

University of KwaZulu-Natal

**Improving service delivery through tacit knowledge within a Government Tax
Service's call centre environment**

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Abstract

In the current, turbulent and volatile economic conditions that organisations face, establishing customer relationships are key to ensuring maximum productivity. Utilising call centres remains a key way of engaging with customers. Call centre agents require the necessary knowledge and skills to provide efficient and effective customer service and resolve customer queries. However, most training and knowledge transfer are conducted mainly via theory-based methods and may not necessarily assist with current and new customer queries. This type of knowledge is usually derived from customer experience. This is hence known as tacit knowledge which is deeply embedded knowledge that is built over a period of time and is not easily qualifiable. As organisations aim to deliver excellent customer services, there is a need to recognise the potential of tacit knowledge in improving service delivery. This study aims to address this gap by exploring the potential of tacit knowledge to improve service delivery at a call centre environment within a government institution. The objective was to determine whether there are systems in place to capture tacit knowledge, determine the challenges in capturing tacit knowledge, ascertain whether tacit knowledge can impact service delivery as well as how to promote tacit knowledge and was underpinned by the Nonaka and Takeuchi SECI model. This study was undertaken in a call centre at a government institution and a census approach was used whereby 522 call centre agents were selected as the target population. A response rate of 98 agents was received which constituted to almost a fifth of the entire population thereby increasing validity. Data analysis included reliability analysis and descriptive statistics. The study confirmed capturing tacit knowledge and converting it into explicit knowledge can increase the knowledge of call centre agents, thereby having the potential to improve service delivery. The study indicated that the majority of call centre agents are not trained on how to capture tacit knowledge and there is a lack of processes regarding tacit knowledge management. The study recommends it is essential to include management as part of the tacit knowledge management process to create awareness and encourage the capturing and sharing of tacit knowledge. The COVID-19 pandemic resulted in delays in processes and therefore the study was limited to responses received within a shorter period. Future researchers may consider a countrywide study be conducted with all of the organisation's call centre staff and management.

Key Words: Tacit, Knowledge, Call Centre Agent, Awareness, Capture, Sharing.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

Knowledge Management possesses the necessary tools and approaches to assist companies to improve an organisation's efficiency and decision-making capability thereby helping to overcome various challenges. This study investigates the potential of knowledge management in the form of tacit knowledge towards improving service delivery in a large governmental institution in South Africa. This chapter introduces the study. It articulates the research problem and brief background supporting the problem. This further informs the research questions and objectives that the study intends to answer and fulfil. The theoretical framework is also introduced. In addition, it provides a snapshot of the intended methodology and analysis. An overview of each chapter will be provided.

1.2 Research Problem and Background

In recent years globalisation and technological advancements have contributed to high competition amongst companies (Rasooli, 2006). This has forced companies to now focus on building customer relationships in order to maximise earnings(Rasooli, 2006). To build customer relationships, call centres have become the preferred choice in interacting with customers(Rasooli, 2006).For agents, giving seamless access and the correct information at the right time assists in improving customer service (Knowledge Management for Customer Service, 2021).According to Kohn (2021), customers are insisting on timeous and personalised services, to meet these growing needs, organisations must empower agents with the applicable knowledge and technical systems. It is therefore imperative that companies build a knowledge management strategy as this allows for increased organisational learning, and collaboration among team members assists in quicker decision-making and efficiency throughout the business (What is Knowledge Management, 2021).

Call Centre Agents represent the image of the company as they are responsible for customer satisfaction and are faced with customer queries on a daily basis. Agents obtain their knowledge from attending training provided by the company's training department. Since the training consists mainly of theory, the problem arises when agents are faced with queries that are practical and come from experience in that line of work. This is tacit knowledge. Tacit knowledge refers to the knowledge, expertise, and capabilities acquired through experience which cannot be expressed in words or easily communicated. (Oragui, 2020). Oragui (2020) maintains that tacit knowledge in team members is regarded as one of a company's most valuable assets. The author asserts that the more organisational knowledge team members possess about the products, the industry and the client's needs, the more likely the company will become productive and successful.

Whilst research and studies on tacit knowledge in developed countries abound, this study examines the concept and potential of tacit knowledge in a South African setting. The study is based within the context of a large government institution's call centre. This institution is responsible to collect revenue, providing services to the public and ensuring optimal compliance by the public. The call centre agents receive queries ranging from simple to complex and aim to resolve a query on the first call. In order to achieve this goal, call centre agents require the necessary skills and knowledge. Capturing tacit knowledge can assist in empowering agents to meet this goal. The research problem herein is that there is no clear indication or process of how tacit knowledge is being captured, processed, and utilised to enhance service delivery. The study, therefore, intends to bridge this gap and determine processes needed for the capture of tacit knowledge and utilise this to create and manage new knowledge to improve service delivery in at the government institution's call centre.

1.3 Motivation for the study

Government institutions are responsible for the country's economic growth and community upliftment. These institutions promote an integrated approach to governance to enhance planning, decision making and service delivery (South African Government online, 2022). In order for the government's institution call centre mentioned in this study to perform its function efficiently, it requires highly capable employees to resolve the queries from the public and abide by the institution's processes. The motivation for the study is to determine the potential of tacit knowledge in improving service delivery and that the findings can be used to leverage tacit knowledge to improve the skills and knowledge of the call centre agents, make tacit knowledge capture a part of knowledge management strategy, create platforms to capture tacit knowledge and utilise tacit knowledge to improve overall service delivery at the government institution's call centre.

1.4 Research Questions

In light of the problem statement, background, and motivation, the study undertakes to address the following critical questions:

1. What are the current systems and processes in place to capture tacit knowledge at the call centre?
2. What are the challenges in capturing tacit knowledge at the call centre?
3. How can tacit knowledge be used to create and manage new knowledge to improve service delivery at the call centre?
4. What would be needed to promote knowledge creation and management from tacit knowledge at the call centre?

1.5 Research objectives

The Research objectives are as follows:

1. To establish current systems and processes in place to capture tacit knowledge at the call centre.
2. To determine the challenges in capturing tacit knowledge at the call centre.
3. To determine the use of tacit knowledge to create and manage new knowledge to improve service delivery at the call centre.
4. To find ways to promote knowledge creation and management from tacit knowledge at the call centre.

1.6 Theoretical framework

The study is underpinned by the Nonaka and Takeuchi model. The main aim of the model is to differentiate between tacit and explicit knowledge and the creation of knowledge through cycles of Socialisation, Externalisation, Combination, and Internalisation (SECI). (Nonaka and Takeuchi, 1995). Nonaka and Takeuchi (1995), advocate that knowledge is created through an epistemological process of knowledge adaptation from one type to another (tacit and explicit), to generate new knowledge. The new knowledge is thereafter expanded from interactions between people, groups, and the organisation (Nonaka and Takeuchi, 1995). These continuous processes give rise to spiral motion. The spiral begins in socialisation where tacit knowledge is shared among people through daily social interactions. In the externalisation mode, the tacit knowledge is converted into explicit knowledge in the form of an idea, picture or written in a document. The explicit knowledge is thereafter merged with organisational knowledge in the combination mode. The explicit knowledge is taken in by individuals in the internalisation mode, which completes the SECI cycle.

1.7 Significance of the study

In the 21st century, knowledge has become the most significant resource. The fundamental aim of organisations is to capture tacit knowledge and adapt it into explicit knowledge. Organisations are dependent on tacit knowledge to maintain their competitive advantage, drive innovation and manage their daily operations.

1.8 Methodology

1.8.1 Research Design

The research approach followed a quantitative research method. The reason for selecting a quantitative method is due to it being linked to a positivist research concept which involves using scientific means that are created to generate authentic statistics or details and it eliminates any human validation or wrongness (Saunders, Lewis and Thornhill, 2016). This study made use of the deductive approach and focused on descriptive research to obtain precise information to respond to the research questions set above (Saunders, et al, 2016).

1.8.2 Data Collection techniques

A census approach was used which entailed targeting an entire population within a given time and space (Parker, 2011). This included an amount to 552 call centre agents from a country wide perspective. A census technique was selected as it allows for all agents to participate, it is easier to administer, and the results are considered to be more accurate (Parker, 2011). The researcher will use an online questionnaire that was emailed to call centre agents via bulk email. The survey was opened open for a period of 7days in January 2022 due to time limitation of the study.

1.8.3 Data Analysis

Data analysis followed primarily a descriptive approach due to the nature of the study. Therefore, the primary analysis involved Cronbach alpha reliability analysis and frequency analysis in the form of tables and graphs. Each table and graph were unpacked and analysed objectively thereby providing a fair and non-biased interpretation and reasoning of the statistics.

1.9 Structure of the study

A summary of each chapter is provided below:

- Chapter 1 Introduction - This chapter gives an introduction and a synopsis of the study. It outlined the research problem, objectives and research question that the study will address. The motivation for the study and research methods used was briefly summarised.
- Chapter 2 Literature Review and Theoretical framework - This chapter provides a detailed examination of the literature relevant to the study. It comprehensively covered the key concepts and areas that the study will address. The theoretical framework that is considered in this study was defined in full.
- Chapter 3 Research Methodology - This chapter fully outlines the research methodology which was used to execute this study. The relevant components such as the sample size, method of data collection, form of analysis used, and respondents are described in full.
- Chapter 4 Data Analysis - In this chapter, the data collected is presented, examined and discussed in connection to the literature review and research objectives.
- Chapter 5 Conclusion and recommendation - The last chapter concludes the study by giving suggestions based on outcomes from chapter 4. The limitations of the study and the directions for further studies are also recommended.

1.10 Summary

The purpose of this chapter was to introduce the research topic and the current study. This chapter presented the problem statement and brief background as well as the motivation for the study. It thereby established the gap that the study will address. The research objectives and questions were highlighted in this regard. A summary of the research methodology and a brief

outline of the theoretical framework applicable to the study were provided. The next chapter will present an in-depth review of the literature regarding the topic as well as the theoretical framework upon which the study is based.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

After defining the research problem in chapter 1, it has become apparent that tacit knowledge could play a pivotal role in maintaining a competitive advantage, promoting innovation and increasing productivity. The main aim of this chapter is to provide a wide examination of literature relating to tacit knowledge, and how it can be captured and applied in organisations to drive performance. This will in turn address the research objectives of this study. The review takes a closer look at the challenges associated with capturing tacit knowledge as well as the benefits related to it. The review will further examine how tacit knowledge is shared in advanced countries and developing countries. The theoretical framework that underpins this study will be comprehensively covered.

2.2 What is knowledge?

Citing an early reference, Ganascia (1996) asserted that knowledge does not exist outside a human being instead it is strictly a cognitive depiction. Similarly, Ermine (2000) described knowledge as being connected with a cognitive structure that enables the interpretation of information that is obtained from experience to connect with the physical or psychological activity in a certain circumstance. More along current times, recent authors such as Chergui, Zidat and Marir (2018) posit that knowledge is conceptualised as the ability of an individual to reason based on observing, perceiving and experience).

2.3 What is Knowledge Management?

Knowledge management is responsible for the creation and efficient handling of information. (Zaim et al., 2015) assert that knowledge assists in developing business processes that are used in achieving organisational goals. Jennex (2007), supports this view and maintains that knowledge

management is a combination of technical and organisational activities to manage formalised and unstructured knowledge to assist organisations to improve their efficiency through maintaining and reusing knowledge. Girard (2020) further defines knowledge management as a process of generating, communicating, utilising and managing the knowledge and information of an organisation. Rasooli (2006) proposes that knowledge management refers to the organisations' strategies and duties linked with creating and disseminating knowledge quickly and effectively to meet the growing needs of customers.

2.4 Explicit Knowledge

Nonaka and Takeuchi (1995) classify knowledge into two kinds namely explicit and tacit. They believe that explicit knowledge can be articulated in words, numerical expressions, books, manuals, etcetera and can be easily transferred to another person. Nonaka and Takeuchi (1995) hold the view that tacit knowledge is gained from experience and deeply embedded in a person's beliefs, views and values, and cannot be easily expressed in words or numbers and transferred to other people.

Explicit knowledge is seen as technical or scholastic information that is portrayed in words such as books, guides, numerical expressions and copyrights (Smith, 2001). The author asserts that this set of logical knowledge is readily available to be accessed through in printed format, electronic means or any other formal medium of communication. Once explicit knowledge has been codified, the information may be used to resolve similar types of problems or provide reusable knowledge (Smith, 2001).

In addition, "Knowledge that can be expressed in words and numbers represents only the tip of the iceberg of the entire body of knowledge" (Nonaka and Takeuchi, 1995; p. 60).

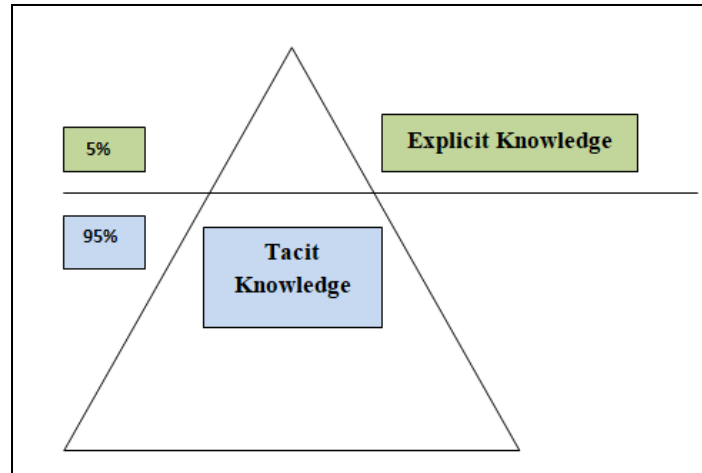


Figure 2.1 Michael Polanyi's representation of Explicit and Tacit knowledge, Polanyi (1966)

As illustrated in figure 2.1, explicit knowledge signifies that part of the triangle (iceberg) that is above water, which is the knowledge that people are aware of, and which can be categorised and easily transferred Polanyi (1966).

2.5 Tacit Knowledge

Tacit knowledge can be separated into two dimensions, the first dimension being more technical which relate to skills that a person possesses such as a craftsman who has acquired their skills over years of experience and finds it difficult to articulate what he knows, and the second dimension is cognitive which reflects a person's image of reality and what the future should be (Nonaka and Takeuchi, 1995). Furthermore, Nonaka and Takeuchi (1995) consider mental models, belief systems and schemata as entrenched in an individual and shape how people perceive reality (Nonaka and Takeuchi, 1995). Chergui et al. (2018), supports this view and assert that tacit knowledge is obtained as a result of previous learnings and experience. The authors believe that it can only be transferred if it is able to be converted into language, numbers or images that can be understood by anyone. Chergui et al. (2018) affirm that when tacit

knowledge is transferred from one person to another, it will create new knowledge, the new knowledge may be explicit knowledge or tacit knowledge and will rely on the person receiving the information.

Tacit knowledge is not necessarily conveyed by communication, people can learn tacit knowledge by imitating, adjusting to the situation and thereafter creating new ideas to resolved problems (Ding, Aoyama and Choi, 2020). Nohria and Eccles (1992) confirm this in their study and affirm that face to face interactions allows all senses into the process and capture the complete human interaction. The authors further elaborate that face to face interaction assist with problem-solving tasks as it allows for transferring full information and is more effective than other communications mediums especially when there is ambiguity and doubt. In another more recent study, Athanassiou and Nigh (2021) argue that imitative learning is most effective using face to face interactions.

Dube and Ngululbe (2012) assert that tacit knowledge is the key driver of the economy in a knowledge economy setting and the value of tacit knowledge grows when it is shared. They maintain that tacit knowledge sharing is vital to generating knowledge, organisational learning and driving performance. Although tacit knowledge is a complicated process, it can render and increase organisational productivity which in turn remedies inefficiencies such as working in silos, repetition of work, wastage of resources, loss of good suggestions, etcetera (Dube and Ngululbe, 2012). Scarbough (2003), on the other hand, suggests that tacit knowledge can encourage innovation and forms intellectual capital. Even though both authors have different views, they both concur that collaborative instruments have over a period assisted in allowing the management and maximisation of tacit knowledge which in turn has resulted in people reaping the benefits even if it is only a small portion.

2.6 Challenges in capturing and sharing Tacit Knowledge

The main issue surrounding tacit knowledge diffusion is not being conscious of what one knows or how tacit knowledge is linked to explicit knowledge (Mahroeian and Foroza,

2012).Mahroeian and Forozia (2012) agree that there are challenges in transmitting tacit knowledge. According to these authors, the most challenging are perception and language, time, value and distance. Gichuruand Tobin (2004) share the same view, however, they add to the increasing body of literature and believe that the management style, the organisation's communication structure, various types of networks, management skills, team dynamics and kind of systems also contribute to challenges experienced in managing tacit knowledge diffusion. Al-Attar and Shaalan (2016) suggest in their research that culture, job insecurity, lack of tools and incentives prevent tacit knowledge sharing.

These challenges will be further discussed in the following sections.

2.6.1 Perception

In terms of perception, explicit knowledge is easily recognised in a person whereas the full extent of one's knowledge or the basic intuition is difficult to identify (Mahroeian and Forozia, 2012). Mahroeian and Forozia (2012) share in their research that given tacit knowledge is internalised and usually becomes a component of one's behaviour or thought processes, it makes it difficult to transfer. Prior studies such as Haldin-Herrgard (2000), support these findings and believe that just as people are not mindful of their heart beating, they are not required to reflect on their tacit knowledge. As much as these authors claim that deeply embedded tacit knowledge is difficult to transfer, there are other means cited in other literature to capture tacit knowledge and these will be discussed further in this study.

