Encouraging knowledge sharing behaviours in a Nigerian SME.

An action research inquiry.

Thesis submitted in accordance with the requirements
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Doctor of Business Administration

By

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Abstract

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This thesis is about improving knowledge sharing in a Nigerian small-medium sized company that currently sees knowledge not being shared enough by key members of the organization and therefore, where key knowledge does not flow to those individuals that need it to effectively achieve their daily tasks.

Using action research, the aim of this thesis is to identify the key factors that cause knowledge to be hoarded among the workforce in the company and then by addressing these factors, take action to improve knowledge sharing between organisational members.

I have taken a social constructivism philosophical position to gain a better understanding of the organizational problem through collaborative learning with the members of the organization who impact and are impacted by the organizational problem of knowledge sharing.

The first stage of the research consisted of preliminary steps, in which the diagnosis of the problem commenced with an extensive literature review to gain an understanding of the current state of research on the factors that impact knowledge sharing in organizations, followed by an exploration of the problem with organizational members to gain a better understanding of the problem in context of the organization. In the second action research cycle, the research employed a qualitative research method in which first hand data was collected through the use of face-to-face interviews with 13 members drawn from various departments within the organization. The collection of data through the course of these action research cycles was followed by a cycle of planning, taking action and reflection.

The research revealed that the current nature of power, culture and organizational process in the organization, all have a significant impact on how, why and when members of the organization choose not to share their knowledge. Most significantly, the research also revealed that there exists a link between these factors of power, culture and organizational process in the form of an interrelationship that creates a complex web of impact on one another and ultimately combining to impact knowledge sharing within the organization. This knowledge culminated in the development of a knowledge sharing model of interconnectivity.

These findings were then used in group meetings, where a collaborative effort was made together with members of the organization, to intervene and take action to bring about a resolution to the problem of poor knowledge sharing. The results of this collaborative effort, narrowed the scope of an initial first step intervention to the area of communication and reporting. Intervention meant that I made changes to my communication and reporting style and in my role as owner-manager, I withdrew from all direct official communications with organizational members not directly subordinate to me in the organizational hierarchy, instead, communicating solely to and through their respective managers. The results of this, were initially, an increased level of communication and collaboration between organizational members, who with my withdrawal, were forced to communicate more and share more knowledge between each other to resolve organizational issues while carrying out their daily tasks. However, even after intervening, some key knowledge was still being held back by those who possessed it and meant that knowledge sharing was still not sufficient enough to say that the problem of a lack of knowledge sharing within the organization had been resolved.

The results of this intervention show that it takes time to unlearn behaviours that see individuals willingly volunteer to share knowledge in my organization. Therefore, to intervene further and see knowledge sharing being done in the short term, a knowledge broker officer (KCO) will be introduced to the organization, with the task of improving the interface between knowledge generators and knowledge users by acting as a physical link between them, i.e., physically taking knowledge from the knowledge holder to the knowledge seeker.

Declaration of own work

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree or qualification. Except where it states otherwise by reference or acknowledgment, the work presented is entirely my own.

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CHAPTER 1- INTRODUCTION

1.1 Overview

The purpose of this research is to understand the reasons why knowledge is not being shared within my organization by investigating the factors that influence knowledge sharing and to use the results of this investigation to uncover strategies to improve knowledge sharing and ensure that the organization does knowledge sharing better, to contribute to the organisational development of the company.

This thesis will contribute significantly to the pool of existing management research on knowledge management and in particular, knowledge sharing. In the area of knowledge sharing in small to medium sized businesses in Nigeria, this thesis will provide insights to the increase the understanding of the complexity of knowledge sharing in modern organizations, so as to inform any strategies managers may take in encouraging increased knowledge sharing in their organizations. Specifically, this thesis will reveal the complex cobweb like nature of the relationships that exist between those factors that influence knowledge sharing within my organization, creating an understanding of the extent these factors affect each other and therefore, how they affect knowledge sharing as a whole, thereby informing any strategies that managers may use to improve knowledge sharing within their organizations. Therefore, it is my belief that by providing a greater insight into the knowledge sharing phenomenon in organizations, this thesis will serve as a guide to the managers and owner-managers of small and medium sized organization in their pursuit to lead their organizations to meet its obligations the 21st century marketplace.

Secondly, for me personally this research has impacted me greatly by improving my understanding of the unique role that I as an owner-manager play in my SME organization with regards to the knowledge sharing process. I have come to understand the power and influence I hold in my organization, and how such power is used consciously and unconsciously to hinder or promote knowledge sharing among other less powerful members of their organizations. Through this research, I have also gained the personal habits of continuous and critical self-reflection and self-evaluation of my actions as an owner-manager and this has increased my learning ability. It is my hope that the new knowledge I have gained may be used by other owner-managers of SMEs in Nigeria to add value to their roles within their organisations.

Lastly and most importantly, as this research was conducted using action research methods, in which members of the organization actively participated, this thesis has also greatly contributed to increased learning within my organization which has resulted in changes that will bring lasting benefits to how the organization is managed. More precisely, learning has occurred through the process of planning, taking action, observing the effects of those actions and engaging in critical reflection on a daily basis, as we as an organization, attempted to resolve the organizational problem of poor knowledge sharing. As a result, the organization has improved its ability to mobilise, communicate with and motivate its workforce to focus on problem solving as a group, in an active effort to create a new organizational value that sees knowledge sharing done better.

1.2. Background of the researcher

I, as the author of this research obtained a BA(Hons) in Accounting and Finance from the University of Kent and an MSc. International Management from the Royal Holloway, University of London. Upon the completion of my MSc degree, I returned home to Nigeria and worked for two SMEs in Nigeria in the logistics and retail industries, holding key positions as an accountant, business development manager and chief operating officer. In these key roles, I had extensive experience managing people and information flows to achieve desired organizational outcomes.

I moved on from those companies and proceeded to found a snack food manufacturing company that this research has been conducted on and I currently serve as its Managing Director. The experiences I have had throughout my career working in small and medium sized enterprises in Nigeria informed my decision to conduct research on this problem of poor knowledge sharing in Nigerian SMEs as my experience showed me that although several sizeable problems plague SMEs in Nigeria, the inability to freely, consistently and continuously pass knowledge across the organization from the organizational, group and individual levels, in my opinion poses the greatest threat to organizational survival, continuity and success.

1.3 Introduction to the topic

Doing business in the modern world means that an organizations ability to sustain its operations by being innovative and growing, depends significantly on its ability to utilise its core competencies and those resources that are available to it (Subramaniam and Youndt, 2005). Furthermore, key to innovation is an organization's ability to draw on and utilise the intellectual capital or knowledge resources embedded within it (Subramaniam and Youndt, 2005), putting knowledge front and centre as the foremost resource available to an organization (Perotti, 2022; Nonaka, 1994) who intends to create and sustain a competitive advantage in their market (Zheng et al., 2010; Swart et al., 2014) and survive (Matusik and Hill, 1998).

Prahalad and Hamel, (1990) argues that competitive advantage does not come merely from possessing core competencies, which they defined as "collective learning", rather, to develop and keep a competitive advantage, organizations must find ways to duplicate their core competencies, through the sharing of knowledge across the organization and by sharing such knowledge, core competencies are enhanced. Therefore, engaging in knowledge sharing helps the organization enhance competencies that lead to survival and growth (Desouza and Awazu, 2006).

Knowledge sharing is the process whereby individuals or groups engage in the passing of useful information and know-how across the organization (Argote and Ingram, 2000; Staples & Webster, 2008; Wang & Noe, 2010), thereby allowing an organization to tap into and utilise its knowledge resources (Cabrera & Cabrera, 2005; Nonaka & Takeuchi, 1995), which in turn, causes learning at the individual level and thereby leading to learning at the organizational level (Ryu et al., 2005). This learning, can lead to the improvement of organizational performance, as individual performance improves (Cabrera & Cabrera, 2002).

As a small company, adequately adopting a system that utilises knowledge as a resource, could help us become more competitive (Sirmon and Hitt 2003). This is because as an SME company with limited financial resources to draw on to compete effectively against larger companies in our marketplace, research tells us that we must rely on other intangible resources which we have, such as knowledge, to achieve our goals (Rezaei et.al, 2022; Desouza, and Awazu, 2006). Therefore, we must make efforts to ensure that we engage in the creation and sharing of those knowledge elements in our organization, such as the ideas and experiences of members within our organization (Rezaei, 2018). Also, Harel et al., (2021) found that the innovative capacity which is an advantage of a small business over larger organizations, as a result of its entrepreneurial nature, flexibility, ability of its members to communicate informally, can be improved, if there is an organizational focus on the knowledge sharing process and the utilization of knowledge. Therefore, this focus on knowledge resources should be a key part of the business strategy of a small and medium sized enterprise such as ours (Rezaei et.al, 2022).

However, although research has made clear the importance of knowledge sharing to the development of organizational competences and ultimately the survival of the organization, the implementation of knowledge sharing has proven difficult for a lot of organizations (Bakker et al., 2006). This is due in part because knowledge sharing rarely occurs automatically, rather, it is a complex process (Lessard & Zaheer, 1996), leading to continued difficulty in implementing knowledge sharing within organizations (Ouakouak and Ouedraogo, 2019). There are several factors that contribute to the complexity of knowledge sharing. For example, academic research has shown that the nature or type of knowledge has an impact on the ease of sharing that knowledge. Tacit knowledge which are individual skills based knowledge gained through experience is much more difficult to organise, store and share with others in the organisation due to its internalised nature, compared to explicit knowledge, which in the case of the organisation, is more structured, written down information such as a standard operating procedure (Haldin-Herrgard, 2000). Research has also shown that there are factors that affect the willingness or ability of individuals and groups within organizations to engage in knowledge sharing behaviours. These factors emerge from the individual, group, and organizational levels as well as the environment external to the individual, within and outside the organization. Although not an exhaustive list, some academic researchers on the subject have discussed some of the major factors to be management support (Cabrera et al., 2006; Kulkarni, et al., 2006), rewards and incentives (Yao, et al., 2007), leadership (Politis, 2001), culture/climate (Kankanhalli, et al., 2005); trust

(Nahapiet & Ghoshal, 1998) and motivation (Nguyen, et al., 2019; Argote et al., 2003), making them all relevant when determining why an organization may not be sharing knowledge adequately.

