as socialisation, externalisation, combination and internalisation. Awareness and understanding of the knowledge assets that exist within an organisation contribute to the process through which knowledge should be shared. By creating knowledge sharing opportunities, knowledge creation and exploitation could potentially be accelerated. Each of the aspects reflected in Figure 2.1 contributes to purposeful knowledge sharing and will be discussed further in this chapter.

2.2 Definition of knowledge

According to Davenport and Prusak (2000: 5), "Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of those who know. In organisations, it often becomes embedded not only in documents or repositories but also in organisational routines, processes, practices, and norms." Rumizen (2002: 6) simply views knowledge as "information which is placed in context in order to produce an actionable understanding".

As was stated in the introduction, knowledge is a very ambiguous term, and it does not have one set meaning. Therefore, in order to develop some understanding of what knowledge is, it is important to be able to make a clear distinction between data, information, understanding and wisdom (Bellinger, Castro & Mills: 2004; Ackoff, 1989: Internet). The content of the human mind can be organised into five categories, namely data, information, knowledge, understanding and wisdom.

- Data is information in its unorganised form, which has no meaning. It encompasses elements such as symbols and numbers.

- Information is data that has been presented within a context in order to create meaning.
- Knowledge is information, both external and explicit, which has been accumulated over time. This information usually belongs to a community, and is leveraged by tacit intrinsic insights, which originate within individuals (Fletcher, 2002: Internet).
- Understanding is cognitive and analytical. When individuals understand, it means that they have the ability to synthesise new knowledge from their previously held knowledge.
- Wisdom is a form of superior understanding and the ability to apply or relate perceptions and knowledge effectively to specific situations, in order to produce the desired results. Synonymously, wisdom can be viewed as insight.

Yang and Wu (2006: 1) further state that knowledge can be described as either specific or general, general being knowledge which is held by a great number of people, and is usually explicit. This is knowledge that can be transferred with very little effort through means such as documentation. In contrast, specific knowledge is held by a limited number of people and it is a lot harder to transfer than general knowledge. This tacit type of knowledge can only be shared by learning from one another through close interaction and observation.

Knowledge is the content within an individual's mind, consisting of principles, facts and experiences that have been acquired over a period of time. There are many definitions to what knowledge is. For the purpose of this study, knowledge will be referred to as "useable ideas" which are current, relevant and actionable (Bailey & Clarke, 2000: 235).

2.3 Knowledge conversion methods

The means by which knowledge is converted from tacit to explicit or vice versa is very important to understand, when discussing the concept of knowledge sharing. It is also important to discuss the means by which knowledge is created. To date the most prominent model that illustrates the four methods of knowledge conversion was developed and adapted by Nonaka and Takeuchi in the mid 1990's, and is called the

SECI model. The reason why this SECI model is considered significant to knowledge sharing is because it identifies the different forms that knowledge can take and how these forms can be altered, integrated and transferred (Spencer, 1997: Internet).

According to Spencer (1997: Internet), in response to a presentation by Nonaka on organisational knowledge creation, Nonaka is quick to state that the significance of the SECI model lies in the fact that it is not simply a knowledge cycle. Nonaka emphasises the fact that as individuals learn in a cycle, their level of understanding moves to a deeper and deeper level. It is not a flat process; hence he refers to his model as a knowledge conversion spiral.

Nonaka, Toyama and Konno (2000: 8) also note that in order for knowledge to be effectively created within an organisation, the SECI model should use existing knowledge assets within an organisation in order to create new knowledge. These assets are the "inputs, outputs and moderating factors of the knowledge-creating process". In conjunction with these knowledge assets, the SECI model needs to take place in *ba,* which is the shared context for knowledge creation. Hence they propose a unified model of dynamic creation through SECI, *ba* and leadership.

Figures 2.2, 2.3 and Table 2.1 provide an illustration of Nonaka and Takeuchi's (1995: 62) SECI model for knowledge conversion, *ba* as a shared context in motion, as well as the four classifications of *ba* and the four categories of knowledge assets. Each of these illustrations is followed by an explanation of the key processes depicted in the relevant model, table or diagram.

2.3.1 SECI model

Nonaka and Takeuchi's (1995: 62) SECI model is characterised by four processes namely socialisation, externalisation, combination and internalisation (Figure 2.2).

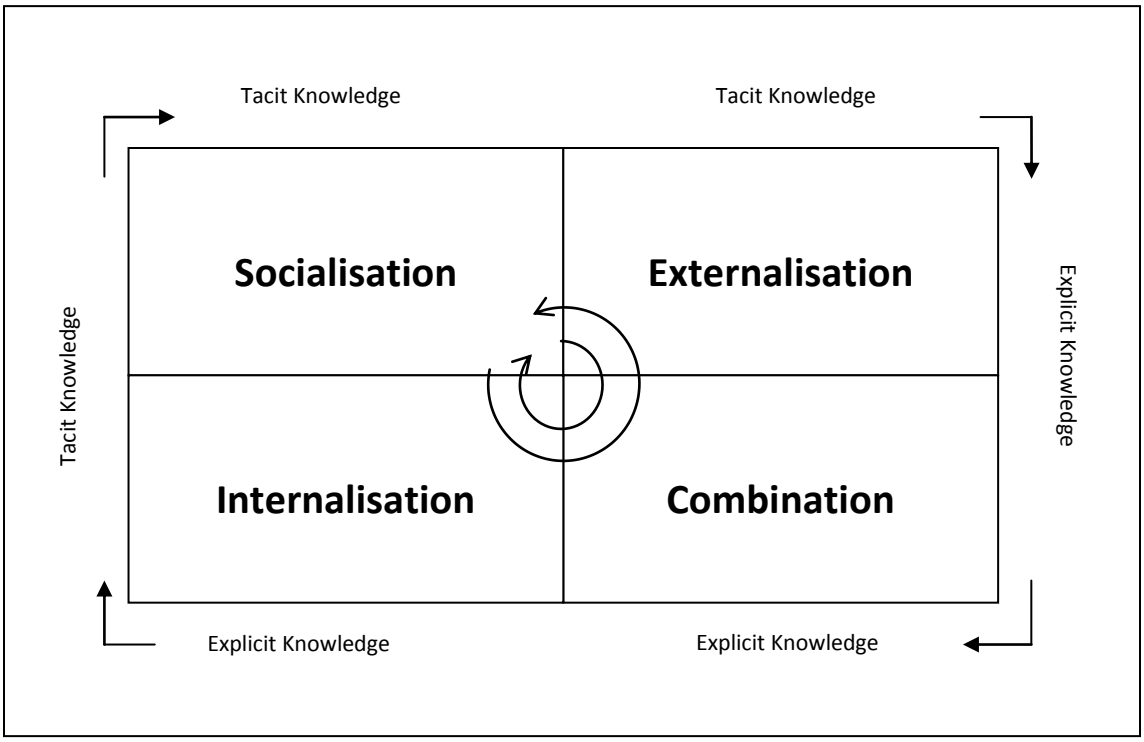

Figure 2.2: Nonaka's four modes of knowledge conversion: SECI model (Nonaka & Takeuchi, 1995: 62).

Socialisation is the process which transfers tacit knowledge in one individual to tacit knowledge in another individual. This happens through means such as brainstorming, observation or even simple conversation. Externalisation is a process which sees tacit knowledge being converted into explicit knowledge, either in the form of articulating one's own tacit knowledge such as words, images, analogies and metaphors or by eliciting and translating the tacit knowledge held by others. For example, within an organisation, knowing what its customers want and turning those wants into a product is a form of eliciting and translating someone else's tacit knowledge into an explicit form Nonaka, Toyama and Konno (2000: 9).

Nonaka and Takeuchi's conversion spiral also consists of a process called combination. Combination is the process which sees explicit knowledge being built into somebody else's explicit knowledge, through a variety of sources such as databases, documentation and e-mails. Technology is a very helpful tool to have in the combination stage. Lastly, internalisation focuses on examining and understanding explicit knowledge and adding it to one's tacit knowledge Nonaka, Toyama and Konno (2000: 9).

In order for the SECI model to function effectively within any organisation, it needs to be implemented in an environment characterised by community spirit and collaboration. (Nonaka & Takeuchi, 1995: 64). Hence culture plays a large role in transforming knowledge into its different forms. Knowledge conversion methods and knowledge sharing can be seen as synonymous to one another; one cannot function without the other. In order for knowledge to be converted, for example, from tacit knowledge to tacit knowledge through socialisation, knowledge sharing will have to take place. The same is true for externalisation, combination and internalisation. The space in which this knowledge sharing takes place is called *Ba.*

2.3.2 *Ba*

Ba is a Japanese word which, loosely translated, means 'place'. It is a concept which integrates physical space such as organisational space, virtual space such as a portal and mental space such as mental ideals, in order to create a specific context. In essence, *ba* is a place where information is interpreted, in order to become knowledge (De Geytere: 2012, Internet).

Unlike the Cartesian view of knowledge, which insists that knowledge has a context-free nature, Nonaka, Toyama and Konno (2000: 14) believe that knowledge needs a knowledge context in order to be created. "There is no creation without place"; *ba* offers such a context.

Ba goes against all research which depicts individuals as the key driving force behind knowledge creation. Rather it suggests that 'interaction' is the primary concept and driving force to creating new knowledge. Hence, in order for people to understand *ba*, they need to understand that it focuses on interaction among individuals (Nonaka, Toyama & Konno, 2000: 14). "Knowledge is a dynamic human process that transcends existing boundaries and is created through the interaction amongst individuals or between individuals and their environment" (Accorsi & Costa, 2008: 1-12).

Nordberg (2006: Internet) also emphasises that simply building or finding *ba* within an organisation is not enough. In order for *ba to* be successful, it needs to be "energised", through conditions such as autonomy, creative chaos, redundancy, requisite variety,

love, care, trust and commitment. Through these conditions *ba* becomes energised and allows the individuals within an organisation to create and increase knowledge through the SECI process.

Figure 2.3 is an illustration of how *ba* functions; by creating a shared environment/context between individuals, new knowledge is effectively created.

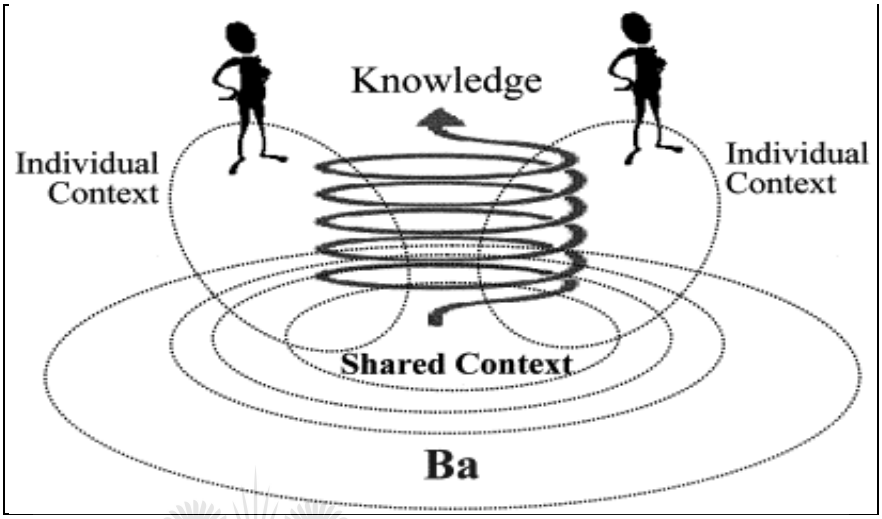

Figure 2.3: *Ba* as shared context in motion (Nonaka, Toyama & Konno, 2000: 14)

The environment created can arise from things such as shared interest, a need to solve a common problem or perhaps to understand a specific content better. Hence the concept of *ba* can be viewed as having some similarity to the concept of communities of practice. Just like members of a community of practice learn through collaboration, so too *ba* uses collaboration. The difference is that *ba* is a living space, which uses collaboration for knowledge creation, while in a community of practice members collaborate and only learn from the knowledge that is already embedded in the community (Nonaka, Toyama & Konno, 2000: 15).

Another difference between communities of practice and *ba* is that the boundary of a community of practice is defined by the task to be performed. Consistency and continuity are key in order for a community of practice to exist, whereas the boundary of *ba* is fluid and evolves constantly as the context of participants changes. *Ba* is a 'here and now' concept, meaning that it is not stagnant; rather it is created and disappears according to need (Nonaka, Toyama & Konno, 2000: 15). It is also important to note

that with communities of practice there are members who belong to that specific community, whereas with *ba,* participants relate to the *ba* and so change accordingly (Nonaka, Toyama & Konno, 2000: 15).

Nonaka, Toyama and Konno (2000: 16) distinguish between four categories of *ba,* originating *ba,* dialoguing *ba,* systemising *ba,* and exercising *ba.* These categories of *ba* are classified by two aspects of communication. One aspect is the type of communication (individual or collective) and the second aspect is the media that are used for the type of communication. These media can either happen through face to face interaction or virtually through applications such as e-mails or telephone conferences.

Each category of *ba* offers a unique context for a particular step within the knowledge-creating process. The relationship between the four different types of *ba* and the different methods of conversion is not restricted, meaning that they mix and match. Therefore it is imperative to comprehend the different characteristics of each type of ba and how they interact with one another (Nonaka, Toyama and Konno, 2000: 16).

Originating *ba* focuses on individuals who share emotions and occurrences through face-to-face interaction, in a context characterised by socialisation. Face-to-face interaction allows for physical senses and psycho-emotional reactions to be captured effectively. This is important, as issues such as ease or discomfort contribute to how tacit knowledge will be shared. Through originating *ba*, care, love, trust and commitment are expressed. These four aspects are vital, as they form the platform for knowledge conversion among individuals (Nonaka, Toyama and Konno, 2000: 16).

Dialoguing *ba* offers a context of externalisation and can be considered as a place where people's individual mental models and abilities are shared, changed into common terms and expressed as ideas. Tacit knowledge is shared through the process of dialoguing among members, which is then taken by the individual member and further expressed through self-reflection. If exercising *ba* is to allow for the effective management of the knowledge-creation process, people with the right mix of specific knowledge and abilities need to form part of the process (Nonaka, Toyama and Konno, 2000: 17).

Systemising *ba* primarily offers a context for merging explicit knowledge, which is already in existence, since explicit knowledge can be transferred to a large number of individuals, in written form, with relative ease. Systemising *ba* is both collective and virtual in nature and uses technology such as groupware to create a virtual collaborative environment in order for it to exist (Nonaka, Toyama and Konno, 2000: 17). Portals and intranets are a good example of how technology is used to exchange necessary knowledge among individuals within an organisation.

Exercising *ba* is described by individual and virtual interactions, where individuals exemplify explicit knowledge, which is communicated through virtual media such as documented manuals or simulation programs. The context that exercising *ba* primarily offers is that of internalisation (Nonaka, Toyama and Konno, 2000: 17). Organisations such as Seven-Eleven Japan are booming today because of their successful implementation and management of *ba* (Glass & Joseph, 2007: Internet).

In discussing knowledge sharing it is also important to note Snowden's Cynefin model. Cynefin (pronounced kun-ev'in) is derived from the Welsh language and when directly translated as a noun, means habitat or place, as an adjective it is translated as acquainted or familiar (Snowden, 2002: 103). Snowden believes that this direct translation of the word fails to describe it to its full intent. For that reason he describes Cynefin "as the place of our multiple belongings; the sense that we all, individually and collectively, have many roots: cultural, religious, geographic, tribal etc. We can never be fully aware of the nature of those belongings, but they profoundly influence what we are. The name seeks to remind us that all human interactions are strongly influenced and frequently determined by the patterns of our multiple experiences, both through the direct influences of personal experience and through collective experience expressed as stories" (Kurtz & Snowden, 2003: 467).

Cynefin was originally developed in 1999 through the modification and combination of Max Boisot's I-Space and the study of the then stated management practice in IBM. Between 2002 and 2005 the model was further developed to incorporate aspects such as complex adaptive systems theory. "A complex system is one in which numerous

independent elements continuously interact and spontaneously organize and reorganize themselves into more and more elaborate structures over time" (Valle, 2000: Internet).

The Cynefin model is made up of four open areas, namely known (simple), knowable, complex, chaotic and a fifth central area which is not named however is known as the domain of disorder (see Figure 2.4). These areas are subsequently divided into two sides, the right hand side which incorporates the two domains of order (knowable and known) and the left hand side, known as the domain of un-order and includes the areas of both complex and chaos.

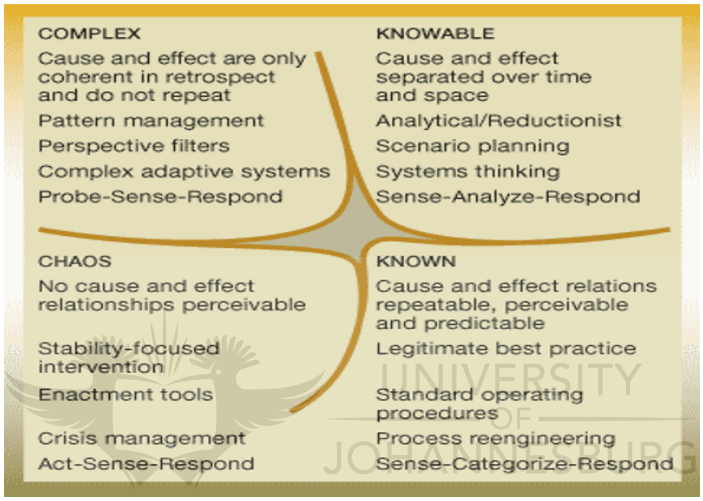

Figure 2.4: Cynefin model (Kurtz & Snowden, 2003: 468)

Known "is where the relationship between cause and effect is obvious to all, the approach is to sense - categorise - respond and apply best practice", Knowable, "in which the relationship between cause and effect requires analysis or some other form of investigation and/or the application of expert knowledge, the approach is to sense – analyse - respond and apply good practice" (Kurtz & Snowden, 2003: 468). Complex, "in which the relationship between cause and effect can only be perceived in retrospect, but not in advance, the approach is to probe - sense - respond and sense emergent practice" (Kurtz & Snowden, 2003: 469). Chaotic, "in which there is no relationship between cause and effect at systems level, the approach is to act - sense - respond and discover novel practice." Disorder, is the central domain where "the state of not knowing

what type of causality exists, in which state people will revert to their own comfort zone in making a decision" (Kurtz & Snowden, 2003: 469).

This Cynefin model, just like *ba,* describes "place" or shared context as a driving force for knowledge creation. This place can either be physical in nature or may possibly be simulated in software in order for individuals to interact and thus create new knowledge. However Snowden (2002: 104) is adamant that *ba* and Cynefin differ in the sense that, "Cynefin links a community into its shared history - or histories – in a way that paradoxically both limits the perception of that community while enabling an instinctive and intuitive ability to adapt to conditions of profound uncertainty". While *ba* is fluid and can easily adapt to a changing environment or context, a community functioning on the Cynefin system can become estranged from its environment if it is not physically, temporally and spiritually rooted. In such an occurrence the community's survival mode is triggered resulting in less or no creativity or collaboration within community. In extreme cases, this alienation from the external environment causes the community to look inwards leading to "an incoherent babble of competing self interests".

In essence, although the *ba* and Cynefin model may differ, both models identify collective context or a shared "place", as a fundamental aspect, for purposeful knowledge sharing to occur in order to generate knowledge assets.