2.6.2 Language

Mahroeian and Forozia (2012) claim that language also poses a challenge since tacit knowledge is not in a verbal format, most people find it difficult to express and convert it into explicit knowledge. Haldin-Herrgard (2000) supports this claim and further proposes that there are various terminologies and jargon that exist in different jobs and types of organisations, the sharing of tacit knowledge will depend on the use of common language. Anwar et al. (2019)

maintain that when teams are distributed worldwide, it is difficult to transfer knowledge as a result of language barriers. The accents make communication difficult to understand and exchange information (Anwar et al., 2019). Since the government's call centre is a customer service environment, the jargon is similar to any other service offering organisation. Furthermore, the official language of this government's call centre is English and therefore based on the view of Haldin-Herrgard (2000), it will be easier to share tacit knowledge.

2.6.3 Time

Another challenge pointed out by Mahroeian and Forozia (2012) is time. They maintain that it takes a long time to internalise knowledge for a person or an organisation. They believe that tacit knowledge is gained over years of experience and once this knowledge is deeply entrenched, it becomes intricate to express. In the fast pace of today's business world, the time for reflection is limited. In most organisations, tacit knowledge can be found in their culture, daily routines or brainstorming sessions (Mahroeian and Forozia, 2012). Gichuru and Tobin (2004) propose that time is a fixed attribute and the use of mentors at every level will increase the contact time between staff. Al-Attar and Shaalan (2016) share in their research that the lack of sufficient time to exercise tacit knowledge sharing amongst staff does pose a challenge. Taking into account the findings from the authors mentioned, time in the government's call centre is precisely scheduled and closely monitored to achieve performance targets and this may hinder the transfer of tacit knowledge to some extent.

2.6.4 Value

Value is another challenge in sharing tacit knowledge. Haldin-Herrgard (2000) argues that value which was usually linked with some form of measurement has now been looked at differently. People have learnt to value immeasurable items like knowledge which include intangible items such as tacit knowledge which has become an important benefit in the labour market (Haldin-Herrgard, 2000). Mahroeian and Forozia (2012) claim that other forms of tacit

knowledge such as intuition and the rule of thumb are not regarded as valuable as it lacks being logical and rational especially concerning decision making.

2.6.5 Distance

Distance also raises a challenge in the current business world. As more businesses have moved to work virtually or globally, there is fewer face to face interactions which are strongly recommended to improve efficiency and the pace of knowledge sharing activities (Al-Attar and Shaalan, 2016). O'hagan and Green (2002) support this view and claim that due to tacit knowledge being extremely personal, it can only be transferred through face-to-face interactions. Anwar et al. (2019) concur with the authors that when a team is spread geographically, the distance limits communication and therefore becomes a barrier for the transfer of knowledge.

2.6.6 Technological Barriers

Many studies reveal that Information Technology aids the knowledge sharing process (Anwar et al., 2019). However, there are barriers that prevent this from occurring, for instance, other studies indicate that employees do not utilise existing technology due to inadequate knowledge sharing tools or are not familiar with how to use the technology (Anwar et al., 2019). Nadason et al. (2017), concur with this view and claim that individuals lack technological expertise as well as do not know how to apply it in the company. The low usage of technologies in organisations may be attributed to inadequate training and user support (Nadason et al. (2017). Shahid and Alamgir (2011), further argue that other barriers include a mismatch of the system with the job requirement or, a new technology is not compatible with the existing systems or, there is a lack of knowledge of the capability of a system. These barriers mentioned above prevent the usage of technologies which poses a huge challenge for tacit knowledge sharing.

2.6.7 Work Overload

Workload has been cited as being a challenge to tacit knowledge sharing, Chugh (2018) claims that employees are overworked with admin and bureaucracy to participate in knowledge sharing and reflection. The author recommends that workload must be reduced in order to share tacit knowledge effectively. Al-Attar and Shaalan (2016) advocate that the workload of management plays a vital role as they need to spend time with their subordinates to understand who requires knowledge sharing. Asrar-ul-Haq and Anwar (2016), argue that when the workload is heavy, it adds pressure which acts as a barrier to knowledge sharing. The authors add that increased competition and work pressure result in the lesser time available for knowledge sharing engagements.

2.6.8 Job Insecurities

Some employees fear that sharing their knowledge may detriment their job security (Spiro, 2021). In today's highly competitive business world, employees tend to hold on to their knowledge to perform better than their peers who lack certain knowledge (Spiro, 2021). Hubert and Lopez (2013), discovered that employees believe that sharing their knowledge, may reduce their value to the company and place their jobs at risk. Spiro (2021) proposes that to curb this behaviour, organisations need to recognise these employees and make them feel valued and appreciated.

2.6.9 Lack of Management Involvement

The lack of management involvement is regarded as a barrier to knowledge sharing as they are responsible to communicate the advantages and value of sharing tacit knowledge (Awang et al., 2021). Since knowledge sharing is regarded as a voluntary and conscious behaviour, some team members need to be trained and given guidelines for efficient knowledge sharing (Riege, 2005). Riege (2005) advocates that managers should be able to create an environment where staff are willing to share their knowledge and be receptive to ideas from others. The author suggests that

the dedication and supportive role of a manager is key to creating a culture of knowledge sharing. Ketvirtis (2011) furthermore add that managers should lead by example, clarify expectations, create opportunities to share knowledge and recognise team members who are contributing to the process. It is clear from the above that management plays an integral role in the sharing of tacit knowledge.

2.7 Enablers of Tacit Knowledge Sharing

Tacit knowledge may be easily fade away if not properly managed and shared (Asrar-ul-Haq and Anwar 2016), the authors claim that since tacit knowledge is built over time and located in the minds of individuals, it must be shared. They believe that tacit knowledge sharing is vital for an organisation's survival. This study will expand on the following enablers of tacit knowledge sharing:

2.7.1 Trust

There has been a growing trend of research focusing on trust as being a major component of sharing and transferring of knowledge. Xue, Bradley and Liang (2011) in their research identifies 'trust' in a team influences the tacit knowledge sharing behaviour of people from an internal and external perspective. The authors claim that in teams interpersonal trust internally affects the attitudes of people and peer pressure from the team supervisor externally affects people in a team. The authors maintain that where there is a greater amount of trust, the transfer of tacit knowledge becomes easier. Huie, et al. (2021) posit that in order to build workplace relationships, trust is required. Trust in organisations inspire individuals to embrace their job roles, adapt to changes and improve their expertise by sharing tacit knowledge (Huie et al., 2021). Hubert and Lopez (2013) define trust as the assurance individuals have on information and expertise accessible to them, and their dependence on others to offer support to assist them to deal with challenges and opportunities.

2.7.2 Rewards programme

A rewards system is regarded as an enabler to sharing tacit knowledge (Jeon et al., 2011). The authors maintain that it is important to have a rewards and motivation program to promote the sharing of tacit knowledge. Extrinsic and intrinsic motivation influences the knowledge sharing behaviour of people positively and when organisations offer rewards, the staff is motivated to share tacit knowledge thereby creating organisational knowledge. (Jeon et al., 2011). Trees (2021) assert that the building and maintaining of knowledge sharing is the toughest role of a knowledge manager and therefore incentives can assist in encouraging employees to contribute, transfer and reuse knowledge. The author argues that organisations may have the best technology and processes however if the employees are not utilising these, it becomes meaningless. Kanaan et al. (2013), suggest that organisational rewards shape the behaviour of employees and increase the knowledge-sharing ability of the staff.

2.7.3 Organisational Structure

Knowledge sharing is dependent on organisational structure as it determines how roles and responsibilities are controlled and coordinated (Becerra-Fernandez and Sabherwal, 2010). The authors conclude that organisational structure also governs the way information flows between the various level of management. Huang (2021) claims that the structure of the organisation should be aligned to the objectives of the organisation and motivate employees to learn. The organisational structure should create opportunities for staff to engage with each other and participate in knowledge sharing activities (Huang, 2021). Lee and Choi (2003) posit that a centralised structure in an organisation limits communication between departments and regular sharing of ideas, whereas a decentralised structure eliminates layers of authority and assists in creating an environment where employees participate in knowledge building activities.

2.7.4 Organisational Culture

According to McDermott and O'Dell (2001), culture has been recognised as a critical factor that allows tacit knowledge sharing (McDermott and O'Dell, 2001). Culture involves a system of deeply embedded beliefs that are articulated through the behaviour of individuals in an organisation (McDermott and O'Dell, 2001). Suppiah and Singh Sandhu (2011) support this view and further add a type of culture called 'Clan Culture.' The authors associate clan culture to working like a huge family or tribe in an organisation that encourages staff to share their knowledge. The authors add that clan culture has a positive influence on knowledge sharing which include continuous team-building exercises or programmes that involve the staff, and strong corporate commitment to the staff. Cavaliere and Lombardi (2015) highlighted that culture is a prerequisite for sharing tacit knowledge. The authors expand further by referring to examples such as innovative culture, the culture within a community and bureaucratic culture which they believe influences a knowledge-sharing attitude of people.

Organisational culture is those norms, values and beliefs that can either assist or hinder the creation and sharing of knowledge in an organisation (Ogbonna, 2020). Shein (2010) describes organisational culture as "A pattern of shared basic assumptions learned by a group as it solved its problems through external adaption and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel about those problems" (p. 18). A strong organisational culture that includes the sharing of knowledge assists organisations to enhance their competitiveness and managing knowledge more effective (Makamba, 2015). Organisational culture influences knowledge sharing in various ways, these include how processes are created, authenticated and spread across the organisation, outlining the interrelationship regarding employee knowledge and organisational knowledge, as well as creating an environment for social interaction which is vital for the exchange of knowledge (Makamba, 2015).

2.8 Methods of Capturing Tacit Knowledge

Tacit knowledge is gained mainly from experience and cannot be easily replicated or shared Sampath (2021). In organisations, the more experienced and older staff possesses more tacit knowledge than recruits. One of the greatest challenges faced in organisations is capturing tacit knowledge, strategies are recommended in capturing tacit knowledge:

2.8.1 Leadership

Leadership plays a key role in advocating tacit knowledge transfer in an organisation (Asrar-ul-Haq and Anwar, 2016). The authors maintain that leadership is responsible for creating trust between staff, developing opportunities to contribute to ideas, rewarding and inspiring them to share their knowledge. Theriou et al. (2011) supports this view and assert that is the responsibility of leaders to specify how an organisation should approach and coordinate knowledge sharing practices. Leadership must ensure that employees are afforded the same opportunities and growth, and are being measured and rewarded for productivity, conduct and attitude, which is regarded as a prerequisite for managing knowledge (Theriou et al., 2011). Leadership must be able to create an environment that promotes tacit knowledge sharing and makes employees feel secure to contribute in every way (Theriou et al., 2011). Furthermore, the environment should encourage employees to willingly exchange information to constantly learn and find fresh ideas and obtain new knowledge (and Barnett, 2000).

2.8.2 Conduct Mentorship programmes

Mentoring is regarded as one of the best methods of capturing tacit knowledge (Murphy, 2020). Mentoring allows for learning to occur through regular feedback loops, whilst creating customised learning with a side by side approach (Murphy, 2020). Mentors offer opportunities that managers may not be able to, they encourage critical thinking and teach problem-solving techniques from experience (Murphy, 2020). Bajracharya and Masdeu (2006) suggest that mentors depend on long-term experience in different scenarios which allows them to find patterns and thereafter choose the appropriate information. Mentors transfer organisational

knowledge and skills more accurately and also explain the values and norms of behaviour of the organisation (Bajracharya and Masdeu, 2006).

2.8.3 Teamwork

Teamwork is an internal platform which creates a safe place for employees to discuss complex, challenging work issues and processes (Bothra, 2021). Management should motivate employees to interact within the team in order to upskill and embrace a continuous learning process since these channels assist with the sharing of tacit knowledge and conversion into explicit knowledge (Bothra, 2021). Seager (2018) posits that working in a team that can improvise or create solutions indicate that there is a strong feeling of trust, association and belonging. Teamwork supports knowledge sharing by allowing employees to share their thoughts and provides a collaborative environment to willingly exchange information (Işık et al., 2021). The authors further add that dialogue is crucial in converting tacit knowledge into explicit knowledge.

2.8.4 Meetings

Meetings serve as opportunities to share and capture knowledge (Brown et al., 2003). Meetings are learning events and part of a greater process (Brown et al., 2003). Meetings must be interactive and allow for everyone to participate, it is within this process tacit knowledge is exchanged and converted into explicit knowledge (Brown et al., 2003). Tacit knowledge is gathered when organisations conduct meetings such as briefing their staff regarding its goals and deliverables, brainstorming sessions, and debriefing sessions (Sampath, 2021).

2.8.5 Documenting tacit knowledge

In order for tacit knowledge to be documented, it must first be converted into explicit knowledge. Organisations may use information and document management systems to store knowledge systematically for easy access (Sampath, 2021). Other mediums include standard operating procedures, guidelines, manuals, tutorials, books, case studies and white papers (Sampath, 2021). Tacit knowledge can also be stored in software solutions, social media or any online platform

that is user friendly (Navidi et al., 2017). The documenting of tacit knowledge assists organisations by preventing the loss of valuable knowledge, it enhances processes, help train new employees, and ensures bests practices are used each time. (Navidi et al., 2017).

2.8.6 Forums and Communities of Practice (CoP)

Communities of Practice(CoPs) are formed by people to interact on a platform to learn from each other (Venkatraman and Venkatraman, 2018). People learn from each other either by face-to-face interactions or using online platforms to create a body of knowledge, share problems, skills, perceptions, tools and best practices (Venkatraman and Venkatraman, 2018). White (2021), shares this view and suggests that CoPs are operative mechanisms for recording and sharing knowledge throughout the organisation. These interactions afford employees opportunities to engage, collect, and share information that can increase the performance of the organisation and reduce duplications of work (White, 2021). When employees participate in CoPs using different communication tools, tacit knowledge is being recorded onto online platforms which can be used by new or existing employees (White, 2021). Hence, CoP's can be regarded as an effective means of capturing tacit knowledge.

2.8.7 Training

In view of the fact that tacit knowledge is usually experiential, staff training becomes vital in sharing knowledge (Sampath, 2021). Experiential learning involves side by side training, simulated or demonstrations where employees can learn faster and complete tasks by themselves (Sampath, 2021). Anderson (2022) claims that training assists in capturing tacit knowledge and recommends the use of both informal and formal training. Informal training can be completed by allowing employees to conduct presentations on specific topics or projects that they are working on (Anderson, 2022). These sessions afford employees greater interaction thereby increasing employee knowledge. The formal sessions may follow a more structured approach where an end to end training curriculum is created for a complete transfer of knowledge (Anderson, 2022). This approach allows new and existing employees to learn everything they need to know about the job .

2.8.8 Information Technology and Social Networks

As a result of globalisation and many organisations becoming virtual, Information Technology (IT) has never played a more significant role in knowledge management than it is today. It assists in transforming organisations to effectively share knowledge using technology (Priljeva, 2020). Technology assists in locating information faster and efficiently as well as for capturing, distributing and sharing knowledge globally (IBID). Malamed (2020) shares this view and adds that the sharing of tacit knowledge is done through a process of ‘socially constructed learning’. The author suggests that when communities collaborate online, using social platforms such as Facebook, WhatsApp and Twitter among others, they become a “node in the network” for dispersing knowledge, thereby making knowledge easy to transfer (Malamed, 2020).

Information technology (IT) greatly assists in knowledge sharing and has become more significant recently due to advanced technologies (Mitchell, 2003). Information technologies such as the use of the internet, emails, websites, databases and other electronic platforms have successfully facilitated knowledge sharing internally and externally (Mitchell, 2003). Panahi, Watson and Partridge (2013) place great emphasis on the significance of social media platforms in sharing tacit knowledge. Likewise, Web 2.0 technologies such as blogs, instant messaging and wikis promote communication within the organisation and allow for knowledge sharing (Panahi, Watson and Partridge, 2013). Falconer (2006) supports the view that technology "offers significant potential to transform and communicate tacit knowledge" (p.149) and disagrees with researchers who believe that technology cannot assist tacit knowledge sharing.

2.8.9 Capture stories from staff

Stories from employees provide the best context for knowledge being shared (Sampath, 2021). Staff find it easier to relate and learn from stories. Storytelling is regarded as the best means to share experiences (Sampath, 2021). Kalid and Saifullah (2013) affirm that storytelling is a powerful tool which is used by organisations to capture tacit knowledge. Stories can be shared during debriefing sessions, sharing of experiences, meetings or discussions (Kalid and Saifullah,

2013). Mamabolo (2014) proposes that stories make information simple to understand. Stories are linked to personal experience, it evokes visual illustrations and therefore forms effective means of transferring knowledge (Mamabolo, 2014).

2.9 Tacit Knowledge Sharing in Developed Countries

Developed nations are classified as having a strong economy, sophisticated manufacturing productivity, fully developed infrastructure, effective laws, and lesser levels of poverty (Kuepper, 2017). In developed countries such as the United States of America (USA), Japan, European Union (EU), knowledge management is used to enhance education, the economy, the health sector, technology, and other major sectors (Peng, Li-HU and Moffett, 2007). Developed countries are constantly developing their employees with new knowledge and capabilities by continuous learning and teaching (Peng et al., 2007).