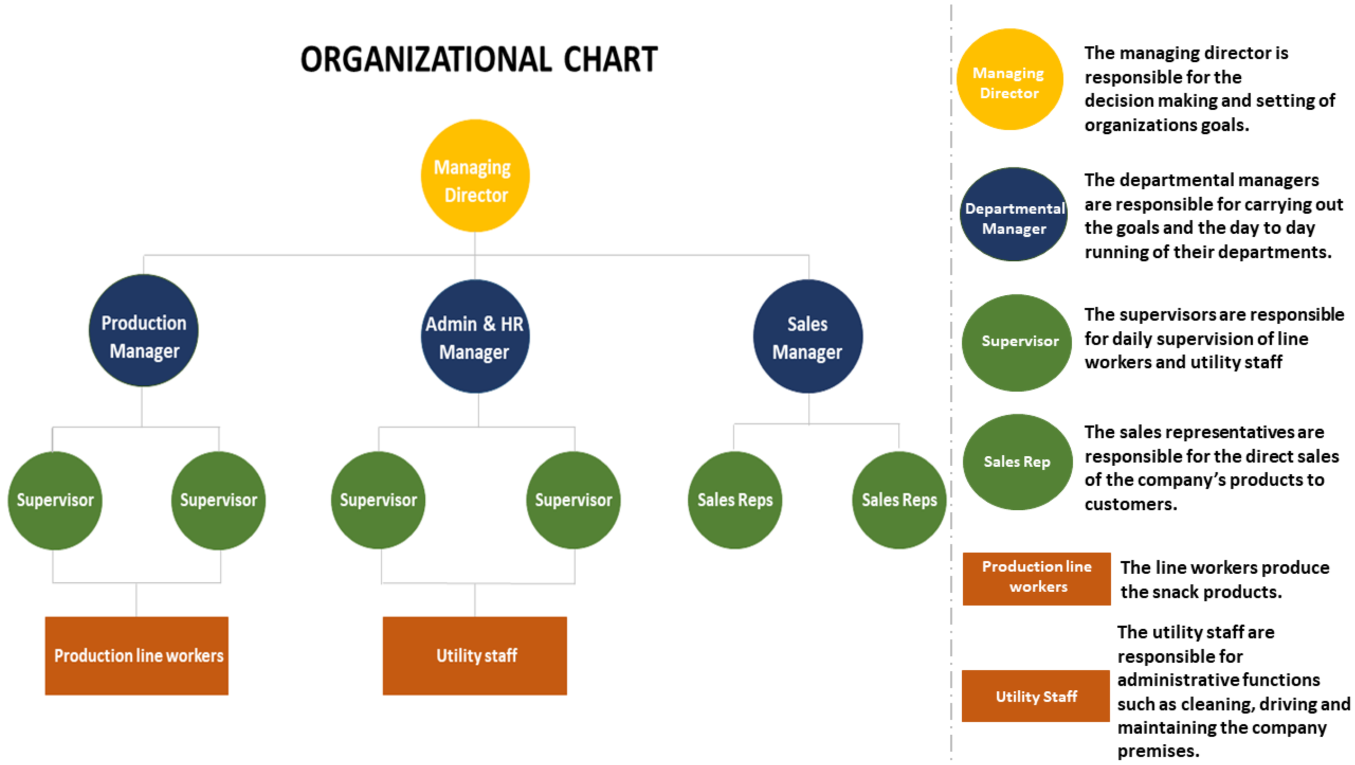
Research on this topic has shown that knowledge sharing is an important and well researched area, pointing to several dimensions that managers need to consider when trying to understand knowledge sharing within their organizations. As shown in the academic research, the complexity; difficulty of knowledge sharing and its rewards if done properly, justify the importance to my organisation, of engaging in this research project.

1.4 Context of the study

Small, medium sized enterprises also known as 'SMEs' vary in their definition and composition across different countries, however, in Nigeria, SMEs are business enterprises whose asset capital base is not more than 500 million Naira, with a workforce of less than 300 people. With this definition, my organization in which is the subject of this research, is an SME organization.

The company where this research is being conducted is a fast-moving consumer goods manufacturing company in Nigeria. It engages in the business of manufacturing packaged snack products and the distribution and sales of those products to its numerous customers across the country. The company has 59 employees across three departments of production, administration & human resources and sales. The company has a simple organizational hierarchy which is represented in figure 1.

Figure 1. Organizational Chart of the organization



1.5 Introduction to the problem

As the owner and managing director of an SME organization, in addition to operating at the strategic level, I am also hands-on and involved in the day-to-day running of the organization and attend to operational matters. This type of management style is usual for small businesses as it is often the case that managers of small firms act in various roles within the firm and are often the go between for the flow of information and decision making for the entire firm (Cardoni et al., 2018).

Since I am involved in the day-to-day operations of the organization, I gain first hand insight into the implementation of organizational policies and strategies, while also being privy to the transfer of skills and know-how within the organization. It is from my daily on the ground involvement within my organization that I have observed that, there is a visible and growing problem of poor knowledge sharing among key members of the organization, resulting in relevant knowledge not being delivered when and where it is needed within the organization.

Wong & Aspinwall, (2004) notes that due to the flatter hierarchy of small companies, senior managers are closer to the 'action' and therefore would have a greater understanding of the nature of the knowledge related issues plaguing the firm.

Knowledge is not flowing freely vertically or horizontally across the organizational hierarchy, i.e., from manager to subordinate and vice versa and across peers in the same level of the organizational hierarchy. In other words, knowledge is being shared very poorly. Both key tacit knowledge gained by experienced managers through their years of work in the form of skills and expertise, as well as, explicit knowledge in the form of basic process and procedural data. Also, job task related feedback that should flow among peers, upward and downward the organizational hierarchy, from subordinates to their supervisors and vice versa are all not being shared freely.

An example that should suitably capture poor knowledge sharing in my organization and how it affects our performance in a key objective area of increasing market share is as follows:

A long-standing sales manager overseeing a team of sales representatives tasked with the generation and execution of sales leads, by company policy, is required to keep an official database of customer information, which will be used by the sales representatives to daily contact and visit customers to generate sales and meet their allocated sales targets. However, the sales manager fails to keep an official database of customers information, only keeping one privately for his personal use, thereby not providing the sales representatives with the customer information they need to do their jobs. Furthermore, the sales manager, through his experience in the organization, has developed personal relationships with several key customers and although it is not directly his responsibility to maintain those relationships for the purpose of sales continuity (as this is the direct responsibility of his sales reps), he chooses to cut the sales representative out of that relationship with those key customers and personally engages in the generation of sales leads with those customers. Upon the sales managers resignation from the organization, sales falls drastically, as firstly, there is no customer database for his replacement to work with and therefore, has to start developing customer relationships from scratch. Secondly, existing sales representatives have not developed relationships with key customers and therefore, have limited knowledge about their business needs, to continue selling to them at a level that sees their sales targets met. All of which results in the organization losing market share of its products to competitors.

Research supports this behavioural tendency of managers to act differently from what the owner expects. Agency theory posits that there is a difference in the goals of owners and managers within an organization. While owners aim to organise the firm in a manner that maximises the wealth they earn, managers are motivated by self-interest and act in ways that sees their personal risks minimized (Oswald and Jahera, 1991). Therefore, using the above example, as the owner, although I would expect the managers to share their knowledge in a manner that builds the structure to support the company's goals, their action of withholding that knowledge may be done in line with their personal interests.

From my experience since founding the company and working within it, I have discovered that when procedural knowledge is not shared and feedback not communicated on job tasks, the result is a lack of coordination and cooperation among members of the organization in handling daily tasks, leading to a disjointed workforce and increased inefficiencies. As an organization, this has been a serious management issue as it has been observed that some managers set their subordinates daily tasks, without a framework and other necessary information to complete those tasks. Consequently, the organization consistently has cases of junior employees who struggle to obtain job task procedural information from their respective managers, who then proceed to perform their jobs however, they deem fit, inevitably, resulting in unfavorable outcomes. This scenario occurs frequently in the production department, in which machinery operators are not given detailed instructions by their superiors on how to carry out basic machinery prechecks, machinery servicing and troubleshooting which results in their wrong handling of machinery that ultimately leads to high costs in wastage and machinery downtime due to high levels of breakdowns. All of which results in high operational costs and a negative impact on the organizations profitability.

As opposed to larger organizations, research on SMEs have also revealed that due to limited resources, these kinds of organizations often lack organizational knowledge repositories and therefore, most of their knowledge is contained in the heads of their owners/managers which other members of the organization often find it difficult to access (Desouza and Awuza, 2006).

I have noticed this to be true as in the case of my organization, we do not have these knowledge repositories that members of the organization can gain access to whenever they need it, instead, we mostly rely on one-on-one guidance from those members with key skills, impacting their knowledge to members that need to learn these key skills.

For example, in trying to organize management teams to implement our organizational plans, I have noticed that managers and other key members with key experience within the organization prefer not to share important tacit knowledge they have and that could benefit the development of other members who do not possess that specific knowledge. This is most evident when there is a requirement that a manager trains his subordinate to perform a key task, however, the manager chooses to perform that task himself rather than train or explain to the that subordinate how the task should be done. This is a problem because, although I am aware that tacit knowledge contained in the head of that manager is usually difficult to pass from individual to individual in a written form, the passing of such knowledge is dependent on the knowledge holder explaining the fundamentals to the knowledge receiver, however the knowledge receiver only gains full knowledge of the task from the experience he gains by constantly performing that task (Nonaka and Takeuchi 1995).

Therefore, if the managers and those with tacit knowledge keep failing to kick start the process of allowing their subordinates to first gain a basic explanation or training of the task and then perform the tasks themselves to start their journey of gaining experience, they will never gain tacit knowledge themselves.

This lack of sharing of tacit knowledge means that there is no tangible capture and dissemination of valuable tacit knowledge that is contained in the heads of managers and other key experienced members of the organization. Therefore, time and time again during our life as an organization, the departure of key individuals has led to the loss of valuable tacit knowledge and expertise, which the organization always finds difficult to replace. Lastly, organizational learning is low as knowledge gained from organizational problems resolved by key individuals are not captured and therefore cannot be replicated by others and hence cannot be used as an organizational resource. The result is that similar organizational problems that have been resolved in the past keep occurring and the organization has no choice but to pull on resources and time to re-discover methods to resolve such problems. Methods of which, it had already discovered in the past but knowledge of which was not appropriately captured, stored and shared. For example:

A head of maintenance conversant with a specific diagnosis procedure of faulty machinery fails to detail in written form the process he takes whenever there is a fault in the machinery and a faults diagnosis is needed. Instead, he always chooses to perform this task alone and *isolated from his subordinates, who should be learning from him. This means that whenever the head of maintenance is unavailable, his subordinates are forced to try to figure out from scratch how to perform the diagnosis.*

If we are to be successful in our marketplace, we must survive and continue to develop as an organization. To do this, our company must be innovative, profitable and remain competitive. However, we cannot hope to be competitive without effectively capturing the knowledge and know-how contained in the heads our members and effectively sharing it across the organization to aid decision making and problem solving. To overcome these problems, my organization must do knowledge sharing better.

Therefore, the purpose of this research is to understand the reasons why knowledge is not being shared within my organization by investigating the factors that influence knowledge sharing and to use the results of this investigation to uncover strategies to improve knowledge sharing and ensure that the organization does knowledge sharing better, so as to contribute to the organisational development of the company. Using insider action research, both of these goals should be achieved in a manner that will see the organization improve learning and gain the ability to resolve future problems in knowledge sharing.

1.6 Research Approach

This thesis tries to achieve two things:

1) To understand the reasons why knowledge is not being shared within my organization by investigating the factors that influence knowledge sharing.

2) To use the results of this investigation to uncover strategies to improve knowledge sharing and ensure that the organization does knowledge sharing better, so as to contribute to the organisational development of the company.