2.3.3 Knowledge assets

According to Nonaka, Toyama and Konno's (2000: 20) proposed model of knowledge creation, assets are defined as "firm-specific resources that are indispensable to create values for the firm". Hence knowledge assets are viewed as "the inputs, outputs and moderating factors of the knowledge-creating process within an organisation" and are constantly evolving.

In an attempt to understand how knowledge assets are created, obtained and used, Nonaka, Toyama and Konno (2000: 20) group knowledge assets into four different categories, namely experiential, conceptual, systematic and routine assets (Table 2.1).

Table 2.1: Four categories of knowledge assets (Nonaka, Toyama & Konno, 2000: 20)

Experiential Knowledge Assets	**Conceptual Knowledge Assets**
Tacit knowledge shared through common experiences • Skills and know-how of individuals • Care, love, trust, and security • Energy, passion and tension	Explicit knowledge articulated through images, symbols and language • Product concepts • Design • Brand equity
Routine Knowledge Assets	**Systemic Knowledge Assets**
Tacit knowledge shared routinised and embedded in actions and practices • Know-how in daily operations • Organisational routines • Organisational culture	Systemised and packaged explicit knowledge • Documents, specifications, manuals • Database • Patents and licenses

Experiential knowledge assets consist of collective tacit knowledge that is built through shared practical experience between the members of an organisation and between the individuals within an organisation and its customers, suppliers and associated firms. Skills, emotional knowledge such as care, physical knowledge such as body language, energetic knowledge such as enthusiasm and rhythmic knowledge such as entertainment are all examples of experiential knowledge assets. Because of their tacit nature, experiential assets are difficult to take hold of, assess or trade and are specific to a firm, hence allowing for competitive advantage Nonaka, Toyama and Konno (2000: 21).

Conceptual knowledge assets are founded on the thoughts held by customers and associates of an organisation and are made up of explicit knowledge, which is expressed through the use of images, symbols and language. Even though it may be difficult to understand what customers and organisational members perceive, conceptual knowledge assets are easier to grasp than experiential assets, simply because conceptual knowledge assets have a tangible form Nonaka, Toyama and Konno (2000: 21).

Systematic knowledge assets are made up of systemised and packaged explicit knowledge, which may include aspects such as product specifications and documented, packaged information pertaining to customers and suppliers, and intellectual property such as patents. One of the positive and main characteristics of systematic knowledge assets is the fact that they can be transferred fairly easily and they are considered to be the most 'visible' type of knowledge Nonaka, Toyama and Konno (2000: 21).

Routine knowledge assets are practical assets that are made up of all the tacit knowledge which is habitualised and rooted in the behaviours and practices of organisations. The four types of knowledge assets that have been mentioned form the foundation of the knowledge-creating process. Hence it is important for an organisation to 'map' its supply of knowledge assets in order to manage and promote knowledge creation and exploitation successfully Nonaka, Toyama and Konno (2000: 22). This awareness of knowledge assets will lead to a more conscious approach to knowledge sharing.

2.4 Knowledge sharing

In recent years there has been a shift in organisational paradigm. More and more organisations have come to realise the importance of individual employee contributions to the competitiveness and survival of an organisation. No longer is the focus solely on tangible resources such as monetary capital and machinery, for intangible assets, such as intellectual property and knowledge, also play a significant role in the development and sustenance of any organisation.

Knowledge sharing, as defined by Sharrat and Usoro (2003: 188), "is a process whereby a resource is given by one party and received by another." If the resource is of an explicit nature then it is easy to share and does not necessarily require face-to-face interaction. However, Al-Hawamdeh (2003: 81) states that if the source is tacit, it can only be shared or transferred through face-to-face methods such as socialisation, interaction, observation, simulation and training. Norris, Mason, Robson, Lefrere and Collier (2003: 17) also state that interactivity and knowledge sharing are fundamental not only to "knowing", but also for constantly developing knowledge to new levels of meaning.

According to Skyrme (2008: Internet), there are three C's that constitute knowledge sharing, namely culture, commitment and co-opetition. Co-opetition is the process of promoting collaboration and competitiveness among workers, and will be discussed as the second C in Skyrme's ideology. In order for knowledge sharing to take place effectively in an organisation, these three factors not only need to be present, but also need to be developed.

Culture, as defined by Rumizen (2002:163), "is you, me, and everyone else, it is the way in which we choose to do things." Developing and sustaining an organisational culture that promotes sharing among individuals is an important part of the knowledge sharing process. Skyrme (2008: Internet) identifies various ways in which such an organisational culture can be achieved, namely:

- Challenge improper behaviour: This can be achieved by identifying individuals in the organisation who tend to hoard information. Once these individuals have been identified, a challenge should be put out to them to share information.
- Encourage involvement: Group involvement is important, however individuals in an organisation need to feel that their knowledge is respected. When respect and acknowledgment are given, it is more likely that employees will openly share knowledge.
- Arrange team-building or development sessions: Such sessions will focus on processes for achieving successful outcomes, rather than focusing solely on task and output.
- Change people: Quality of leadership is what makes the aforementioned culture techniques possible, therefore it is wise to ensure that an organisation places individuals who display the characteristics of leadership at the forefront. Skyrme (2008: Internet) even goes as far as to say that if need be, people should be dismissed in order to make space for more competent individuals.

Compliance is usually the result of lack of competitiveness within any organisation, therefore cultivating an environment which promotes healthy competition among peers is an important factor to consider in any organisation. At present individual competition within organisations is high; everybody wants to be acknowledged for various tasks. In

order to gain recognition, people need to excel in the various work tasks assigned to them, keeping in mind that in today's complex work environment, achieving objectives requires a sufficient amount of collaboration to take place (Skyrme, 2008: Internet).

Co-opetition, as mentioned earlier in this section, is the second C in Skyrme's (2008: Internet) ideology and focuses on creating a mentality of employees working together to achieve a specific goal, but at the same time still maintaining a competitive streak. Some of the key issues to consider when promoting co-opetition are things such as project creation, benchmarking and employee competitions. The sole purpose of generating projects within an organisation is to allow group collaboration and competition to take place at the same time. Projects in a sense compel individuals to share knowledge in order to excel. Benchmarking of internal processes against the processes of other organisations can potentially lead to employees striving for improvement through learning from one another.

Internal competitions such as "knowledge wiz of the year" may encourage individuals to share knowledge. Having an awards ceremony at the end of each year to grant such awards is also something to consider, as people love recognition. It is important to note that even though Skyrme (2008: Internet) mentions recognition and reward as a means to boost knowledge sharing among individuals, other research has indicated that this may not necessarily be the best way to enhance knowledge sharing. "I do not really believe that this rewarding and recognition stuff works. I have made interviews in companies and came to the conclusion, that when asking people about how they could be motivated to share knowledge many of them answered: 'Well, I do not know. But giving information to my colleagues is part of my job'" (Wunram as quoted by Gurteen, 2012: Internet). If one looks at the work of individuals such as Gurteen and Wunram, it becomes evident that there is a lot of criticism of reward systems. There is continuing debate on whether a system such as this contributes to, or hinders the process of knowledge sharing among employees in an organisation. It is the opinion of the researcher that the success of implementing a rewards system would depend largely on the characteristics of the employees and the organisational culture maintained in an organisation.

Finally Skyrme (2008: Internet) also suggests that instead of employees competing against one another, whether individually or in teams, the focus can be shifted to collective competing to achieve an organisation's internal objective or alternatively to compete against external competitors. The overall aim of co-opetition is to ensure that competitiveness goes hand in hand with collaboration. At the end of the day, all employees should feel as though they contributed and shared, while maintaining a competitive streak.

According to Coetzee (2005: 5.2) and Mogotsi, Boon and Fletcher (2011:44), commitment is the psychological relationship of an employee to an organisation. The degree of employee participation, loyalty and belief in the values of an organisation are all factors that contribute to the extent of the employee's commitment. Commitment is the third C that Skyrme (2008: Internet) identifies as a contributing factor to effective knowledge sharing. It is important for organisations to generate commitment to aspects such as culture, change, challenges, competitiveness, collaboration and time management.

More often than not pressures in the workplace and limited time lead to ineffective knowledge sharing, so it is crucial that organisations commit to allowing time for efficient knowledge sharing to take place. Leading by example is also a vital aspect of developing an overall employee attitude of commitment to knowledge sharing. Therefore individuals who hold leading positions in an organisation, such as managers and chief knowledge officers, need to display their full support and commitment to knowledge sharing by making resources and time available (Skyrme: Internet).

2.4.1 The benefits and limitations of knowledge sharing in an organisation

There are many advantages associated with knowledge sharing for an organisation, whether academic or corporate. One of the main values of knowledge sharing is the fact that it contributes to enhancing and retaining intellectual capital within any organisation. Intellectual capital can be defined as an intangible asset that a human being attains from various experiences or traditional education. It is knowledge that can be learned and shared, through various means (Marr, Gupta, Pike, Göran & Roos, 2003: 771). Intellectual capital is tacit knowledge that can be utilised for making strategic decisions

in an organisation, contributing to the overall competitiveness and success of the organisation. Intellectual capital usually includes knowledge and skills that a company has acquired over a period of time. These attributes come in the form of people. The intellectual capital found within an organisation is usually based on the aims and objectives of the organisation and can be influenced by culture (Jusop & Taliyang, 2011; Mačerinskienė & Aleknavičiūtė, 2011).

Smith (2001a: 331-321) discusses additional benefits of knowledge sharing. Some of which include:

- Knowledge sharing allows for enhanced organisational effectiveness and efficiency through the spreading of high-quality information and practices.
- Knowledge sharing allows for emotional relief and minimised tension as problems are shared with colleagues and resolved in a collective effort.
- Knowledge sharing allows for enhanced innovation and discovery.
- Sharing knowledge can save time, in terms of learning from past mistakes and sharing information with colleagues to prevent them from repeating the same mistakes.

While there are many benefits to sharing knowledge in an organisation, there are many natural barriers that may hinder the process of knowledge sharing (Andriessen, 2006: 18-19). These may include the following:

- People within an organisation could fail to understand or appreciate the value of sharing knowledge.
- Not knowing how to share knowledge properly can hinder the knowledge sharing process.
- Some people are motivated by rewards. If there is no clear reward for sharing knowledge with peers, employees may choose not to share.
- Often people feel that they are too busy and therefore do not have time to share knowledge.

- People often feel that if they share what they know with others, they reduce their own value within an organisation. For that reason people choose rather to hoard or keep their knowledge to themselves, in order to retain power.
- Competiveness, real or perceived, constantly leads people to vie for supremacy and that can lead to an individual withholding information

All of the above listed barriers can be avoided or resolved through careful planning and management. For example, issues such as individuals not sharing because they do not know how to, can be resolved or avoided by offering training sessions or including workshops as part of job requirements. Ultimately individuals in an organisation really should have no excuse not to share knowledge with one another.

2.5 Knowledge sharing methods

Knowledge sharing can occur through different channels. For the purpose of this study a variety of knowledge sharing methods will be discussed, including both technology-assisted methods and face-to-face methods.

2.5.1 Peer assist

According to the Canadian International Development Agency (2003: Internet) peer assist is a form of knowledge sharing that was introduced to industry in 1994 by British Petroleum. Collison and Parcell (2001: Internet) define peer assist sharing as a "methodology that consists of bringing together a group of peers to get feedback on a problem, project, or charity, and then drawing lessons from the participants' knowledge and experience". It is a method that can easily be adapted to specific user needs and that promotes interaction and learning between peers.

Peer assist can be a useful technique to use in many situations, Canadian International Development Agency (2003: Internet) describes some of these situations as:

- Learning from individuals who are more experienced than oneself. This can be very useful when starting a new job, as it can help to ease individuals into their new job descriptions.
- Solving a problem similar to one that has already been solved.

- Planning an assignment that is similar to an assignment that another group has already completed.
- Gaining new insight into dealing with a specific situation that one has been dealing with for a long period of time.

Canadian International Development Agency (2003: Internet) further discuss some of the benefits of using such a technique, these include:

- The peer assist technique for sharing knowledge benefits both the host (individuals who need the knowledge) and the individuals who are consulted.
- It allows for a decidedly focused atmosphere for knowledge sharing.
- It can be implemented immediately and focuses on a particular task.
- It allows individuals to seek knowledge outside of working groups.
- It promotes collaboration between teams, which in turn develops strong networks.
- It is a method which costs little, is easy to use and is not time-consuming.

2.5.2 After action review

This is a technique developed by the US armed forces. Its main focus is to review lessons learned rather than to solve inconveniences from scratch. An after-action review approach to knowledge sharing can be viewed as a technique that ascribes to the notion “prevention is better than cure.” In the hope of not repeating mistakes, individuals get together and discuss the outcomes of various projects in order to learn, grow and avoid future mistakes (Canadian International Development Agency, 2003: Internet).

The success of this exercise is largely dependent on the willingness of the participants to contribute their tacit knowledge. There are various rules that one should follow to ensure successful implementation. These include placing a great deal of emphasis on useful feedback and highlighting positive input given by specific employees. Viewing all individuals who participate in the process as equal is another very important rule, as well as thinking about specific questions which one should ask. Below is a summarised table of the questions that people should ask themselves in order to gain better

understanding and give relevant feedback and input on a certain topic Canadian International Development Agency (2003: Internet).

Table 2.2: Questions for after action review (Canadian International Development Agency, 2003: Internet)

What was supposed to happen?	→ Why?
What actually happened?	→ Why?
What is the difference?	→ Why?
What went well?	→ Why?
What could have gone better?	→ Why?
What lessons can we learn?	

According to Canadian International Development Agency (2003: Internet) the benefits associated with implementing an after-action review strategy for knowledge sharing include the following:

- An after-action review can be applied to any activity in an organisation, which has a preset goal.
- It allows all individuals who participated to share their ideas.
- It helps people to comprehend what they have learned.
- It promotes/develops an attitude of confidence in a team that chooses to use this method.
- It can be implemented at any point in a project cycle.

2.5.3 Retrospects

A retrospect is the gathering of a specific group of people in an organisation, at the end of a project. The purpose of this gathering is to review the events that occurred during the course of the project, and to learn from these incidents. Usually individuals who form part of the project only have thorough knowledge of aspects of a project in which they took part, therefore implementing a retrospect allows for the collective telling of the entire project journey (Canadian International Development Agency 2003: Internet). A retrospect not only identifies the problems that were encountered and highlights the

lessons learned, but also aims to solve these problems and possibly fill gaps. For this reason it is far more comprehensive than an after action review.

To allow retrospects to be implemented effectively, one should take the following into account:

- Include everyone who may have a part of the story to tell.
- Make sure that sufficient time is scheduled for the story to be told. A rushed process will lead to an incomplete story, therefore it would be ineffective.
- A facilitator should be present to guide the storytelling process. This person should be someone who was not actively involved in the project (Canadian International Development Agency 2003: Internet).

2.5.4 Intranets/extranets

Intranets and extranets are two methods of knowledge sharing which have similar features. The main differentiating factor is the fact that extranets allow for controlled access from the outside for specific business or educational motives, whereas intranet access is limited to the individuals who work within an organisation. Intranets, as defined by Natarajan (2008: 5) and Mockler and Gartenfeld (2010: 610), are computer networks that function according to the same technologies and set of rules as the internet. However, unlike the internet, intranets are limited to certain users, who are usually the internal employees of an organisation.

Authentication is needed for users to gain access to the intranet, and access to the external environment, the internet, is often prohibited by the intranet provider. However, if access is granted, a firewall is used to ensure that the intranet is not penetrated by external sources, Natarajan (2008: 6) and Mockler and Gartenfeld (2010: 610) identify benefits for building intranets as a tool for knowledge sharing that includes the following aspects.

(i) Reduction of costs: Intranets are a cost-effective means of sharing knowledge. This is largely attributed to the fact that it is a virtual environment where paper is not needed, therefore issues such as printing cost and duplication of work are of little concern. In addition to being a paperless environment, intranets provide a common universal

browser interface in corporate computing environments that are very diverse. Because of this, alternative computer platforms can be used and training costs are considerably reduced.

(ii) Saving time: Communication becomes faster and easier since employees no longer have to correspond face to face. Intranets provide employees with facilities such as e-mail, chat and news groups. In addition, intranets also allow for just-in-time and on-demand functions, as information is discovered and accessed in a speedy manner.

(iii)Enhanced collaboration: Intranets allow for increased communication and collaboration through applications such as virtual teamwork or online feedback mechanisms where employees voice their opinions or complaints, sometimes even posting employee surveys, which promotes interaction.

(iv) Increased productivity and effectiveness: Increased productivity and effectiveness are the result of easier, faster and more flexible communication, which happens through facilities that are characterised by their easy-to-use nature and speedy transmission. Better learning through intranet facilities help to improve the productiveness of an organisation, while rapid access to information contributes to the effectiveness of an organisation.

(v) An integrated and distributed computing environment: A fifth benefit of building an intranet for an organisation. Intranets are rich in format, which simply means that due to a wide variety of media types, which include but are not limited to, audio and video, communication becomes dynamic and information sharing becomes more accurate and rapid.

(vi) Virtual Space: An extranet is a virtual space, which functions according to the same technologies and protocols as an intranet; it facilitates communication and collaboration among employees within an organisation. Furthermore, it allows various users who are external from the organisation to gain access. Because extranets allow for external penetration, special security measures must be put in place, not only because of the sensitive nature of the information being shared, but also because if no security

measures are put in place, an extranet would exist as just another part of the internet (Ling & Yen, 2001: 39).

Alexandrou (2006: Internet) identifies some of the benefits of implementing an extranet as follows. to enable individuals to work together regardless of distance. Extranets serve as a platform for enhanced interaction, as all participants can get involved by posting documents and comments. Furthermore, extranets are easy to access and easy to surf since the interfaces developed for such methods are uncomplicated and straightforward to understand. The advantage that stands out most is the fact that information being exchanged is not limited to only internal users, which means that a broader scope can be obtained.

2.5.5 Knowledge fairs

According to the Canadian International Development Agency (2003: Internet), a knowledge fair is used as a means to share information on a particular theme, through a variety of techniques. These techniques can include the use of kiosks, scale models, presentations, panels, showcases and demonstrations. Knowledge fairs can be very costly and are often very time-consuming in terms of preparation. Possible information overload is another pitfall of pursuing such a technique. Because of these considerations, attaining senior management buy-in is very important. Regardless of the pitfalls associated with the use of knowledge fairs, if implemented effectively, there are many advantages, which include the ability to present a lot of information at a time. It is also a brilliant method to use for the purpose of networking and establishing new contacts for present and future use (Canadian International Development Agency (2003: Internet).

2.5.6 Knowledge network

A knowledge network is an initiative where a group of individuals who share a common interest or fascination in a particular subject area, gets together in order to share and build their knowledge (Hollingshead & Contractor, 2002: 221). Knowledge networks and communities of practice (discussed in Paragraph 2.5.13) are similar in nature. The major difference is that knowledge networks are largely considered as a formal method

of knowledge sharing; corporate policies have been established for the use of this methodology within an organisation. In addition, knowledge networks are usually not time-bound. Alternatively, communities of practice only function in response to a specific concern and are often time-bound. Knowledge networks can operate on a face-to-face or technologically driven basis. Twitter and Facebook have popularised the concept of online social networks and when these popular sites are applied for knowledge sharing it becomes a very valuable source of knowledge exchange.

2.5.7 Coaching

Coaching is a process which aims at developing the abilities, skills and qualifications of employees, in order to satisfy organisational goals (Ulrich, 2008: 104). It is for that reason that coaching is considered as a formal method of knowledge sharing. Unlike mentoring, which is more focused on guidance, coaching focuses on developing specific skills needed from each employee, while the coach does not convey his or her personal vision to the employee or employees in training.