In the USA, knowledge is a main competitive differentiator in improving organisational performance (Volini, Schwartz and Mallon, 2020). As a result of advanced technology, different ways of working and change in the composition of workers, organisations have been forced to redefine how they generate knowledge to attain the maximum potential of their employees (Volini et al., 2020). Employees are now working across roles, projects, departments, companies and countries, and sharing their tacit knowledge (Volini et al., 2020). The movements of employees are assisting organisations to build their knowledge sharing strategies (Volini et al., 2020).

In the current “hyper-connected”, digital era, organisations are gathering and generating massive amounts of data. A substantial amount of employee conversations are taking place using online collaboration tools. Knowledge no longer resides in databases but moves across digital communication platforms. Microsoft Teams and Slack are examples of digital communication platforms that are widely used in organisations today (Volini et al., 2020). Technological advancements in Artificial Intelligence (AI) is being used to automatically classify and combine data across different platforms (Volini et al., 2020). Artificial Intelligence is able to contextualise

data and provide solutions real time (Volini et al., 2020). It can be concluded that developed countries are utilising knowledge management to its maximum in order to continuously build and maintain their high economy and provide for their citizens.

2.10 Tacit knowledge sharing in a Developing Country

Many developing countries are still struggling with the issues of inadequate education, poor health services, high levels of unemployment, no easy access to drinking water and lack of use of Information Technology (Wickramasinghe, 2019). Furthermore, information technology plays a huge role in tacit knowledge sharing as it provides a platform to access a wealth of information (Malhan and Gulati, 2003). Developing countries lack faster networks, intricate software and appropriate skills to develop new technologies. Many people living in outlying areas have limited knowledge as they do not have access to Information Technology. For this reason, the sharing of tacit knowledge is negatively impacted in developing countries (Wickramasinghe, 2019). To accelerate the development of a knowledgeable society, there should be a greater focus on quicker, less expensive and secure internet services, investments in people and skills development, and greater stimulation of the use of the internet (Malhan and Gulati, 2003).

In a developing country such as China, group centred culture is the foundation of encouraging tacit knowledge sharing (Huang, Davison and Gu, 2008). Organisations in China are similar to Japan where the majority of learning occurs through observation and standards set by competitors (Drummond and Martinsons, 2005). A Chinese culture known as Guanxi is a representation of a system of relationships and social networking in a business environment (Wang and Qiu, 2011). Guanxi is the driving force for sharing tacit knowledge, following the organisation's culture, ability to assist other people and attaining personal satisfaction (Wang and Qiu, 2011).

Drummond and Martinson (2005) argue that in developed countries such as the USA, codification of knowledge is necessary for organisations and in society. The Chinese, on the other hand, prefer informal and implicit forms of communication. They favour the diffusion of

tacit knowledge through interpersonal contact rather than documented means. China has a widespread application of Information Technologies to capture tacit knowledge; however people interaction is mainly encouraged (Drummond and Martinsons, 2005). As can be observed from the above that tacit knowledge in developing countries is still evolving due to the complexities in different countries. It is clear that the issues are around poverty, poor infrastructure, lack of technology and cultural norms are hindering the development of tacit knowledge.

2.11 Tacit Knowledge sharing in South Africa

Finestone and Snyman (2005) point out that due to cultural diversity in South Africa, optimising tacit knowledge is a challenge. They argue that due to South Africa's history of apartheid and the present focus on creating equal opportunities for all, tacit knowledge sharing is impacted. On the contrary, Bock (2014) asserts that in order to compete globally South African organisations have to fully utilise their human capital by sharing tacit knowledge. He further adds that many initiatives have been given to build explicit knowledge, for example, some industries are provided with Black Economic Empowerment (BEE) points for each staff member that is sponsored to attend university; however, more attention must be given to share tacit knowledge.

Bock (2014) indicate that in a culturally diverse country such as South Africa, management should not underestimate the influence of each employee and they should recognise the importance of sharing tacit knowledge. Maharaj (2021) supports this view and further proposes that an efficient knowledge management approach can provide staff with a greater platform to develop each other's knowledge and skills. Current global trends suggest innovation and creativity rely on a combination of information and possible solutions, and therefore the sharing of tacit knowledge must be promoted (Maharaj, 2021).

With great emphasis placed on global competitiveness, researchers have been led to recognise the critical benefits of cultural diversity in a country (Finestone and Snyman 2005). When individuals are forced to brainstorm cross-culturally, new ideas are generated and creativity begins, this, in turn, paves the path for a competitive advantage for the organisation Finestone

and Snyman (2005). Ocholla (2002) claim that there are great benefits of cultural diversity that apply to sharing tacit knowledge, these include quicker response to diverse markets, leveraging of skills which the organisation did not previously possess, encouraging a culture of inclusivity thereby increasing team performance, and attracting the finest skilled workers. Hence, South Africa certainly has the potential to transfer and share tacit knowledge.

Mkhize (2015) builds on this view and adds that due to the cultural diversity in South Africa, the use of the appropriate technology will assist in sharing tacit knowledge. Even though there is a digital gap regarding internet usage and computer literacy in South Africa, social media diffusion is proof that people do use computers and access the internet if they are inspired by social needs Mkhize (2015). The author maintains that social computing systems such as email, discussion rooms and instant messaging will allow staff members to connect more easily, exchange ideas and build virtual communities. Various other social networks such as blogs, Whatsapp and Facebook have become popular in many public and private sectors Mkhize (2015). These social networks will make the capturing and sharing of tacit knowledge much easier. This implies that even though, South Africa is still in its developing stages, there is great potential to leverage of tacit knowledge.

2.12 Tacit knowledge and Call Centre Efficiency

Various studies suggest that the quality of service of call centres links organisations to their customers (Rasooli, 2006). The quality of service resides in the organisation's standard operating procedures and practices which results in customers satisfaction and customer loyalty. (Rasooli, 2006). Feinberg et al. (2000) discovered that the main component driving customer satisfaction was the number of calls closed on the initial call. Rasooli (2006) maintains when tacit knowledge is captured and structured, it can influence the following call centre measurements: average handling time; the number of calls finalised on the first call; reduction in the number of escalations and number of calls deflected.

Rasooli (2006) describes these in Table 2.1 below:

1) An average handling time of calls	Structured knowledge allows agents to respond to queries faster as it reduces time spent on searching for answers and therefore reduces the handling time of the calls.
2) First Call Resolution	When knowledge is structured, it offers more accurate problem diagnoses and answers to the initial query. This enables agents to resolve queries on the first call.
3) Number of Escalations	Structured knowledge creates more options for solving queries. This allows agents to resolve more queries by themselves, thereby reducing escalations to a specialist.
4) Deflection of calls	The knowledge that is organised contains verified and quality checked information which can be placed on the organisation's websites for self-service. There is a higher possibility that clients will be able to locate correct answers faster and therefore reduce call volumes.

Table 2.1 Call Centre Measurements (Rasooli, 2006)

2.13 Benefits of Tacit Knowledge

Tacit knowledge can bring a variety of benefits for organisations. This is outlined in the sections to follow.

2.13.1 Tacit knowledge provides a Competitive Advantage

Tacit knowledge is regarded as a significant differentiator and essential for organisations to retain its competitive advantage (Muthuveloo, Shanmugam and Teoh, 2017). Approximately ninety percent of the knowledge in an organisation is entrenched and created in the form of tacit knowledge (Mohajan, 2016). Thus, tacit knowledge is referred to as an important long-term resource since it is responsible for the organisation's activities and competitiveness (Mohajan, 2016). Sigala and Chalkiti (2007), maintain that in today's volatile business environment, tacit

knowledge is an important competitive tool that can maintain and nurture an organisation's adaptability, existence and performance. Mason (2022) posit that organisations must eliminate information hoarding and encourage knowledge sharing. Maintaining a competitive advantage will be based on how resources are strategically allocated and how intellectual capital such as tacit knowledge is managed (Mason, 2022).

2.13.2 Tacit knowledge improves Productivity

Tacit knowledge is regarded as a vital asset for organisational performance, competitiveness, improved customer satisfaction and increased accuracy and quality of work. The logical process of obtaining, classifying, maintaining and renewing knowledge has made organisations withstand turbulent economic conditions (Mohajan, 2016). Orgaui (2020), supports this view and proposes that injecting tacit knowledge into existing knowledge, will result in using best practices which is highly likely to boost productivity throughout the organisation. Lee and Choi (2003) found that tacit knowledge does impact the performance of an organisation by improving employees performance and organisational skills. Gharakhani and Mousakhani (2012), further add how employees capabilities merged into organisational skills have always been crucial for organisational performance. Hence, management should always use and build knowledge for the success of the organisation (Gharakhani and Mousakhani, 2012). When tacit knowledge is correctly utilised with existing knowledge, it can enhance job performance, reduce operational costs, improve intellectual capital, change employee competitiveness and organisational competitiveness (Jackson et al., 2006).

2.13.3 Tacit Knowledge Fosters Innovation

Tacit knowledge does not only form part of the organisation's strategy and competitive advantage but also influences learning, technical enhancements and the development of new products (Mohajan, 2016). By sharing tacit knowledge, new organisational knowledge is created

which is essential for creating individual and organisational innovative capabilities (Mohajan, 2016). Cummings (2003), suggest that tacit knowledge sharing can result in successful innovation, enhanced manufacturing processes, better organisational designs and greater quality of products. As a result of changes in customer choices, strong competition and changes in technology, innovation is becoming complicated, expensive and risky for organisations (Cavusgil, Calantone and Zhao, 2003). Attaining tacit knowledge through collaboration has been regarded as an effective means of innovation (Cavusgil et al., 2003).

2.13.4 Tacit Knowledge assists in Problem Solving

When there is effective tacit knowledge sharing, problem-solving can be improved (Morrow, 2021). This can be achieved by employees sharing their ideas and using previous cases where solutions worked well (Morrow, 2021). In this way, tacit knowledge sharing prevents monotonous or mundane efforts from employees, but rather motivates employees to work more effectively (Morrow, 2021). Soieb (2012) suggest that when managers are faced with complicated situations which require quick and accurate responses, tacit knowledge is activated. Elements of the mind and experience are used by leaders to diagnose the correct problem thereby recommending the best possible solution (Soieb, 2012).

2.13.5 Tacit Knowledge improves Decision making

When decision making in the organisation is optimised, it saves time, effort and reduces cost (Morrow, 2021). Decisions can be made by using trend analysis of internal issues, in this way decisions are made from true employee experience (Morrow, 2021). Brockmann and Anthony (2002) supports this view and add that the process of making decisions involves assessing present and future actions, followed by the skills and resources of the organisation and its competitors. Organisations may not know the future actions of competitors and therefore tacit knowledge may be used to recognise the missing information which can assist in making quality

and quick decisions (Brockmann and Anthony, 2002). Matthews (2021) asserts that the greatest benefit of sharing and managing tacit knowledge is that it allows for teams to work together. Tacit knowledge sharing builds trust which enhances effective workflows (Matthews, 2021). When there are various information platforms available, middle management can escalate their queries faster and leadership is able to make decisions quicker (Matthews, 2021).

2.13.6 Tacit knowledge retains Intellectual Capital

As a result of layoffs, employee turnover, retirements, mergers and acquisitions being faced throughout the world, organisations are being threatened with the loss of knowledge (Martins, 2011). Many organisations are trying to use technology to document knowledge residing in the minds of employees (Mason, 2022). This will ensure that when employees leave the organisation, tacit knowledge is not lost. When knowledge is stored in systems or processes, it has greater value than when people leave the organisation (Mason, 2022).

2.13.7 Tacit Knowledge enables faster response times

Tacit knowledge sharing and consistent collaboration assists in improving the value offered to customers (Quintarelli, 2021). When employees have access to contextual knowledge, the period for responding is shortened (Quintarelli, 2021). There is one important differentiator amongst competitors and this is the speed of implementation or response (Kumar, 2021)

2.14 Theoretical framework

This section outlines the theoretical model that underpins the study. The chosen applicable model was the Nonaka and Takeuchi SECI Model (1995), and this model will be applied in the study.

2.14.1 Introduction of the Nonaka and Takeuchi SECI Model (1995)

Various frameworks are used for Knowledge Management, these include:

- Nonaka and Takeuchi SECI (Socialisation, Externalisation, Combination and Internalisation) Model (1995)
- Knowledge Management Assessment Tool (KMAT) 25 Model (1995)
- World Bank Knowledge for Development (K4D) framework (1996)
- Etienne Wenger Communities of Practice (COP) Model (1998)

The relevant model that underpins this study is the Nonaka and Takeuchi SECI Model (1995).

Amongst various knowledge, related theories, ideas and models, the SECI model has been widely recognised as an academic landmark and used in the majority of knowledge-based studies. Nonaka and Takeuchi (1995) regard knowledge generation as a sophisticated process in which constant dialogue amongst tacit and explicit knowledge develops new knowledge. The SECI model is famous for not only formalising the theory for knowledge creation centred on tacit and explicit knowledge but for providing a tool that can be practically used to assess knowledge creation in an organisation (Nonaka and Takeuchi, 1995). The SECI model is different from other knowledge management conceptual frameworks as it emphasises holistic processes where knowledge conversion from one type to another produces new knowledge, rather than evolutionary processes (Nonaka and Takeuchi, 1995).

Nonaka and Takeuchi's SECI model provides a major step forward in the way tacit knowledge is perceived (Adesina and Ocholla, 2019). Instead of tacit knowledge being simply entrenched in an individual that cannot be expressed, they deem tacit knowledge as a type of knowledge that can provide immense potential and value in a business environment (Adesina and Ocholla, 2019). Nonaka and Takeuchi (1995) assert that tacit knowledge can be externalised to become explicit knowledge. This forms the foundation of their tacit knowledge conversion model known as the SECI model. Zhang et al. (2014), assert that the SECI model is the most extensively cited and significant theory in Knowledge Management. The model is easy to use and appropriate for explaining the process of knowledge conversion (Zhang et al., 2014). As seen in figure 2.2, Nonaka and Takeuchi's SECI model consists of four modes namely socialisation,

externalisation, combination and internalisation in a constant spiralling motion (Nonaka and Takeuchi, 1995).

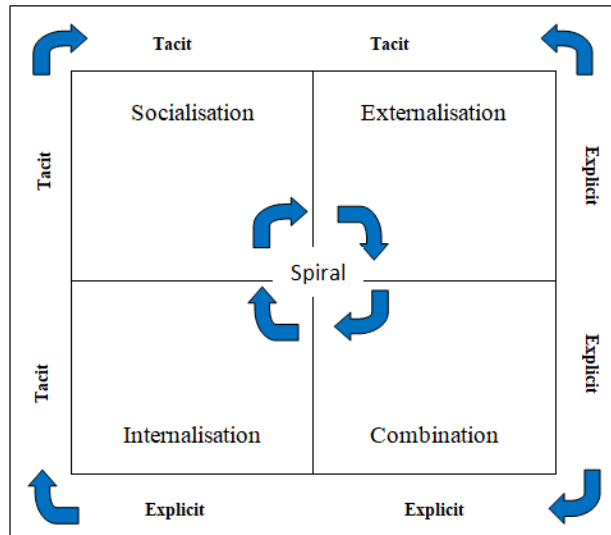


Figure 2.2: The SECI Model (Nonaka and Takeuchi, 1995)

2.14.2 The Socialisation Mode

Socialisation includes critical social interaction that is required to discover new knowledge (Mahroeian and Forozia, 2012). Since tacit knowledge is entrenched in individuals, people interaction is necessary to exchange information. Socialisation takes place amongst individuals in conferences, meetings, team gatherings or any shared space where individuals meet to speak about their stories or experiences (Mahroeian and Forozia, 2012).

Many researchers consider learning as a social activity where interaction is required for learning to take place (Mahroeian and Forozia, 2012). People can also obtain knowledge without the use of language, they can learn through observing, imitating, and practising, such as an apprenticeship or during mentoring (Kumar and Ganesh, 2016). These authors argue that the key to gaining tacit knowledge is through experience since people share the same emotions and

thought processes. In this mode, tacit knowledge from one person is transformed into tacit knowledge to another person (Nonaka and Takeuchi 1995).

2.14.3 Externalisation Mode

In order for knowledge to be shared, it must first become conscious and expressed (Nonaka and Toyama, 2003). This is when externalisation takes place. Externalisation is the second mode of the model where the tacit knowledge obtained in the first mode is changed into explicit knowledge Nonaka and Takeuchi (1995). The time that is spent when discussing staff experiences, the errors made or the achievements made, all form part of the conversion of tacit to explicit. During this period, individuals are inspired to come up with reasons for their accomplishments or failures. When this deeper understanding is attained, the knowledge must be captured in any format. An example would be when organisations create platforms where they can interact and contribute to knowledge sharing (Mahroeian and Foroza, 2012). In this mode, tacit knowledge is converted into explicit knowledge (Nonaka and Takeuchi 1995).

2.14.4 Combination Mode

In the combination mode of the model, explicit knowledge is merged with other knowledge to form more systematic explicit knowledge. This knowledge is made available to add value to other staff or for a global audience (Kumar and Ganesh, 2016). These may include reports, manuals, guides, computerised formats such as intranets, virtual communities for sharing knowledge, etcetera (Kumar and Ganesh, 2016). Nonaka (1994) concludes that by reorganising current information into categories, adding or recontextualising explicit knowledge will result in new knowledge being created and this process of developing explicit knowledge from explicit knowledge is known as combination.