I am conducting this research into my organization because I need a real-world solution to a real world problem in which I and my organization are experiencing. The resolution of this problem should improve my life in my job role, the lives of other employees in their job roles and my organization at large. Therefore, I need a research approach that can accommodate my unique role duality as an on-going and active participant in my organization, as well as my researcher role.

Also, my goal is to not start the research with a theoretical position, rather it is to allow meaning emerge and be derived from the experiences of the research participants. It is my philosophical position that in trying to understand the world around them, people experience their realities in subjective ways (Creswell, 2017). These individual experiences should create a spectrum of subjective meanings derived from the research participants interactions with others in their social environment, that will offer me a chance to view the problem in a more complex way and from their own reality, which should see a pattern of meaning emerge from the data that shows how they experience the problem. This philosophical position is termed 'Social Constructivism' (Creswell, 2017). By this reasoning, the problem of knowledge sharing in my organization may have different interpretations depending on the individual employees' experience. Therefore, for any solutions to be practical and fit the organization, it must be shaped by the lived experiences of as many employees as possible as it is by those experience that we gain a better understanding of the problem, how it affects people and what an improvement to the problem will look like in the lives of the people. This means that I must involve other members of the organization in this research, to gain access to the knowledge informed by their lived experiences in a manner that enhances the research.

Although Action Research is a requirement for this doctoral programme, I have also chosen to use it as the research method because it is more suitable, relevant, and practical to achieving my research aims.

Thorpe and Holt, (2008) argues that one of the key differences between action research and other forms of research is the fact that the researcher is an active member of the organization and the research is being conducted into a real organizational problem that if resolved, will bring about change that will benefit the researcher and other members of the organization.

Action research is "*a set of collaborative ways of conducting social research that simultaneously satisfies rigorous scientific requirements and promotes democratic social change".* (Greenwood and Levin, 2007, p.1). Greenwood and Levin, (2007) go further to say that for a research project to be considered an Action research project, it must be conducted by a team constituting a professional action researcher and stakeholders of the entity being researched into, who's aim is to improve the current circumstance of those participants. As a seasoned professional working for an organization with an organizational problem that needs to be resolved, this is my current reality.

Action research follows a cyclical process aimed at taking action and conducting research at the same time (Holian and Coghlan, 2012), seeing the researcher and other participants collaborate to define the problem, pool their knowledge to inform the conceptualization of that problem, take action to resolve that problem (Zuber-Skerritt & Perry, 2002). Learning at the individual, group and organizational level can occur through the actionable knowledge we will gain from the process of taking action, engaging in reflection-in-action, by being conscious of the effects of the actions we have taken, then making immediate changes to improve the action to better resolve our organizational problem (Coghlan and Brannick, 2014). Therefore, it is believed that *"there can be no learning without action and, no action without learning*" (Revan, 2011 pg. 85)

The insider action research method employed in this research sees me as the researcher, actively collaborate with other members of the organization to take action to solve this problem of poor knowledge sharing and therefore create actionable knowledge which should aid in organizational learning (Zuber-Skerritt & Perry, 2002) and eventual change. By conducting research using action research, I hope to not only create benefits for my organization but also contribute to the existing body of management research in knowledge management.

1.7 Thesis Structure

The thesis is structured into six main chapters starting with an introduction chapter which introduces the research, its purpose, the organizational problem and how the research will be conducted to fulfil and answer the research question.

The literature review chapter follows the introductory chapter and contains a critical review of relevant scholarly literature on the topic of knowledge sharing and knowledge management at large. The chapter explores the complex nature of knowledge sharing, uncovering factors and circumstances that cause individuals and organizations to fail at effectively sharing knowledge, the detrimental effects poor knowledge sharing has on organizations, as well as factors organizations have employed to try to improve knowledge sharing among their members.

Chapter 3 is the methodology chapter and this chapter details the methodology chosen for this research to aid in the collection of data that will form the bedrock of further analysis in subsequent chapters. This chapter also details the data collection tools and process, laying out the process of ethically soliciting for participation of the organizational members, as well as detailing the interview process and outcomes.

Chapter 4 is the Findings chapter which details the findings from the research data collected during the interview stage. In this chapter, the emerging themes that will inform subsequent actions are beginning to emerge and become evident.

Chapter 5 is the Analysis, Discussions and Researcher reflections chapter and this chapter will follow the analysis of the research findings as well as detailing the actions taken to intervene and address the problem of poor knowledge sharing. The reflections of the outcome of the intervention will also be described as well as the consequences of the intervention. This chapter will also detail the proposal to management for future solution driven interventions informed by the actionable knowledge that has resulted from this research and further action that needs to be taken going forward that will see the organization improve its ability to do knowledge sharing better.

Finally, chapter 6 being the conclusion and recommendation chapter will detail how the research has answered the initial research questions and summarise the process undertaken to conduct this thesis, the impact the research has had on both my organization and myself, and the implications the research will have on the management community, limitations of the research and suggestions for future research.

CHAPTER 2- LITERATURE REVIEW

2.1 Introduction

The literature review aims to create an in depth understanding of the research problem by exploring the existing literature on knowledge sharing in organizations and framing it within the context of the organizational problem. The purpose of the literature review is not to search for a problem or as with traditional research, to search for any gap that may exist within the literature and then conduct research to fill that gap. Rather, the literature review process for this research is being conducted to examine the pre-existing problem of poor knowledge sharing within my organization. Therefore, the literature review commenced with a broad scope of the literature and slowly narrowed as the main themes in the literature that informed the specific organizational problem were uncovered.

In conducting the literature review, various sources of literature were used which include books, academic journals that have been peer reviewed and publications. The initial areas of inquiry and literature search terms explored were knowledge sharing within organizations, factors that affect knowledge sharing, knowledge management, improving knowledge sharing. As themes began to emerge, the areas of inquiry and search terms explored narrowed down to types of knowledge, knowledge sharing and motivation, organizational culture, knowledge sharing and leadership, and, motivation and knowledge sharing.

What I am about to present is the literature I searched for in the preliminary stages of the investigation and is based on what I saw as my knowledge of the problem at the time. Subsequently, based on the data emanating from the research, I had to return to the literature, discussing additional literature in chapter 5. This action of returning to the literature as my knowledge about the problem was developed through the qualitative data collected was necessary in my development as an action researcher.

Chapter 2.2 starts by introducing an overview of the concept of knowledge in organization and in particular, knowledge sharing within organizations.

The review goes on to uncover and highlight the major factors that influence knowledge sharing within an organization. It is revealed that at the heart of knowledge sharing is the involvement of the individual who holds great power in how he chooses to use or not use his knowledge for the advancement of himself or the organization at large. The chapter goes on to show that knowledge sharing is a complex phenomenon and is significantly influenced by factors which are intrinsic to the individual, occurring as a result of individual motives or externally induced motives; as well as being influenced by the opportunities available for knowledge to be shared.

Also, the literature review brings about an understanding that individuals cannot be forced to change their behaviour and share their knowledge, therefore, factors such as the type of knowledge, culture, leadership, management support, rewards are important in helping to guide or shape the behaviours of individuals, to encourage them to willingly share their knowledge.

Theory uncovered in the literature review process increased my understanding of the problem and informed the research methods on how data can be used in combination with theory to discover greater insights into how to resolve the organizational problem by improving knowledge sharing.

2.2 Knowledge in organizations

Grant, (1996), pg. 110 refers to knowledge as *"that which is known"* but a more precise definition with regards to how knowledge will be discussed throughout this research is defined by the Oxford Learner's dictionary as, "*knowledge is the information, understanding, and skills that you gain through education or experience" (Oxford Learners Dictionary, 2023).* There are several types of knowledge that relate to organizations, however, when it relates to the management of knowledge in an organization, the consensus of literature on this topic refers to knowledge that has certain characteristics that aid in the creation of value for the organization (Grant, 1996). It is this characteristic to create value that contributed to the conceptualization of my organizational problem and it is this characteristic of knowledge that I focus on in my research, when I refer to knowledge. It is important that I make the distinction between knowledge and mere information in the context of this research because most literature on knowledge management do not make a hard-line distinction between knowledge and information, as both terms are used interchangeably (Wang and Noe, 2010). However, Nonaka (1994) distinguishes between information and knowledge by referring to them separately and cites Machlup, (1983), referring to information as the "flow of messages" in other words, communication. In the context of my research, I do not refer to knowledge relating to the mere flow of messages or just the mere act of communicating, rather I refer to knowledge such as skills, employee experiences, internal organizational data/information such as financial data, organizational policies and procedural data, and market information such as customer data. According to Uden et al., (2019) knowledge management then becomes the process of how an organization utilises this knowledge internally and externally to the organization.

During the 1990s, as an expansion of the 'resource-based view of the firm', by researchers such as Grant, (1996) the idea of the 'knowledge-based view of the firm' developed, in which knowledge is considered a core resource that aids in an organizations ability to develop and sustain competitive advantage in its marketplace. The theory of the knowledge-based view of the firm looks at an organization as an economic entity and analyses the organization through the lens of the production of goods and services, rather than the social interaction-based analysis of other social science theories (Grant, 1996). Hence, the basic activities of a production organization tasked with the conversion of inputs to outputs revolve around the creation, collection, storage and utilization of knowledge (Grant, 1996). This surge in interest on how to adequately utilise organizational structures and processes to manipulate knowledge creation, integration and sharing in a manner that can aid the organization in achieving its goals (Grandori, 1997; Kankanhalli et al, 2005) has become a key area in management science.

The increased competition faced by companies in this modern era mean that for these organizations to be competitive, survive, thrive, and create competitive advantage that endures the test of time, they must utilise knowledge as a natural advantage in a manner which ensures that their work teams collectively perform better and constantly keep at the forefront of innovation (Nonaka, 2007; Gruenfeld, et al, 2000; Liu et al, 2019). This is especially true for SMEs because due to their smaller size and smaller resources as compared to larger companies, they usually rely on being competitive using their knowledge, therefore, their success is often tied to how they succeed in managing this knowledge (Brush and Vanderwerf, 1992). Unlike other physical resources such as finance that are not abundantly available to the SME, knowledge is often seen as an available and abundant resource that they must try to harness to ensure their survival (Desouza and Awazu, 2006).

However, Nonaka, (2007) argues that despite the known importance and significance of knowledge to the success of companies, most managers do not know how to use knowledge for the advancement of their companies. For companies to become knowledge capable, a key function of a manager is to ensure that the process of capturing and protecting knowledge is done as efficiently as possible (Teece et al. 1997). For this to be possible, managers must drive the advancement of knowledge within the organization (Nickerson and Zenger, 2004) and in turn, the organization will develop these knowledge advancement competencies (Argyres, 1996) that lead to achieving or sustaining their competitive advantages in their market environment (Nonaka, 2007; Kankanhalli et al, 2005).

The creation, capturing, storing and protection of knowledge is not all that is necessary to achieve organizational success and thus are not the only knowledge related competences an organization must possess. These activities are all evidence that knowledge exists, however, the mere existence of knowledge within an organization does not translate into organisational success (Hussein et al, 2016).