Some of the benefits and strengths that have been associated with the use of coaching as a knowledge sharing method include the fact that the method:

- contributes to employee confidence;
- serves as a support system for employees and it gives ample follow up;
- allows the employee to learn from the coach's know-how; and
- enhances the employee's chances of success (Canadian International Development Agency 2003: Internet).

2.5.8 Formal group-based knowledge sharing

"Recent perspectives have focused on the role of the firm in the generation and use of knowledge. These perspectives suggest that, while knowledge is "owned" at the individual level, the integration of this knowledge to a collective level is necessary" (Garcia-Lorenzo, Mitleton-Kelly & Galliers, 2003: 27). Hence it is important for an organisation to employ individuals who can work well with one another, and build healthy relationships, as a lot of focus is placed on group efforts. Based on a study done

by Okhuysen and Eisenhardt (2002: 370), it was established that three formal interventions, namely information sharing, questioning others and managing time, contributed to the overall success of group-based sharing, in terms of enhancing output. The output in this case would be, for example collective knowledge, innovative ideas and problem solving. Group-based learning promotes interaction among peers and colleagues, in the hope of later enhancing the interaction from peers and colleagues to external stakeholders such as customers and suppliers. Group-based learning works on the premise that in order for communication with external individuals to excel, communication first needs to be 'perfected' within the organisation.

2.5.9 Storytelling

The word "story" is rooted in both French and Latin, literally meaning an account of incidents or events. According to Shaw (2004: 15), stories are amazingly powerful knowledge sharing tools that can be used in numerous environments, ranging from business to academia. The effectiveness with which a story is relayed depends largely on the storyteller. McWilliams (1998: Internet) mentions some ways narrators can use to enhance their storytelling skills. These include:

- the inclusion of a character that the audience can relate to;
- setting the stage;
- establishing conflict;
- foreshadowing; and
- using dialogue that is easy to understand.

The Canadian International Development Agency (2003: Internet) further mentions some of the benefits and strengths of using stories as a method for transferring knowledge namely:

- Stories are humorous, interesting and unforgettable.
- The language used in stories is more real and personal.
- Stories have the ability to make complex issues seem simple.
- It is easy for audiences to relate to the story being told.
- Stories can encourage people to take action.

- Stories promote the development of human relationships, which in turn helps to cultivate a sense of community.

Based on a study done by Tobin and Snyman (2008: 140), it was found that stories and storytelling do indeed have the potential to enhance the knowledge sharing process in an organisation. In effect, it appears as if storytelling is transforming organisations in the 21st century. This is evident in the revival of storytelling as a mechanism for management (Armstrong, 1992; Smith, 2012).

2.5.10 Mentoring

Mentoring is a relationship between two individuals which focuses on learning. For learning to take place, knowledge must be shared, and so mentoring functions as a platform for this to occur. The mentor is usually an individual with a lot of experience, who then takes this experience and sows it back into individuals who are less experienced. Mentoring is not limited to an employer-employee relationship, in other words, one doesn't necessarily have to be mentored by one's manager. Mentoring is future-orientated and can be very advantageous within an organisation, as it allows for enhanced internal communication, which in turn makes the work environment more exciting and productive (Canadian International Development Agency, 2003: Internet).

Mentoring is not only restricted to the business or political world; it can definitely be used in other arenas as a form of knowledge sharing. Based on a study by Mohan (2010: Internet), it was discovered that mentoring enhanced the success rates of PhD students in the Indian community. In a society that is transforming at a rapid pace, mentoring proved to be one of the best solutions for PhD and masters students to keep up with the pace and meet the needs of society.

2.5.11 Weblog

According to Drezner and Farrell (2008: 19), a weblog is a "web page with no external editing, providing online commentary, periodically updated and presented in reverse chronological order, with hyperlinks to other online sources". Usually weblogs are published by individuals, on an informal basis. Weblogs can be considered as an

informal method for sharing knowledge, because an individual who chooses to take part in a weblog does so on a voluntary basis (Jackson, 2006: 38).

The benefits of a weblog include the fact that it serves as a platform for individuals to communicate, and in doing so, to share ideas, opinions and knowledge. It also captures information, meaning that knowledge is codified and ready for organisational use (Wolak, 2012: Internet).

There are positive reasons why an organisation should use a weblog; however, there are also some hazards that may arise from using weblogs in an organisation. If left unattended, confidential company information can be leaked. This could be done intentionally or accidentally by an employee, regardless of the fact that the consequences of such an action are bound to be dire. Since the content of a weblog is usually the opinion of an individual, problems can arise when opinions become too controversial or negative, as the organisation to which that individual is linked may develop a bad reputation (Wolak, 2012: Internet).

There are both pros and cons to using a weblog, one just needs to make sure that it is regulated and managed effectively. This can be done, perhaps by integrating web logging into an organisation's intranet and extranet, to allow for knowledge sharing to take place, but at the same time monitoring the content being shared.

2.5.12 Chat show

A chat show is an informal, fun way of sharing knowledge and is based on the format of a television chat show, with one host and three to four guests, while an audience watches. This audience will usually be made up of co-workers and can be of any size. However, smaller audiences tend to encourage participants to share more. A chat show usually runs for about 60-90 minutes, with a host inviting questions from the audience, to be answered by the participants (Hewlett, Barnard & Fisher, 2010: Internet). Chat shows can be used as an alternative to a formal presentation. They can also be used in order to weave ideas between individuals to identify key issues and as a technique to draw stories from individuals without having them do a lot of preparation beforehand. The best time to implement a talk show is when the stories told by the participants relate

to one another, yet give different perspectives. Therefore the main planning activity lies in selecting an appropriate theme and inviting interesting guests.

2.5.13 Communities of practice

According to Wenger (2006: Internet) a community of practice is a process where a group of people share a common interest, set of problems, or a passion for a specific topic. They get together and discuss this issue on an ongoing basis in order to learn and to gain a broader understanding. Wegner (2006: Internet) further elaborates that not everything called a community is necessarily a community of practice. For example, people often refer to a neighbourhood as a community, but this does not necessarily make the neighbourhood a community of practice. In order for the neighbourhood to be justified as a community of practice it would have to have three fundamental characteristics: the domain, the community and the practice.

(i) The domain: A community of practice is defined by a shared domain of interest, meaning that the individuals who form part of the community are not just a network of connections or a group of friends. They are individuals who share a common concern. The domain does not inevitably have to be acknowledged as an area of "expertise" outside the community. Take, for example, a jail gang that may develop different ways to deal with their common interest, which would most probably be survival. Although a few people outside this group would value such information, or even recognise their expertise, to the group this collective know-how is of the utmost importance (Wenger, McDermott & Snyder, 2002: 31).

(ii) The community: "In pursuing their interest in their domain, members engage in joint activities and discussions to help each other, and share information" (Wenger, 2006: Internet). It is an important factor that in order for a community of practice to qualify as such it has to involve interaction and learning. Individuals within the community need to learn from one another. It is for that reason that having the same job title as someone else or simply working in the same place as someone else does not make for a community of practice. It is also important to note that members of a community of practice can come from different organisations; they do not necessarily have to work together on a daily basis.

(iii) The practice: A community of practice is not purely a community of interest. Individuals need to view themselves as practitioners who get together, interact with one another, learn from one another and eventually develop a shared repertoire of resources, such as experiences and ways of addressing problems. According to Wegner (2006: Internet), a community of practice can be more or less self-conscious. Individuals are not always aware that what they have is a shared practice. One could look at a group of doctors, for example, who meet regularly for lunch at the hospital's cafeteria. They may not realise that the stories that they share over lunch are one of their main sources of knowledge. In these informal discussions they have created a shared repertoire for their practice.

Developing the three components mentioned above (domain, community and practice), is the only way to establish a community of practice effectively. It is also important to note that a community of practice cannot go on and on forever, it has a certain lifespan. Wenger (2006: Internet), view a community of practice as progressing through five stages, these being potential, coalescing, active, dispersed, and memorable.

A community of practice can be a very effective knowledge sharing technique, if implemented correctly. In fact, it is a technique that is being applied in both the corporate and academic realm in order to achieve certain goals through knowledge sharing. In organisations communities of practice are viewed more and more as a medium or instrument to cultivate strategic capabilities, knowledge development, social development and problem-solving. Communities of practice have long been viewed as one of the most important informal means of knowledge sharing. However, they can become formal means of sharing if integrated into the work space as part of job requirements and if sponsorship is given Wenger (2006: Internet) .

2.5.14 Knowledge cafés

A knowledge café can be defined as a process where individuals with a similar interest or problem get together in order to interact with one another, first in small groups and then as one unit in order to resolve a problem or to gain better understanding. (Knowledge@Singapore Management University, 2008: Internet). Knowledge cafés are characterised by the following components: a guest speaker who speaks for five to 30

minutes, an open-ended question which serves as the basis for conversation, small groups of four to five that discuss the topic of the café and finally a large feedback session.

The International Union for Conservation of Nature (2012: Internet) mention eight suggestions that can be used to ensure the successful implementation of a knowledge café:

- Introducing the facilitator or host to the participants.
- Agreeing with participants on what the qualities of a great conversation are. Some of these qualities include, but are not limited to, open-mindedness, acceptance, curiosity, discovery, sincerity and brevity.
- Articulating the purpose of the knowledge café. It is very important that participants know why the knowledge café is being organised.
- Providing individuals with an idea of the agenda for the discussions.
- Managing the discussion in order to keep the dialogue in the different groups on track.
- Keeping the noise level down. In order for a knowledge café to work, small groups are created where conversations are held simultaneously. As one can imagine, this can cause quite a lot of noise, which is disruptive, therefore facilitators should try to maintain an acceptable level of noise.
- Ensuring that there is enough space for the knowledge café to take place. Matters such as seating should be addressed in order to accommodate all participants.
- Informing people about the event, possibly through advertising or word of mouth.

Considering the lack of literature on knowledge cafés, this study aimed to document expert opinions on knowledge cafés and furthermore measured the perceived effectiveness of knowledge cafés as a knowledge sharing approach.

2.6 Measuring the effectiveness of knowledge sharing methods

Measuring is the process of establishing the magnitude of some attribute of an object relative to some unit of measurement. It is not beyond question whether it is possible to

measure knowledge sharing methods as effective tools for knowledge sharing. In 2009 Hemmasi and Csanda (2009: Internet) implemented a study, where the objective was to explore the effectiveness of communities of practice by using empirical data acquired from State Farm Insurance Companies. In order to do this, the researchers administered a survey questionnaire to a population of 579 employees who were actively participating in the 18 active communities of practice at State Farm Insurance Companies. From this, 204 surveys were answered, representing a 37% response rate, of which 49% was from females and the remaining 51% from males.

All the variables to be tested, with the exception of demographics, were measured using a five-point Likert scale. The questions that were developed looked at issues such as the extent to which the community was meeting the respondent's expectations, whether it was a valuable source for meeting business expectations and if the respondent would perhaps consider starting another community about a diverse topic. The data obtained was then analysed and descriptive results were given (Hemmasi & Csanda, 2009: Internet).

In essence, knowledge sharing methods are best measured through individual and group perceptions and therefore offer an indication of the effectiveness of the knowledge sharing techniques.

Knowledge sharing methods cannot really be measured through some mathematical formula. It is only by determining individual and group perceptions that the effectiveness of knowledge techniques can be measured.

For the purpose of this study, the effectiveness of knowledge cafés were measured on the basis of the attitudes and perceptions of individuals concerning the use of knowledge cafés as a method for knowledge sharing.

2.7 Summary

In the current economy, knowledge is considered as the foundation of any organisation. Therefore, knowing how to enhance, extract, and manipulate knowledge has become essential for organisations. Hence it is important to implement relevant knowledge sharing techniques for the situation to allow for knowledge to be shared effectively.

The knowledge sharing techniques chosen may depend on a variety of factors, culture being one of the most prominent, along with the specific knowledge need of the organisation. Ultimately competitive advantage, daily operations and an organisations success all depend on using knowledge for making strategic decisions. “Everyone benefits from sharing knowledge” (Burk, 1999: Internet).

In the next chapter an in-depth discussion will examine knowledge cafés and the use thereof as a method for knowledge sharing. Results from a Delphi technique study which was implemented as part of this study is also included and discussed in Chapter 3.

Chapter 3

Knowledge cafés

3.1 Introduction

As was stated in the opening paragraph of Chapter 1, interactions between people are the fundamental prerequisite for successful knowledge sharing. A knowledge café is a technique that offers individuals the opportunity to interact on a face-to-face level on a specific topic, in the hope of sharing knowledge.

In Chapters 1 and 2 it was established that a knowledge café is a relatively new method for sharing knowledge, hence there is a lack of literature associated with this method. Chapter 3 aims to contribute to the body of knowledge associated with knowledge cafés, through information gathered after the implementation of a Delphi study. The Delphi study that was implemented focused on discussing the guidelines, pre-conditions, advantages, obstacles, successes and alternative uses of knowledge cafés, as well as other forms of knowledge sharing that can be considered as equivalent to knowledge cafés.

Chapter 3 also looks at giving some practical examples of where knowledge cafés have been used as a technique for knowledge sharing, both in the corporate realm and in academia.

3.2 Delphi summary

The word "Delphi" refers to a location in Greek folklore called the Oracle of Delphi, a place where prophecies were passed on. The original Delphi method was developed by Norman Dalkey of the RAND Corporation in the 1950s during the Cold war. The objective of the mission was to create consensus of opinion among a group of experts, on the ways in which the Soviet military might attack the US industrial system (Amos & Pearse, 2008: 96).

Over the years the use of the Delphi has progressed to other areas of research and it has been implemented as a means to collect data where there is a lack of literature or

information on a specific topic of interest. The technique has also been used where one wishes to obtain the opinions of independent experts on a specific subject (Hallowell & Gambatese, 2010: 99-107).

Amos and Pearse (2008: 96) categorise the Delphi method into five sections. These categories are listed as follows:

(i) Future-orientated or lack of information: Delphi focuses on creating forecasts of events that may occur in the future or on researching areas where there is a lack of information. According to Beech (1999: 261) the Delphi method is an effective technique to acquire data that would not normally be attainable.

(ii) Reliance on expert opinion: According to Murray (2011: Internet) an expert is an individual who has the necessary knowledge and understanding to give an opinion on a specific topic. In order for a Delphi study to be implemented, there has to be a panel of experts to whom questions are posed and from whom answers are received. The experts that are chosen to form part of the panel are not limited to one discipline. They may come from various professional backgrounds, and they may also be international or national experts.

(iii) Remote group communication: Although the Delphi is a group effort, it does not require direct or face-to-face communication between the panel of experts. In fact, most of the time the communication takes place between the researcher and each individual expert. It can be argued that the e-mail version of the Delphi is far more effective than the traditional method of meeting all experts in one location (Saint-Germain, Ostrowski & Dede, 2000: 163).

(iv) Iterative research process: The Delphi process is repetitive in nature. Usually the Delphi consists of three rounds. However, because it is a flexible data-capturing method, it can be adjusted to suit alternative studies.

(v) Consensus of opinion: The Delphi method works towards gaining consensus of opinion from participating experts. Once consensus has been reached, the Delphi process comes to an end.

For any data-collection method to be effectively implemented, there needs to be guidelines that direct the entire process. Hallowell and Gambatese (2010: 102) suggest a Delphi procedure that can be followed. This procedure is subsequently discussed and is summarised in Figure 3.1

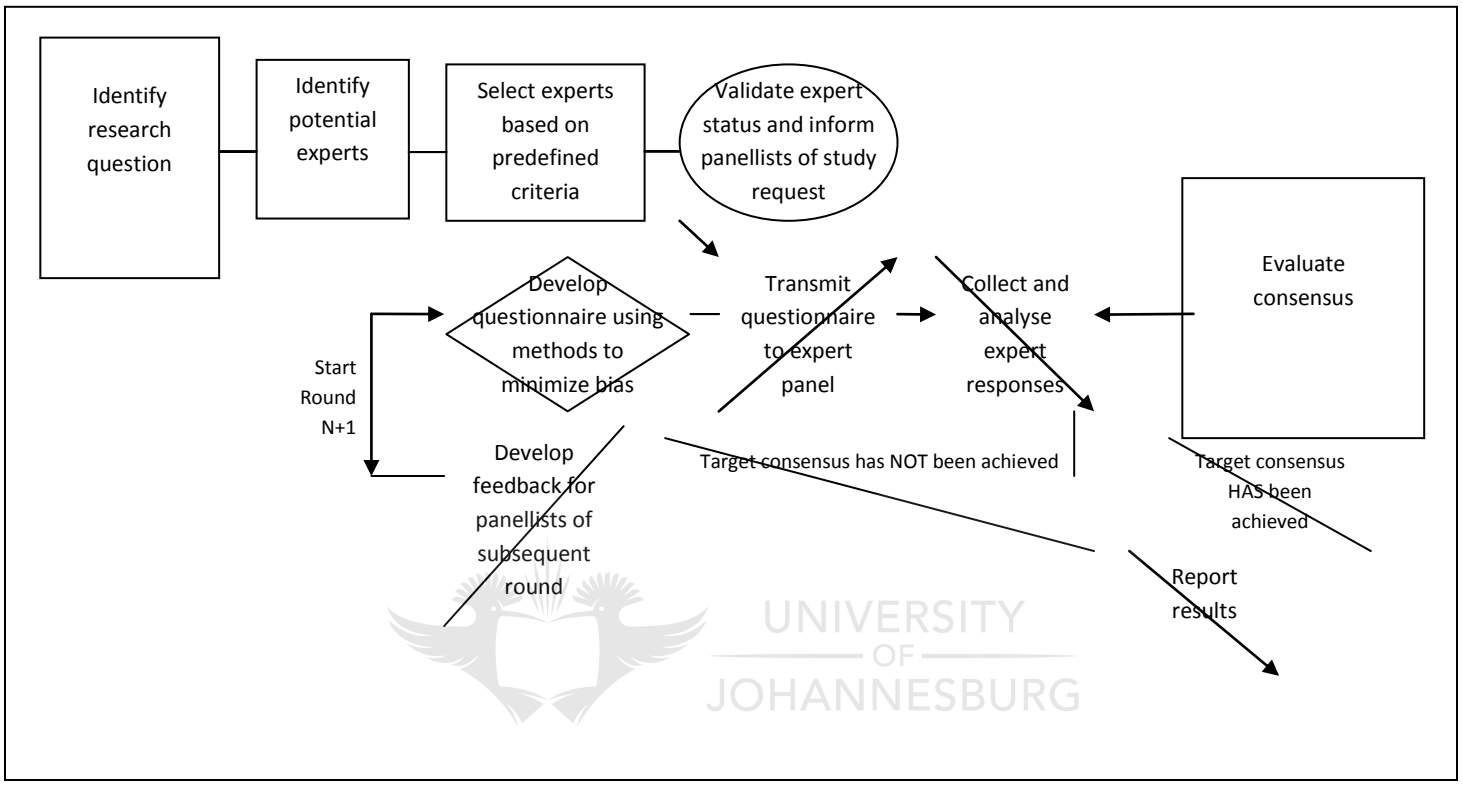

Figure 3.1: Suggested Delphi procedure (Hallowell & Gambatese, 2010: 102)

In accordance with Hallowell and Gambatese's (2010: 99-107) suggested Delphi procedure, identifying the main research question would be the initial step to take. Once this question has been identified, potential experts need to be recognised and selected, based on the researcher's predefined criteria. Experts can also be identified through methods such as snowball sampling. Developing a questionnaire that minimises bias is essential, as the answers given by the panel of experts should be objective.