2.14.5 Internalisation Mode

The last mode of the model is internalisation. This is when explicit knowledge is absorbed by staff to broaden their knowledge and form tacit knowledge. An example would be attending training programs where trainees can read guides or manuals about their job or attend simulation sessions where they learn to do the job (Koh and Kim, 2004). These interventions allow the trainees to combine the new knowledge with their knowledge to create tacit knowledge (Koh and Kim, 2004). This new internalised knowledge flows in a circular motion which stimulates more conversion processes giving rise to the spiral of knowledge creation (Nonaka and Takeuchi, 1995).

Drawing from the model above, the researcher has observed that there is a systematic process in which tacit knowledge is generated and transformed into new knowledge (explicit). The four modes in the model represent each process. Organisations adopting the model will have to ensure that there are correct processes, systems and people in place in order for tacit knowledge to be captured and transformed into explicit knowledge.

2.15 Summary

The literature review in this chapter defined the main concepts associated with tacit knowledge which provides the key foundation of this study. As much as tacit knowledge is difficult to express in words and transfer, the literature review did reveal that there are methods to capture and codify tacit knowledge in an organisation. This chapter also highlighted the advantages of tacit knowledge and how it can contribute to organisational efficiency. There are however challenges that are associated with sharing tacit knowledge and these must be taken into account in the study. The theoretical framework discussed in this chapter does support the study. In light of this, it deems necessary to conduct a study. The next chapter will detail the research methodology that will be used for the study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology applied to the current study. The research method includes key components such as the method of sampling, the target population, the location where the study was conducted and the research design. Constituents of the research design such as the development of the research instrument and the data collection are described. The data analysis processes and the ethical consideration of the study are discussed and the chapter is concluded with a summary of the research methodology.

3.2 Research Philosophy

3.2.1 What is Research Philosophy

Research philosophy is about the way the researchers gather information to create new knowledge (Saunders et al., 2016). When conducting research, researchers are constantly making assumptions in each step of the process (Saunders et al., 2016). These assumptions can be seen as ontological, epistemological or axiological (Saunders et al., 2016). These are defined as follows:

- Ontological assumptions refer to how the researcher perceives reality and which techniques are associated with the assumption (Žukauskas, et al., 2018).
- Epistemological assumptions are how knowledge is acquired, what makes up the knowledge, and how it is assessed (Žukauskas, et al., 2018).
- Axiological assumption refers to the personal values or ethics associated with the research and what makes a considerate researcher (Burke et al., 2018).

When the assumptions are accurate and consistent, the research philosophy will be regarded as reliable and will therefore be able to support the research study (Saunders et al., 2016).

3.2.2 Types of Research Philosophies

There are five main types of research philosophies namely positivist, interpretivist, pragmatic, critical realism and postmodernism (Saunders et al., 2016). These are described as follows:

- **Positivist** - The researcher is factual, works autonomously and is not personally involved in the research (Žukauskas, et al., 2018). The research follows a deductive approach where data is gathered using instruments completed by the participants (Creswell and Creswell, 2018). Positivist research adopts the quantitative research method, where sampling is crucial since it is representative of the target population (Shah and Al-Bargi, 2003). The majority of quantitative research begins with testing the theory and the outcomes are likely to be more objective and generalisable (Creswell and Creswell, 2018, Saunders et al., 2016). A positivist assumption argues that factual information offers the greatest scientific evidence (Saunders et al., 2016). This study adopts positivist research.
- **Interpretivist** - Interpretivists concerns themselves mainly with subjectivity and aims to recognise the participant's view and understanding of the phenomena (Shah and Al-Bargi, 2003). Interpretivists use an inductive approach where the phenomenon is monitored, a pattern is established, the hypothesis is tested and concludes with the theory (Abdel-Fattah and Galal-Edeen, 2009) The research follows qualitative research methods which include interviews and observations (Abdel-Fattah and Galal-Edeen, 2009).
- **Pragmatic** - This philosophy results from actions, circumstances and outcomes (Creswell and Creswell, 2018). Pragmatism focuses on the research problem and is more concerned with practical solutions (Saunders et al., 2016). Pragmatism applies to qualitative, quantitative design or mixed methods, thereby offering the researcher a wider range of assumptions and views to choose from (Creswell and Creswell, 2018). The research takes into account societal, historical, political and any other applicable context (Creswell and Creswell, 2018).

- Critical realism - Critical realism places great emphasis on what the world sees and what is experienced (Saunders et al., 2016). It involves two parts, firstly it is the "sensations" that is being experienced, and secondly, it is the psychological processing that occurs after the experience and thereafter we rethink what was the real cause (Saunders et al., 2016, p. 147). The methods used is quantitative or qualitative methods or mixed methods (Saunders et al., 2016). The aim is to abolish unjust human relationships (Abdel-Fattah and Galal-Edeen, 2009).
- Postmodernism – Postmodernism contests the normal way of thinking to provide a voice for the people who have been disregarded and oppressed (Saunders et al., 2016). They attempt to bring in the views of the oppressed and break down what is regarded as 'reality'. Postmodernist embodies the whole paradigm which includes ontology, epistemology, axiology (Mora, 2012). They are similar to interpretivist as they take a deeper examination of the phenomena (Saunders et al., 2016). They follow a qualitative research design (Mora, 2012).

3.3 Research Paradigm

The four paradigms namely functionalist, interpretive, radical structuralist and radical humanist paradigms were created by Burrell and Morgan in 1979 and have been broadly accepted and used (Burke, 2007). A paradigm describes the relations of people in a society (Dunn, 2021). Paradigms assist researchers in having a wide range of viewpoints that guide them to construct their theories (Dunn, 2021).

3.3.1 Functionalist

Functionalists search for clarity from a realist perspective (Burke, 2007). It is a rational view of problems that can be quantified, assessed and observed (Burke, 2007). Theories can be examined objectively with the use of practical data (Ardalan, 2010). The approach is closely associated with positivism where the world is viewed as real and concrete (Ardalan, 2010). The

functionalist paradigm is currently leading in academics where societies can be described as cause and effect (Ardalan, 2010).

3.3.2 Interpretive

Interpretivists see the world as being subjective and their purpose is to comprehend it as it is (Cronje, 2016). They want to understand the world from the eyes of the participants rather than from the researcher (Rehman, Alharthi, 2016). They aim to create a new and meaningful understanding of the social world (Saunders et., 2016). The interpretive paradigm allows researchers to evaluate the behaviour of humans taking into account the political, ethnic, moral and social issues (Ardalan, 2010).

3.3.3 Radical Structuralist

Theorists focus on an objective world (Cronje, 2016). Radical structuralists consider class or race in a community as important for understanding the nature of knowledge (Ardalan, 2010). They claim that all knowledge is specific to class or race (Ardalan, 2010). They believe that everything in the world has a formal relationship and are associated with the view of functionalists (Burke, 2007).

3.3.4 Radical Humanist

Radical humanist theorists are associated with radical change and are similar to interpretivists, they also view society as being subjective (Saunders et., 2016). These theorists see society as one and are focused more on removing social restrictions that hinder the potential of people (Burke, 2007). They are related to interpretivists whose beliefs reside with subjectivity (Burke, 2007). Their greatest emphasis is placed on power, government, superiority and oppression (Saunders et., 2016).

3.4 Research Design

Research Design is the road map of how a researcher will go about gathering the appropriate data and the techniques used to examine the data which are aligned to the objectives of the research (Sileyew, 2019). The correct design must be selected before commencing with the research process or else it may result in unsuccessful research. (Sileyew, 2019). There are three types of research designs, namely qualitative, quantitative and mixed methods (Saunders et al., 2016). Qualitative designs are associated with being more flexible and aim to create theories, whilst quantitative designs are more rigid and aim to test current theories (Bhandari, 2022).

3.5 Quantitative Research

This study adopts a quantitative research approach. Quantitative research centres on measuring a lucrative set of variables to respond to theory-guided research questions and hypotheses (Creswell and Creswell, 2018). Apuke (2017) describes quantitative research as calibrating and examining variables to obtain results. This entails the utilisation and analysis of numerical data by using precise statistical methods to answer questions such as who, what, where and how (Apuke, 2017). According to Rehman and Alharthi (2016), the quantitative data can be gathered by using true experiments, standardised tests or surveys with questions that are mostly closed-ended. The data produced using these methods are subjected to descriptive and inferential statistical analysis (Saunders et al., 2016). Quantitative analysis strives to investigate the cause and effect relationship amongst two variables by utilising statistical and mathematical methods (Ahmad et al., 2019). Graphs and tables are used to assist in making the analysis of results easier for the researcher (Ahmad et al., 2019).

3.6 Location

This study will be conducted at the government's intuition's four call centres. Two call centres are located in Gauteng, one in the province of KwaZulu-Natal and the other in the Western Cape. Although the call centres are located in different provinces, it is regarded as a national call centre.

3.7 Respondents and Census Approach

Census is a method of gathering and recording information about the members of a population (Surbhi, 2017). It studies every unit of that population and is regarded as reliable and accurate (Surbhi, 2017). This study followed a census approach where the complete population of participants were targeted within a specified period. All 552 call centre agents in the government institution's call centre were chosen as the targeted census.

3.8 Developing the Research Instrument

This study made use of a questionnaire to collect data. Questionnaires are in most instances designed to gather large amounts of quantitative data (Sekaran and Bougie, 2016). It can be made available online, posted or personally administered. Questionnaires are commonly used methods in a survey strategy and work well for a descriptive or explanatory type of research (Saunders et al., 2016). Since each participant is provided with the same set of questions, it is an effective means of gathering responses from large populations (Saunders et al., 2016). Researchers must ensure that questionnaires can gather accurate data which they require to respond to the research questions and attain the objectives of the study (Saunders et al., 2016). Questions contained in the questionnaire should be clear and free from any ambiguity as they should not confuse the respondent (Adams, Khan and Raeside, 2014). They should no way lure the respondent to the response as this will be regarded as a biased type of question (Adams et al., 2014).

The first page of the questionnaire indicated the title, the Informed Consent (see Appendix 3) and an option to accept or reject participation. The questionnaire comprised of two parts, section A which contained five questions related to demographics and section B contained fourteen questions that were related to the research. Questions in section B were constructed to prompt responses about the concepts and topics highlighted in the literature review as well as the theoretical model that underpins this study.

3.9 Data Collection

Administration of the questionnaire

The questionnaire was created on an online system called GoogleForms® (see Appendix 4). The link to the questionnaire was emailed to all participants using bulk email. Reminders notices were emailed to the participants to ensure the completion of the questionnaire was within the specified period. Even though the target population was located nationally, the data collection was effective. The data collection began on 21 January 2022 and ended on 27 January 2022.

3.10 Reliability and validity of the study

The questionnaire consisted of questions that were clear and specific. It was carefully constructed to match the objectives and theoretical framework of the study which added to the reliability and validity of the study. There were nine Likert scale questions used in the questionnaire which was grouped into 5 classifications. These classifications were "Strongly Agree", "Agree", "Uncertain/No Comment", "Disagree" or "Strongly Disagree". This format is simple for respondents to complete. It allows for closed questions which limits the responses, therefore ensuring reliability and validity.

3.11 Researcher Bias

Bias was removed from the study in the following ways:

- The census is located around the country and therefore has no relation to the researcher.
- Most questions were limited using Likert scale questions that contain alternatives to select.
- The completion of the survey was completely voluntary.
- Demographic information was only used to support findings in Chapter 4
- The findings from the study were captured and analysed by the researcher only.

3.12 Data Analysis

A total of 98 responses were received and this resulted in a 19% response rate of an entire 'population'. The data was analysed using descriptive frequency analysis. Once the submission deadline was reached, the data was extracted from GoogleForms® onto Microsoft Excel format. Chronbach's alpha reliability testing was used to test the reliability and consistency of the data. Frequency analysis was used and the results were illustrated in table and graph format.

3.13 Ethical Considerations

In order to conduct data collection for this study, an application for Ethical Clearance (see Appendix 1) by the University of Kwa-Zulu Natal (UKZN) Research Committee was required. This process did not follow standard protocols as the organisation used for the study contains sensitive and confidential information and therefore required Ethical Clearance first. Once the Ethical Clearance was approved, an application for gatekeepers' letter was submitted to the organisation on which the study is based. Data collection only commenced when gatekeepers' approval was received.

Ethical consideration was taken into account before distributing the questionnaire. An Informed Consent was placed on the opening page of the questionnaire to confirm the respondent's anonymity. The questionnaire was designed to ensure respondents agreed to the informed consent before commencement. Participation in the study was completely voluntary. All data received from the respondents are kept confidential and there were no details of the respondent's identity required. This study ensured that the highest ethical standards were adhered to.

3.14 Summary

This chapter outlined the applicable research methodology that was used in this study. It included the research design, census approach, the selection and creation of the research instrument, and data collection. The chapter also included an overview of data analysis and the technique used. The reliability and validation, bias and ethical consideration were discussed. The following chapter will present data analysis and discussion of the findings.

CHAPTER FOUR

ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents details of the quantitative analysis of all data collected from the study. The purpose is to provide a closer examination and discussion of the responses to the question contained in the questionnaire. The questionnaire was composed of 14 questions which were developed based on the research objectives and theoretical framework that underpins this study. To begin the analysis, a reliability analysis was conducted to establish the credibility of the data. This was followed by the descriptive statistics which in this study is the frequency analysis.

4.2 Recapping the Research Questions and Objectives

The questions that the research intended to answer is:

- What are the current systems and processes in place to capture tacit knowledge at the call centre?
- What are the challenges in capturing tacit knowledge at the call centre?
- How can tacit knowledge be used to create and manage new knowledge to improve service delivery at the call centre?
- What would be needed to promote knowledge creation and management from tacit knowledge at the call centre?

The objectives of the research were to:

- To establish current systems and processes in place to capture tacit knowledge at the call centre.

- To determine the challenges in capturing tacit knowledge at the call centre.
- To determine the use of tacit knowledge to create and manage new knowledge to improve service delivery at the call centre.
- To find ways to promote knowledge creation and management from tacit knowledge at the call centre.

4.3 Census approach and response rate

The total population for this study was 522 call centre agents. A link to the online questionnaire was emailed to the call centre agents for ease of access. Ninety eight (98) responses were received resulting in an approximately 19% response rate of the total ‘population. ‘Hence the response rate makes up almost one fifth of the entire population thereby indicating strong and valid results.

4.4 Demographic statistics

This section describes the demographic details of the respondents which are displayed in graph and table format.

4.4.1 Race

Figure 4.1. displays the racial population of the respondents.

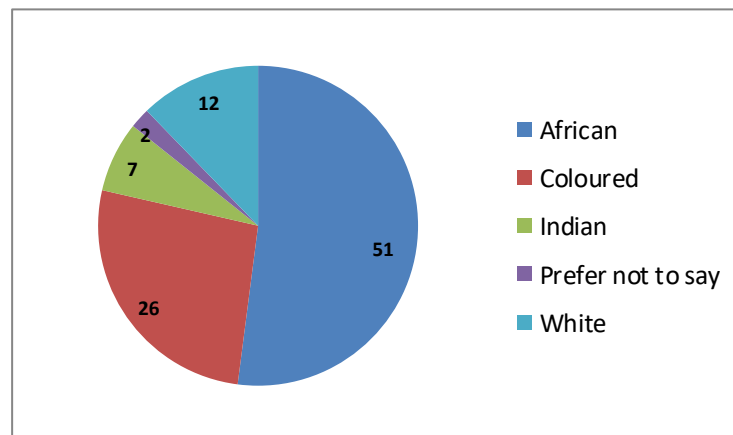


Figure 4.1 Racial population of the respondents

The largest number of people that participated in the study were African (n=51), followed by Coloured (n=26), White (n=12), Indian (n=7) and a small number of people (n=2) preferred not to say.

4.4.2 Demographic depiction of the gender and age category

Table 4.1 provides a summary of the gender and age of the respondents.

Demographical Details	Frequency
Gender	
Female	82
Male	16
Total	98
Age Group	
21 - 30	7
31 - 40	53
41 - 50	30
51 - 60	8
Total	98

Table 4.1: Gender and Age Category

Females (n=82) represent the largest number of respondents in the study, with a substantially low number of males (n=16). This indicates that the organisation is empowering females and gender equity in this regard. The largest age group of the respondents were between 31 – 40 years (n=53), this was followed by respondents between the age group of 41 – 50 years (n=30). Since the majority of the respondents are above the age of 31, this may suggest that the respondents

possess a significant amount of experience and are fairly acquainted with the working environment.

4.4.3 Level of education

Figure 4.2 demonstrates the level of education of all respondents.

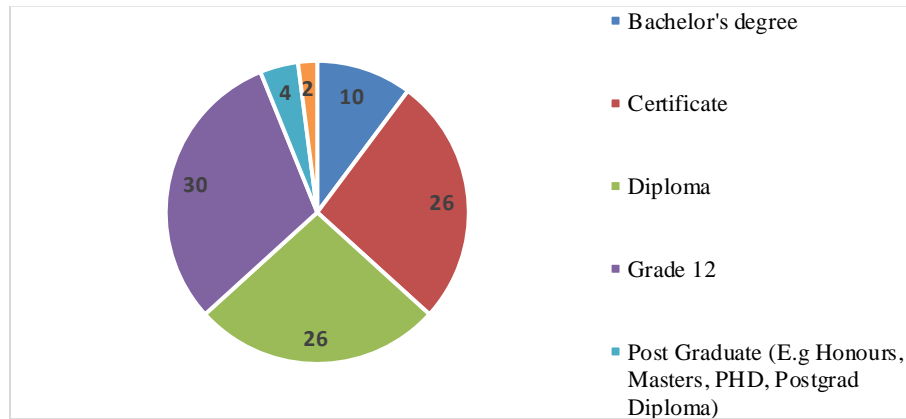


Figure 4.2 Level of Education

The majority (67%) of respondents had post-grade 12 qualifications, thus indicating that most respondents have acquired a tertiary education which is indicative of the high level of education and knowledge that exists within that division.