Therefore, in my opinion, the problems that exist in my organization are not problems related to the creation of knowledge, rather, they are problems that appear to emanate from our inability or reluctance as individual members to freely share already created and captured knowledge among one another inside the organization. Key knowledge that aids in the creation of value by the organization already exists within my organization as a resource, however, my organization cannot effectively utilise that resource to create value in a repetitive and sustained manner, unless it effectively transfers that knowledge from those individuals that have it to those that do not have it. As in my example in chapter 1, the manager was creating knowledge through his own contacts and experience but not sharing it.

Research has shown these sentiments to be true as to create and sustain an organization's competitive advantage and to defend itself in its marketplace, employees within the organization must share already captured knowledge and put it to use in their daily organizational lives, through the implementation of competent knowledge management systems (Nonaka et al, 2000; Barney 1991; Foss & Pedersen, 2002; Chen et al., 2009). Organizations must decide how to transfer knowledge from those that are considered to have expert knowledge to those that do not have the required expertise (Hinds, Patterson, & Pfeffer, 2001) to gain competitive advantage in their marketplace. Hence, if organizations cannot find ways to ensure that knowledge which primarily is generated on an individual level, is adequately transferred to the organizational level, then that knowledge will cease to exist and no larger benefits can be derived from it (Bennet and Bennet, 2004). Therefore, leading to organizational failure or a lack of organizational success. This is because knowledge collected and utilized as a resource at the individual, group and organizational level within an organization has direct implications to how that organization performs competitively (Seok-Young Oh, 2019; Han et al, 2016).

2.3 Knowledge sharing in organizations

Knowledge sharing is the process of converting the knowledge of the knowledge holder, into a state that is understandable by the knowledge seeker and then, transferring that knowledge from holder to the seeker, through available mediums of exchange (Hong et al., 2001). Knowledge sharing can be further described as when members of an organization pass information between them, that is useful to the organization in the fulfilment of its goals (Bartol & Srivastava, 2002; Staples & Webster, 2008). Also, knowledge can be said to be shared when individual organizational members, contribute their knowledge to the larger organizational knowledge pool, according to Cabrera and Cabrera, (2002).

Knowledge sharing is crucial to organizational success because if knowledge moves from the individual level to the organizational level, the organization can use this knowledge to enhance its abilities to create the economic value that it needs to compete in its market place (Hendriks, 1999). Using this knowledge, the organization can create value through innovation, far greater than that which can be created by the individual, if individual knowledge is not shared (Cohen & Levinthal, 1990), thereby, creating a useful and enduring competitive advantage.

As in the case of my organization, with its core business in food manufacturing, our key competitive advantages in cost control, new product development and customer satisfaction are all factors that have been identified in knowledge sharing research as having benefited from the sharing of knowledge within organizations (Wang and Noe, 2010). The learning that results from the collaborative nature of knowledge sharing between actors in an SME, can help SMEs like ours, improve the quality of our products and increase our production efficiencies (Tesavrita, C. *et al.*, 2017).

Also, to keep being successful, the owners of SMEs who started their businesses mostly to leverage on their unique know-how in a specific field in the marketplace, must try to transfer that knowledge to others in the organization, through teaching and training, to ensure continued organizational success (Desouza and Awazu, 2006).

However, there is general research consensus which reveals that knowledge has a shy and elusive nature and is not willing to be automatically shared by employees without motivation (Lagerstrom & Andersson, 2003; Osterloh and Frey 2000). Several researchers have studied the knowledge behaviours among individuals that lead to poor knowledge sharing within an organization. For example, on one extreme, Serenko, (2020) identified knowledge sabotage as a detrimental knowledge sharing behaviour in which employees deliberately provide incorrect information to their colleagues. On the other extreme, Ford et al., (2015) discusses the phenomenon of disengagement from knowledge sharing, whereby employees do not necessarily intentionally withhold and protect their knowledge, rather, they disengage entirely from the process of sharing knowledge by neither communicating nor protecting their knowledge.

This nature of individuals that cause them not to share knowledge can be problematic for the organization because, according to Hislop, (2013), for organizational knowledge management systems to be successful, all employees within the organization must buy into knowledge sharing and consequently engage in knowledge sharing as a key activity. Therefore, organizations need to find creative and efficient tools or methods to encourage their employees to share their knowledge willingly for the good of the organization and themselves (Lagerstrom & Andersson, 2003).

As a manager, one of my concerns about knowledge sharing within my organization as it relates to people is that given the fact that knowledge resides in the heads of individual employees i.e., tacit knowledge, if those individuals depart from the organization or are unavailable, and the organization has not found the means of converting that knowledge into an explicit form to enable its sharing, that knowledge is going to depart with the individual and become inaccessible to the organization (Gupta & Govindarajan, 2000). This concern remains the same even when those individuals remain in the organization because, as Weiss, (1999) explains, the organization may never get access to the entirety of the knowledge contained in the heads of the individual, unless it provides the opportunities for those individuals to share what they know with others.

2.4 The role of the individual in knowledge sharing

Knowledge is the by-product of individual interactions (Nonaka and Takeuchi, 1995) and all new knowledge begins or is created at an individual level (Nonaka, 2007). Scholarly research on knowledge sharing shows evidence that knowledge sharing within organizations is greatly influenced by factors relating to or influenced by individuals and the actions they take or do not take (Andrews & Delahaye, 2000). Focusing on this people centric view of knowledge sharing, it becomes clear that fundamentally knowledge is seen as being possessed by the individual, at the individual level in organizations and individuals must then pass that knowledge to other levels in the organization, for the achievement of organizational goals and objectives (Nonaka,1994). As such, organizational knowledge is one of those few organizational assets that grow rapidly when individuals engage in sharing it (Quinn et al., 1996).

Knowledge at the individual level is owned by the individual, resides inside that individual and its application, completely dependent on that individual (Lam, 2000). This type of knowledge constitutes skills and know-how that the individual gains through experience, it is difficult to articulate and code and therefore, difficult to transfer to others (Lam, 2000). *As* an agent of knowledge sharing, the individual member of the organization holds significant power by deciding through their own motivations, how, to whom and by what means they want to share their knowledge to others within the organization (Henttonen et al, 2016). Hence it becomes very difficult or even impossible for management to force knowledge sharing behaviours on individual members (Spender, 1996, Spender and Grant, 1996; Kaser & Miles, 2002). The challenge with organizations and for my research becomes, how to share this individual knowledge and convert it into what Lam, (2000) calls 'collective knowledge'. ''*Collective knowledge refers to the ways in which knowledge is distributed and shared among members of the organization''* (Lam, 2000. Pg. 491). "*It is the accumulated knowledge of the organization, stored in its rules, procedures, routines and shared norms which guide the problem-solving activities and patterns of interactions among its members''* (Lam, 2000. Pg. 491).

The literature covered so far has put the individual at the heart of knowledge sharing within the organization and has helped in shaping my conceptualization of my organizational problem. This combined with my in-depth practical experience within my organizational system and my understanding of the organizational problem, it becomes key for my research to further explore the literature, with a focus on gaining further understanding of the specific nature of knowledge sharing between individuals and those factors that directly or indirectly influence their knowledge sharing behaviours, within the boundaries of a single organization.

2.5 Factors that influence knowledge sharing

Research on knowledge sharing has uncovered a significant number of factors that influence knowledge across all levels of the organization. However, the literature review for this research has uncovered the following as the major factors: Firstly, the characteristics of knowledge i.e., tacit, or explicit knowledge, cultural characteristics of the environment in which knowledge is shared, motivational factors that affect the individuals who share knowledge, and scenarios/opportunities available to the individual to share his/her knowledge.

Findings from the literature on these factors will be discussed in the following subsections.

2.5.1 Knowledge characteristics

Ipe, (2003) posits that knowledge at a fundamental state, can be classified as either being tacit in form or explicit in form, and, based on this classification, are valued differently within organizations. Argote et.al, (2003) argued that the tacit or explicit properties of knowledge directly influences the manner and speed in which it spreads across the organization. These two characteristics of knowledge and the value placed on them by members of the organization have an impact on how knowledge is shared by individuals within the organization (Ipe, 2003).

The idea of tacit knowledge was first articulated by Michael Polyani in 1966, in trying to describe human knowledge, he said *"we can know more than we can tell*" (Polyani, 1966, Pg. 4). He goes further to give an example of our innate human ability to recognise the faces of others, however, our inability to describe or put into words how we recognise those faces. Those few words in my opinion, perfectly sum up the distinguishing difference between tacit knowledge and explicit knowledge. On the one hand, tacit knowledge is that type of knowledge that cannot easily be articulated and therefore, cannot be codified or transferred with ease or without the knowing of the individual who generated the knowledge (Lam, 2000; Nonaka, 1994). On the other hand, explicit knowledge is knowledge which is easily articulated, codified, stored, and transferred without the knowing of individual who generated the knowledge (Lam, 2000).

Tacit knowledge is know-how (Buckley & Jakovljevic, 2013) and is generated through a process internal to the individual, such as practice, his experiences or talent and as such, makes it difficult to transfer to others (Haldin-Herrgard, 2000). SMEs due to the owner-managed nature of their businesses have high levels of tacit knowledge, for example, knowledge regarding their customers etc, which is usually contained with the owners due to the time they have been with their businesses (Dessi, C. *et al.*, 2014). Their competitiveness in their markets usually come from this accumulated tacit knowledge (Dessi, C. *et al.*, 2014) and finding ways to transfer it is important for survival. Since this knowledge resides inside the individual, the only way to transfer it to another individual is to convert it into explicit knowledge.

Explicit knowledge is objective knowledge obtained from information in a formal way and communicated through easily accessible ways such as documentation and reports (Maravilhas & Martins, 2019). When knowledge is in an explicit form, it becomes easier to transfer. However, a lot of tacit knowledge in organizations often fail to be converted to explicit knowledge because the process of collecting this knowledge can be costly (Weiss, 1999).

Ipe, (2003), also argues that ease of transfer of explicit knowledge does not automatically equate to ease of sharing that knowledge between individuals in organizations. In his research into knowledge sharing in professional service firms, Weiss, (1999), posits that organizations should be aware that explicit knowledge can be classified into rationalised knowledge or embedded knowledge, either of which has a different degree of difficulty to share. Rationalised knowledge which is knowledge that is *"general, context-independent, standardized, widely applicable, public, official and depersonalized"* (Weiss, 1999 Pg. 66), is collected in written form, therefore, making it easier to share, as compared to Embedded knowledge which knowledge that is *"specific, context-dependent, unstandardized, narrowly applicable, private, personalized, unofficial and may be personally or professionally sensitive*" (Weiss, 1999 Pg. 66). Embedded knowledge is not collected in written form and is spread across several individuals, making it more difficult to share.

Within my organizational context, the tacit knowledge contained within the heads of its key members seems to be the type of knowledge that is at the heart of poor knowledge sharing. This type of knowledge is highly personalised and gained through the experience and skills of that individual member who possesses such knowledge. For example, a packaging machine operator who through his years of operating a machine has gained certain nuanced skills which cannot be obtained by merely reading the operational manual or instruction guide of the machine, as those skills came from years of personally operating that machine. Whenever this operator refuses or fails to transfer that knowledge to a newly employed operator, the operational performance of that new operator is always very low and leads to adverse effects on the company's operations in the short term, before he too acquires those nuanced skills in the long term.