The sixth step of Hallowell and Gambatese's (2010: 99-107) procedure sees the researcher sending out the questionnaire to the selected panel of experts who agreed to participate in the study. Collecting and analysing the data of the first round of responses serve as the seventh step. Once the data has been analysed the researcher should

evaluate the level of consensus. If consensus has been achieved, the results can be reported. However, if the target consensus has not been reached, a second round of the Delphi will be implemented. On average the Delphi process continues over three rounds before consensus is reached.

In line with guidelines for implementing a Delphi study, no more then ten experts should be identified. For this specific study, eight experts were identified through snowball sampling. Of the eight experts that were identified, five agreed to participate in the data-collection process. The criteria for the experts were that they should at least have facilitated a knowledge café and also be known as an expert in the knowledge management field. Once these experts had been identified, a questionnaire comprising six key questions was disseminated. The responses that were received were summarised according to the following themes: guidelines, advantages, pre-conditions, obstacles, success rates, alternative uses and equivalent techniques. These responses were then sent to each expert to review and add extra comment if need be.

The six questions that were presented read as follows:

- What would you say are the guidelines for successfully implementing a knowledge café?
- What are the advantages of implementing knowledge cafés for knowledge sharing?
- What are the obstacles that can hinder the process of effectively implementing a knowledge café?
- How would you describe the success rate of previous efforts, to use knowledge cafés as a technique for knowledge sharing?
- Are there any other techniques that you are aware of that you can equate to knowledge cafés?
- Do you have any suggestions for where knowledge cafés can be implemented successfully, as a technique for knowledge sharing, other than in the corporate arena?

Below is an analysed summary compiled from the responses to the questionnaire.

3.2.1 Guidelines for implementing a knowledge café

According to one of the experts, the guidelines for implementing a knowledge café are to be kept to a minimum. The experts then went on to mention guidelines that were necessary for effectively implementing a knowledge café:

(i) Time should be well managed. According to all the experts, time is an essential guideline and it should be adhered to. There should be a 15-20 minute time span between rotations of seats/groups and an overall sufficient number of rotations, to allow for at least three rotations per session. The time allocated for the knowledge café to take place should also allow for an introduction by the facilitator, a short talk by the guest speaker and a review session at the very end.

(ii) The size of the group is important. In terms of a corporate setup, it was made clear by the experts that larger groups do not work effectively. Ideally the number of individuals that should participate in a knowledge café is 30-40. These individuals should then be divided into smaller groups of no fewer than four and no more than five. There have, however, been cases where very large groups have resulted in seemingly successful cafés. It would seem that the size of the group can be influenced by the expertise of the facilitator and what he/she can handle.

(iii) A good facilitator is crucial. The experts clearly agreed that a good facilitator is another important factor that should be taken into account. The facilitator chosen will be in charge of ensuring that the knowledge café is run smoothly, in terms of time management and listening in on group conversations. The facilitator and the guest speaker can be the same individual; alternatively, two separate individuals can be chosen to fulfil the facilitator role and guest speaker role.

(iv) A suitable location must be found. The knowledge café should take place in a suitable location, meaning that the venue should be big enough to allow for rotation of chairs and for a café-style setup to be implemented. If the venue doesn't allow for rotation and easy movement, the process of running the knowledge café could be hindered.

(v) An informal atmosphere encourages participation. An informal environment with a relaxed atmosphere contributes greatly to the amount of sharing that should take place in a knowledge café. Since sharing is the main purpose of a knowledge café, it is important that the facilitator should create a relaxed atmosphere. The manner in which the venue is set up can contribute to achieving this atmosphere.

(vi) Participants must know one another's names. According to Remenyi (2011: Internet), all the individuals participating in the knowledge café should know one another's names. This can be facilitated by supplying name badges to all participants. He also states that it is vital for individuals to be able to contact each other after the knowledge café has been implemented, perhaps just to verify some of the knowledge that was shared or for networking.

If the above-mentioned guidelines are adhered to, the likelihood of a knowledge café being successful appears to be better. With success come advantages.

3.2.2 Advantages of implementing knowledge cafés for knowledge sharing

Various advantages were identified by the five experts. For the purpose of effectively summarising these advantages, three categories were created: implementation, sharing and learning.

(i) Implementation perspective: From an implementation perspective, the following two advantages were identified: knowledge cafés are easy to implement and can be run on a low budget. It is not necessary for vast amounts of money to be spent on the implementation of knowledge cafés, which makes them a cost-effective means of sharing knowledge. In comparison to knowledge cafés, alternative techniques for sharing knowledge, such as intranets or knowledge fairs, require a substantial amount of money to initiate. Planet Apex (2007: Internet) lists one of the benefits of intranets as being inexpensive to initiate. However, according to Smith (2011: Internet), investing in intranets is not a once-off cost. Organisations that choose to implement intranets as a tool for knowledge sharing will also have to ensure that there is sufficient money for periodical maintenance of the application, whereas with knowledge cafés no such costs are incurred.

Other knowledge sharing initiatives, such as knowledge fairs, require a considerable amount of money to put into practice (Canadian International Development Agency, 2003: Internet). This is because knowledge fairs work on the premise of developing displays in order to share knowledge. The displays generated by individuals are put up at an exhibition site and face-to-face discussions ensue around these displays. In addition to being expensive, knowledge fairs can also be considered to be time-consuming in terms of preparation and dismantling. In comparison, knowledge cafés are very cost-effective.

(ii) Sharing perspective: The advantages that were listed, from a sharing perspective, included the fact that knowledge cafés serve as a platform for individuals to verbalise ideas and to share their thoughts, as well as to accumulate a vast amount of knowledge in a relatively short time. Knowledge cafés can also be advantageous in the sense that they allow individuals to validate their own understanding of a specific topic or subject through sharing. Often within an organisation there are difficult topics or issues, which may need to be discussed. Knowledge cafés can serve as a tool to help build consensus on these difficult issues. Knowledge cafés can also be an effective tool to generate conversation in hierarchical organisations where dialogue would otherwise be stifled.

(iii) Learning perspective: For an organisation or an academic institution to thrive in today's knowledge economy, individuals need to have the ability to learn (Hoskins & Frederickson, 2008: Internet). Learning is a process through which information and experience are altered into knowledge, skills, behaviours and attitudes (Cobb, 2009: Internet). According to LearningRx (2011: Internet) there are three main types of learning namely, auditory, visual and kinaesthetic. Based on the nature of knowledge cafés, it can be noted that the two types of learning that take place are of an auditory and visual nature, where listening and seeing are the media. Often auditory messages are enhanced through visual aspects such as manual gestures or facial expressions.

It was also identified that the reason why a knowledge café allows for easy learning is the informal environment in which it takes place. Not only are participants motivated to think differently, to learn from one another, and to understand different perspectives, but they are also given a platform to provide visual answers.

Although the panel of experts identified the above mentioned advantages, they also identified challenges regarding the implementation of knowledge cafés. These challenges are detailed in the discussion that follows.

3.2.3 Challenges that may hinder the process of effectively implementing a knowledge café

There are challenges that may arise to hinder the process of effectively implementing a knowledge café. It is important to identify these challenges in order to avoid them. The experts identified the following challenges, some of which reflect back on the previously identified guidelines.

(i) Closed-mindedness: Individuals who are narrow- or close-minded are unwilling to explore different points of view and can thus hinder the process of implementing a knowledge café. Individuals such as these are often set in their ways, and because of this they will not gain new knowledge, which defeats the purpose of implementing a knowledge café.

(ii) Not giving enough context and briefing: It is important for participants to know what is expected of them, hence prior to launching a knowledge café it is essential that the café be placed into context through relevant briefing. This is in line with the type of question asked. The question should be compelling and evoke a discussion among participants.

(iii) Size of group: The size of the group participating in the knowledge café may also pose a possible challenge. The group cannot be over-populated or alternatively too small. The reason is that in larger groups, not all the participants get a chance to voice their opinions. Alternatively, in smaller groups there may be limited insight owing to the

fact that knowledge is only being shared among a few individuals. An ideal number is usually 30-40 participants.

(iv) Language barriers: The essence of a knowledge café is to share knowledge through conversation. One of the factors that can lead to ineffective communication is language barriers. If individuals who are participating in a knowledge café do not understand each other, or are unable to converse with one another owing to a language difference, the knowledge café will be futile. A common language should always be spoken; the language chosen will depend on where the knowledge café is implemented.

(v) Disregarding the guidelines: There are various rules that one needs to adhere to in order for a knowledge café to be successful. Guidelines such as having a facilitator who can facilitate the process are crucial, otherwise chaos will ensue, especially when implementing a process that relies on face-to-face conversation. If guidelines are not adhered to, it is most likely that the knowledge café will not be successful.

(vi) Location is important: It would be difficult to implement a café if participants are geographically dispersed. Location in terms of securing a venue that permits for a café-style setup is also important, as this contributes to the overall process of implementing a knowledge café. The location needs to allow for easy movement and comfortable group seating.

(vii) Non-vocal individuals: Participants who do not give any input into discussions, even though they may have a great deal of knowledge to share, can also be seen as a challenge that needs to be overcome. Conversation is key; if one is not willing to converse and share personal insight the knowledge café will not succeed. Alternatively there are individuals who talk non-stop. These individuals usually dominate conversations, leaving little room for outside input. It is important to realise that although talking is key, so too is listening. One of the ways in which an individual learns is by listening and understanding. It is for this reason that the suggestion discussed in Paragraph 2.5.14, of agreeing beforehand what effective conversations are, makes good sense.

In light of the above challenges it was also important to discuss the successes achieved through the utilisation of knowledge cafés as a technique for knowledge sharing. These successes are subsequently discussed.

3.2.4 Successes of knowledge cafés as a technique for knowledge sharing

From the answers given by the panel of experts, it became evident that the success of implementing knowledge cafés is fairly good in both the corporate and academic realm. The successes achieved included the following:

(i) Connecting people: From a corporate perspective the experts share the same view, that knowledge cafés can be utilised best for connecting people. When individuals are connected, it simply means that conversation and collaboration are taking place. A knowledge café can be linked to team effort, because just like team effort, knowledge cafés also require the contribution of all the members who are participating in them.

(ii) Knowledge sharing: In addition to connecting people, they also believe that knowledge cafés are valuable tools, which allow for successful knowledge sharing among peers. Expert two went on to give practical examples, of where she had previously facilitated knowledge cafés as a means to share knowledge. The three examples she gave included the use of a knowledge café for training purposes, mergers and internal/organisational sharing.

(iii) Leadership training programmes: According to expert two, a leadership training programme is a forum where leaders get together to share their experiences, as to how they contributed to empowering and motivating employees. During these sessions various topics, such as “outcomes of the training programme” and “problems encountered” were discussed. In order to assist the discussion and the knowledge sharing process, expert two chose to take a knowledge café approach.

(iv) Mergers: The number of mergers and acquisitions that have occurred worldwide reached a staggering four trillion in 2006 (Braksick, 2007:8).
According to Whitaker (2009, Internet) these mergers and acquisitions continue to take place. There are many factors to consider in order to achieve a successful merger. One of these factors is ensuring that effective communication between the merging organisations takes place. Expert two gave an example of how she implemented a knowledge café in order to assist in the merger process of two organisations. The intent of the knowledge café was to ensure that best practices from the two merging companies were shared and understood.

(v) Leading advisors sharing experiences: The third example, given by expert two, centred on using a knowledge café in order to encourage leading advisors in a specific organisation to share their experiences in leading communities of practice and professional networks. Ultimately the aim was to get advisors to share knowledge on topics such as what to do and what would work, and tips and tricks for their organisation.

Expert two further stated that although in the end success was achieved, in the knowledge cafés that were implemented, there were some individuals who were initially reluctant to participate in the sharing process. However, after running the knowledge cafés the facilitators received positive feedback. Another success that was highlighted was the fact that participants learned a lot from one another, which is a key factor in the success of a knowledge café.

(vi) Creative idea generation and consensus building: The experts found that knowledge cafés were very useful in generating creative ideas. Consensus-building challenges were successfully overcome by using a knowledge café.

(vii) Change management: Change management is a process which is people-focused and centres on using knowledge, tools and resources to help people deal with change in an organisation. Expert four felt that knowledge cafés have limited success; however,

they can be used as a tool for change management, as well as to get individuals talking about their emotions and fears in a business context.

(viii) Learning and understanding: From an academic perspective it was found that a knowledge café for postgraduate students helped students to grasp concepts and principles much easier than if they had been taught in a normal classroom setting where the educator presented everything. This was reflected in the answers that were given by the students in their examinations. Knowledge cafés can therefore also be implemented successfully in academic settings.

In discussing the successful outcomes of knowledge cafés, it is relevant to give practical examples of where knowledge cafés have previously been implemented. The Statoil and Hydro merger is one such example that is discussed as Example 1.

A number of years ago two major oil companies, Statoil and Hydro, decided to merge. Following this merger, it was decided that all the managers, from both oil companies, would be brought together in a knowledge café. One of the reasons for the two organisations implementing a knowledge café was to establish a firm understanding of the core business processes of each company and to develop an action plan for the way forward. This was successfully achieved through the knowledge café process.

A second reason for implementing a knowledge café was to retain as much information as possible from retiring engineers. Rather than trying to document everything, it was decided that conversations would work best in order for the experts to share their tacit knowledge effectively, as is clearly explained in Example 1.

Example 1: Statoil and Hydro : the merger

Following the merger between Statoil and Hydro, they brought the managers together to talk in a knowledge café. What they're doing is getting to know each other and building a relationship which is pretty important in such a merger. They are getting to understand the different cultures, ways of seeing the world, processes and systems. You'll be amazed how two oil companies have totally different ways of doing things. They're getting to understand the different problems, issues and barriers about working together, and using the tool for a specific business purpose.

They're also using it because of senior engineers retiring and that's a loss of knowledge. So rather than trying to interview those engineers and get them to write everything down, which is pretty much impossible, they're having conversations with younger engineers to pass across their tacit knowledge. They are not being put together to have a conversation about how to share knowledge, but to capture some of the specific knowledge.

(Excerpt extracted from: Knowledge@Singapore Management University, 2008: Internet).

Having discussed the successes of a knowledge café, the Delphi questions further examined the techniques that were similar or equivalent in nature to knowledge cafés.

3.2.5 Techniques that can be equated to knowledge cafés

One of the questions included in the Delphi study looked at identifying if there were any alternative methods that could be considered as similar to knowledge cafés as a technique for knowledge sharing. A number of techniques identified by the panel of experts, have been summarised in table 3.1

Table 3.1 Knowledge sharing techniques (Source: Own research)

Technique	Definition	Key differences
Technology cafés	A technology café is where a group of individuals get together to discuss the implementation and the use of new technology.	• All topics of discussion are centred on technology.
Open space technology	Open space technology is a process where individuals get together, initially in one large group and then in smaller groups, in order to discuss various topics of interest. One of the key principles of open space technology is "The Law of Two Feet", which implies that if you as a participant find that you are not contributing to the discussion on a specific topic or are not gaining new insight, you should go to another group (Owen, 2008: 95) (Pereira & Figueredo, 2010: 315).	• Smaller group discussions all focus on different topics. • One of the key principles of open space technology is that participants can leave the discussion being held in their group at any time if they feel that they are not gaining new insight or alternatively if they are not contributing to the group.
Dialogue meeting	A dialogue meeting is a forum where questions are presented and individuals work as a group towards a common understanding (Wilhelmson, 2006:243-256).	• There are no smaller group discussions. One large group from the beginning till the end.
Brainstorming	Although brainstorming is a formal method for knowledge sharing, two of the experts mentioned it as a technique that can be equated to knowledge cafés. Brainstorming is a process that encourages individuals within a group to generate creative ideas and solutions through group discussions (Levi, 2011: 212). According to Litchfield (2008; 2009) there are four rules that guide individuals and groups in creative idea generation: (a) generate a lot of ideas, (b) avoid criticising any of the ideas, (c) attempt to combine and improve on previously articulated ideas, and (d) encourage the generation of "crazy" ideas.	• One individual is responsible for summarising the group discussion and reporting back to management. • Notes are taken during the brainstorming session. • Sessions are often recorded.
Communities of practice	A community of practice is a process where a group of individuals who share a common interest, set of problems, or a passion for a specific topic, get together and discuss it on an ongoing basis in order to learn and to gain broader understanding (Hislop, 2009: 167; Monaghan, 2011: 428).	• Communities of practice are continuous in nature. • The focus is on one topic of interest, that is discussed over a period of time (days or months), whereas knowledge cafés are once-off and the topic changes with each new café. • There are no smaller different group discussions. One group from the beginning of the process until the end.
Action learning groups	According to the Association for Coaching (2011: Internet), action learning is a process where individuals in an organisation, who have diverse levels of skill and experience, get together in order to analyse a work problem and develop a plan of action.	• The catalyst for action learning is a problem to be solved, whereas knowledge cafés emphasise inquiry and understanding rather than problem-solving, although problems can be solved as a result of the sharing that has taken place, knowledge cafés are not driven as a problem-solving process.

Although each knowledge sharing technique that was mentioned by the experts comes with its unique differences, there were core similarities that allowed the techniques to be considered as similar to knowledge cafés. These core similarities are:

- They are group orientated.
- They are driven by goals or interest.
- Conversations are used as a medium for sharing knowledge.
- Participants are involved in the creation of new knowledge.
- Learning occurs in a real-time context.

Surprisingly, there was one technique that was not mentioned, which links remarkably to knowledge cafés. This technique is known as a world café, which focuses on cultivating conversations as a means to initiate the transfer of knowledge and subsequently allow a learning process to take place (World Café Community, Brown, Isaacs, Wheatley, & Senge, 2005: 40). The world café adheres to seven key design principles, which are interlinked and used as a means to harness the power of conversation for business and social value. These seven principle include: Set the context, create a hospitable space, explore questions that matter, encourage everyone's contribution, cross-pollinate and connect diverse perspectives, listen together for patterns, insights and deeper questions, harvest and share collective discoveries (World Café *et al;* 2005: 40).

(i) Set the context: Clarify the purpose and the boundaries within which the discussions will take place. This is usually done by sending invitations to possible attendees, highlighting the subject area to be discussed. The context is then repeated at the beginning of the actual event so as to avoid confusion (Lewis, 2008: 119).

(ii) Create a hospitable space: Create a café-like environment, which encourages relaxation. This can be done through the use of various props such as music or room decorations (Schieffer, Isaacs & Gyllenpalm, 2004: 1-8).

(iii) Explore questions that matter: It is senseless to investigate questions that do not arouse conversation; therefore questions should be constructed in such a manner that they promote a sense of inquiry, leading to individuals engaging with one another (Lewis, 2008:119).

(iv) Encourage everybody's contribution: Showing interest in what is being said by each member of the café, listening attentively and speaking with intent will encourage an attitude of participation (Schieffer, Isaacs & Gyllenpalm, 2004: 1-8).

(v) Cross-pollinate and connect diverse perspectives: Invite individuals from different perspectives in order to create diversity and gain different viewpoints. However, retain a common focus on central questions (Lewis, 2008:119).

(vi) Listen together for patterns, insights and deeper questions: Emphasis should be placed on common themes, but in doing so individual contributions should not be neglected (Schieffer, Isaacs & Gyllenpalm, 2004: 1-8).