4.4.4 Period of Employment

Figure 4.3 depicts the period of employment of the respondents.

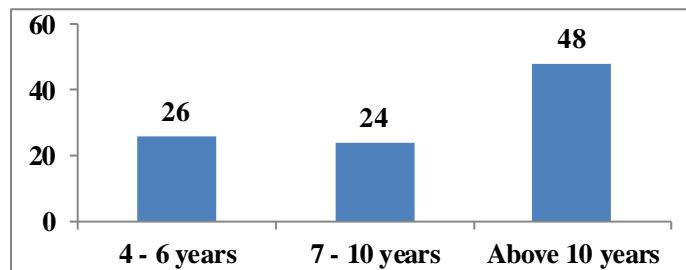


Figure 4.3 Period of Employment

A substantial proportion of the respondents are employed for a period longer than 7 years with 48 respondents having over 10 years of employment. This implies that most of the respondents are sufficiently knowledgeable about their business unit and identify with the culture of the organisation.

4.5 Reliability Analysis

In this study, Cronbach alpha reliability testing was used to conduct a reliability analysis of the research instrument. Cronbach alpha is a measure that is used to test the reliability and consistency of a certain group of variables (Goforth, 2015). It is usually used for Likert type questions which form a scale and the Cronbach alpha assesses the strength of the scale (Goforth, 2015). Cronbach alpha tests the degree that items are independent measures of the same underlying construct which will be correlated with one another (Sekaran and Bougie, 2016). Internal consistency can range between zero and one (Ursachi, Horodnic and Zait, 2015). The overall acceptance rule is that 0.6-0.7 depicts an acceptable level of reliability and 0.8 – 0.9 is regarded as excellent. (Ursachi, Horodnic and Zait, 2015). Using the Cronbach alpha testing, all 9 questions which are linked to scaled questions have been regarded as valid and reliable.

Table 4.2 provides the summary of the results.

Question	Number of Items	Cronbach's Alpha
2	6	0,743
4	4	0,611
5	4	0,868
6	5	0,838
10	4	0,846
11	6	0,929
12	5	0,939
13	8	0,977
14	5	0,950

Table 4.2 Cronbach Alpha Reliability scoring

The majority of questions scored an alpha value over 0.7 and therefore regarded as reliable. Only question 4 scored slightly lower than 0.7. This may be due to the research instrument being

developed fairly recent, therefore an alpha value of 0.6 can be considered acceptable. In addition, the response rate was approximately 19% of a target population of 522. Therefore, the research instrument is viewed as being valid and reliable.

4.6 Descriptive analysis of responses

A descriptive frequency analysis was used to analyse the data. This was done to illustrate the data more logically and profoundly. The analysis is depicted using graphs and tables. This will allow for a thorough explanation of the outcomes associated with each objective.

4.7 Descriptive statistics

This section provided a detailed description of the statics and discussions thereof. These are further supported by references to studies cited in the literature review.

4.7.1 Recording of customer feedback in the call centre

Figure 4.4 illustrates whether customer feedback is being captured in the call centre.

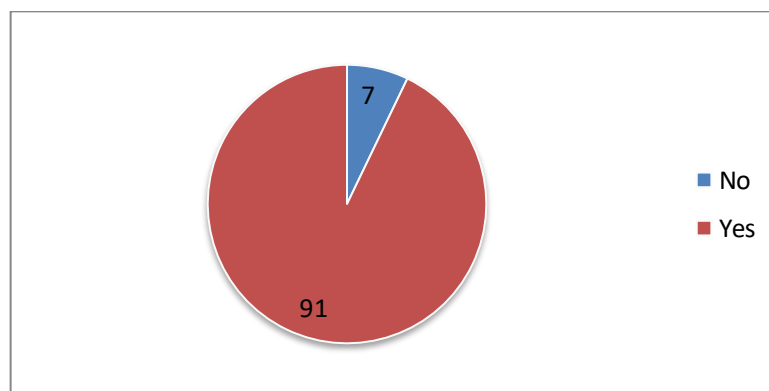


Figure 4.4: Recording of customer feedback in the call centre

Approximately 93% of respondents (n=91) concur that customer feedback is being recorded in the call centre. This is a result of the systems that are in place to record voice interactions as well as the system that is used when agents capture the summary of the call.

4.7.2 Information being communicated from the Knowledge Management Team to call centre agents for resolving customers' queries

Figure 4.5 illustrates how much information is being communicated from the Knowledge Management Team for resolving customer queries.

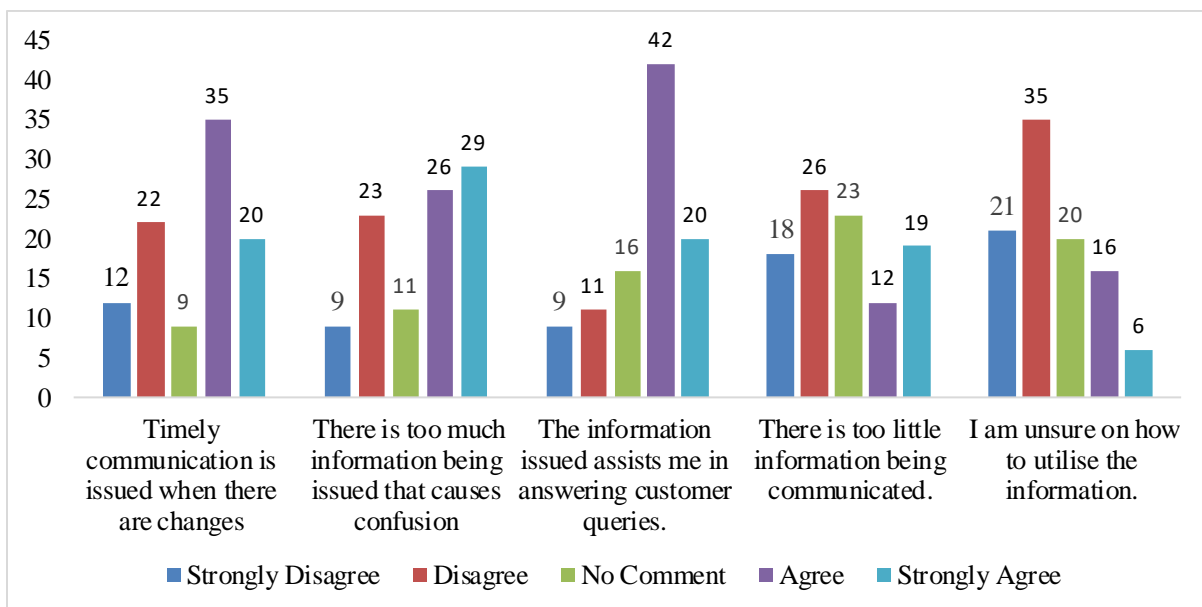


Figure 4.5 Information being communicated from the Knowledge Management Team for resolving customer queries

A significant number of respondents strongly agree and agree that the information issued from the Knowledge Management team assists them in answering customer queries. However, there were considerable amounts of respondents that disagreed on timely communication, the amount of information, and whether the information assists them in resolving customer queries. This shows a fair degree of uncertainty.

In order to ensure information is provided to call centre agents to answer customer queries, Sampath (2021) proposes that organisations may use document management to store knowledge for easy access. Other mediums include standard operating procedures, guidelines, manuals, tutorials, books, case studies and white papers (Sampath, 2021). Information can also be stored in software solutions, social media or any online platform that is user friendly (Navidi et al., 2017).

4.7.3 Challenges in capturing tacit knowledge

Figure 4.6 outlines the various challenges that organisations face in capturing tacit knowledge.

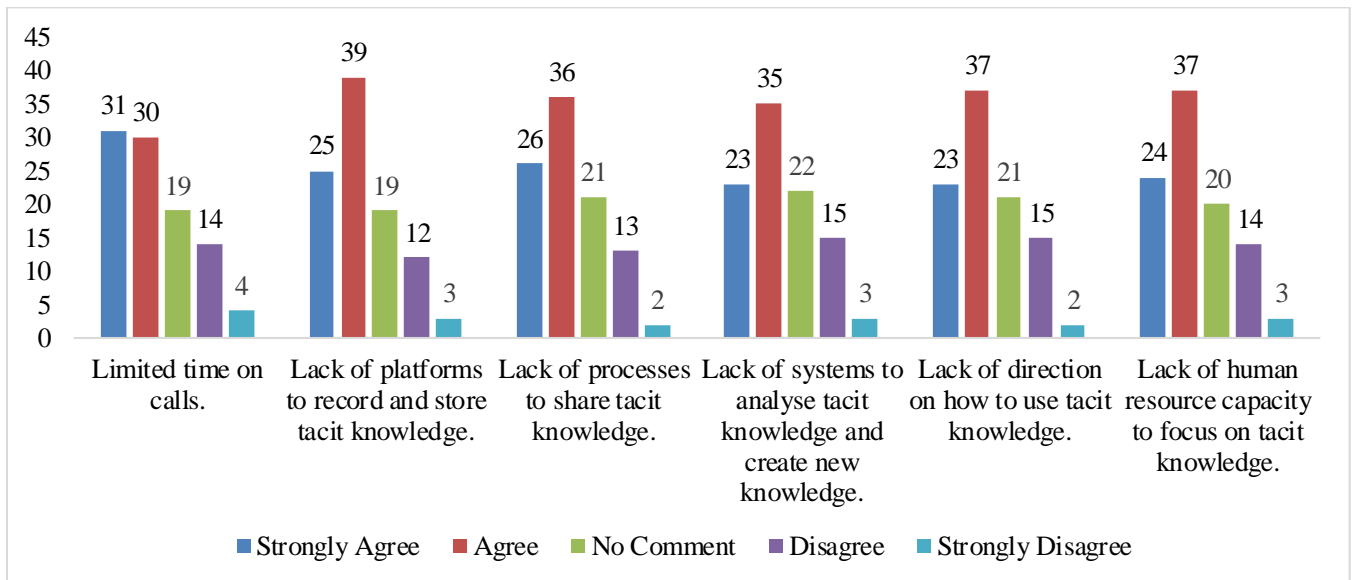


Figure 4.6 Challenges in capturing tacit knowledge

There is significant agreement on all, clearly indicating that challenges do exist when it comes to capturing tacit knowledge. There is a fair number of respondents who did not comment, this implies that they are uncertain. All challenges were ranked high by respondents. This, therefore, demonstrates a lack of time, lack of platforms to record and store knowledge, lack of processes to share tacit knowledge, lack of analytical systems, lack of guidance and direction on the use of tacit knowledge and a lack of human capacity.

In terms of lack of time, Mahrooian and Forozia (2012) assert that it takes time to internalise knowledge therefore the availability of time is crucial for tacit knowledge sharing. Al-Attar and Shaalan (2016) share the same view and further add the lack of time to practice tacit knowledge sharing amongst staff does pose a challenge. With regards to the lack of platforms, Mitchell (2003) proposes that information technology such as emails, websites and other platforms successfully assists in knowledge sharing. Similarly, Panahi, Watson and Partridge (2013) maintain that blogs, instant messaging, wikis do encourage communication which allows for knowledge sharing. Volini et al. (2020) claim that the use of advanced technology contextual information can provide solutions real time thus aiding new knowledge to be shared. A lack of systems that analyse tacit knowledge will result in call centre agents not having the correct information available when required. In terms of the lack of guidance and human capacity, Ketvirtis (2011) suggest that managers should lead by example, clarify expectations, create opportunities to share knowledge and recognise team members who are contributing to the process. Taking into account the above, the challenges in the call centre can be overcome.

4.7.4 Conversion of tacit knowledge is being converted to formalised (explicit) knowledge

Figure 4.7 displays whether tacit knowledge is being converted into formalised knowledge.

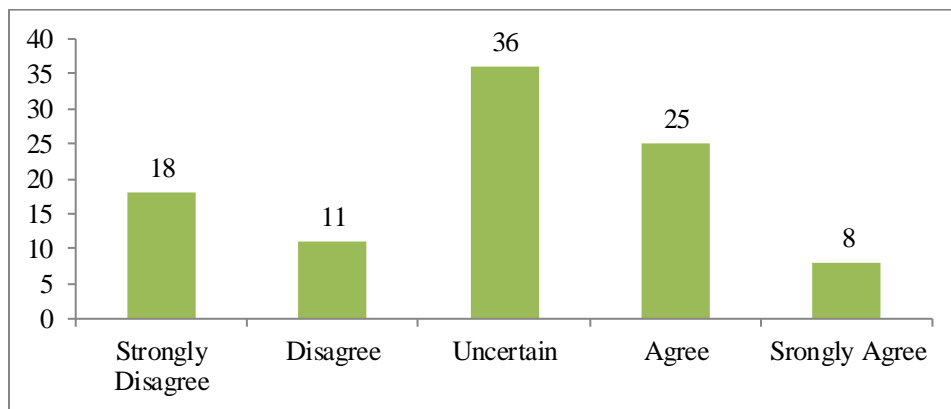


Figure 4.7 Is tacit knowledge being converted to explicit knowledge

A large number of respondents (n=36) are uncertain whether tacit knowledge is being converted to explicit knowledge. A further (n= 29) strongly disagree and disagree. This signifies that the

respondents do not know if tacit knowledge is being converted to explicit knowledge and thereby may not know its potential. According to Awang et al. (2021), it is critical to involve management in the tacit knowledge sharing process. Managers are responsible to promote the sharing and capturing of tacit knowledge (Awang et al., 2021). Sampath (2021) claim that documenting is one way to capture tacit knowledge.

4.7.5 Access to all core systems to assist customers with queries

Figure 4.8 indicates whether call centre agents have access to all core systems to assist customers with queries. A substantial number of respondents (63%) are in strong agreement and agreement that they are provided with access to all core systems.

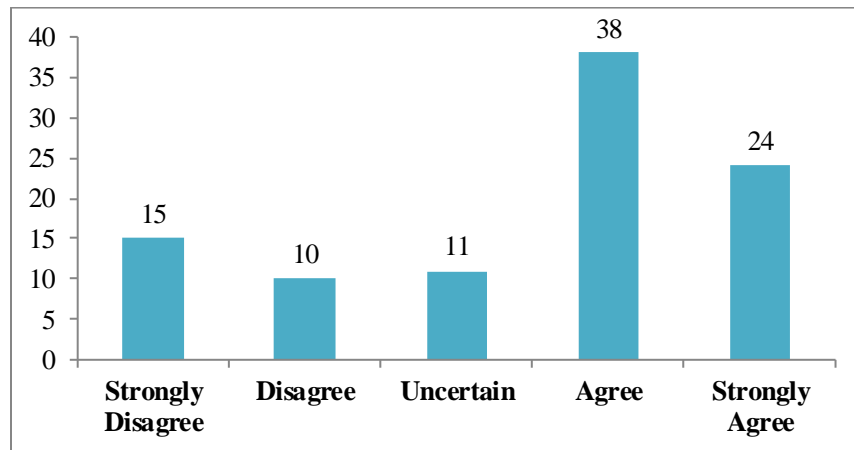


Figure 4.8 Access to core systems

This can indicate that they are sufficiently equipped with the call centre's systems to assist customers. However, in order to capture and share knowledge, more collaborative systems are required. Mitchell (2003) claims that technologies such as the internet, emails, websites, databases and other electronic platforms have successfully facilitated knowledge sharing. Panahi, Watson and Partridge (2013) furthermore suggest that systems such as Likewise, Web 2.0 technologies like blogs, instant messaging and wikis promote communication within the organisation and allow for knowledge sharing.

4.7.6 Call centre agents are trained on how to capture tacit knowledge

Figure 4.9 depicts whether call centre agents are trained to capture tacit knowledge. A large number of the respondents (n=44) are uncertain whether they have been trained on capturing tacit knowledge whilst a further 26 disagreed.

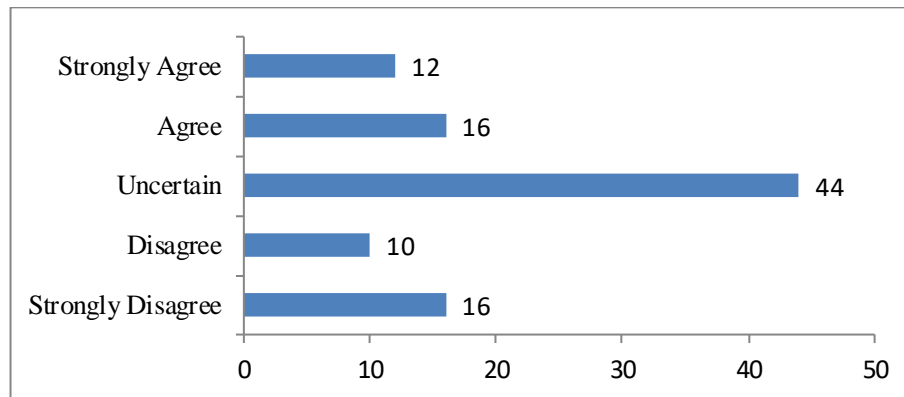


Figure 4.9 Number of call centre agents trained to capture tacit knowledge

This statistic indicates that respondents may not be trained on capturing tacit knowledge. Training is one way of capturing tacit knowledge (Anderson, 2022). Whether training is formal or informal, it provides a platform for employees to interact thereby increasing employee knowledge (Anderson, 2022). Furthermore, due to tacit knowledge being experiential, training is vital for sharing knowledge (Sampath, 2021).