2.5.2 Individual motivational factors

The motivation of employees to participate in the knowledge sharing process is at the heart of the knowledge sharing dilemma (Argote et al., 2003) because motivation influences the desires of those with knowledge, to share their knowledge (Wasko and Faraj, 2005; Kankanhalli et al., 2005). An individuals' motivation to share his knowledge can be grouped into internal motivational factors and external motivational factors. These will be further discussed in the following subsection.

Internal motivational factors

Knowledge as power

Individuals often use their knowledge as a source of power in which to have influence or dominance over others in their environment (Gupta & Govindarajan, 2000). This way knowledge is used can become a key reason why some individuals fail to share their knowledge as they may feel a loss of their power if they do so (Kim & Mauborgne, 1998). For example, most individuals in organizations use their knowledge to successfully perform their job roles and in return may be positively appraised or gain career advancement (Husted & Michailova, 2002). Therefore, to keep achieving personal gains, employees may feel the need to withhold sharing valuable knowledge that could see their colleagues also gain personal advantages over them. Hence, sharing knowledge can often be seen as leading to a loss of power by the knowledge sharer (Suppiah and Sandhu, 2011). In the case of my organization, junior employees express their concerns of feeling stagnant and not developing in their careers because their managers routinely fail to pass on their valuable know-how and skills on critical job functions. It was my initial working assumption that managers were engaging in this kind of conduct to maintain their sense of being indispensable to the organization, as they try to safeguard their careers.

The reverse can also be the case where employees may choose to share knowledge only in situations where they feel that by doing so, they gain more power (Wang and Noe, 2010). For example, employees sharing information with a superior, may do so in the hopes that they gain expert power (Wang and Noe, 2010).

Individuals may also choose not to share their knowledge if they feel that their knowledge will not be received in the manner they intend (Wang and Noe, 2010). If the individual fears that his knowledge will be undervalued, misinterpreted, or criticised by others, this creates an apprehension to share knowledge and reduces knowledge sharing (Bordia et al., 2006). This apprehension of negative evaluation of his knowledge by other members may arise from the individual's self-evaluation of himself, his interpretation of his self-worth and his membership in the organization (Pierce & Gardner, 2004). Employees who feel assured of their place within a group and have high self-worth, may feel more competent that their knowledge will be well received by others, and hence may feel more eager to share that knowledge (Wang and Noe, 2010).

External motivational factors

1) **Rewards/Incentives**

The notion that employees will willingly share their knowledge without some form of compensation or reward is naive (Bock et al., 2005), therefore, organizations need to investigate what forms of reward will motivate employees to engage in knowledge sharing activities if they are to succeed in effective knowledge management (Nguyen, et al. 2019).

The prevailing argument is that if some form of intrinsic or extrinsic reward system exists, it will increase motivation that leads to knowledge sharing (Constant et al. 1996; Huber, 2001; Lin and Lee, 2006) as when individuals are of the belief that they will gain more benefits for sharing knowledge, the more likely they are to engage in knowledge sharing activities (Bennet and Bennet, 2004).

Research has shown that providing tangible rewards motivate individuals to engage in the knowledge sharing process Bock et al. (2005). These tangible rewards are known as extrinsic motivators and are rewards that are derived from outside the individual (Nguyen, et al. 2019). Extrinsic motivation is a form of exchange process where motivation to act is derived from an analysis by the individual that his actions will bring about benefits to himself that outweigh any costs associated to his actions (Osterloh and Frey, 2000). Therefore, knowledge sharing will only occur if the individual feels that the benefits to him of sharing his knowledge outweighs the cost in either time, effort etc of sharing that knowledge (Nguyen, et al. 2019; Bordia et al., 2006).

To increase extrinsic motivation, some authors have suggested that organizations need to design better reward systems that visibly reflects the tangible rewards employees will benefit from taking part in knowledge sharing activities (Nguyen, et al., 2019). Managers can also encourage an organizational culture that promotes intrinsic motivation by making the beneficiaries of rewards public information (Kwahk and Park, 2016), in a manner that will encourage others to aspire to participate in knowledge sharing with the hope of also getting publicly rewarded. At one point in my organization, this form of reward style was being utilised as the company would conduct an event which showcased the best performing employee across several work categories. Winners would be announced and gifts presented to them. The organization could leverage on this and adapt it in ways that may further encourage motivation.

Nguyen, et al., (2019) discovered that motivation derived intrinsically had a better and longer lasting effect on knowledge sharing than motivation that was derived from some external reward system. This is because, extrinsic motivation only generated the minimum amount of contribution from individuals however, the natural internal desire of intrinsic motivation saw individuals act in a more long-term manner to continue knowledge sharing (Pee and Lee, 2015). Therefore, it appears that organizations should put greater effort into promoting intrinsic motivation as this has been evident to outweigh extrinsic motivation in promoting long term knowledge sharing behaviours in its employees.

Unlike extrinsic motivation, intrinsic motivation is generated inside the individual and is determined by their own principles of reward or fulfilment (Park & Rainey, 2012). Intrinsic motivation can be derived from those individuals who willingly offer help to other members of society, without the expectation of receiving anything in return as they derive an innate joy from helping others (Bennet and Bennet, 2004). This innate desire to help others can only come from within the individual and if allowed to engage in such altruistic activities, these individuals will naturally transfer knowledge and gain the natural satisfaction that may come from doing so (Wasko and Faraj, 2005). Also, one can argue that when identification is strong i.e. when the interests of the individual and organization aligns, the desire for individuals to share knowledge based on intrinsic motivation also increases, as individuals will tend to overlook the need for external rewards, due to their greater interest in the collective outcomes derived from a greater identification (Kankanhalli et al, 2005).

2) Relationship with the knowledge recipient

The nature of the relationship that exits between the knowledge giver and the knowledge recipient, has an influence on how knowledge is shared between individuals (Ipe, 2003). Therefore, in understanding knowledge sharing, it is important to consider the effect of the strength of the conditions that govern the relationship between the two units involved in the transfer and receipt of knowledge (Argote et al., 2003). These relationship conditions largely lie in the feelings of trust, identification, and reciprocity that individuals believe exists within a network (Nahapiet & Ghoshal, 1998) and have an influence on the knowledge givers motivation to share knowledge with the knowledge recipient.

Trust: In networks that exhibit high levels of trust among individuals, members are more willing to abide by and promote existing group conduct (Koranteng and Wiafe, 2018) while also increasing their interactions with one another (Nahapiet and Ghoshal, 1998). Andrews & Delahaye, (2000) argue that trust was influenced by the past relationships between the knowledge giving and receiving pair, and anchored on the quality of that relationship.

When generalized trust is high, those contributing knowledge within the organization will believe that their knowledge will be applied appropriately and as intended, and thus, will be more willing to contribute that knowledge to the system (Davenport and Prusak, 2000; Argote, et al., 2003). On the other hand, if generalized trust is low, the opposite happens, creating an environment in which knowledge sharers refrain from sharing knowledge as they feel that their knowledge will be misused (Kankanhalli et al, 2005).

Although not a theory I am using in this research, Kankanhalli et al., (2005) used social exchange theory to explain how trust may influence knowledge sharing in social interactions. Individuals in a social interaction will only choose to exchange if it means costs reductions and benefits increment for them. Therefore, if those with knowledge, trust that sharing that knowledge will not result in them being worse off as a result, then, knowledge sharing will increase (Kankanhalli et al., 2005).

Organizations can improve trust among employees by regularly involving employees in the decision-making process (Kang et al, 2008), so that they can have first-hand insight as to how their knowledge is being used, ensuring that employee's performance are appraised fairly (Kang et al, 2008).

Identification: Identification is said to occur when an individual's interests and the organization's interests align (Johnson et al. 1999). Members of a network who have a strong sense of identification, feel that they have been fully accepted into their community and this breeds a feeling of positivity for their community that sees them interact more with other members and share their knowledge more willingly (Nahapiet and Ghoshal, 1998; Koranteng and Wiafe, 2018). The result is the formation of an identity that is shaped by those common interests (Johnson et al, 1999). The existence of strong identification within an organization mean that knowledge contributors may be more willing to overlook any costs or challenges they perceive to sharing their knowledge, as they will be motivated to share knowledge because they feel that contributing to a collective organizational cause is beneficial to them (Kankanhalli et al, 2005).

Reciprocity*:* In networks with high levels of reciprocity, members feel that the good deeds they do for others will be repaid to them when the need arises at some future point (Cook et al, 2013). Therefore, members in such networks exhibit a greater willingness to give their resources to others within the network (Koranteng and Wiafe, 2018) leading to greater engagement (Wasko & Faraj, 2005). Although the positive implications of reciprocity on knowledge sharing have been identified by several researchers, there is also evidence to the contrary that shows that the expectation of receiving future positive repayment for good actions, may lead to a fall in knowledge sharing (Burgess, 2005). This may be seen in organizations where the incentive systems used to reward employees are based on a single factor. For example, some organizations may place much emphasis on rewarding some employees for immediate tangible achievements such as sale turnover in a manner that causes employees to focus solely on achieving higher sales figures, to the detriment of sharing their knowledge in the process (Burgess, 2005).

Also, reciprocity may lead to an unwillingness to share knowledge if there is a fear of being exploited i.e., if the individual feels that the knowledge he receives in return for his knowledge sharing is not of value to him (Empson, 2001). Hence, he feels that he has been taken advantage of in the process with nothing of value to show for it.

2.5.4 Scenario/Opportunities to Share

Knowledge cannot be shared in a vacuum and as such require a setting or as Ipe, (2003) puts it “opportunities to share”. For knowledge management to be effective, individuals must be given the opportunity to create and share their knowledge (Argote, 2003). In organizations, these opportunities come in the form of formal settings such as training, work teams or using technology systems (Ipe, 2003) and informal settings such as social networks and interpersonal relationships (Nahapiet & Ghoshal, 1998).

Training and Development: Training and development is a useful HR practice to encourage knowledge sharing because it ensures that individuals within an organization have improved skills (Bennet and Bennet, 2004) that can increase the quality of tacit knowledge they hold, which they can then pass to others through training (Gara Bach Ouerdian et al, 2019). The use of training also increases self-efficacy in employees that are trained, leading them to feel a greater sense of self-worth and assurance in their abilities, which in turn, sees them willing to share that knowledge about their abilities with others (Cabrera & Cabrera, 2005).

Training also creates an environment of dialogue where employees can openly share vital work issues they are experiencing and receive detailed feedback on how to resolve those issues from others with the specific knowledge (Fong et al., 2011 and Ipe, 2003). This is especially true when training is used in team building as training in teams can encourage socialization and interaction that improves relationships and ties between team members and in turn makes them more open to sharing knowledge with each other (Cabrera & Cabrera, 2005).