(vii) Harvest and share collective discoveries: Make combined knowledge and insight perceptible and actionable (Lewis, 2008:119).

These seven principles are reflected in Figure 3.2 and are key to the successful implementation of a world café approach where conversation and contribution are essential. Knowledge cafés function on the same premise as world cafés and can be used in various environments for knowledge sharing.

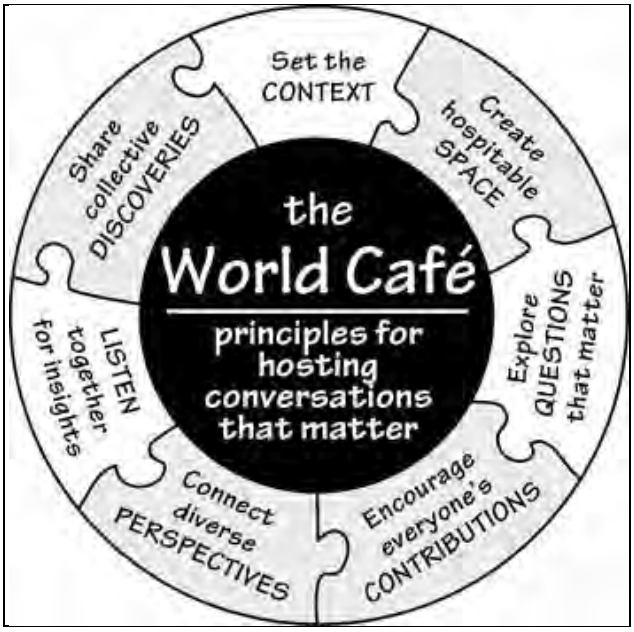

Figure 3.2: World café design principles (World Café *et al;* 2005: 40)

However, there are key differences that distinguish the two methods, which are summarised in Table 3.2.

Table 3.2 Differences between world café and knowledge café (Source: Own Research)

World café	**Knowledge café**
A table host is responsible for "holding the collective and evolving stories of the group conversations at his/her table throughout the duration of the multiple changes of visitors" (Prewitt, 2011:189-202).	No table host is assigned, all individuals are free to move as they please.
Community-focused: deals with topics that are community-related.	Business-focused: deals with topics that are business-related.
Multiple questions asked at one world café proceeding.	One key question per knowledge café.
Large group intervention.	Knowledge cafés work best with groups averaging between 30 and 40 people.
Individuals encouraged to note key ideas through doodle and drawing.	Individuals are encouraged to talk and listen. Note taking is not necessary as the focus is solely on conversations.

The next section highlights some alternative areas where knowledge cafés can be implemented.

3.2.6 Alternative areas of implementing knowledge cafés

There were various places, alternative to academia and the corporate world, that the five experts mentioned, where knowledge cafés could be implemented successfully as a tool for knowledge sharing. These included: labour unions, conferences and social groups or groups of interest.

(i) Labour unions: The core task of a labour union is to ensure social justice through dialogue (Friedrich-Ebert-Stiftung, 2009: Internet). Knowledge cafés can be effective tools to evoke dialogue that focuses on solving issues of a social nature in the workplace.

(ii) Conferences: Often most of the interaction that occurs at conferences is during tea breaks and lunch breaks. When asked by Knowledge@Singapore Management University (2008: Internet), if knowledge cafés can be useful in academic settings, Gurteen answered in the affirmative, giving an example of how knowledge cafés can help to transform academic conferences that are held on a yearly basis by many institutions. Instead of having people present, papers knowledge cafés should be implemented to allow for more interaction among individuals attending the conference. Simply presenting papers can become monotonous. Knowledge cafés can also be used for corporate conferences.

(iii) Social groups or interest groups: The expert's felt that knowledge cafés could be implemented in large social groups for change settings, also adding that knowledge cafés would work well in community settings as well as in interest groups such as societies.

3.3 Summary

Chapter 3 discussed various aspects of knowledge cafés, including the guidelines, advantages, obstacles, successes and alternative techniques for knowledge sharing that equated to knowledge cafés. This was achieved through the implementation of a Delphi study. In the chapter that follows the research design and methodologies that were used to implement the empirical part of this study are discussed.

Chapter 4

Research design and methodology

4.1 Introduction

"Research design involves a set of decisions regarding what topic is to be studied, among what population, with what research methods, for what purpose" (Babbie: 2008: 112).

In order to create new knowledge, data needs to be collected and subsequently analysed hence the selection of an appropriate research paradigm and methodology is key to the success of any empirical study. Chapter 4 focuses on a discussion of the sequential mixed-methods research design and methods used in this study. The chapter begins with an overview of both qualitative and quantitative approaches. It is then followed by a full description of the mixed-methods approach used in this study.

A discussion of social systems theory and complexity theory is incorporated, as these two theories make up the philosophical paradigm to which this study adheres. This is then followed by the research design type and the various research methods that were incorporated into this study, including a discussion on the data collection instrument designed for this study.

4.2 Overview of research designs in the social sciences: Qualitative and quantitative

Collis and Hussey (2003:113) state that "a research design is the science and art of planning procedures for conducting studies so as to get the most valid findings" therefore in order to meet the information needs of any empirical research project, a fitting research design needs to be chosen. Based on the research design chosen, specific methods for data collection and analysis need to be identified and instruments need to be developed. According to Ramchander (2004:104), there are two primary design approaches that dictate the gathering of data in any research project. These are a quantitative approach or a qualitative approach. A third approach that can also be considered is derived from the merging of both quantitative and qualitative approaches

in order to form what is known as a mixed-methods or triangulation approach. In order to meet the empirical research requirements for this particular study, a mixed-methods approach was taken, making use of methods from both quantitative and qualitative research paradigms.

Because the mixed-methods research design chosen for this study incorporated both qualitative and quantitative aspects, it is imperative to give a brief background on both qualitative and quantitative designs, and to highlight the specific qualities that were drawn from each, in order to form a mixed-methods paradigm.

4.2.1 Qualitative research design

According to Carcary (2009:12), when creating a qualitative design it is important to maintain consistency. Ramchander (2004:104) further elaborates that a qualitative research approach is rooted in the interpretive social sciences paradigm, meaning that it focuses on the exploring, describing, and interpretation of behaviours, themes, and trends where there is lack of information, in order to understand viewpoints and to develop deeper levels of meaning (Mason, 2002:18). This would contribute to the various areas of research. The characteristics mentioned are very important for this particular study, as there is a lack of literature on knowledge cafés, hence identifying various trends, themes and behaviours assisted the researcher in contributing to the overall body of knowledge.

Good qualitative research is also characterised by the fact that it begins with a single focus. The researcher should have one specific idea or problem in mind that he or she seeks to understand or explore. With regard to this study, the focus was on assessing the attitudes and perceptions of individuals concerning knowledge cafés as a technique for knowledge sharing. This study also included in-depth details on methods used, such as the discussion of the Delphi method in Chapter 3, and a thorough approach to data collection and data analysis. The data analysis process focused on employing multiple levels of abstraction and in the end a document of results was compiled, which can be deemed credible. The best qualitative studies engage the reader (Creswell, 2007: 35-41), and that is exactly what this study aims to do.

The Delphi study, which was employed as a data-collection technique in this study, allowed for open-ended questions. Open-ended questions allow for more detailed answers to be drawn from the participants in a study. The fact that the researcher can probe initial participant responses also allows for more specific answers, as individuals are allowed to respond using their own words, rather than being forced to choose from fixed responses, as is the case with quantitative methods. Overall open-ended methods have the capability to bring to mind responses from participants that are more meaningful and culturally relevant to the participant, unexpected by the researcher and rich and exploratory in nature, as was the case in this study. However, with advantages come disadvantages. The major limitation of implementing a qualitative approach is that often the analysis process is time-consuming and can be difficult. It is not easy to summarise the thoughts of a group of individuals. However, that was a challenge that the researcher managed to overcome.

4.2.2 Quantitative research design

Quantitative designs are grounded in the positivist social sciences paradigm. Studies implemented through quantitative approaches tend to take on a more deductive style where assumptions are drawn from observations made or data collected. Unlike qualitative research, which is exploratory in nature, quantitative research focuses on measurable characteristics. The main purpose of a quantitative study is to describe, predict and control. It does not aim to develop new theories; rather it focuses on testing or verifying pre-existing theories (Walker, Payne, Smith & Jarrett, 2007: 11).

The positive aspects of implementing a quantitative study include the fact that the research problem is always direct and to the point. Quantitative research studies are also able to achieve high levels of reliability of gathered data due to the fact that observations are either done in a controlled environment, through laboratory experiments, or in relation to this study through the distribution of questionnaires.

Having summarised both qualitative and quantitative designs, and drawing on the aspects that were incorporated into this study from the various paradigms, a mixed-methods approach was discussed as the research design selected for this study.

4.2.3 Towards mixed-methods as a research design

Over the years the way in which research is implemented has evolved. The focus is no longer on using methodologies from one research design. Researchers have come to realise an alternative paradigm, which employs the use of a combination of research methods from both quantitative and qualitative designs. This approach to research, which is emerging rapidly, is known as a mixed-methods approach.

According to Harrison and Reilly (2011: 8), the combination of different methods in social research has been given a variety of names, which include triangulation, integrative, multi-method, blended research, multiple methods, ethnographic residual analysis and mixed-method research. In research associated with Information and Knowledge Management, “mixed method” is the most commonly used term Harrison and Reilly (2011: 8).

Woolley (2009: 7) makes one aware that researchers have found that there are difficulties with successfully integrating data sets from two different research approaches. One of the main reasons for this stems from the fact that there is a lack of literature associated with good research examples where mixed-method designs have been implemented successfully. This fact leaves researchers without a point of reference to get a better understanding of how, or if, a mixed-methods approach is relevant to their research.

According to Collins and O’Cathain (2009: 2-7) there are ten points that a novice researcher should be aware of when designing a mixed-methods study. These ten points are discussed under three phases namely: research formulation which discusses five points, research planning which discusses two points and research implementation which discusses the final three points. These ten points were used as a point of reference while designing the sequential mixed-methods approach (Figure 1.2) for this study.

4.3 Research formulation phase

Research formulation is the first phase of Collins and O'Cathain's (2009: 2-7) guidelines for designing a mixed method; in this phase there are five stages, which include the following:

4.3.1 Importance of a definition

Within a shared profession professional language will always be used. An important element of language is definitions, which allow researchers to communicate accurately to an audience, as well as to collaborate with peers when designing a research study. Because mixed-methods research is an up-and-coming paradigm, new definitions are also coming to the fold. Different researchers refer to the term, mixed-methods, in a different manner. It is therefore important for a researcher to be aware of these emerging definitions in order to understand mixed-methods as a research design, and to distinguish mixed-methods better from single-method approaches (Onwuegbuzie & Johnson, 2006: 48-63). In order to gain enhanced understanding of mixed-methods as a research paradigm, it was pertinent to view research initially from a qualitative point of view and then from a quantitative approach.

4.3.2 Importance of mental model for mixing

A researcher's decision to employ a mixed-method approach is influenced by the researcher's mental model. A mental model, according to Zhang (2008: 2087-2098), is a mindset, and is made up of a researchers' understanding, ideals, individual assumption, and beliefs about what an effective mode of inquiry encompasses. Therefore it is important that a researcher be aware of his or her mental model, and of the extent to which this way of thinking shapes his or her understanding of what represents thoroughness within a study. The mental model or philosophical paradigm that defines this particular study discussed in Paragraph 4.7 guided the decision for the research process framework (Figure 1.1) and organisation of the investigation (Paragraph 1.7).

4.3.3 Utilising typologies of designs

In examining typologies, researchers are awarded the opportunity to compare, contrast and gain a deeper level of understanding of the mixed-methods research process. Although typologies of designs are limited and do not offer a complete solution as to how mixed-methods should be implemented, they can serve well to assist researchers in differentiating mixed-methods from other research paradigms, namely quantitative and qualitative ones. By differentiating mixed-methods from other research approaches, authenticity is achieved. Typologies also offer researchers a structure for the design and implementation of mixed methodology studies, as well as vocabulary to use when interpreting and disseminating information acquired from the study Collins and O'Cathain's (2009: 2-7).

4.3.4 Selecting the reason, rationale, and purpose for mixing

Teddlie and Tashakkori (2009: 162) developed a typology which comprises three universal categories, which can be used by the researcher to recognise a variety of reasons for implementing a mixed-methods study. These three categories are (a) A researcher's personal reason for implementing a study, (b) The researcher's reasons for progressing his or her knowledge, and (c) Societal reasons linked to enhancing or empowering society, institutions and subjugated groups. According to Collins and O'Cathain (2009: 2-7), this three-step process influences the researchers, research objectives and the questions or hypothesis to be developed.

Collins and O'Cathain (2009: 2-7) also mention a five-step typology developed by Green *et al* in the 1980s, which highlights five reasons for a researcher to implement a mixed-methods approach. These five purposes are linked to the data analysis step of the mixed-methods research process and include:

- Triangulation: Triangulation involves comparing findings derived from different research methods in order to analyse the observable fact.
- Complementary: Complementary research employs the use of a number of methods to assess a variety of observed facts.

- Development: Developmental research focuses on the researcher employing both qualitative and quantitative methods in a sequential manner as is the case with this research.
- Expansion: An approach which involves using alternative methods to measure various phenomena.
- Initiation: Initiation focuses on addressing the objective of discrepancy. This type of analysis employs the use of diverse methods to evaluate different dimensions of the phenomena being observed.

This study took on more of a developmental approach when the Delphi was first implemented, followed by the use of questionnaires to collect data.

4.3.5 Determining the research question

Mixed methodology questions contain aspects of both an exploratory nature and statistical nature. Hence the answers to a mixed-method question contain information that is both descriptive and statistical. In developing a mixed-methods question, Teddlie and Tashakkori (2009: 326) recommend that the main question should contain both quantitative and qualitative aspects, followed by sub-questions, which are a combination of separate quantitative and qualitative questions.

Reversing the process by creating the sub-questions first and then creating the mixed-methods question from the sub-questions is an alternative view advocated by Creswell and Plano Clark (2011: 167). Either way the researcher needs to develop a question and sub-questions that contain both qualitative and quantitative aspects, which was done in Paragraph 1.3.

4.4 Research planning phase

Research planning is the second major phase in Collins and O'Cathain (2009: 2-7) ten-tip programme for novice researchers. In this phase two key steps are discussed:

4.4.1 Selecting a mixed-methods research design

When selecting a mixed-methods research design, two options are available to the novice researcher.

He or she can either choose a pre-existing design or develop a design in line with the specific aims and objectives of the study. There are a variety of typologies to assist the novice researcher in selecting a research design. One of these typologies is the Methods-Strands Matrix typology, which was developed by Teddlie and Tashakkori (2009: 140). This typology assists a novice reader's choice by presenting design alternatives that are organised by (a) selecting the type of approach that will be used in the study. This approach can be a mono-method, which entails the implementation of qualitative or quantitative approaches across all stages of the study, or a mixed-method approach, which employs both qualitative and quantitative methods that are mixed across the stages of the study; (b) choosing the number of strands to be implemented in the study. This study opted for the sequential implementation of qualitative and quantitative methods required to address the research questions.

According to Teddlie & Tashakkori (2009: 151), there are five multi-strand mixed method designs that a researcher may choose to use, namely parallel, sequential, conversion, multilevel and fully integrated.

For the purpose of this study a sequential mixed-method approach was chosen where both qualitative and quantitative methods were employed at different phases of the study. As part of the literature review, Chapter 3 employed the use of the Delphi method, which is a qualitative approach. However, during the analysis phase a quantitative design was chosen through the use of a questionnaire, which incorporated both open-ended and closed-ended questions.

4.4.2 Determining the sampling design

The strategies used to select the unit of analysis and its size, are important. This is due to the fact that the sample selected by the researcher will have an impact on the end results. According to Collins and O'Cathain (2009: 2-7), a researcher's sampling decisions should be reflective of both the qualitative and quantitative segments of the

study. Probability, purposive, convenience and mixed-methods sampling are the four categories of sampling that Teddlie and Yu (2007: 77) offer to the researcher as options.

During the Delphi study snowball sampling was executed, where eight experts were identified, of which five chose to participate as indicated in Paragraph 3.2. The sample size of five, according to Delphi guidelines, was efficient, as it did not exceed ten individuals. The sampling design for the quantitative portion of the study was determined as follows. Three separate knowledge cafés were implemented with 42 undergraduate students, 42 post-graduate students on tertiary level, as well as 27 working individuals and knowledge management practitioners. This was in line with the research question stated to assess the effectiveness of knowledge cafés in a number of knowledge sharing applications.

This sample was designed as a voluntary sample and every individual who participated in the knowledge cafés formed part of the sample. In total 111 respondents formed part of the quantitative portion of the study (also refer to Figure 1.1)

4.5 Research implementation phase

4.5.1 Collecting data

The eighth point on Collins and O'Cathain's (2009: 2-7) list pertains to the data collection process. Collecting data is essential to the empirical part of any empirical research study. According to Abowitz and Toole (2010: 108-116), no single method is best for collecting data. The methods selected to collect data should complement both quantitative and qualitative aspects of a mixed-methods study. This can be achieved through the use of multiple data-collection methods, for example interviews, surveys or questionnaires or by selecting a single method and adding two facets to the method chosen. An example of adding two facets to one method could be the development of a questionnaire with both open-ended and statistical questions, which were in fact included in this study. A two-faceted questionnaire was designed due to the advantages of questionnaires being a low-cost means to obtain data from a potentially large number of respondents. The type of questions that were used in the questionnaires were both

open-ended, which do not restrict answers and allow for respondents' opinions, and closed-ended, which included responses that are of a dichotomous (yes/no), as well as rank-ordering nature. With both types of questions there are advantages and disadvantages. Some of the major advantages and disadvantages highlighted by Barker, Pistrang and Elliott (2002: 109-117) include the following:

(i) Open-ended questions

The advantages that can be associated with open-ended question include the fact that open-ended questions enable the researcher to study multifaceted experiences. They also allow for in-depth responses from participants, as they allow the respondent free rein over the answers they choose to give. This allows for individual opinion to reveal itself.

With advantages come disadvantages and the disadvantages associated with open-ended questions include the fact that it is often difficult to evaluate the reliability and validity of verbal data and responses are time-consuming to analyse because they produce large quantities of data. Another pitfall of open-ended questions is that they often cause inconsistency in terms of the way in which questions are answered. Respondents who are verbally gifted tend to provide full answers, whereas individuals who are less verbal will often give a limited answer or leave such a question blank. Open-ended questions in written questionnaires are often left blank because of the exertion it takes to answer such a question Barker, Pistrang and Elliott (2002: 109-117).

(ii) Closed-ended questions

The major advantage associated with closed-ended questions is that the answers are easier to analyse and quantify and that comparison across respondents is clear-cut. The disadvantage of using closed-ended questions is that answers are constrained. A questionnaire with only closed-ended questions can be frustrating to respondents, as they may feel that they are not getting the opportunity to present their own views. People tend to understand questions differently and respondents are forced into a reply that may not seem natural to them Barker, Pistrang and Elliott (2002: 109-117).

In order to manage the stated disadvantages of the various types of question, it was decided to employ the use of both open and closed questions, thus balancing the responses and countering disadvantages and advantages of both kind of questions.

Having stated the advantages and disadvantages of open and closed-ended questions, it is also important to consider various guidelines when designing the questions for the questionnaire. The criteria suggested by Malhortra (2006: 83-93) were taken into consideration when designing the questionnaires, for this specific study. When using open or closed-ended questions, there are key points that must be taken into consideration in order to develop and interpret questions effectively.