4.7.7 Current primary systems in place to capture tacit knowledge from customers

Figure 4.10 summarises the type of systems the call centre currently uses to capture tacit knowledge.

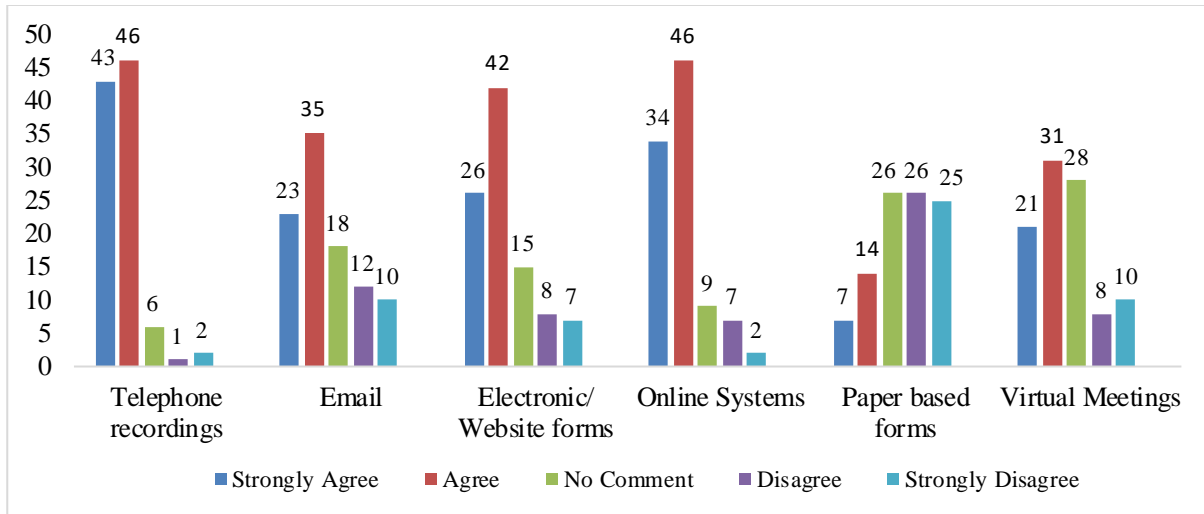


Figure 4.10 Current Systems in the call centre to capture tacit knowledge

Most respondents were in agreement that telephone recordings, email, electronic forms, websites and online systems are mainly used in the call centre, however, this may not mean that the systems have the capability to capture and share tacit knowledge. Paper based forms (n=21), are the least as most functions in the call centre are performed online. As a result of call centre agents working from home in recent years, some respondents (n=52) did select virtual teams and email (n=58).

Many studies reveal that Information Technology aids the knowledge sharing process, however, there are barriers that prevent this from occurring such as when employees do not utilise existing technology due to inadequate knowledge sharing tools, or are not familiar with how to use the technology (Anwar et al., 2019). Shahid and Alamgir (2011) agree with this view and further add that other barriers include a mismatch of the system with the job requirement or, a new technology is not compatible with the existing systems or, there is a lack of knowledge of the capability of a system. The call centre may have systems in place, however, these systems need to be assessed to understand the capability of the system and whether it can be used to capture and transfer tacit knowledge.

4.7.8 Capturing tacit knowledge and converting it into new formalised knowledge assist in reaching the organisation's objectives

Figure 4.11 provides a summary of the different ways in which tacit knowledge can be used to reach organisational objectives based on respondents perceptions.

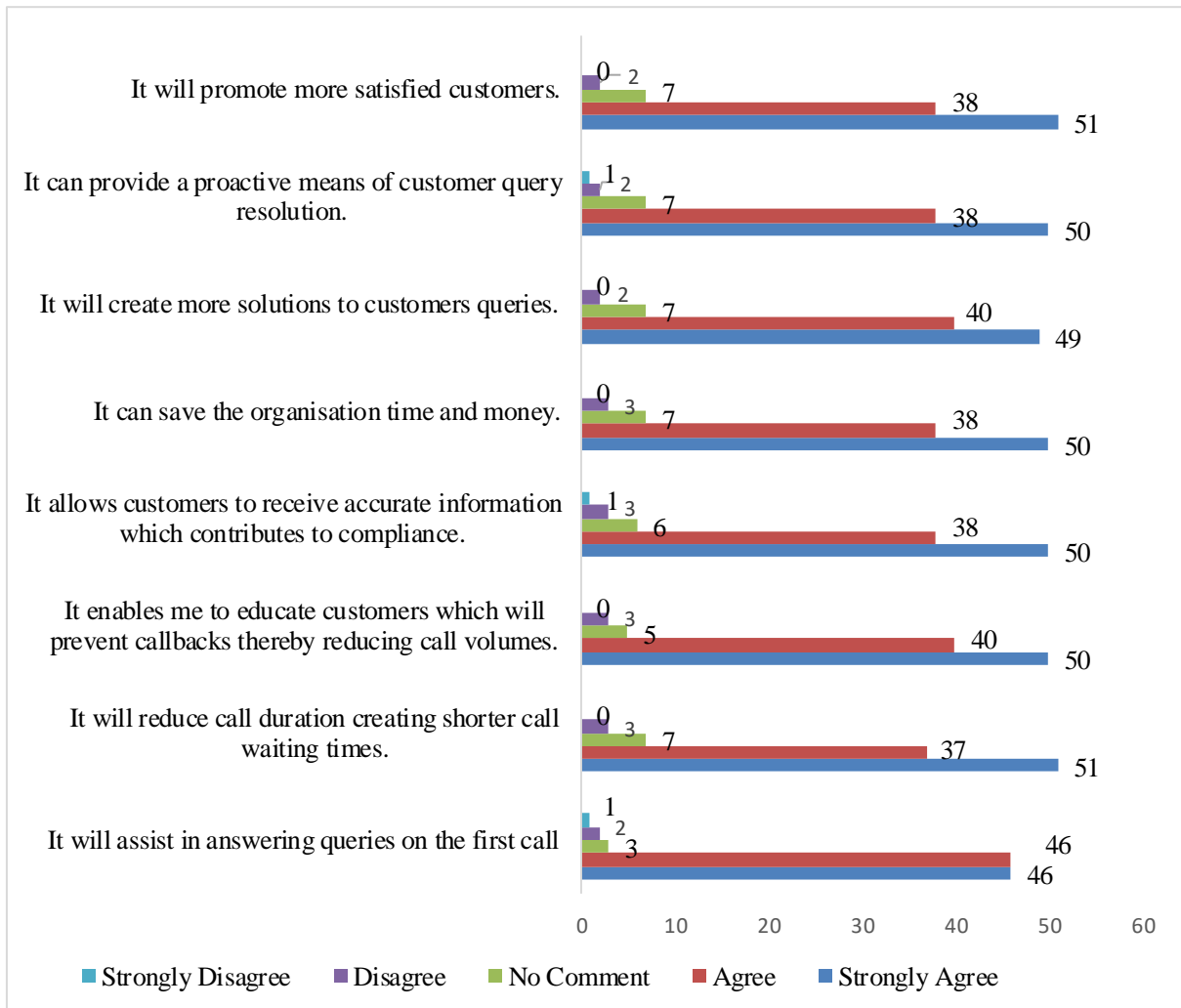


Figure 4.11 Capturing of tacit knowledge and converting it into new formalised knowledge assist in reaching the organisation’s objectives

It was more than obvious that the majority of respondents agreed and even strongly agreed that if tacit knowledge is converted into new formalised knowledge, it will assist in reaching the organisation’s objectives. These include promotion of customer satisfaction, providing proactive

means of customer query resolution, creating more solutions to customer queries, saving time and money, allowing customers to receive accurate information which contributes to compliance, educating customers which will prevent call-backs thereby reducing call volumes, reducing call duration creating shorter call waiting times and assist in answering queries on the first call.

Feinberg et al. (2000) concur and further add that the main component driving customer satisfaction is resolving queries on the first call. In addition, Morrow (2021) suggest that where there is effective knowledge sharing and sharing of ideas from previous cases, problem-solving can be improved. In terms of saving money, Morrow (2021) further proposes that when decision making in the organisation is optimised, it saves time, effort and reduces cost.

Structured knowledge enables call centre agents to respond to queries faster since less time is spent searching for answers, which reduced call handling time thereby reducing call waiting times (Rasooli2006). Furthermore, in terms of first call resolution, when there is structured knowledge, call centre agents can diagnose a problem much faster which results in finalising queries on the first call (Rasooli, 2006).

4.7.9 Ways to improve the capture and use of tacit knowledge in the call centre

The various methods to improve the capture and use of tacit knowledge are summarised in figure 4.12.

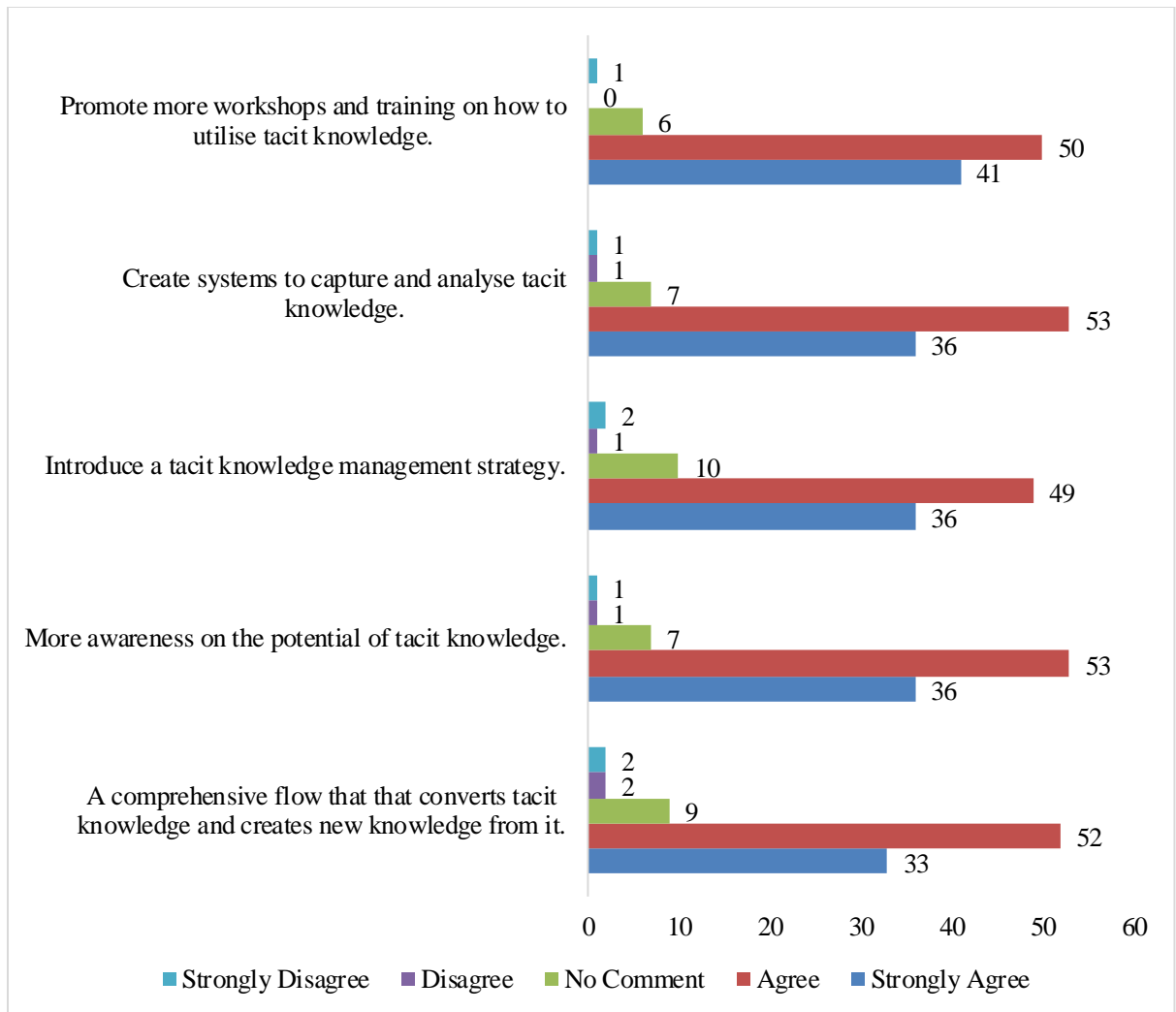


Figure 4.12 Ways to Improve the capture and use of tacit knowledge

Most respondents agreed and strongly agreed that all methods to improve the capturing and use of tacit knowledge can be used. These included promoting more workshops and training on how to utilise tacit knowledge, creating systems to capture and analyse tacit knowledge, introducing a tacit knowledge management strategy, more awareness on the potential of tacit knowledge, a comprehensive flow that converts tacit knowledge and creates new knowledge from it.

There are various studies that support these finds. To promote workshops on tacit knowledge, Communities of Practice (CoPs) can be formed by people to interact on a platform to learn from each other (Venkatraman and Venkatraman, 2018). These platforms can be used to learn about

tacit knowledge. Training can be introduced in a form of a mentorship programme. Mentors offer opportunities that managers may not be able to, they encourage critical thinking and teach problem-solving techniques from experience (Murphy, 2020). In terms of analytical systems, Volini et al., 2020 suggest that the use of advanced technology can assist in contextual information and providing solutions in real-time. With regards to creating a tacit management strategy, Makamba (2015) suggest creating an organisational culture influences knowledge sharing. These include sharing of information such as how processes are created, authenticated and spread across the organisation. With regards to awareness, leadership must be able to create an environment that makes employees feel safe to share their knowledge and to encourage tacit knowledge sharing (Theriou et al., 2011).

4.7.10 Converting tacit knowledge to explicit knowledge can make call centre agents more effective in answering customer queries.

Figure 4.13 is indicative of whether tacit knowledge is converted into explicit makes call centre agents more effective in answering customer queries.

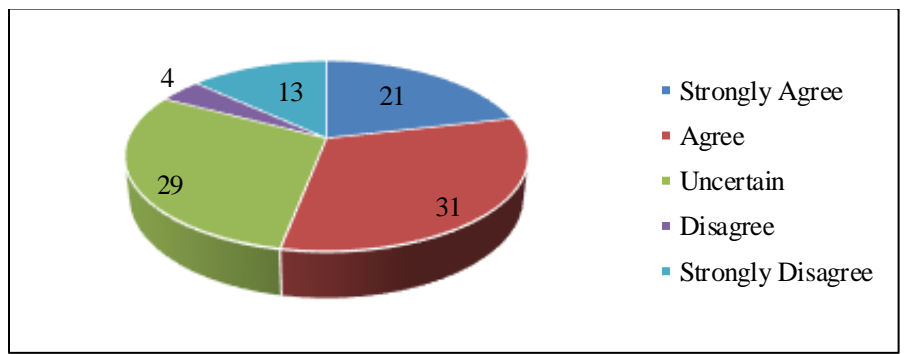


Figure 4.13 Converting tacit knowledge to explicit knowledge can make call centre agents more effective in answering customer queries

The majority of respondents strongly agree and agree that when tacit knowledge is converted into explicit knowledge it is effective when answering calls. However, many were also uncertain. This shows that they may not be aware of the potential of tacit knowledge.

According to Orgau (2020), converting tacit knowledge into exiting knowledge will result in employees using best practices, which results in increased productivity. When tacit knowledge is correctly utilised with existing knowledge, it can enhance job performance (Jackson et al., 2006). This implies that when tacit knowledge is converted to explicit knowledge, it can make the call centre agents more effective when answering calls.

4.8 Application of the Theoretical Framework

The Nonaka and Takeuchi’s SECI model is composed of four modes namely Socialisation, Externalisation, Combination and Internalisation (Nonaka and Takeuchi, 1995). The statistics below demonstrate the applicability of the model in this study.

4.8.1 Ideas and suggestions are taken into account in the call centre

The various methods of capturing suggestions and ideas are summarised in Figure 4.14.