The key outlet of knowledge sharing in training is in the interactions between the trainer and trainee and in the interaction of the trainee with his environment, after he has absorbed new knowledge from the trainer (Grossman & Salas, 2011 and Snoek & Volman, 2014). In the work environment, this continuous process of trainer passing knowledge to the trainee and the trainee passing that knowledge to others in his environment through his regular interactions, creates an atmosphere where knowledge sharing runs smoothly (Gara Bach Ouerdian et al, 2019). Therefore, the new knowledge gained by an individual in training, is knowledge that is possessed by that individual and can naturally flow for example, in the individual trying to offer help or support to his colleagues with work related tasks etc.

Training and development are an area lacking in the organization as relates to training exercises that encourage knowledge sharing, especially team building training exercises. There is a culture of isolationism among employees and adopting training methods that encourage team building may be key to unlocking this problem. As it is evident that my organization's employees respond well to rewards and compensation, this could possibly be used as a tool to encourage teamwork and team building.

Teamwork: Knowledge intensive firms use teamwork as a key medium to facilitate knowledge sharing across the organization. Working in teams encourage interdependence among employees, where employees depend on each other to complete team-based tasks (Cabrera & Cabrera, 2005). In this scenario, knowledge must flow from knowledge givers to knowledge users, improving interaction, communication, and cooperation (Gara Bach Ouerdian et al, 2019). Working in teams also improves trust, which has been shown to be a key factor in encouraging knowledge sharing among individuals (Janz, Colquitt, & Noe, 1997; Lim & Klein, 2006).

Information and communication technologies: Information and communication technologies (ICT) have transformed the way organizations are run. In my lifetime at least, I have witnessed first-hand how the internet, computers and mobile devices have increased the speed of communication and access to information. Research shows that the organizational resource of information and communication technology is a key contributor to the success of knowledge management practices in an organization (Pandey *et al.*, 2021). ICT specifically enables knowledge sharing because of its capacity to reduce the distance (Podrug et al., 2017) between the knowledge holder and the knowledge seeker, by improving access to knowledge databases, increasing the speed at which information is accessed by those who need it, increasing the range in which information can be passed and overcoming the limits placed on knowledge by barriers such as distance (Podrug et al., 2017). This has occurred as the advancement of data transmission technology has meant that information and knowledge that can be transmitted is done so at a much faster pace, as well as increasing the coverage of that information to a wider population of people (Canals, 2021).

In my organization, information and communication technology plays in the sharing of information, primarily in reporting and communication of messages. As with most organizations, we use mobile phones and computers to which contain messaging applications that help us in communication within the organization and transmitting daily reports. However, when it comes to information and communication technology, we are a low-tech organization and our use of these technologies does not go beyond the basics as mentioned.

2.5.5 Cultural characteristics

Ruppel & Harrington, (2001) believe that social dynamics play a key role in the acceptance of knowledge systems by the employees. Therefore, for knowledge sharing to be successful, social barriers which arise through culture must be taken into account (Kankanhalli et al, 2005). Understanding the role culture plays in knowledge sharing is of great importance because according to Ipe, (2003), culture as a factor in knowledge sharing, is the one major factor which influences all the other factors discussed previously. Hence, it becomes important to understand the powerful forces of culture, in order to gain a better understanding of how we behave and why we behave in any given manner (Schein, 2010).

Culture is the amalgamation of the agreed upon norms which relate to values, history and language by a given society, community, or group, and is used by one group to distinguish itself from another (Hofstede, 1980). Culture can be observed and interpreted on several levels, however, in this thesis, culture will be looked at on the organizational level.

Culture is considered a significant influencer to knowledge sharing behaviour (McDermott and O'Dell, 2001) because culture moulds individual attitudes and the knowledge sharing attitude of an individual is a key factor in understanding the power an individual wields in the process of knowledge sharing because the attitude of an individual directly determines his corresponding behaviour (Henttonen et al, 2016). According to Jarnagin and Slocum, (2007), culture is very significant in understanding how knowledge is shared within an organization because it has a greater influence on employee behaviours within organizations, than the influence management directives have on employee behaviour. Therefore, an individual who feels positively towards knowledge sharing, will act positively towards sharing his knowledge and vice versa (Bock & Kim, (2002); Ruy et al, 2003).

In setting the context for interaction in an organization, culture also determines what knowledge is valuable and how that knowledge is to be used by members of the organization. For example, culture shapes the rules in how subordinates speak to supervisors, which in turn determine what type of knowledge subordinates will pass unto supervisors and how it will be passed (De Long and Fahey, 2000).

Knowledge sharing has been discovered to be influenced by both the organizational culture and the culture of the environment that is external to the organization (Rivera-Vazquez et al, 2009). Organizational culture embodies the collective values, beliefs, and norms at play within an organization and which determines or influences the acceptable behaviour of its individual members and provides internal integration (Schein, 1985). Therefore, the organizational culture has a significant impact on how people behave within an organization (Jacobs & Roodt, 2007; McDermott and O'Dell, 2001). A company's organizational culture can be understood by peering into what the core values, philosophies, and practices of the organization (Cameron and Quinn, 2006; McDermott and O'Dell, 2001). An organizational culture that promotes knowledge sharing will naturally see employees engage in knowledge sharing activities, whereas organizations with a culture that does not promote knowledge sharing will see employees not engage in knowledge sharing (Alavi et al., 2005).

Some characteristics of SMEs also impact knowledge sharing behaviours in ways that it would not otherwise do in large companies (Lim and Klobas, 2000). For example, small companies typically have fewer employees, which in turn means that there is a more homogenous organizational culture as a result of fewer groups who share similar values and beliefs (Wong and Aspinwall, 2004). This smaller number of employees with a homogenous culture may be more tolerant to change initiatives such as knowledge management (of which knowledge sharing is a part) as employees may understand better why change is needed. As such, it may be easier to mould the culture into a knowledge sharing culture (Wong and Aspinwall, 2004). Also, SMEs often have a corporate culture with a flatter and simpler organizational hierarchy which see members seek information from other members in a more informal, person to person manner, ultimately encouraging knowledge sharing (Supyuenyong et al., 2009).

Also, there are further cultural challenges to knowledge sharing in organizations that comprise employees from varied cultural backgrounds (Ford & Chan, 2003; Minbaeva, 2007). In large international and multinational companies, comprised of employees from varied cultures and backgrounds, knowledge sharing can be seen as a challenging exercise as these employees have different cultural norms (Ford & Chan, 2003; Minbaeva, 2007). This can also be at play in my organization because although we are an SME, Nigeria is made up of over one hundred different ethnic groups and sub groups, with different languages and cultural norms and in most organizations in Nigeria, a proportion of these ethnic groups are usually represented in the workforce. As highlighted in the literature review so far, the varied cultural norms may be inhibitive to knowledge sharing as different groups may have different perspectives about the nature of knowledge and how to use that knowledge. Also, there exists ethnic and political tensions between these groups in the larger society and sometimes, this tension spills over into the working environment and causes friction and 'bad blood' among employees, making knowledge sharing difficult to achieve.

It is also important to know that although the organization has an organizational culture, organizational culture can be influenced by national cultural dimensions and hence, managers must be aware that knowledge production and knowledge sharing in an organization are impacted by both the organizational culture and cultural dimensions (Hauke, 2004; Rivera-Vazquez et al, 2009).

Some researchers have tried to explain individual attitudes towards knowledge sharing under the scope of Hofstede's cultural dimension theory. For example, it has been discovered that in cultures that exhibit high levels of collectivism as opposed to individualism, members will take actions that favour group interests, rather than their own self-interests (Witherspoon et al., 2013), because members in such cultures exhibit greater loyalty to group agendas, rather than individual agendas (Wollan, et al, 2009). Therefore, this loyalty to groups provides a natural incentive for members to act positively towards engaging in knowledge sharing behaviours (Wilkesmaan et al, 2009). In the context of my organization, according to Hofstede insights, (2019), Nigeria is a country with a low score of 30 on the Hofstede individualism scale, hence this means that Nigerians are a people that value collectivism over individualism and thus should be more inclined to engage in knowledge sharing. However, it has been seen in my organization that this is not the case as individuals have hoarded knowledge in a manner that hampers the group interest.

The understanding of national cultural dimensions can be used as a tool to steer certain cultural behaviours that are known to be positive for knowledge sharing e.g.: a culture inclined towards collectivism may be more open to solutions that improve the feeling of identification within their groups, which in turn, improves knowledge sharing.

However, although literature shows that cultural dimensions of a nation may have an impact in the knowledge sharing attitudes of individuals inside organizations, the literature also makes it clear that organizational culture has a greater influence on employee behaviour than the influence of employee's national culture (Straub et al., 2002), as the effects of national culture is subtle (Boden et al., 2010). Therefore, understanding the unique culture of an organization can shed more light on the various reasons' employees behave in any particular manner (Suppiah and Sandhu, 2011).

One way to understand the culture of an organization would be to peer into the way people act as well as the practices they engage in (McDermott and O'Dell, 2001). For example, McDermott & O'Dell, (2001) note that the link between the invisible values of culture and the observable effects of knowledge management can be seen in the influence of its leaders, managers and other individuals in the organization who exert significant influence on it as the actions of these individuals often translate into the core cultural values of their organizations. Leadership is very significant to organizational culture as research on leadership has shown that leadership is a key component of organizational culture (Northouse, 2021) as leadership styles have an impact on the culture within the organization (Muhammed and Zaim, 2020. Because leaders play a key role in the creation and continuation of an organizational culture (Schein, 2004; Kavanagh and Ashkanasy, 2006) its effect on knowledge sharing within the context of organizational culture will be investigated further.

2.5.5.1 Leadership

Schein (2004) argues that it is difficult to draw a distinction between organization culture and leadership when thinking about organizations because they represent two sides of the same phenomenon. For example, Nguyen and Mohamed (2009) note that a founder who sets up an organization, in doing so, creates the culture of the organization by instilling the core values he believes that the organization should possess. Therefore, leadership can be seen as a key part of organizational culture. This culture also impacts upon the actions and ways its members do things, thereby, in turn affecting leadership and its actions and beliefs. Top managers are considered leaders in their organization, and as leaders, are expected to direct and guide organizational members to behave in line with the culture of the organization and in doing so, fulfil the mission of the organization (Bennet & Bennet, 2004).

Research has shown that leadership styles significantly influence employee motivation (De Vries, Bakker-Pieper, & Oostenveld, (2010); Le Ba Phong et al., (2018). Le Ba Phong et al., (2018) goes further to specify that every leadership style has its own unique effect on employee behaviour in the work place, such as motivation, their attitude to work and in this context, their knowledge sharing behaviour. Leadership styles that encourage trust, mutual respect and participation among subordinates tend to encourage more knowledge sharing behaviours in comparison to more autocratic leadership styles (Politis, 2001). Therefore, research has shown that shared leadership and transformational leadership are two leadership styles that have been identified to encourage employees to improve their knowledge sharing behaviours within an organization (Coun et al, 2019). For example, a shared leadership style is one that does away with the traditional leadership notion where a single individual bears the mantle of leadership and decision making (Carson et al, 2007; Pearce, 2004). Instead, all members of the group are giving leadership responsibilities that see each member engage in leadership activities and decision making together (Raelin, 2003). In shared leadership, goals of the group are not determined by an individual member, instead every member comes together to define the goal and through their shared interests, influence each other through encouragement, to work towards achieving those goals (Raelin, 2003). By sharing this leadership responsibility, trust within members of the group can be increased, thereby increasing their willingness to share their knowledge with one another, for the greater fulfilment of the group's goals (Coun et al, 2019). Using social exchange theory, this trust generated in shared leadership is key to encouraging knowledge sharing as it creates a climate where employees feel that the rewards of cooperation will outweigh any personal cost that they may incur (Coun et al, 2019).