- Clarity: The context of questions was clear-cut and unambiguous. When reading a question, the respondent should not be confused about what is being asked. Confusion or incorrect interpretation leads to questions being answered according to the respondents' understanding of the question, which influences the outcomes of one's study.
- Leading questions: Formulating a leading question, which influences a potential respondent's answer, is a very easy mistake to make. A leading question gives innuendo as to how a respondent should answer a specific question. A question that leads the potential respondent will lead to a study being biased. Therefore it is best to avoid formulating leading questions.
- Phrasing: The English language includes of adjectives, verbs and nouns, which can have either positive or negative connotations. Hence it was essential to phrase words in a manner that reflects the true essence of a stated question. The negative or positive connotation of words in sentences could potentially generate different data, simply because of the way in which each sentence had been phrased.
- Embarrassing questions: No individual enjoys being placed in an awkward position. It is therefore the duty of the researcher to ensure that questions which may cause embarrassment are avoided. Pursuing questions that cause awkwardness will ultimately have an effect on the data that a researcher will receive.

- Hypothetical questions: The use of hypothetical questions was avoided, as questions of this nature will not generate answers that reflect a respondent's honest opinion. This is because the answers produced by respondents are ambiguous and lack consistency, and force individuals to think about something that they had perhaps never thought about.
- Prestige bias: Prestige bias is the phenomenon where respondents tend to answer a question in a manner that makes them feel better. This does not necessarily mean that they literally lie; rather they try to paint a better picture of themselves. Prestige bias often occurs where questions refer to one's capability, for example asking individuals how long it takes them to learn a particular skill. They are most likely to give a response that shows that they are faster than they really are. In order to minimise this phenomenon, the questionnaire is regarded as private. This is in line with the ethical considerations stipulated for this study (Paragraph 1.6). Distance is also a contributing factor. A respondents' answer is more likely to be honest when there is a critical eye (researcher) looming around.

For the purpose of this study a questionnaire was designed that incorporated two open-ended questions and eight closed-ended questions. One of the reasons for keeping the open-ended questions to a minimum was time. Questionnaires that are not time-consuming for the respondent to answer tend to work best (Malhortra, 2006: 83-93).

4.5.2 Conducting data analysis

According to Onwuegbuzie and Teddlie (2003: 351-383) and Teddlie and Tashakkori (2009: 250), a mixed-methods research design employs both qualitative and quantitative analytical techniques. Some of these techniques that a researcher can use to analyse data received include data reduction, data display, data transformation, data correlation, data comparison and data integration. For the Delphi study and open-ended questions from the questionnaire implemented, a content analysis approach was adopted. Various themes were identified from the answers given and then discussed. For the statistical section of the questionnaire, a combination of data display, data comparison and data description was used. Answers given by respondents were

depicted in a variety of graphs and subsequently discussed and compared. Univariate analysis was used in order to provide descriptive statistics (Steyn, Smit, DuToit, Strassheim, 1994: 5) ordering and summarising the data by means of graphic representations from frequency tables (Willemse, 2009: 25).

The open-ended questions were analysed through the use of content analysis. The focal point of content analysis is to identify emerging themes in text or speech. As a researcher, one should not only identify what people discuss most, but all the underlying themes, and distinguish how themes relate to one another. Although content analysis is theory-driven, meaning that theory determines what one looks for, inductive reasoning was used to analyse the open-ended questions for this study. Transcripts of the participants' open-ended questions were coded using analytic coding from which themes were identified (Glesne, 2006: 152), and subsequently discussed in Chapter 5.

4.5.3 Legitimising inference and formulating generalisations

Ensuring the inferences made by the researcher are legitimate is the aim of this final step. Collins and O'Cathain (2009: 2-7) offer two possibilities which may be used, Onwuegbuzie and Johnsons' (2006: 48-63) legitimisation model or Dellinger and Leeds's (2007: 309-332) validation framework.

The ten steps that have been discussed were developed in the hope of assisting the researcher to appropriately plan and implement a mixed-methods research design appropriately. As with any research method, there are strengths and limitations to implementing a mixed-methods approach, which had to be taken into consideration when designing this mixed-methods design.

4.6 Strengths and limitations of mixed-methods design

According to Milon (2004: Internet), there are various strengths and limitations to implementing a mixed-methods research design. The strengths of the mixed-methods approach designed for this specific study included the following:

- Words and graphs were used to add meaning to the numbers obtained from the questionnaire. A researcher need not rely on one form of presentation.

- Numbers were incorporated to add truthfulness to the words and graphs.
- The mixed-methods approach designed for this study incorporates the strengths from both quantitative and qualitative research.
- A mixed-methods researcher can produce and test a grounded theory.
- Mixed-methods research can answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach.
- A researcher can use the strengths of an additional method to overcome the weaknesses in another method by using both in a research study. Hence methods complement one another.
- Mixed-methods research can provide stronger evidence for a conclusion through integration and validation of findings.
- Mixed-methods research can add insights and understanding that might be missed when only a single method is used.
- Mixed-methods research can be utilised to increase the generalisation of the results.
- Qualitative and quantitative research used together produce more complete knowledge necessary to inform theory and practice.

The limitations of mixed-methods research are summarised as follows (Milon, 2004: Internet):

- It can be difficult for a single researcher to carry out both qualitative and quantitative research, especially if two or more approaches are expected to be used concurrently.
- The researcher has to learn about multiple methods and approaches and understand how to mix them appropriately.
- Methodological purists contend that one should always work within either a qualitative or a quantitative paradigm.
- Mixed-methods research can be more expensive to implement.

- Mixed-methods research is more time-consuming, largely because that one has to design the actual study and in this design both qualitative and quantitative methods for data collection and analysis need to be understood.
- Some of the details of mixed research still need to be fully worked out by research methodologists (e.g., problems of paradigm mixing, how to analyse quantitative data qualitatively, how to interpret conflicting results.

According to Jogulu and Pansiri (2011: 687), “The triangulation of research methods strengthens the findings and inferences made for understanding social phenomena in more depth, compared to using a single method”. In line with this view, the researcher too believes that integrating methods from both quantitative and qualitative approaches is the pre-eminent way to ensure a successful study.

Having discussed the research paradigm to which this research study adheres, it was also important to discuss the philosophical paradigm that this study centres on, as this offered the mental model for mixing the methods.

4.7 Philosophical paradigm

A philosophical paradigm can be defined as a way of thinking or viewing reality, which is influenced by the assumptions, perceptions, ideals and traditions that an individual or a group of individuals hold. According to Brennan, Voros and Brady (2011: 103), “A paradigm represents a worldview that defines, for its holder, the nature of ‘the world’, the individual’s place in it, and the range of possible relationships to that world and its parts.” Furthermore, they state that in order for research to be implemented correctly, the philosophical foundation that drives the research needs to be understood, since each methodological approach has within it an embedded philosophical foundation (Brennan, Voros & Brady, 2011: 103).

According to De Loo and Lowe (2011: 22-38), when selecting a philosophical paradigm for quantitative or qualitative research there are no specific characteristics regarding which paradigm should be selected for the particular type of research. Integrating paradigms is a possibility that researchers can take into consideration. If researchers

choose to borrow and integrate paradigms from different research methods, they should ensure that they have comprehensively explained the reasons for their decision.

Many theories have been developed over the years, but for the purpose of this study both social systems theory and complexity theory were incorporated. Social systems theory, which was developed in the 1920s, is a narrower field of general systems theory, and stems from the subject field of biology. Social systems theory focuses on analysing a group of objects which work together in order to achieve a specific outcome. According to Smith (2001b: Internet), a systems approach is characterised by some of the following traits:

- Interdependency: Objects and their attributes are interdependent. This simply means that independent elements can never constitute a system.
- Goal seeking: A systems theory means that systematic interaction must result in some goal or final state, being attained.
- Inputs and outputs: In a closed system, inputs are determined once on a regular basis, whereas in an open system additional inputs are admitted from the environment.
- Transformation: Transformation of inputs into outputs is the process by which goals are obtained.

In order to discuss social systems further, reference is made to Luhmann's 1995 social systems theory. According to Kadinov and Varey (2008: 3), Luhmann's 1995 work on social systems is not an easy read; his ideologies are complex and abstract, with a minimal amount of explanation. A German sociologist, administration expert and social systems theorist, Luhmann identified communication as the core element of a social system. Social systems are systems of communication that exist within a larger societal system, which encompasses all communication. Society, representing the external environment, is portrayed as highly complex because of the content it holds, whereas all the smaller systems within society are considered to be less complex, since they create barriers to the external environment and only draw on information that they intend to use from the external environment. Communication within a system operates by

selecting a limited amount of information from the outside world. Once this is done the system will create meaning from the information extracted (Luhmann, 1995: 195).

Smith (2001b: Internet), describes the general systems theory as a process where various parts cannot function individually; instead they need to function as a whole in order to achieve one specific goal. Smith (2001b: Internet) also states that this theory has contributed largely to the development of organisational learning. Organisational learning is a process which involves an organisation working together in order to generate knowledge continually through learning, in order not to re-invent the wheel (Spender, 2008: 158-176). Similar to social systems theory, various sectors within the organisation need to function as a whole in order to achieve organisational learning.

In addition, “complexity theory states that critically interacting components self-organise to form potentially evolving structures exhibiting a hierarchy of emergent system properties” (Lucas, 2006: Internet). Complexity theory is derived from chaos theory and states that equilibrium can never be reached; the world is in a constant state of chaos. It is from this chaos or complexity that ideas are born. Much like complexity theory, learning never stops; new knowledge is created or discovered constantly.

Chaos theory originates from mathematics and the natural sciences, and is of the premise that things are not really random, just complex. Snowden and Boone (2007: 69-76) further state that complexity, although originating from mathematics, is a way of thinking about the world rather than a new way of working with mathematical models. Hence the theory attempts to “explain apparent disorder in a very ordered way” (Stapleton, Hanna & Ross, 2006: 109). Edward Lorenz is commonly referred to as the individual who discovered this phenomenon of chaos, in 1960, while working on a problem regarding weather prediction (Durham, 1997: Internet).

Lorenz’s chaos theory suggests that the behaviour of a system can be explained by “nonlinear equations where the output of one calculation is taken as the input of the next. After multiple iterations the calculation takes on the characteristics of non-linearity and becomes specifically unpredictable while all the time remaining in a determined pattern”. In essence the initial conditions of a system will have an impact on the long-term behaviours of a system. So what one does now has an impact on what may

happen at a later stage. Take for example the butterfly effect; it states that, although tiny, the flapping wings of a butterfly can have a massive impact on the weather (Baggio & Sainaghi, 2011: 844). Chaos theory can be viewed as a method to promote understanding of the behaviour of various systems.

When summarising the two concepts, it can be said that social systems theory and complexity theory both state that in order for the sum of the whole to be understood, each individual part that contributes to the "whole" needs to be understood first. Take for example the human body; in order to understand how each organ works, one would first need to understand how the human body functions as a whole. The key difference between these two theories is that with social systems common ground can be reached, and there are boundaries between the internal and external environment. The internal environment only draws on what it needs from the external environment, whereas with complexity theory no state of equilibrium can ever be reached. There are no boundaries and chaos/complexity is the catalyst for greater understanding (Cleveland, 1994: Internet).

In the context of this specific study it can be stated that a knowledge café possesses elements of both social systems and complexity theory. A knowledge café operates as a system, where knowledge is shared and enhanced understanding of a specific topic is achieved. The system, however, is chaotic and complex in nature. As individuals communicate and share their knowledge in different groups, all at the same time, chaos and complexity ensue. It is through this complexity or chaos that new knowledge and enhanced understanding are gained.

One must keep in mind that although chaos and complexity are evident in the knowledge café process, barriers do exist; these barriers are formed in the sense that the focus of a knowledge café is always on a specific topic, which is withdrawn from the external environment. Participants in the knowledge café will only draw on information needed and consequently discard all other information. The knowledge captured varies from individual to individual, as everyone hears things differently and will identify certain aspects of the conversations held.

The initial stages of a knowledge café, where a large group of individuals come together in order to be briefed on a topic, serve as the complex phase where chaos and complexity are in abundance. This complexity comes in the form of large amounts of external information, or individuals with different opinions. As the large group is divided into smaller groups, a more social systems approach takes over, where individual entities discuss an issue in order to obtain a better understanding of the bigger picture. Once the small groups merge again, a broadened understanding of a concept should be the result. This broadened understanding can be viewed as a state of equilibrium. However, once the participants leave the boundaries of the knowledge café and enter into the world (the world in the context of this study is represented by industry or academia) complexity takes over again, hence there is a continuous cycle between social systems and complex systems, where sharing, learning and understanding never end.

4.8 Summary

Planning is the key to the successful implementation of any research design. Whether selecting a qualitative, quantitative or mixed-methods approach, planning is essential. This specific study adopted a mixed-methods approach, where both qualitative and quantitative methods were used. An in-depth discussion on how to implement a mixed-methods approach was then presented. Various other aspects including the philosophical paradigm, research design type, data-collection instrument and participant selection, were also discussed, in order to provide a clear understanding of how the empirical study was implemented and the thinking associated with this study.

In the chapter that follows, the results that were obtained from the empirical study are discussed.

Chapter 5

Empirical study

5.1 Introduction

Knowledge is one of the factors if not the defining one, of any organisation's success. For that reason knowledge sharing becomes an essential part of the competitiveness and sustenance of any organisation. The literature overview in Chapter 2 examined the importance of knowledge sharing and the different types of knowledge sharing methods, placing emphasis on knowledge cafés as a knowledge sharing technique. Chapter 3, a continuation of the literature review in Chapter 2, is fundamental to the study, as the literature discussed focuses on formulating the guidelines on how to implement a knowledge café successfully. This was achieved through the application of a Delphi study.

The aim of Chapter 5 is to assess the attitudes and perceptions of individuals concerning knowledge cafés as a technique for knowledge sharing, through the use of both quantitative and qualitative methods. As was stated in Chapter 4, three knowledge cafés were implemented on three different occasions, involving three different samples of individuals. From these knowledge cafés, information was acquired through the use of questionnaires. The questionnaires incorporated both open-ended and closed-ended questions.

The data collected was analysed separately according to each knowledge café, and then merged into a holistic view, which reflected all three data sets from which descriptive statistical conclusions were drawn. Undoubtedly Chapter 5 is fundamental to the study, as this is largely where the central research question, namely how effective knowledge cafés are as a knowledge sharing technique, is answered.

5.2 Characteristics of knowledge cafés

The sample size of this empirical part of the research study consisted of 111 individuals spanning three different knowledge café groups. This research study received a 100% response rate, because the sample was built on a census of all knowledge café

participants. The results obtained from the quantitative questions are presented according to each question, with all three knowledge cafés summarised into one graph, reflecting the attitudes and perceptions of the participants.

The first eight quantitative questions from the questionnaire were descriptively analysed, presented in graphical format based on frequency tables and subsequently discussed, whereas the open-ended questions were summarised and discussed according to emerging themes. Before displaying the graphs or addressing the qualitative results, it is essential to describe the characteristics of each café that was implemented. All three cafés were facilitated by leading knowledge management academics who both teach and conduct research on knowledge sharing techniques and knowledge management. These academics also had experience in facilitating knowledge cafés. Anonymity and confidentiality is maintained in accordance to the research ethics declared for this study (Paragraph 1.6).

5.2.1 Knowledge café one

Knowledge café one (KC1) consisted of 27 individuals, who were invited based on their role as knowledge practitioners or industry contacts with an interest in knowledge management. Although knowledge management practitioners were targeted in the invitation, there were also professionals who arrived who did not have experience in the field of knowledge management but were still included in the sample as the principle of knowledge management is applicable to all professionals, even if they are not formally involved in knowledge management. The knowledge café was hosted at the University of Johannesburg and the topic of the knowledge café was, “What are knowledge cafés?” and continued over four rounds, three of which were small group discussions and then finally a feedback session. The results received from the questionnaires administered at the end of each knowledge café are reflected collectively in Paragraph 5.3.

5.2.2 Knowledge café two

Knowledge café two (KC2) consisted of 42 post-graduate University of Johannesburg students, on honours, master’s and doctoral level, from two different subject fields,

namely Information and Knowledge Management and Tourism. The purpose of implementing KC2 was to test the application of knowledge cafés in academic settings according to objective three from Paragraph 1.3. The topic of KC2 was “How to avoid plagiarism” and the responses to the questionnaires are also reflected collectively in Paragraph 5.3.

5.2.3 Knowledge café three

Knowledge café three (KC3) consisted of 42 undergraduate students. The knowledge café was hosted at the University of Johannesburg, and offered to third-year Information and Knowledge Management students to test an undergraduate academic setting. The knowledge café spread over four rounds, three of which were small group discussions and then finally a feedback session. The topic discussed, was “What is the difference between information management, knowledge management and competitive intelligence” and the responses of KC3 are collectively reflected in Paragraph 5.3.

Having discussed the characteristics of the three knowledge cafés, it is now important to analyse, discuss and reflect the data that was received at the end of each of the three knowledge cafés.

5.3 Presentation and interpretation of quantitative results

According to Bryman and Bell (2011: 340) there are various ways in which quantitative questions can be answered, this is determined by the type of information that a question offers. With regard to the eight quantitative questions in this study, three types of variables were identified namely: ordinal variables, dichotomous variables and multiple indicator measures.

Figure 5.1 represents information of an ordinal nature as the variables were grouped into categories. Bryman and Bell (2011: 341) make note that when an interval or ratio variable is grouped into categories it is automatically transformed into an ordinal variable. Figure 5.2 through to 5.4 are viewed as dichotomous variables due to the fact that there were only two categories from which respondents had to choose, the categories being either “yes” or “no”. Lastly figure 5.5 through to figure 5.8 employed a multiple indicator measure using a 5 point Likert scale with a central neutral response.

All the quantitative questions utilised for this empirical component appear in Appendix B and were analysed based on a univariate approach where one variable was analysed at a time. More specifically, bar charts were used to illustrate the findings, which were then discussed. Below is an analysed summary compiled from the responses to the questionnaire.

5.3.1 Involvement in knowledge management

It was necessary to establish the profile of the participants hence a question about their formal involvement in knowledge management was asked (Figure 5.1).

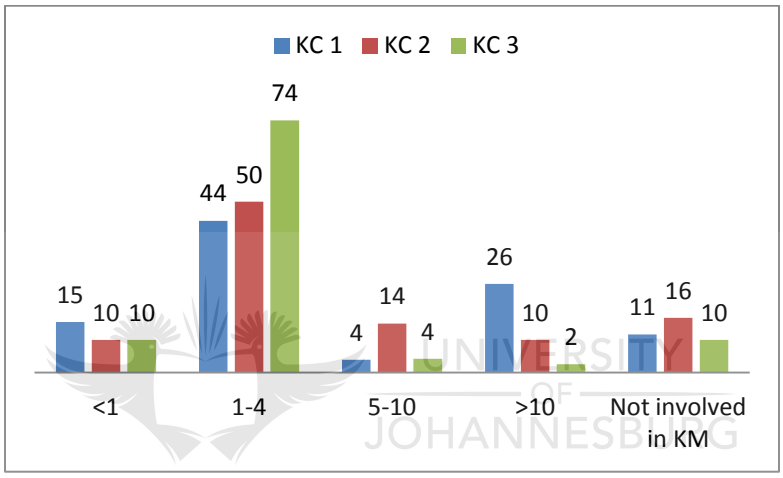

Figure 5.1: Involvement in knowledge management per number of years (Values shown in percentages % N=111) (Source: own research).