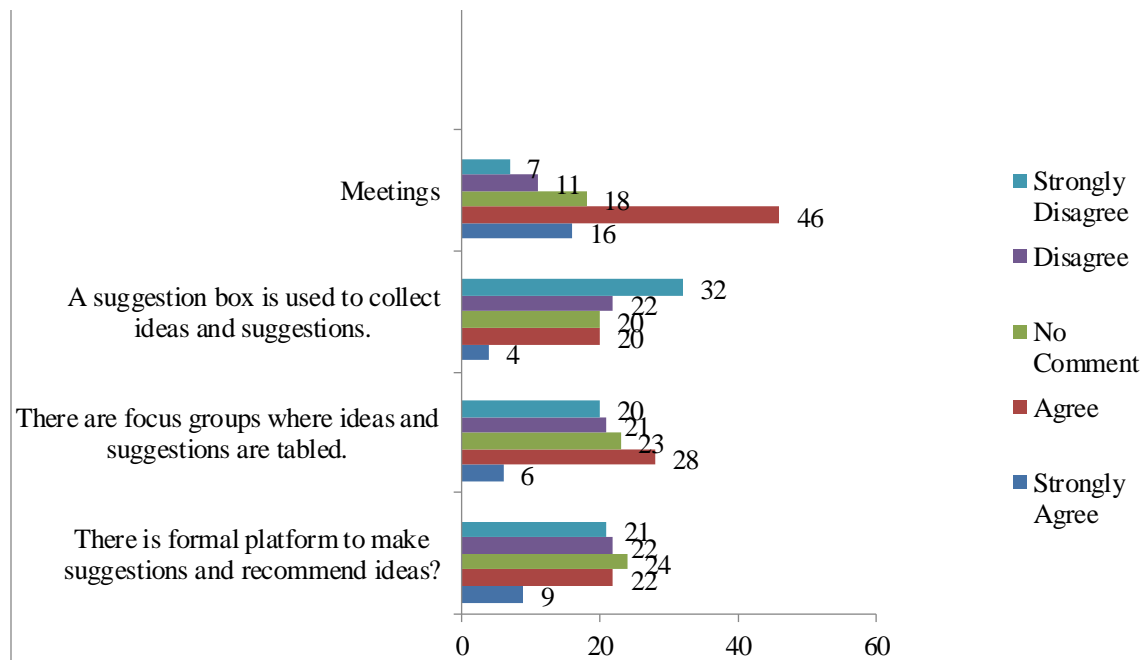


Figure 4.14 Methods of capturing suggestions and ideas

A large number of respondents (63%) strongly agree and agree that meetings are the most suitable platform to share suggestions and ideas. There were very high levels of uncertainty and disagreement on all other methods. This implies that suggestions and ideas are not being taken into account in the call centre. In terms of meetings, Mahroeian and Forozia (2012) assert that when employees have conferences, meetings or any team gatherings to meet and speak about their stories or experiences, socialisation is taking place. In order to create focus groups and use online platforms, Venkatraman and Venkatraman (2018) suggest the use of Communities of Practice (CoP). Employees can either learn using face to face interactions for online platforms.

In terms of socialisation construct, this shows a lack of socialisation (Nonaka and Takeuchi 1995).

4.8.2 Knowledge sharing amongst call centre agents and respective departments

Figure 4.15 depicts the various ways in which the call centre can promote knowledge sharing.

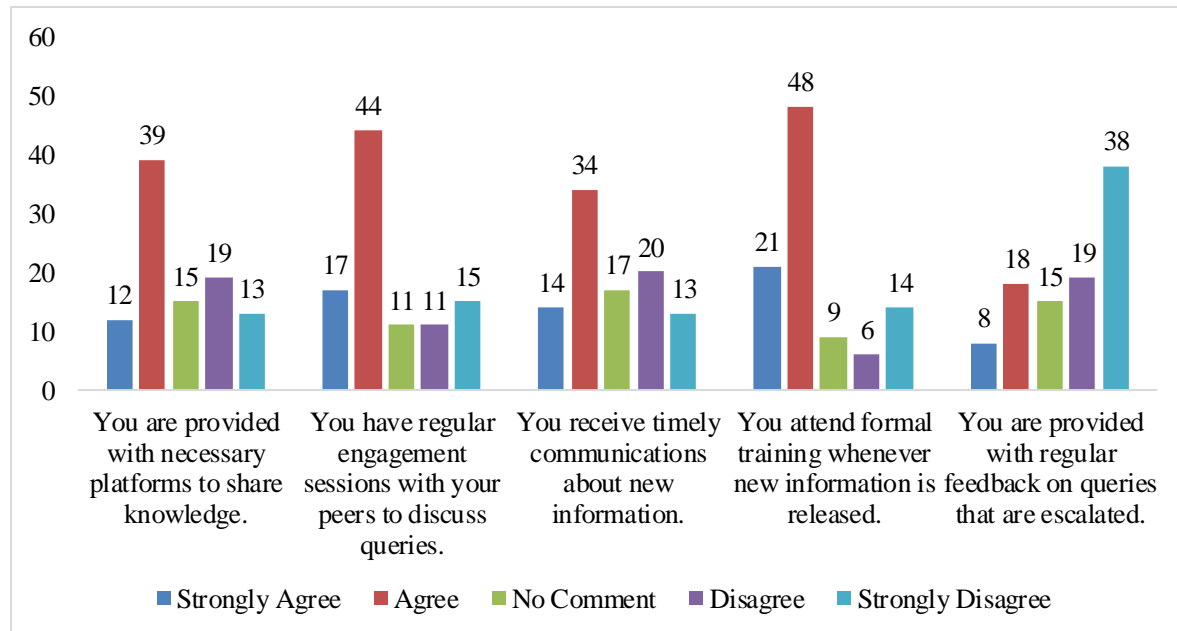


Figure 4.15 How the call centre promotes knowledge sharing amongst call centre agents and respective departments

A high number of respondents (n=69) strongly agree, agree with being provided with training when new information is released. In all other methods, there was uncertainty and disagreement.

In order to share knowledge in the call centre, teamwork should be promoted. Teamwork promotes interaction with their peers to upskill themselves and be part of a continuous learning process (Bothra, 2021). During this process, tacit knowledge is converted into explicit knowledge (Bothra, 2021). Another method to share tacit knowledge would be to create Communities of Practice (CoP). CoP's enable employees to engage, collect and share information (White, 2021). Different communication tools can be used, such as online platforms to record tacit knowledge (White, 2021).

Externalisation takes place when organisations create platforms where they can interact and document knowledge in any format, in other words when tacit knowledge is transformed into explicit knowledge (Nonaka and Takeuchi 1995). The time that is spent when discussing staff experiences, the errors made or the achievements made, all form part of the conversion of tacit to explicit. When this deeper understanding is attained, the knowledge must be captured in any format. (Mahroeian and Forozia, 2012).

In terms of externalisation construct, this shows a lack of externalisation (Nonaka and Takeuchi 1995).

4.8.3 Tacit knowledge captured and added to existing knowledge

Figure 4.16 provides a summary of the various ways in which tacit knowledge is added to existing knowledge.

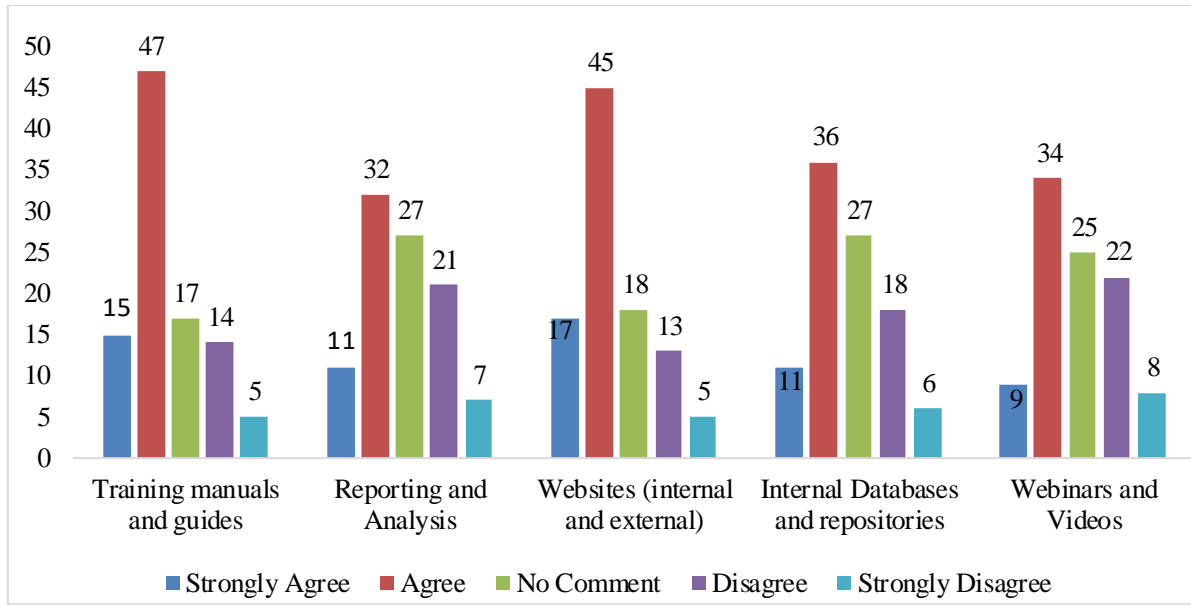


Figure 4.16 Tacit knowledge is captured and added to existing knowledge in the following ways

A majority number of respondents (n=62) strongly agree and agree that tacit knowledge can be captured and added to existing knowledge in both training manuals and guides and on Websites. However, there are significant levels of respondents who are uncertain and disagree. This means that there is a lack of understanding regarding the processes of tacit knowledge being added to existing knowledge.

For tacit knowledge to be documented, it must first be converted into explicit knowledge (Sampath, 2021). Tacit knowledge can be documented in standard operating procedures, guidelines, manuals, tutorials, books, case studies and white papers (Sampath, 2021). It can further be stored in software solutions, social media or any online platform that is user friendly (Navidi et al., 2017).

When explicit knowledge is merged with other knowledge to form more systematic explicit knowledge, this process is knowledge as combination (Kumar and Ganesh, 2016). Tacit knowledge may be captured and added to existing knowledge using reports, manuals, guides, computerised formats such as intranets, virtual communities for sharing knowledge, and

furthermore (Kumar and Ganesh, 2016). In terms of combination construct, this shows a lack of combination (Nonaka and Takeuchi 1995).

4.8.4 Call centre and culture of learning

Figure 4.17 provides the various ways in which the call centre supports a culture of learning.

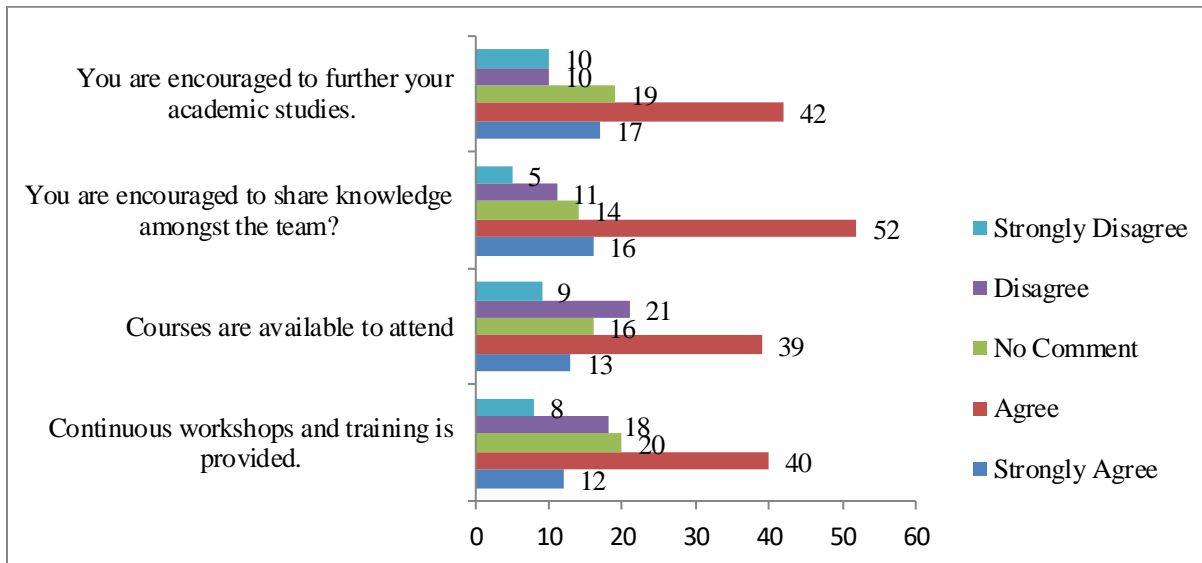


Figure 4.17 Call centre and culture of learning

Whilst many respondents strongly agree and agree that the organisation supports a culture of learning, there is however a substantial level of respondents that are uncertain and in disagreement. This indicates that a learning culture is required.

In order to promote a culture of learning in the call centre, mentorship programmes can be conducted. Mentoring allows for constant feedback and customised learning using a side by side approach (Murphy, 2020). Training, such as experiential learning, which is side by side training, simulations is another form of training that can be used (Sampath, 2021). A reward system helps to promote the sharing of tacit knowledge (Jeon et al., 2011). Cavaliere and Lombardi (2015) maintain that culture is a prerequisite for sharing tacit knowledge. When interventions enable employees to combine the new knowledge with their knowledge to create tacit knowledge, this is known as internalisation (Koh and Kim, 2004). In terms of internalisation construct this shows a lack of effective combination (Nonaka and Takeuchi 1995)

Overall, and currently, the Nonaka and Takeuchi (1995) model does not seem to be applied in the organisation. This can imply why the organisation seems to be lacking in tacit knowledge capture and management. However, the model can have the potential to improve the current situation should the constructs be applied. This has been supported by other studies listed above as well as results in this study whereby respondents did convey that tacit knowledge can bring about various benefits for the organisation. Hence, it can be recommended that the possibility of implementing such a model should be explored and tested.

4.9 Summary

This chapter presented the responses to the questionnaire which is related to the objectives and theoretical framework used in this study. A total of 98 respondents completed the questionnaire, which is equivalent to 19% of the target population. Reliability analysis was conducted using Cronbach Alpha to test the authenticity of the data. A descriptive frequency analysis was used to analyse the data and was illustrated using graphs and tables. The subsequent chapter will highlight the key findings, conclusions, recommendations and direction for further research based on the findings of this chapter.

CHAPTER 5

RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

The previous chapter presented the responses to the questionnaire concerning the objectives and theoretical framework applied to this study. The purpose of this chapter is to present key findings which are related to the research questions and the application of the theoretical framework. Furthermore, the chapter will address the research problem and objectives of the study. The recommendations, limitations and directions for further research will conclude the chapter.

5.2 Problem statement, Research objectives and questions of the study

This section recaps the problem statement, the research objectives and questions to show that the purpose of the study has been achieved.

5.2.1 Problem statement overview

Call centres have remained the ideal choice in terms of engagements with customers. Due to the evolving needs of the customers, building relationships and improving service delivery is the number one goal of any call centre. In order to achieve this, call centre agents must be equipped with the relevant knowledge. Capturing and using tacit knowledge can assist call centre agents to meet this goal. The research problem herein is that there was no clear indication or process of how tacit knowledge is being captured, managed, and applied to improve service delivery. The study, therefore, aimed to bridge this gap within a Government institution setting and determine processes needed for the capture of tacit knowledge and utilise this to create and manage new knowledge, thereby improving service delivery in a call centre.

5.2.2 Research Questions

1. What are the current systems and processes in place to capture tacit knowledge at the call centre?
2. What are the challenges in capturing tacit knowledge at the call centre?
3. How can tacit knowledge be used to create and manage new knowledge to improve service delivery at the call centre?
4. What would be needed to promote knowledge creation and management from tacit knowledge at the call centre?

5.2.3 Research Objectives

1. To establish current systems and processes in place to capture tacit knowledge at the call centre.
2. To determine the challenges in capturing tacit knowledge at the call centre.
3. To determine the use of tacit knowledge to create and manage new knowledge to improve service delivery at the call centre.
4. To find ways to promote knowledge creation and management from tacit knowledge at the call centre.

5.3 Determine if the research question have been answered

This section highlights the key findings about the research questions.

5.3.1 Current systems and processes that are in place to capture tacit knowledge at the call centre.

Figure 4.12 depicts the systems that the organisations use to conduct the daily functions, however, these may not be used with the intention to capture and shared tacit knowledge. Figure 4.8 indicates that most call centre agents are given access to core systems, however, figure 4.9

shows that majority of call centre agents are not trained on how to capture tacit knowledge. Call centre agents are capturing daily interactions, they need to be made aware that they are capturing tacit knowledge.

5.3.2 Challenges in capturing tacit knowledge at the call centre.

It was revealed that there are challenges in the call centre. This is illustrated by Figure 4.6. The most prevailing challenge depicted in Figure 4.6 is the lack of platforms to record and store knowledge. Another common challenge is the lack of direction on how to use tacit knowledge. This finding denotes that call centre management has not created the relevant awareness and drive to encourage tacit knowledge sharing. This finding is linked to the lack of processes to capture tacit knowledge.

5.3.3 Tacit knowledge can be used to create and manage new knowledge to improve service delivery at the call centre

Section 4.7 showed that if tacit knowledge is converted into explicit knowledge, it can be effective in responding to customer queries. This is depicted in figure 4.13. These findings concur with figure 4.10 which illustrates that when tacit knowledge is converted into new formalised knowledge, it will assist in reaching the organisation's objectives. The findings in figure 4.10 are directly linked to call centre measurements.

As much as these findings indicate that tacit knowledge can be used to create and manage new knowledge to improve service delivery, figure 4.7 show that most agents are uncertain whether tacit knowledge is being converted into formalised knowledge. This is due to a lack of awareness regarding the difference between tacit knowledge and explicit knowledge.

5.3.4 What would be needed to promote knowledge creation and management from tacit knowledge at the call centre?

Section 4.7 indicates that there are various ways to promote knowledge creation and the management of it from tacit knowledge. Figure 4.11 summarises the various methods which can be used. The following methods are prioritised from the highest:

- Promote more workshops and training on how to utilise tacit knowledge.
- Create systems to capture and analyse tacit knowledge.
- More awareness on the potential of tacit knowledge.
- A comprehensive flow that converts tacit knowledge and creates new knowledge from it.
- Introduce a tacit knowledge management strategy.