However, some groups may not be receptive to new ideas and therefore it may not be easy to adopt shared leadership without the introduction of the concept of this type of leadership by an individual leader, who can champion and promote the idea (Cabrera et al, 2006). Traditionally, Nigerian communities are extremely hierarchical (Hofstede insights, 2019), with a single leader at the helm of affairs. Therefore, the introduction of shared leadership may compound the problem at hand, as it means trying to change long standing norms in a short time frame and therefore, may end up being too disruptive for the organization. Past attempts of collective problem solving have failed in my organization as employees tend to look to a single individual whenever issues arise.

Therefore, to foster knowledge sharing in this case, it can be argued that a traditional leader is still essential (Cabrera, et al, 2006). This is where the transformational leadership style may become effective.

Transformational leaders are leaders who advocate for the sharing of knowledge by being charismatic and inspiring, instilling pride and trust in subordinates, engaging coaching and in the delegation of tasks and encouraging problem solving thinking (Politis, 2002; Han et al., 2016). Han et al., (2016) also argues that transformational leaders increase the sharing of knowledge among their followers, by engaging in psychologically empowering behaviours that improve their follower's organizational commitment and organizational citizenship behaviours.

Le Ba Phong et al., (2018) found that transformational leadership increased employee's disclosure-based trust, leading to a greater willingness to disclose their thoughts on work related matters, thereby creating an environment that supports knowledge donation. An atmosphere of trust within the group is also created by a transformational leader through his use of charisma and showing encouragement, attention, and concern for the needs of each member of the group (Coun et al, 2019).

The use of charisma by these transformational leaders have been found to be an effective communication tool and led to better influence than leaders who were more task oriented in their leadership approach (De Vries et al., 2010). De Vries et al., (2010) also found that these transformational leaders who are characterised by their supportive communication styles, found that their follower's knowledge donating increased, with a simultaneous increase in their knowledge collecting behaviours. Therefore, the increase in both behaviours mean that knowledge sharing was increased.

Since transformational leaders are perceived as being more supportive by their followers, using social exchange theory, these followers may as a reward for the support of these leaders, take on extra responsibilities and adopt new behaviours in the fulfilment of organizational goals (Coun et al, 2019).

The use of transformational leadership in my organization needs to be reflected upon because, some key traits of transformational leaders such as charisma and inspiring communication styles are also individual personality traits and cannot be taught to existing managers who do not possess these traits. If this is the case, some existing managers who do not have charm and charisma may have to be made redundant and new managers with charismatic leadership styles brought in to replace them. Is this a viable option? It may not be in the case of my organization because the whole point of this research is to transfer the implicit and explicit knowledge from those employees who through their time in the organization have developed certain skills to others who need it. Hence changing personnel will remove that knowledge entirely from the organization. However, other traits of transformational leaders such as coaching and task delegation can be taught to existing managers.

2.5.5.2 Management or Leadership support

Top management support is crucial to improving knowledge sharing among employees of an organization (Kang et al, 2008; Lin and Lee, 2004; Cabrera and Cabrera, 2005) as top management plays a crucial role in influencing the behaviour of other members towards a greater commitment to knowledge sharing (Lee et al, 2006 and Bock et al., 2005). On an organizational level, governance mechanisms used by organizations may have an impact on an individual members willingness or ability to share knowledge, by influencing their beliefs, preferences, perceptions, incentives, and knowledge (Foss et al, 2010). Therefore, the challenge for managers in the knowledge age, is to govern in a manner that will create an organizational climate that encourages employees to share their knowledge (Politis, 2002).

For example, the impact of an owner-manager in the topmost leadership role in the organization has an impact on an organization when dealing with SME companies. In SMEs, the owner-managers usually play a dominant role in the daily affairs of the organization and as such, may influence the culture of the organization through the direct or indirect imposition of their beliefs and philosophies on the members of the organization (Wong and Aspinwall, 2004). Consequently, the employee's behaviour and attitudes may mirror those of the owner-managers. Therefore, if the owner-manager acts in ways that discourage knowledge sharing such as withholding his knowledge from those who need it or creating an environment that lacks trust, then, this can detrimentally affect employee attitudes to knowledge sharing and create a culture that sees knowledge sharing suffer (Wong and Aspinwall, 2004). However, since the owner-manager is so dominant, he can lead the way and act as the driving force behind the implantation of knowledge management initiatives (Wong & Aspinwall, 2004), such as knowledge sharing. Therefore, the owner-managers' impact on the organizational culture of the SME cannot be understated.

Also, perceived organizational support is viewed by employees as a sign that the organization cares about their individual well-being and as a form of reward for that support, employees may partake more in organizational citizenship behaviour, which may be manifested in sharing their knowledge with other members of the organization (Seung-Hyun Han et al, 2016).

Some of the ways top management can improve the perception of organizational support is by involving employees in the decision-making processes and showing them that their inputs are valued and appreciated, financially rewarding employees for their participation within the organization and creating opportunities to improve learning and career advancement through training (Allen et al, 2003).

It has been found that employees that undergo training become better acquainted with their work environment and propagates both the creation and dispersion of knowledge within the organization, thereby, improving learning and performance (McDermott and O'Dell, 2001).

Also, the way top management governs can directly impact how their employees perceive their intentions towards them (Foss et al, 2010), which can either motivate them to share knowledge or demotivate them to share knowledge. For example, the perception of a senior manager's managerial style may vary between his subordinates or his true intentions may be perceived differently from his actual intentions (Foss et al, 2010). Therefore, the interpretations of his behaviour by other members of the organization may cause unintended actions in respect to knowledge sharing. This is because, the way an individual cognitively frames his environment, greatly impacts his motivation (Lindenberg, 2003). For example, employees may become demotivated if they perceive that their organization is extremely controlling, if it actively and regularly monitors them (Foss et al, 2010).

In my organization, top management staff i.e., the departmental heads also fail in their willingness to share knowledge. However, over the years, there is evidence of a lack of training at top management level to foster knowledge sharing. Although considerable feedback had been given to managers about their failures in knowledge sharing, no additional training was implemented, as the organization had only issued knowledge sharing directives to the managers and expected that these be implemented by them. The lack of provision of the means to implement knowledge sharing sends a message that the organization does not see knowledge sharing as a significant endeavour, worthy of allocation of organizational resources. Therefore, the directors of the company will need to provide more management support by training and developing the senior managers in knowledge sharing, who in turn, can pass this new knowledge down to their subordinates.

2.6 The relationship between knowledge sharing factors

Ipe, (2003) in his conceptualization of a knowledge sharing framework, argued that the factors that affect knowledge sharing do not each affect knowledge sharing in an isolated manner, rather they are linked to varying degrees and combined to influence how individuals share their knowledge. He argues that factors relating to the characteristics of knowledge, the motivation to share and the opportunities to share are all dictated by the culture of the environment. He argues that the culture decides firstly, what type of knowledge is most valuable to members of the organization, how the nature of the relationships that exist impact on how knowledge is shared, what types of rewards are needed to encourage people to share their knowledge, and finally, what opportunities are made available for members of the organization to share their knowledge.

Another example of the interrelationship between these factors is if the members of the organisation possess the motivation to share their knowledge but they lack sufficient opportunities to share that knowledge, then knowledge sharing will not occur Ipe, (2003). Therefore, all these factors being present in a favourable way, together, can influence knowledge sharing in a positive way (Ipe, 2003)

2.7 Summary

The literature review has provided me with new insights into the problem of poor knowledge sharing in my organization, by uncovering factors that influence knowledge sharing among individuals in organizations, as well as how these factors can be used to encourage individuals to share their knowledge. It is evident that these factors identified do not affect knowledge sharing individually, but are interlinked in a manner which affects knowledge sharing in a complex way (Ipe, 2003). Figure 2 represents diagrammatic summary of knowledge sharing between individuals in organizations that has been uncovered from the literature review.

Figure 2. A diagrammatic summary of the factors that affect knowledge sharing (based on Ipe, 2003 knowledge sharing model).

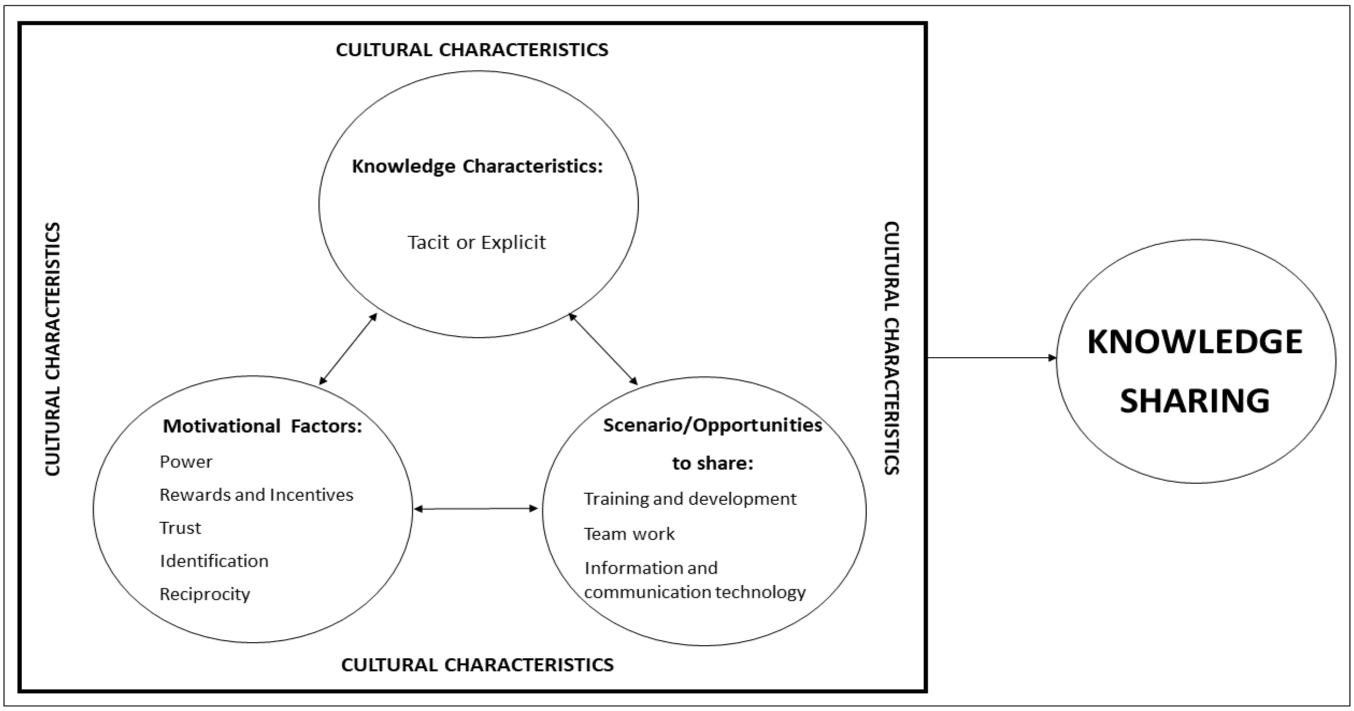


Figure 2 shows the characteristics of knowledge i.e., tacit or explicit, the motivational factors, the scenario/opportunities to share that knowledge and cultural characteristics impact the knowledge sharing process individually, and how they relate to each other. However, though interlinked, it can be observed from the diagram that the three other factors are all rooted in the specific culture of the organization (Ipe, 2003). The culture of the organization has an overarching impact on the other three factors, thereby, influencing what characteristics of knowledge are important and thus valued, what opportunities are available for individuals in the organization to share their knowledge and how individual relationships are organised and rewards given, in a manner that influences the motivation of individuals to share what they know (Ipe, 2003).