According to Figure 5.1, 44 % of the knowledge practitioners and industry participants who participated in KC1 one had one to four years' experience in knowledge management. The second highest number of participants, which was 26%, fell into the ten years' experience bracket, which was then followed by 15% of the participants falling in the less than one year bracket. Four per cent of the practitioners maintained that they had between five and ten years' experience in knowledge management, while 11% of practitioners categorised themselves as having no experience in knowledge management whatsoever. The 11% with no experience attended the knowledge café to learn about what knowledge cafés are and not in a capacity as knowledge manager.

Fifty per cent of the post-graduate students, who participated in KC2, maintained that they had between one and four years' experience in the knowledge management

industry. This is not a surprising number, as a considerable number of the students were also working individuals. Fourteen per cent maintained that they had five to ten years' experience in the knowledge management industry, while 12% considered themselves to have no experience in knowledge management. This number is not unusual, as some of the students were from the field of Tourism and it was likely that they were being exposed to the concept of knowledge management for the very first time, during that knowledge café process. Twenty per cent of post-graduate students were spread evenly between less than one years' experience or alternatively more than ten years' experience in knowledge management.

Knowledge café three saw 74% of the undergraduate students affirming that they had between one and four years' experience in knowledge management. Seventy four per cent is not a number that should be unexpected, largely because all the students who participated in this knowledge café had studied knowledge management as a subject for at least three years. Although they had no experience in industry, they had an understanding of the significance of knowledge management. Ten per cent of the students felt that they had less than one year's experience in knowledge management, while another 10% was of the opinion that they were not involved in knowledge management at all. The two numbers that were not expected were the 4% who felt that they had between five and ten years' experience in knowledge management and the 2% who felt that they had more than ten years' experience in knowledge management. Either these students were already in the working arena, as some were working part-time, or it was an error of judgment on the respondents part which confirms the necessity of the key points which were considered in Paragraph 4.5.1 (ii) of the questionnaire design.

A holistic view of all three knowledge cafés indicates that in terms of experience the undergraduate students were the highest number of participants with some form of experience, whether it was less than one year, one to four years, five to ten years or more than ten years. The next group was the knowledge practitioners, followed by the post-graduate students.

5.3.2 Prior awareness of knowledge cafés

The level of exposure to knowledge cafés was put into place in order to find out how recent the concept of knowledge cafés was to the respondents (Figure 5.2).

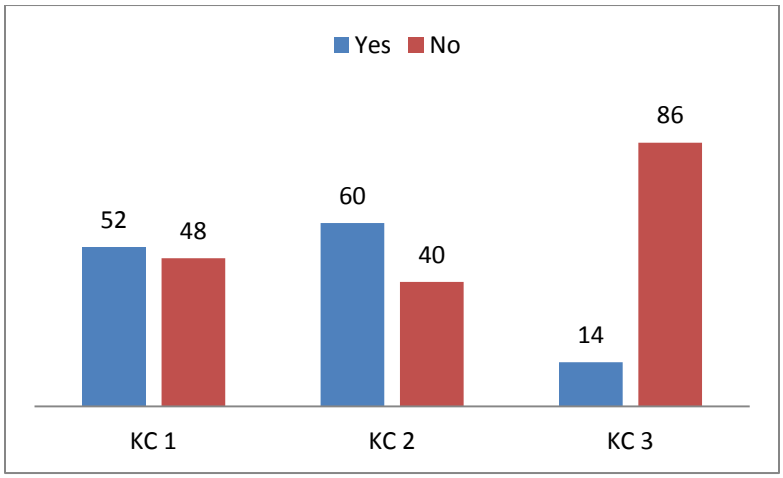

Figure 5.2: Awareness of knowledge cafés (Values shown in percentages % N=111) (Source: own research).

According to Figure 5.2, more than half of the knowledge practitioners (KC1) were aware of the concept of knowledge cafés. Considering that these individuals are knowledge practitioners, the number seems slightly low; however, the concept of knowledge cafés as a technique for sharing knowledge is fairly new, so this could explain the low awareness of the concept.

In KC2 two 60% of the individuals were aware of the concept of knowledge cafés. However, 40% had no idea what a knowledge café was. Apart from knowledge cafés being a new form of sharing knowledge, the lack of awareness could also stem from the fact that some of the post-graduate students present at the knowledge cafés were not from the Information and Knowledge Management field.

For KC3, the third-year Information and Knowledge Management students boasted the highest number of individuals with some form of experience in knowledge management. However, 86% of the students were not aware of the concept of knowledge cafés. This is further evidence that youthful overconfidence might have been responsible for their reports on the years of experience they have in the knowledge management field (refer to Figure 5.1).

Taking a holistic view of the responses to both question one and question two, it can be stated that experience in knowledge management does not necessarily equate to awareness of the concept of knowledge cafés, considering the recent popularisation of knowledge cafés as a knowledge sharing approach.

5.3.3 Participation in knowledge cafés

A connection would be expected between the level of awareness of knowledge cafés and participation in knowledge cafés (Figure 5.3).

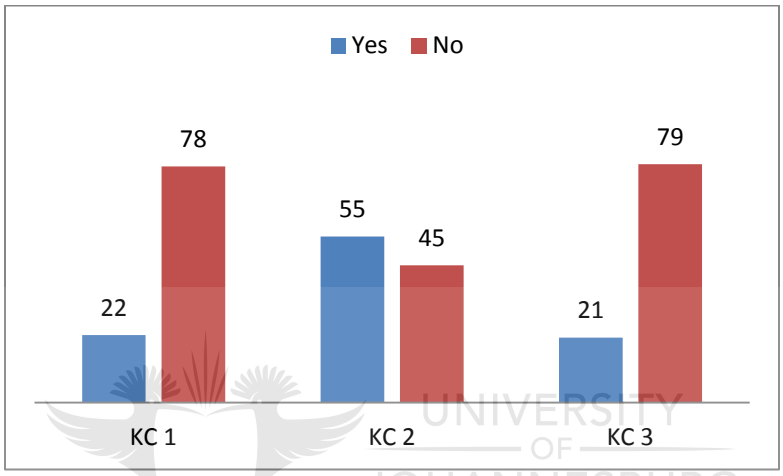

Figure 5.3: Participation in knowledge cafés (Values shown in percentages % N=111) (Source: own research).

Based on the percentages in Figure 5.3, 78% of the knowledge practitioners (KC1) had not participated in a knowledge café before the knowledge café offered by the researcher. This is not unrealistic, as being aware of the concept does not necessarily mean that an individual would have had the opportunity to be part of a knowledge café.

With 55% participation, post-graduate students (KC2) proved to be the group with the highest number of individuals who had participated in a knowledge café before the one offered for the purpose of this investigation. This number was justifiable, as the post-graduate students were also the group with the highest rate of awareness of the concept. That being stated, even though the number was the highest, 45% of the post-graduate students had still never participated in a knowledge café before.

Knowledge café three reflected that 21% of the undergraduate students (KC3) claimed to have participated in a knowledge café before the knowledge café on that particular day; however only 14% of the students knew what a knowledge café was before participating in the knowledge café that was implemented. This is further evidence of the overconfidence that this group had displayed in answering previous questions.

5.3.4 Facilitation of a knowledge café

It was necessary to determine whether respondents had facilitated a knowledge café previously (Figure 5.4).

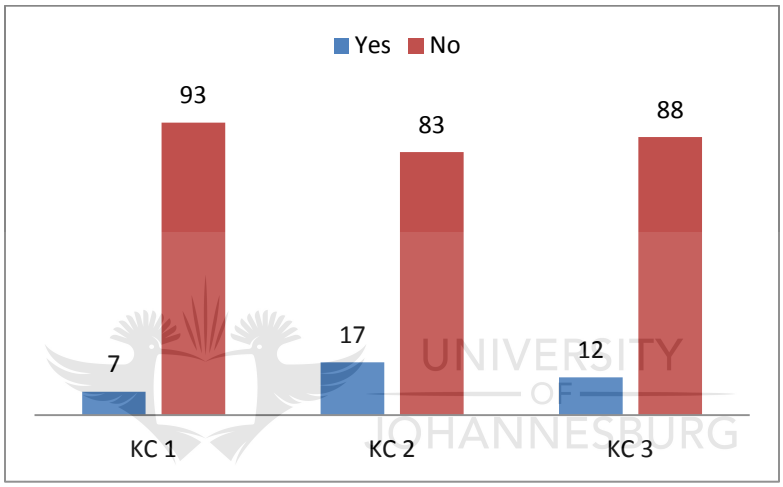

Figure 5.4: Facilitation of a knowledge café (Values shown in percentages % N=111) (Source: own research).

Figure 5.4 depicts that 7% of the knowledge practitioners (KC1) had experience of facilitating a knowledge café, whereas 93 had never facilitated a knowledge café. This number is reasonable, based on the fact that 78% of the participants had never participated in a knowledge café before, therefore could not possibly have facilitated one.

With regard to KC2, Figure 5.4 reflects that 83% of the post-graduate students had never facilitated a knowledge café. Only 17% of the individuals had experience of facilitating. This number is also not unreasonable, as 55% of the post-graduate students had participated in a knowledge café before.

Twelve per cent of the undergraduate students claimed that at some point in their lives they had facilitated a knowledge café. Given the fact that knowledge cafés are a relatively new means of sharing knowledge, it is highly unlikely that undergraduate students on a third-year level would have the experience or know-how to facilitate a sharing technique such as this, unless perhaps they were involved in industry for a number of years before commencing with their studies.

5.3.5 Understanding the expectations of the knowledge café

The effectiveness of knowledge sharing during the knowledge café would partly depend on whether the expectations of the café were understood, as indicated in the guidelines for knowledge cafés (Figure 5.5).

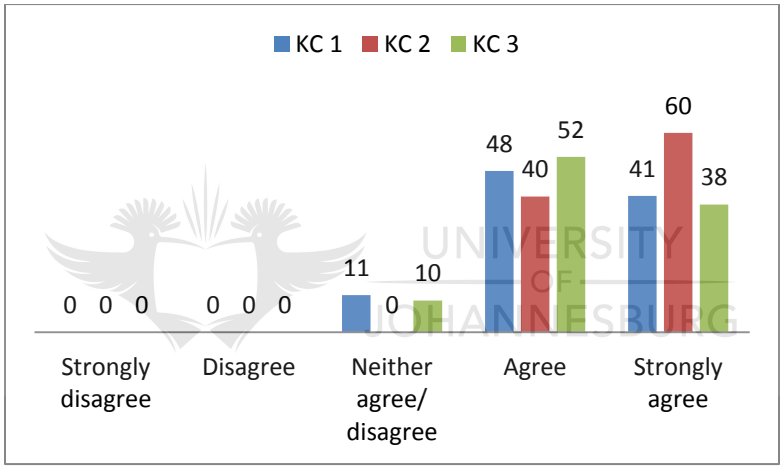

Figure 5.5: Understanding the expectations of the knowledge café (Values shown in percentages % N=111) (Source: own research).

According to Figure 5.5 the majority of the knowledge practitioners (KC1) understood what was expected of them during the knowledge café, with 48% agreeing and another 41% strongly agreeing with the statement. Eleven per cent of the knowledge practitioners were indecisive and chose to indicate “neither agree nor disagree”.

At KC2 all of post-graduate students felt that they understood what was expected of them during the knowledge café process. This was evident, as all the students gave either an “agree” answer or “strongly agree” answer. Knowledge café three saw 10% of the undergraduate students give a “neither agree nor disagree answer” while the rest of the undergraduates either “strongly agreed” or “agreed”.

Holistically it can be stated that most of the participants in all three knowledge cafés understood what was expected of them during the knowledge café. Understanding was a very important aspect, as in order for the knowledge café to be implemented smoothly, people needed to know what to do. Another important factor is that if individuals participated in the knowledge café correctly, they could then give an accurate account of their perceptions of the knowledge café.

5.3.6 Knowledge cafés as a successful knowledge sharing technique

In terms of knowledge cafés being a successful knowledge sharing technique, a very positive response was achieved (Figure 5.6).

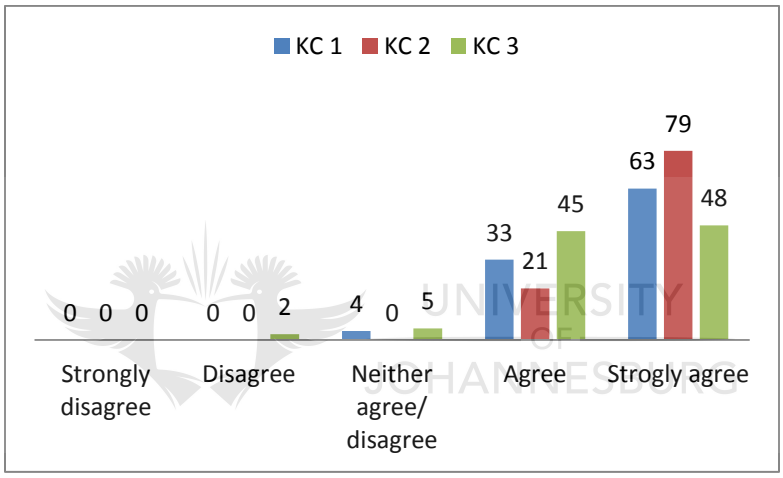

Figure 5.6: Knowledge cafés as a successful knowledge sharing technique (Values shown in percentages % N=111) (Source: own research).

Based on Figure 5.6, 96% of the knowledge practitioners (KC1) indicated that they found the process of a knowledge café to be a successful knowledge sharing experience by agreeing or strongly agreeing with the statement. Only one individual chose not to agree or disagree. This individual constituted 4% of the overall number.

With regard to KC2, 21% of the post-graduate students agreed that the knowledge café was a successful knowledge experience, with 79% of the individuals strongly agreeing about the overall success of the knowledge café experience. Ninety three per cent of those who participated in KC3 felt that the process was a success, indicated by agreeing to the statement.

Figure 5.6 also reflected that a majority of 93% felt that the knowledge café was a success. Only 2% of the group disagreed, while 5% were not sure whether they agreed with the success of the knowledge café as a technique for sharing or not.

5.3.7 Value of knowledge cafés for knowledge sharing purposes

All of the knowledge practitioners, post-graduate students and undergraduate students participating in the knowledge café felt that knowledge cafés were a valuable technique for knowledge sharing (Figure 5.7).

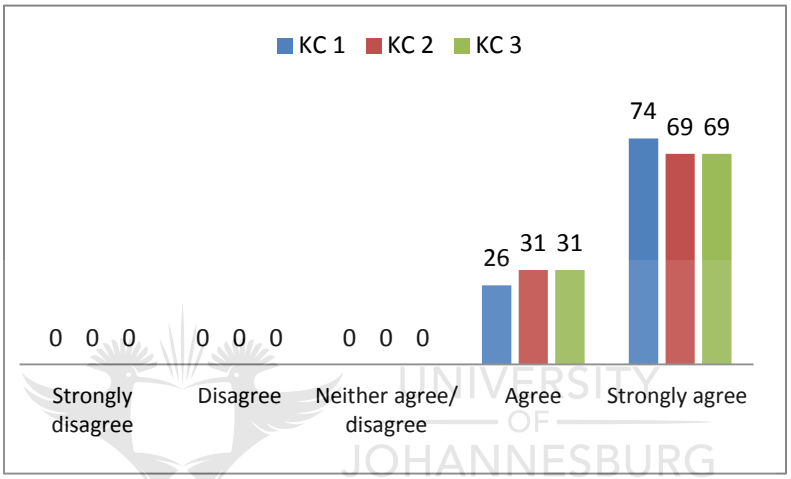

Figure 5.7: Value of knowledge cafés for knowledge sharing purposes (Values shown in percentages % N=111) (Source: own research).

This is clearly depicted in Figure 5.7, which shows that all the answers given were either "agree" or "strongly agree".

5.3.8 Application of knowledge cafés as an organisational knowledge sharing tool

It was necessary to determine whether individuals would be willing to implement knowledge cafés in their current or future organisations. Figure 5.8 reflects a positive response.

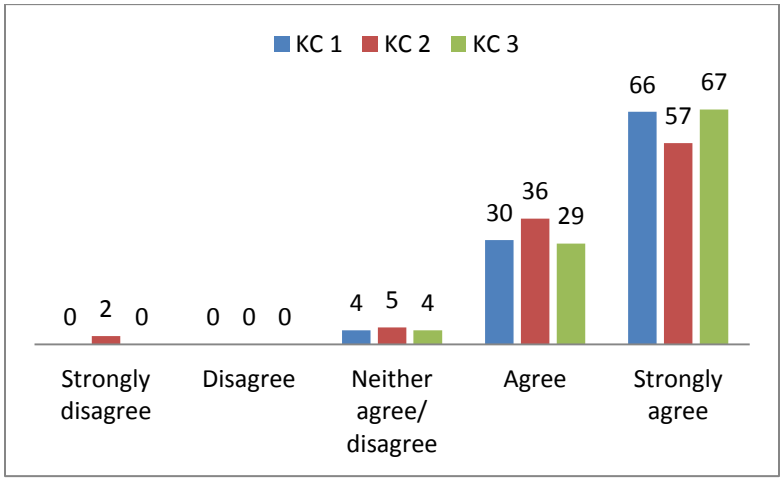

Figure 5.8: Knowledge cafés for organisational knowledge sharing (Values shown in percentages % N=111) (Source: own research).

In KC1, 30% of the knowledge practitioners agreed that they would employ knowledge cafés as a knowledge sharing tool for their organisations, while 66% "strongly agreed" and 4% "neither agreed nor disagreed". It is assumed that the respondents who selected "neither agreed nor disagreed were unsure as to whether the knowledge café could be used within their respective organisations or for their studies as a tool for knowledge sharing.

Based on Figure 5.8, 93% of the post-graduate students agreed or strongly agreed that they would employ knowledge cafés as a learning tool in their organisation. However, 5% of the respondents were unsure, as they neither agreed nor disagreed with the statement, while 2% the group strongly disagreed with this statement.

Figure 5.8 also reflects that 96% of the undergraduate students decided that they would use the technique in the organisations that they would one day work for, while 4% neither agreed nor disagreed.

Overall, when looking at all eight statements, paying special attention to statements six to eight, it can be stated that the attitudes and perceptions of individuals concerning knowledge cafés as a technique for knowledge sharing are positive across all three groups who participated in the knowledge cafés.

5.4 Presentation and interpretation of qualitative results

The two open-ended questions that were presented to the knowledge café participants read as follows:

- Please list possible practical examples from your organisation's perspective for which a knowledge café could work well as a tool to share knowledge.
- Please list possible practical examples from your organisation's perspective for which a knowledge café could not work well as a tool to share knowledge.

With regard to all the undergraduate students, as well as the post-graduate students who did not have work experience, it was requested that they answer the two open-ended questions from a student perspective. In other words, "How could knowledge cafés be beneficial to students in an academic environment?" However, when analysing the data it became evident that some of the students on under-graduate level also provided responses from an organisational perspective. The opposite was also evident in the knowledge practitioner group, where some of the individuals were from academic organisations, and so gave answers focused on the academic arena.

Below is an analysed summary compiled from the responses received from the questionnaire. A content analyses approached was used to compile this summary.

5.4.1 Uses of knowledge cafés for knowledge sharing: Organisational perspective

In any organisation, knowledge sharing is essential; knowledge cafés are a technique which offers individuals in an organisation the opportunity to communicate and share knowledge on various subject areas related to work.