5.4 Application of the theoretical framework

This study is underpinned by the Nonaka and Takeuchi SECI Model (1995). The model is found to be applicable, however, constructs of the model are not currently being applied in the organisation. The findings indicate that tacit knowledge can be captured transformed into explicit knowledge. Once new knowledge is added to existing knowledge, it can improve service delivery. Therefore, the model can be seen as a potential model for exploration which can guide the trajectory of tacit knowledge strategy.

5.5 Did the study meet the intended objectives

The section shows that the objectives of this study have been achieved.

5.5.1 Objective 1: To establish current systems and processes in place to capture tacit knowledge at the call centre.

The study has shown that there are systems in place to capture tacit knowledge. However, these systems are more of a generic nature and not explored to its full potential. Call centre agents do agree that customer feedback is being recorded in the call centre. The majority of agents are given access to all relevant systems. However, they are uncertain whether they have been trained

to capture tacit knowledge. This can be remedied by providing more awareness around tacit knowledge.

5.5.2 Objective 2: To determine the challenges in capturing tacit knowledge at the call centre

The study has found that there are challenges in the call centre. The challenges identified can be categorised into people (management), processes and systems. Figure 4.6 depicts the challenges. These challenges must be addressed to ensure that tacit knowledge is captured and used in the call centre.

5.5.3 Objective 3: To determine the use of tacit knowledge to create and manage new knowledge to improve service delivery at the call centre

The study has found that when tacit knowledge is transformed into explicit (new knowledge), it can improve service delivery. This is illustrated in figure 4.10 and 4.13 respectively. There are call centre agents who indicated that they are not sure if tacit knowledge is being converted into explicit knowledge as illustrated in Figure 4.7, however it is only due to a lack of awareness.

5.5.4 Objective 4: To find ways to promote knowledge creation and management from tacit knowledge at the call centre

The study identifies activities that can be used to promote tacit knowledge creation and management. These activities are illustrated in Figure 4.11.

5.6 Recommendations made by this study

The study presents the following recommendations to address the aim of the study.

5.6.1 Create awareness regarding tacit knowledge

In this study it has been observed that there is a lack of tacit knowledge awareness, this was made clear when respondents were uncertain about components of tacit knowledge and its uses. The following awareness initiatives are recommended:

- Leadership should start creating awareness
- Call centre agents should be made aware of the definition of tacit knowledge versus explicit knowledge.
- Call centre agents need to understand the benefits of using tacit knowledge.
- Create a Tacit knowledge Management Strategy

5.6.2 Ensure systems capabilities for managing tacit knowledge

The study has shown that there are systems in place to capture tacit knowledge, however, it needs to be relooked at to ensure that agents can capture and used tacit knowledge from the system. The following activities are recommended:

- Assess current systems to establish whether they can be used to capture, interpret and project the most accurate information. Systems with artificial intelligence capabilities will be recommended.
- Ensure call centre agents have access to all systems.
- Call centre agents must be trained on how to capture and search for information.

5.6.3 Ensure tacit knowledge is added to existing knowledge.

The study revealed that tacit must be added to existing (explicit) knowledge in order for it to be used. The following methods are suggested to record tacit knowledge.

- Tacit knowledge should be documented in all guides, manuals or systems.
- Call centre agents should be able to easily access documented information.
- Call centre agents can use the information to assist with customer queries.
- Call centre agents should be notified when new information is added.

5.6.4 Create tacit knowledge processes to share and promote tacit knowledge

This study identified that there is a lack of processes to share tacit knowledge, the following ways are recommended:

- Introduce mentorship programmes, these programmes promote critical thinking and teach problem-solving techniques
- Establish Communities of Practice or Forums, this encourages interactions and exchange of knowledge.
- Promote the use of Social Networks, collaborative tools such as WhatsApp, Facebook, Twitter, etcetera. These tools are efficient in tacit knowledge transfer.
- Involve management in the tacit knowledge management process as managers are responsible for establishing a trusting environment where call centre agents feel safe to share their knowledge.
- Create an organisational culture that supports tacit knowledge sharing.
- Incentivise call centre agents for sharing knowledge.

5.7 Limitations of the study

The following limitations of the study are noted below:

5.7.1 COVID-19 Pandemic

As a result of the COVID-19 pandemic, the government imposed lockdown restrictions to mitigate the spread of the virus. The University of KwaZulu Natal adhered to the restrictions and transitioned to online learning with limited access to the campus. All interactions with the university were primarily virtual and online. This made processes of obtaining the Ethical Clearance difficult and time consuming.

5.7.2 Respondents

Although data collection was completed using an online questionnaire, the target population was working from home and being in a call centre environment they had limited time to complete it. The findings of the study are based on limited responses in comparison to the entire department.

5.7.3 Limitation of time

Due to the delayed process amidst doing research during the pandemic, there were severe time limitations. As a result of a restriction of time, the study was focused on responses received within a shorter timeframe.

5.7.4 Human perception

The responses were based on human perception and hence these can be influenced by emotions and circumstances. The research was done during a pandemic and this could affect human physical and mental wellbeing.

5.8 Directions for future researchers

The following areas for future research are recommended:

- A countrywide study conducted with all of the organisation's call centre staff and management.
- A study can be conducted with other departments and not just the call centre which can be a comparative study.
- A similar type of study can be conducted, however, using a mixed-methods approach research design for a more detailed analysis.

5.9 Conclusion

This chapter summarises the findings related to the main research objections and questions. This study emphasised that if tacit knowledge is converted to new (explicit) knowledge, it can be used to increase call centre agent knowledge, thereby improving service delivery. The study found that the majority of call centre agents are not trained on how to capture tacit knowledge, there is a lack of processes regarding tacit knowledge as well as there are limited platforms to capture and store knowledge. This study recommends that management should be involved in the tacit knowledge management process in order to create awareness, they are required to promote the use of tacit knowledge and create an environment where call centre agents feel safe to share their knowledge. The call centre should consider using collaborative tools as the study reveals these are effective for transferring tacit knowledge. The pandemic limited the study as processes were delayed and this resulted in the study being focused on responses received within a shorter timeframe. Future researchers may consider a countrywide study be conducted with all of the organisation's call centre staff and management.

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APPENDICES

Appendix 1: Ethical clearance



14 February 2023

Asha Santhilal (219039882)
Grad School of Bus & Leadership
Westville Campus

Dear A Santhilal,

Protocol reference number: HSSREC/00002895/2021

Previous amended title: Improving service delivery through tacit knowledge within a government tax services call centre environment

Current amended title: Improving service delivery through tacit knowledge within a Government Tax Service's call centre environment

Approval Notification – Amendment Application

This letter serves to notify you that your application and request for an amendment received on 08 February 2023 has now been approved as follows:

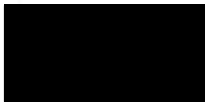
- Change in title

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form; Title of the Project, Location of the Study must be reviewed and approved through an amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

Best wishes for the successful completion of your research protocol.

Yours faithfully



.....
Professor Dipane Hlalele (Chair)

Appendix 2: Gatekeepers consent

Enterprise Research and
Knowledge Management

Enquiries
Nozuko Twala
Dr Rebhone Gcabo

Telephone
012 4227374

E-mail
_SecretariatRC@sars.gov.za

Reference
Request to use SARS data

Date
18 January 2022

Asha Santhilal



South African Revenue Service

Pretoria Head Office
299 Bronkhorst Street,
Nieuw Muckleneuk, 0181
Private Bag X923,
Pretoria, 0001

APPROVAL FROM SARS RESEARCH COMMITTEE

Dear A Santhilal

REQUEST FOR ACCESS AND UTILISATION OF SARS DATA FOR ACADEMIC RESEARCH PURPOSES

Thank you for submitting your request for access and utilisation of SARS data for purposes of conducting academic research.

Your application was submitted to the SARS Research Committee for topic approval and has been approved. The approval is conditional to adherence of the following:

Topic: Examining the potential of Tacit in Improving Service Delivery in a Call Centre at a Government Institution.

Data requirements: Quantitative research method, to conduct a survey with contact centre staff members by means an online questionnaire that will be emailed to the target population.

Data handling & security management:

The researcher will be responsible for ensuring that the research process is handled appropriately. All research data files will be stored securely in secure university systems to ensure that there is no-unauthorised access to the research data.

- Your immediate manager to be informed for the required endorsement of the project aligned to your Personal Development Plan (PDP);
- Compliance with the provisions of the Copyright Act, 1978 (Act No. 98 of 1978) and all laws relating to intellectual property (IP) and facilitating through the relevant learning institutions for SARS to gain access and use any research output;
- The researcher undertakes to comply and process personal information of data subjects in accordance with the relevant provisions of the Protection of Personal Information Act, Act No. 4 of 2013; and
- Your attention is also drawn specifically to compliance to SARS Governance processes and other internal governance procedures to research and data usage to read:
 - ❖ To read the Oath of Secrecy that all SARS employees have signed as part of employment process.
 - ❖ To read and be familiar with the applicable secrecy and confidentiality provisions of Chapter 6 of the Tax Administrative Act, 2011 specifically Section 68 and 69; and applicable provisions in the Customs and Excise Act.
 - ❖ Keep the name of the organisation, employees and taxpayers confidential during the research process and dissemination phase.
 - ❖ To ensure that the final report is shared with SARS through the Research Committee (_SARSResearchCommittee).

Good luck with your research.

If you have any questions or concerns, please feel free to contact the secretariat on _SecretariatRC@sars.gov.za.

Sincerely



Approved

Mamky Leolo, SARS Senior Official

SARS Research Committee

Date: 18 January 2021

Appendix 3: Informed Consent

University of KwaZulu-Natal

Graduate School of Business and Leadership

Tel: 031 260 1615

Good day Colleague

I, Asha Santhilal student no. 219039882, an MBA (Master of Business Administration) student at the Graduate School of Business and Leadership, of the University of KwaZulu Natal. (0672689527, asha7824@gmail.com)

Supervisor: Dr Sachin Suknunan (031 260 7057; suknunan@ukzn.ac.za)

You cordially are invited to participate in a research project entitled “Improving service delivery through tacit knowledge within a Government Tax Service’s call centre environment”

This study aims to find ways to capture tacit knowledge and convert it into new explicit knowledge. Through your participation, I hope to understand the possibility of enhancing service delivery by capturing tacit knowledge to create new organisational knowledge. The results of the study are intended to be used for the compilation of my dissertation as a requirement to achieve an MBA.

Your participation in this project is completely voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey. Confidentiality and anonymity of records identifying you as a participant that may lead to your traceability are not required on this survey. All the completed surveys will be maintained by the Graduate School of Business and Leadership, UKZN.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed above, or the UKZN Humanities and Social Science Research Ethics Committee, the contact details are as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag x54001

Durban

4000

KwaZulu Natal

Tel: 27 31 2604557 - Fax: 27 31 264609

Email: HSSREC@ukzn.ac.za

The survey should take you about 10 minutes to complete. I would like to thank you in advance for your interest, time and support for participating in this survey.

Consent from Respondent

I have been informed about the study entitled “Examining the potential of Tacit Knowledge in Improving Service Delivery at a Call Government Institution's Call Centre”: To find ways to capture tacit knowledge and convert it into explicit knowledge to improve agent knowledge and thereby improve service delivery.

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/concerns or queries related to the study, I understand that I may contact the researcher at (details provided above).

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact the researcher or the Research office through the details provided above.

I agree to participate in the study:

Yes ____

No ____

Appendix 4: Questionnaire

University of KwaZulu-Natal

Graduate School of Business and Leadership

Tel: 031 260 1615

Title: Examining the potential of Tacit Knowledge in Improving Service Delivery in a Call Centre at a Government Institution

Good day

I, Asha Santhilal, an MBA student at the Graduate School of Business and Leadership of the University of KwaZulu-Natal would like to invite you to participate in a research project entitled 'Examining the potential of Tacit Knowledge in Improving Service Delivery in a Call Centre at a Government Institution.'

This study aims to find ways to capture tacit knowledge and convert it into new explicit Knowledge. Through your participation, I hope to understand the possibility of enhancing service delivery by capturing tacit knowledge to create new organisational knowledge. The results of the study are intended to be used for the compilation of my dissertation as a requirement to achieve an MBA. The survey should take you about 10 minutes to complete. Your input will be valuable to address the research aim and objectives. I would like to thank you in advance for your interest, time and support for participating in this survey.

Research Questions

1. What are the current systems and processes in place to capture tacit knowledge at the call centre?
2. What are the challenges in capturing tacit knowledge at the call centre?
3. How can tacit knowledge be used to create and manage new knowledge to improve service delivery at the call centre?

4. What would be needed to promote knowledge creation and management from tacit knowledge at the call centre?

Please select the most appropriate option

Section A

1. Race:

African	
Indian	
White	
Coloured	
Other	
Prefer not to say	
Other	

2. Gender?

Male	
Female	
Prefer not to say	
Other	

3. Age Group:

18 - 20	
21 - 30	
31 - 40	
41 - 50	
51 - 60	
>60	

4. Level of education

Grade 12	
----------	--

Diploma	
Bachelor's degree	
Post-graduate degree (E.g Honours, Masters, PHD, Post graduate diploma)	
Other	

5. How long have you worked within the department?

Under 1 year	
1 – 3 years	
4 – 6 years	
7 – 10 years	
Above 10 years	

Section B - Research Questions

This section focuses on the actual research questions.

Important Definitions:

Tacit knowledge (Knowledge that is captured informally from customer queries)

Explicit knowledge (Is new formalised knowledge)

1. Is customer feedback being recorded in the call centre?

Yes	No
-----	----

2. What are the current primary systems in place to capture tacit knowledge from customers?

	Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree
Telephone recordings					

Email					
Electronic/Website forms					
Online systems					
Paper based forms					
Virtual meeting					
If Other, please specify					

3. Are you are given access to all core systems to assist customers with queries?

Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree

4. What is your opinion of information being communicated from the Knowledge Management Team to call centre agents for resolving customer's queries?

	Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree
Timely communication is issued when there are changes in tax legislation, processes or systems.					
There is too much information being issued that causes confusion.					
The information issued assists me in answering customer queries.					
There is too little information being communicated.					
If other, please specify					

5. How are your ideas and suggestions taken into account in the call centre?

	Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree
There is formal platform to make suggestions and recommend ideas?					
There are focus groups where ideas and suggestions are tabled.					
A suggestion box is used to collect ideas and suggestions.					
Meetings					
Other ways in which ideas and suggestions are be collected					

6. How does the Call Centre promote knowledge sharing amongst call centre agents and respective departments?

	Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree
You are provided with necessary platforms to share knowledge.					
You have regular engagement sessions with your peers to discuss queries.					
You receive timely communications about new information.					
You attend formal training whenever new information is released.					
You are provided with regular feedback queries that are escalated.					
If other, please specify					

7. Tacit knowledge is being converted to formalised(explicit) knowledge at the call centre.

Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree

8. Converting tacit knowledge to explicit knowledge can/does make call centre agents more effective in answering customer queries.

Strongly Disagree	
Disagree	
Uncertain	
Agree	
Strongly Agree	

9. Call centre agents in your organisation are trained on how to capture tacit knowledge.

Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree

10. Does the call centre support a culture of learning?

	Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree
Continuous workshops and training is provided.					
Courses are available to attend.					
You are encouraged to share knowledge amongst the team?					
You are encouraged to further your					

academic studies.					
-------------------	--	--	--	--	--

11. What are the current challenges in capturing tacit knowledge?

	Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree
Limited time on calls.					
Lack of platform to record and store tacit knowledge.					
Lack of processes to share tacit knowledge.					
Lack of systems to analyse tacit knowledge and create new knowledge.					
Lack of direction on how to use tacit knowledge.					
Lack of human resource capacity to focus on tacit knowledge.					
If other, please specify					

12. Tacit knowledge that is captured is discussed and added to existing knowledge at the call centre in the following ways.

	Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree
Training manuals and guides					
Reporting and Analysis					
Websites (Internal and External)					
Internal Databases and Repositories					
Webinars and Videos					

Other methods of adding tacit knowledge to explicit knowledge.					
--	--	--	--	--	--

13. How can the capturing tacit knowledge and converting it into new formalised knowledge assist in reaching the organisation's objectives?

	Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree
It will assist in answering queries on the first call.					
It will reduce call duration creating shorter call waiting times.					
It enables me to educate customers which will prevent callbacks thereby reducing call volumes.					
It allows customers to receive accurate information which contributes to compliance.					
It can save the organisation time and money.					
It will create more solutions to customer queries.					
It can provide proactive means of customer query resolution.					
It will promote more satisfied customers.					

14. What must be done to improve the capture and use of tacit knowledge?

	Strongly Disagree	Disagree	No Comment	Agree	Strongly Agree
A comprehensive flow that that converts tacit knowledge					

and creates new knowledge from it.					
More awareness on the potential of tacit knowledge.					
Introduce a tacit knowledge management strategy.					
Create systems to capture and analyse tacit knowledge.					
Promote more workshops and trainings on how to utilise tacit knowledge.					
Other methods of improving capture and use of tacit knowledge.					

Appendix 5: Turnitin report

Dissertation

ORIGINALITY REPORT

3%

SIMILARITY INDEX

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