According to the individuals who participated in the various knowledge cafés, the following were areas where knowledge cafés could be implemented as a tool for knowledge sharing within the organisation:

(i) Problem-solving: At some point, all organisations experience problems. Often the best way to resolve a problem is through conversation. Knowledge cafés, according to some of the participants, can serve as a platform for knowledge to be discussed among the relevant employees with regard to how a specific problem can be resolved.

(ii) Strategic planning: Simply put, strategic planning is the process of an organisation defining its direction. In order for an organisation to do so, its current position needs to be known. Once this position is known, decisions can be made on the steps that the organisation should take in order to reach its objectives. For an organisation to maintain competitiveness, it is essential that plans involving strategic direction be created. Some of the participants felt that knowledge cafés could assist in this matter. Considering that strategy requires employee interaction, this suggestion of utilising knowledge cafés seems fair.

(iii) Innovation/ implementing new ideas: Ideas often stem from informal conversations; perhaps something said during the course of the day triggers the memory into thinking of a new product or service. An innovative organisation is an organisation that constantly generates new ideas and then implements these ideas successfully. A knowledge café is a technique that can assist an organisation in generating new ideas and then developing a process to implement the generated idea.

(iv) Developing trust and instilling unity among employees: According to some of the participants, knowledge cafés are an effective means of developing trust and instilling unity among employees. Trust and unity are achieved through communication and the bringing together of individuals.

(v) Decision-making: One of the ways in which organisations gain competitive advantage over other organisations is decision-making. The ability to make effective decisions is key, hence a number of participants felt that knowledge cafés are a valuable technique to assist in the decision-making process.

(vi) Team-building: The aim of team-building is to build company spirit and boost employee morale. Through the process of knowledge cafés, organisations can achieve an effective team-building experience. As was stated in Chapter 3, knowledge cafés are a very good way to connect people.

(vii) Bridging gaps between top management and workers: Knowledge cafés can assist in bridging gaps between top management and workers by means of connecting individuals through conversation.

(viii) Feedback sessions: Often in organisations, projects are implemented for various reasons. Knowledge cafés can serve as a technique to give feedback on the successes and failures of these completed projects.

(ix) Employee orientation: A knowledge café can serve as a platform for orientating employees with regard to new processes and methodologies. Training on research resources and mentoring of new recruits are functions that some of the participants felt could be achieved through the use of a knowledge café.

(x) Rapid transferral of information: Knowledge cafés usually take place on a single day for a certain amount of time. Within this time, a certain amount of information is shared. Because the time frame for sharing information is limited, knowledge café participants can end up sharing their information at a rapid pace.

(xi) New insight: To have insight is to know. In order to function efficiently in the workplace, one needs to gain new insight on a constant basis. Knowledge cafés allow employees the opportunity to gain new insight on various work-related topics, through sharing their experiences.

(xii) Debates on various issues: Knowledge cafés serve as a platform for communication on a niche topic. When sharing information with a variety of individuals, consensus is not always reached. This lack of consensus then sparks debates on various issues within the knowledge café.

(xiii) Sustaining organisational knowledge: In order to make strategic and successful decisions, an organisation requires sufficient resources. One of these resources is knowledge; hence satisfying organisational knowledge is a very important aspect of any organisation.

Brainstorming, meetings, workshops, and seminars were other avenues participants mentioned, where knowledge cafés could be used in order to assist the various processes. Seeing that these are alternative mechanisms rather than specific uses for knowledge cafés, these will not be discussed further.

According to the individuals who participated in any of the three knowledge cafés, the following were areas where knowledge cafés could be implemented as a tool for knowledge sharing within academia:

(i) Group discussions/study groups/class discussions: Students can interact with one another in order to enhance knowledge, solve problems and gain a better understanding of various issues. Of course these issues would be subject-related.

(ii) Material development: Through conversation, lecturers can improve on the courses that they offer. As was stated before, gaining new insight allows an individual to excel in the work environment. Part of a lecturer's work is to ensure that student material (work) is up to date and relevant.

(iii) Preparations for examination/enhanced performance on tests or examinations: From a student perspective, it was stated that knowledge cafés can assist students in preparing for their examinations, and thus assist them in enhancing their overall performance.

Having discussed the uses of knowledge cafés for knowledge sharing from an organisational perspective, it was also necessary to view the potential situations in which knowledge cafés could fail.

5.4.2 Failures of knowledge cafés for knowledge sharing: Organisational perspective

According to the individuals who participated in any of the three knowledge cafés, the following were areas where knowledge cafés could not be implemented as a tool for knowledge sharing within organisations.

(i) No reward: When discussing the issue of rewards or lack thereof, the saying comes to mind, "nothing in life is for free". Society has conditioned many to adhere to that notion, so why then should it be any different when the issue is focused on knowledge sharing? Some of the knowledge café participants felt that individuals may not want to share their knowledge if there is no reward linked to the process of sharing; however, there are many critics of the reward system. Referring to Paragraph 2.4 where the works of Gurteen and Wunram were discussed, it seemed apparent that employees did

not really know how or if they should be rewarded at all. Most of the employees that Wunram spoke to felt that knowledge sharing was part of their jobs (Wunram as quoted by Gurteen, 2012: Internet).

(ii) Conflict-management tool: Conflict management is the process of using specific methods such us negotiation and adjudication in order to bring an end to social conflict within the workplace. Knowledge cafés, according to participants, cannot be used as a conflict-management tool.

(iii) Unclear rules of engagement: If individuals do not understand the objectives or purpose of the knowledge café, it cannot be implemented effectively. One can only know what to do if the rules of engagement are communicated correctly.

(iv) Lack of trust: As was discussed in Paragraph 1.1, knowledge sharing requires trust. If participants involved in a knowledge café do not trust one another, knowledge sharing will in effect not take place or alternatively participants may choose to share the incorrect knowledge.

(v) Lack of background information: One of the participants gives an example: “When discussing fine detail within a specific centre there is no use doing a knowledge café with people with no insight/background knowledge about the process”. Clearly all participants in a knowledge café need to have some insight into the topic to be discussed.

(vi) Matters of confidentiality: Often in organisations there are matters of confidentiality, which cannot be discussed openly with all employees in the organisation. In cases such as these, implementing a knowledge café would be a complete waste of time as certain information is restricted.

(vii) Lack of good facilitation: As was mentioned in Paragraph 3.2.1, implementing a knowledge café requires a suitable venue, which allows for movement, adequate time to share knowledge and the right moment. Choosing the right moment refers to when and why the knowledge café will be implemented. An organisation should only implement a knowledge café if the benefit of implementing it is made clear.

(viii) Lack of top management “buy-in”: If top management believes that the knowledge café is worthless and a complete waste of time, the idea will be scrapped. In industry management buy-in is important, as this can also influence the way in which employees respond to the idea or process. Lack of top management buy-in is linked with output; since the benefits of a knowledge café are intangible, it becomes difficult to sell the idea.

(ix) Geographical factors: Knowledge cafés require face-to-face interaction, therefore it can prove difficult for geographically dispersed organisations to share knowledge, although it is not impossible to use an online platform.

(x) Relevance to “real work”: One of the participants felt that a knowledge café was a waste of time, and should not be considered when “real work”, as it was put, needs to be done.

According to the individuals who participated in any of the three knowledge cafés, the following were areas where knowledge cafés could not be implemented as a tool for knowledge sharing in academia:

(i) Forced participation/negative attitude: Forced participation and negative attitudes can hinder the knowledge sharing process.

(ii) Unclear rules of engagement: This problem that was mentioned from the corporate perspective as well. It seems as though from an academic point of view it was also felt that knowledge cafés cannot be implemented if the rules of engagement are not made clear.

(iii) Learning styles: Not all students learn in the same manner; some students remember and understand better when they read something, rather than hearing something. For such students it would not work well as a learning tool, although Paragraph 3.2.2(iii) point towards the inclusion of auditory and visual types of learning as supported by knowledge cafés.

(iv) False information and apprehension or omission of knowledge: Deliberately falsifying information or omitting knowledge is linked to trust and power. If there is lack

of trust among individuals or if participants associate retaining information with power, they may choose to provide falsified information or alternatively omit information which may be beneficial to the knowledge café process.

(v) Pressure: According to the participants, pressure is a component that affects the way individuals share knowledge.

(vi) Language barrier/culture: In Chapter 3 it was highlighted that one of the barriers to sharing knowledge is language; if one cannot understand one cannot share. Language barriers tie in with culture, for instance in some cultures women and men do not converse directly. In order for the knowledge café to be effective, barriers such as these cultural barriers need to be taken into account.

Based on the information acquired from the qualitative component of the empirical study, both positive and negative aspects were addressed with regard to knowledge cafés as a knowledge sharing technique. However, from a corporate perspective the positive outweighed the negative. Suffice it to say that overall, with both qualitative and quantitative results taken into consideration, one can conclude that individuals in the corporate arena had a positive attitude and perception of knowledge cafés.

From an academic perspective the results obtained from the qualitative information reflected a more negative attitude, based on the fact that more failures of knowledge cafés being implemented in the academic world were highlighted. However, if one considers the quantitative results, it is plain to see that knowledge cafés are considered as an effective technique for knowledge sharing.

5.5 Summary

The focus of Chapter 5 was on discussing the findings on the attitudes and perceptions of individuals in both the corporate domain and academic domain, concerning knowledge cafés as a technique for knowledge sharing. Through the implementation of a questionnaire containing both open-ended and closed-ended questions, the attitudes and perceptions of the individuals were tested. Some of the major findings of this empirical component can be summarised as follows:

- Generally the attitude to knowledge cafés was positive from both a corporate and academic perspective.
- From a corporate perspective, more positive uses for knowledge cafés were highlighted, perhaps because knowledge cafés have been functioning in the corporate realm for longer than in the academic world.
- Based on the above answers, knowledge cafés are much more likely to be implemented in the corporate sphere than in academia. However, this may change over time if the process of knowledge cafés is implemented on a regular basis within academia.

Based on the above findings, Chapter 6 will present the conclusion to the study. It will also provide a few recommendations and point out possible areas for future research, based on the findings of the preceding chapters.

Chapter 6

Synthesis, recommendations and conclusion

6.1 Introduction

The aim of Chapter 6 is to synthesise the major findings of the study, in correlation to the stated objectives and research questions in Chapter 1. Chapter 6 also offers recommendations for future research on knowledge cafés, as well as an overall conclusion of the entire study.

6.2 Synthesis

Through addressing each of the formulated research questions, this study has succeeded in attending to each of the research objectives. By assessing the attitudes and perceptions of a portion of individuals, both in the corporate and academic realm, concerning knowledge cafés as a technique for knowledge sharing, the effectiveness of knowledge cafés as a technique for knowledge sharing was established.

Objective one: To discuss knowledge sharing and to create an inventory of the major knowledge sharing techniques

Knowledge sharing was defined in Chapter 2 as: “a process whereby a resource is given by one party and received by another” (Sharrat & Usoro, 2003: 187-196).

Chapter 2 was initiated by a brief definition of knowledge. it was then followed by an in-depth discussion of various concepts such as the SECI model, *ba* and knowledge assets as a form of knowledge conversion or knowledge creation. Chapter 2 also focused on discussing a variety of knowledge sharing techniques that exist in today’s knowledge economy.

Chapter 2 gave a brief introduction to the concept of knowledge cafés positioning it as a knowledge sharing technique of which limited peer reviewed scholarly literature was available. This prepared the investigation for addressing the second research objective of the study.

Objective two: To implement a Delphi study in order to determine the criteria or guidelines for successfully implementing knowledge cafés

In order to determine the criteria or guidelines for successfully implementing a knowledge café and subsequently to contribute to the body of knowledge on knowledge cafés, Chapter 3 focused on implementing a Delphi study with a panel of five experts who were called upon to discuss and reach consensus on the various issues introduced by the questions for the Delphi technique (Paragraph 3.2).

The Delphi process was intended to gather consensus from reliable expert opinion where a lack of information existed. Delphi as a data-collection tool was discussed in Paragraph 3.2 i-v, to clarify its implementation for this specific research project and was graphically presented in Figure 3.1. The information received from this Delphi procedure was then used as a guideline to implement the three knowledge cafés (Chapter 5), which formed part of the empirical component described in Chapter 4 of the study.

According to the panel of experts, the criteria or guidelines for implementing a knowledge café successfully were identified as follows:

- Time should be well managed.
- The size of the group should be considered.
- The skills of an expert facilitator should be retained.
- A suitable location should be selected.
- An informal atmosphere should be created.
- All participants in the knowledge café should know one another's names.

According to the guidelines mentioned, and in greater detail as reflected in Paragraph 3.2.1, three knowledge cafés were subsequently implemented in order to assess the attitudes and perceptions of participants concerning knowledge cafés as a knowledge sharing technique so that Objective three of the study could be addressed.

Objective three: To assess the attitudes and perceptions of individuals, both in the corporate and academic world, concerning the implementation of knowledge cafés as a technique for knowledge sharing

The empirical research, which was discussed in Chapter 5, revealed valuable findings with regard to the attitudes and perceptions of individuals in industry and academia concerning knowledge cafés as a technique for knowledge sharing. Although this is a relatively new knowledge sharing technique, it was clear that the individuals in both industry and academia should take note of the possible advantages to be gained from incorporating this technique as part of a knowledge sharing initiative. From a corporate view, some of the practical examples of where knowledge cafés could be implemented included issues such as problem solving, strategic planning and innovation, whereas from an academic perspective the practical examples included issues such as preparation for examination, class discussions and the development of subject material as highlighted in Paragraph 5.4.

The major findings that were deduced from this study can be summarised as follows:

- Generally the attitude to knowledge cafés is positive from both a corporate and academic perspective.
- From a corporate perspective, more positive uses for knowledge cafés were highlighted, perhaps because knowledge cafés have been functioning in the corporate realm for longer than in the academic world.
- Knowledge cafés are much more likely to be implemented in the corporate sphere then in academia. However, this may change over time if the process of knowledge cafés is implemented on a regular basis within academia, if academic venues are conducive to café-style set-up and if class sizes can be managed within the stipulated ideal guidelines for implementing successful Knowledge cafés (Paragraph 3.2.1, 3.2.3 and 3.2.4.

Taking into consideration both the qualitative and quantitative results, one can conclude that individuals within the corporate arena had a positive attitude and perception concerning knowledge cafés. This positive attitude was also evident from an academic

perspective. Overall, it can be stated that knowledge cafés are considered as an effective technique for knowledge sharing for specific situations.

6.3 Recommendations and areas for future research

This section is divided into two parts, namely recommendations on the use of knowledge cafés as a knowledge sharing technique both in industry and academia, as well as recommendations on areas of future research.

6.3.1 Recommendations

The aim of this research project was to give insight into the attitudes and perceptions of individuals concerning knowledge cafés as a technique for knowledge sharing. The findings of this study, could be used as a guideline for the effective implementation of knowledge cafés by numerous organisations. Not only were various areas of potential use highlighted, but also the perceived advantages of effectively implementing a technique such as this.

It is therefore recommended that organisations, whether corporate or academic, should consider the use of knowledge cafés to satisfy some of their knowledge sharing requirements, as an alternative to an existing repertoire of knowledge sharing techniques.

6.3.2 Areas for future research

During the literature study of this research project, it was evident that peer reviewed scholarly research on knowledge cafés and their use was lacking on both an international and local level, hence the need for a Delphi study to be implemented as the focal point in Chapter 3, in order to gain information on knowledge cafés. This lack of literature was also one of the limitations of the study. Understanding the concept of knowledge cafés and the potential benefits of implementing a knowledge sharing technique such as this is important for organisations, whether corporate or academic. Therefore research aimed at understanding knowledge cafés in order to enhance the

literature; in addition research to harness the potential benefits of knowledge cafés should be a study area potential researchers could consider.

Furthermore, numerous organisations should also consider implementing a study similar to this one, in order to gain new insight into the attitudes and perceptions of individuals in various organisations, concerning knowledge cafés as a technique for knowledge sharing. Perhaps this will give a more holistic view of the concept and its effectiveness.

An additional area for future research is the use of knowledge cafés for different levels of education. The academic knowledge café implemented in this study focused solely on tertiary students and knowledge management industry practitioners. Perhaps the same study can be implemented on a high school level as well as on a primary school level, in order to assess the attitudes and perceptions of a younger age group concerning the knowledge sharing technique.

Enquiring whether there is a correlation between a bad knowledge café experience and an individual's attitude is another possible area for future research. This poses the question, "Would individuals develop a negative attitude towards knowledge cafés for knowledge sharing if they encountered a café session that was not entirely successful?"

6.4 Conclusion

The final conclusions reached, based on this research project, are:

The perceptions and attitudes of individuals play a large role in the value of any knowledge sharing technique. Once potential participants recognise the value of a knowledge sharing technique, only then can it be implemented successfully.

Based on the attitudes and perceptions of the sample group who participated in this research study, knowledge cafés can be implemented in both the corporate and academic realm as a technique for effective knowledge sharing. However, in order to take part meaningfully, potential participants should first realise the value of knowledge

sharing in general and secondly understand the fundamentals concerning knowledge cafés.

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Appendix A

Letter of informed consent

Title: The implementation of knowledge cafés as a technique for knowledge sharing.

Department of Information and Knowledge Management (University of Johannesburg)

Investigator: Pheladi Tracy Lefika

Supervisor: Dr Mearns (Senior lecturer: Department of Information and Knowledge Management - mearnsm@uj.ac.za)

1. **The main purpose of this study**
   The main objective of this study is to test aspects of the implementation of knowledge cafés in a number of settings for knowledge sharing purposes.
2. **Confidentiality**
   By participating in this study, I understand that the information I provide may be used for research purposes, including publications in research journals. All personal information will be coded and at no time will my personal identity be revealed.
3. **Voluntary participation**
   The purpose of the study has been explained to me. I understand that participation in this study is voluntary and refusal to participate will involve no penalty or loss of benefits to which I am otherwise entitled. I may terminate my participation at any time I choose, without penalty. I understand that I may withdraw from participation at any point in the study with no penalty.
4. **Benefits of participation**
   The benefits of participation in this study are to further research only. The University of Johannesburg will not receive any money to conduct this study. My participation will make a contribution to further understanding the way in which people perceive the application of knowledge cafés.
5. **Remuneration**
   I understand that I will not receive money or any other rewards for participation

In acknowledgement of the informed consent please place your initials here:

Signature: _____

Date: _____

Appendix B

Questionnaire: Knowledge cafés

1. How many years' experience have you had with knowledge management?	<1	1-4	5-10	>10	Not involved in knowledge management
2. Did you know what a knowledge café was before today's experience	Yes				No
3. Have you ever participated in a knowledge café before today?	Yes				No
4. Have you ever facilitated a knowledge café?	Yes				No

Based on what you experienced in today's knowledge café please choose an option which best describes your attitude towards the statements.	Strongly agree	Agree	Neither agree/disagree	Disagree	Strongly disagree
5. I understood what was expected of me in today's knowledge café.					
6. Today's knowledge café was a successful knowledge sharing experience.					
7. I see the value of knowledge cafés for knowledge sharing purposes.					
8. Knowledge cafés are an effective tool for learning amongst peers.					
9. Please list possible practical examples of how knowledge cafés can promote knowledge sharing amongst peers.					
10. Please list possible practical examples from a student perspective for how knowledge cafés could **not** work well as a tool to share knowledge.					

Thank you for your willingness to participate in this study!