I have gained the insight that organizational culture on its own has a strong influence on individual behaviour and may pose strong barriers to knowledge sharing and cause individuals not to share their knowledge. In particular, the literature, has exposed how owner-managers can directly impact the culture of their organization in a manner that causes negative attitudes of employees towards knowledge sharing. As an owner-manager of an SME, understanding and exploring the impact I may have had on the culture of my organization in a manner that affects knowledge sharing, may lead to uncovering actionable knowledge that can help resolve the problem.

To change the organizational culture, the attitudes of the individual first need to change and the literature has revealed the use of leadership styles, management support and other organizational practices such as training and rewards, team work, and shared leadership to influence individuals' knowledge sharing behaviours.

As seen in Figure 2, I have also gained the insight that the ease or difficulty in sharing knowledge, at a fundamental level, also stems from knowledge being either tacit or explicit in nature. In the case of my organization, the fundamental characteristic of the knowledge we struggle to share being tacit in nature, may play a part in our inability or unwillingness to freely share that knowledge, because tacit knowledge is more difficult to share than explicit knowledge (Haldin-Herrgard, 2000).

Also, as seen in Figure 2, I have gained the insight that my organizational culture may be responsible for the high value individuals place on the tacit knowledge they possess, which in turn, decreases their motivation to share. My organizational culture sets the stage for this because the organization is organised in a way that sees power manifest in the hands of key members who perform key functions. The knowledge that they use for these functions are largely based on their skills or experience and not available in an explicit form such as manuals or guide books etc. This tacit knowledge is currently considered important in the organization, as without it, those key functions cannot be easily performed by others. As such, this highly valued tacit knowledge is currently not being shared freely.

Knowledge sharing begins at the individual level as the individual holds significant power in the knowledge sharing process. Deciding, when, where and how to share or not share the knowledge he/she possesses is governed at the individual level by specific factors that affect an individual's motivation to share. Figure 2. shows that within the context of an organization, an understanding of the incentives (internal and external) to the individual, that motivates him to share knowledge is important. Therefore, I must investigate to uncover the specific factors motivating some individuals in my organization to withhold their knowledge and not share it freely.

I have also gained the insight that the organization must provide scenarios or opportunities for its members to share their knowledge, for example through training activities or through technological mediums of communication. Without these, those individuals who may want to share what they know, may lack the avenue to do so.

These insights gained from the literature review have broadened my insights into the organizational problem, however, to answer my research question, it is vital that knowledge sharing be understood in the specific context that is my organization, as this understanding will better shape any strategies to resolve the problem. This is where this research positions itself. Of these factors identified in the conceptual model, what specific factors are at play and in what specific ways do they interact that cause knowledge not to be shared in my organization.

The factors identified in the literature review are to a large extent based on people related factors that are not quantifiable in nature and also, do not interact in a quantifiable way. Therefore, the investigation into these factors must be qualitative in nature because I need to gain a better understanding of the nature of these factors and how they interact in my organizational context, by gaining an insight into the lives and lived experiences of individual members, through listening to their first-hand account of how they have engaged with knowledge sharing. Therefore, a qualitative method of inquiry which is best placed to ask participants questions that draw out detailed narrations of their personal experiences and provide the insights into their lives with knowledge sharing is an essential as a next step. Chapter 3 outlines how action research approach and the data collection method chosen for this research were implemented.

Action research in its nature is cyclical and although the literature has informed the research process so far, it is important to keep in mind that the literature review preceded my investigation into the problem. Therefore, as I proceed to collect data and explore my organizational reality more, I recognise that other factors may come to light that take responsibility for the lack of knowledge sharing within my organization.

Given that this is an action research thesis, the only way to achieve this, will be for me to engage and interact with other members of the organization as any successful solutions will need to be backed by factual data, as well as achieved in collaboration between myself as the researcher and other members of the organization. To achieve this, a wide array of qualitative data will be collected using face-to-face interviews and meetings, with the hope of uncovering answers to the questions posed in this research.

CHAPTER 3- METHODOLOGY AND METHODS

3.1 Introduction

The preceding literature review chapter stated that the aims of the research were twofold:

1. To understand the reasons why knowledge is not being shared within my organization by investigating the factors that influence knowledge sharing.
2. To use the results of this investigation to uncover strategies to improve knowledge sharing and ensure that the organization does knowledge sharing better, so as to contribute to the organisational development of the company.

The investigation into the factors that influence knowledge sharing should uncover how knowledge is perceived in the organization, how members of the organization understand knowledge sharing individually and collectively, how their interactions promote or inhibit knowledge sharing, what challenges they experience and what support they are given, while trying to share their knowledge. As a researcher, this should fuel my understanding of the reasons why knowledge is not being shared within the organization because it enables me to uncover the issues experienced by the members of the organization within their unique organizational context and therefore, create a greater understanding of the social phenomena that is knowledge sharing within this given context.

This methodology chapter describes in great detail the rationale for the research methodology used in this research on knowledge management in an organisational context. To begin with, the philosophical position in which the research is framed and which forms the foundation of the research design will be described by a detailed discussion of the ontological and epistemological paradigms the research is based on. This discussion of the philosophical position of the research will reveal why the research method was chosen, following which, a discussion of the chosen research method of participatory action research will commence, leading to a discussion of the research design by a description of the action research cycles. Following this, the chapter will proceed to a discussion of the process of data collection and analysis and conclude with a description of the limitations of the methods chosen and finally, the ethical issues considered.

3.2 Philosophical position

Philosophy is defined as "*the use of abstract ideas and beliefs that inform our research" (*Creswell, 2013 p.16). All research, regardless of field or discipline, is grounded in a specific set of beliefs which provide guidance for how such research should be conducted (Esterby-Smith et al., 2012). An understanding of the philosophical position taken by a researcher is important to the process and outcome of the research because, any philosophical position taken by the researcher aids in the formulation of the research question (Creswell, 2013), aids in the reasoning behind a particular research design and influences the type of data that is required to answer the research question and also, how this data will be collected and analysed (Esterby-Smith et al., 2012).

Philosophically, ontology and epistemology are two key areas of consideration in management research. Ontology is the preoccupation of the nature of existence and reality, while epistemology is the preoccupation of the different means to enquire into the essence of the world. The ontological position taken in this research is that of 'Relativism', in which the view is taken that the nature of knowledge sharing within the organization, does not have one truth but several truths held by each individual within the organization who have their own experience of the problem at hand (Esterby-Smith et al., 2012). This philosophical position is taken because the successful implementation of good knowledge management in organizations must take into account the social interactive nature of knowledge sharing (McDermott, 1999) because the process of knowledge sharing starts with an individual who creates the knowledge and then transfers that knowledge to another individual through a form of social interaction (Nonaka, 2007). Therefore, it stands to reason that knowledge sharing as a phenomenon has to be particularly unique to every individual in that process, as every individual's experience while passing through the knowledge sharing process may vary. Therefore, as the research aims to gain a broader understanding of the subject matter, an investigation should be done into discovering what those varying unique experiences and truths may be for each individual.

This research takes the philosophical epistemological position that reality is subjective and its meaning is unique to the individual. Therefore, the nature of knowledge about knowledge sharing in my organization must be understood from the perspective of its individual members. The research takes the approach that the knowledge being sought after is not objective in nature and hence the aim is not to uncover existing facts that point to a general law that explains the phenomenon of a lack of knowledge sharing within this particular organization (Creswell, 2013). Rather, the research takes the approach that the knowledge being sought after must be understood through the complex and varied meaning that the individuals who experience this organizational problem, give to their realities (Creswell, 2013). Therefore, the knowledge being sought after must be constructed by the individuals involved in this research, through their interactions with others in their environment (Creswell, 2013). This epistemological position is called 'Social Constructivism'. The social constructivism approach also puts aside the notion that the researcher is neutral and observes the research at a distance, therefore, the researcher must consider how his preconceptions and position may impact the analysis of the data (Charmaz, 2014). This is very important, considering the Insider Action Research stance of this research, in which I must consider how the assumptions, biases and privileges I bring into the research in my dual role as an active member of the organization and researcher, may impact the research process and outcome.

In designing this research, I did not adopt an approach that entails the collection of data for the purpose of uncovering patterns among research participants with the ultimate aim of uncovering a causality between knowledge sharing and certain factors, rather, the research was designed to uncover how each research participant individually feels about the subject matter and how this is informed by their interactions and communications collectively as well as any cultural norms (Creswell, 2013), with the aim of increasing my understanding of the situation at hand to aid in the development of a context specific solution. Therefore, whatever patterns or themes that may arise from analysis of the data collected will be used to create a construction of the problem in the social environment by an appreciation of the experiences of all involved (Creswell, 2013).

3.3 Research Design

3.3.1 Action Research

According to McTaggart, (2002) the purpose of social research, is to improve social practice. From this ideology, it can be said that in other words, if one wants to improve a social practice, then one wants to bring about change to that social practice. This for me, is one of the key reasons why I chose Action Research for this research project as my ultimate goal is to bring about the change in my social practice from an organization that does knowledge sharing poorly to an organization that does knowledge sharing well.

"Action research is neither a method nor a technique; it is an approach to living in the world that includes the creation of areas for collaborative learning and the design, enactment and evaluation of liberating actions … it combines action and research, reflection and action in an ongoing cycle of co-generative knowledge" (Greenwood, 2007 Pg. 131).

In distinguishing Action Research from other forms of social science research methods, McTaggart, (2002) argues that in contrast to other research methods, the action researcher possesses a commitment to ensure that his research brings change to the body being researched into because in action research, it is believed that an understanding of social environments stem from the process of trying to bring about changes to it.

Action research is described by most researchers as being, "*problem-focused, context specific, participative, involves a change intervention geared to improvement, and a process based on continuous interaction between research, action, reflection, and evaluation"* (Hart, 1996 pg. 454).

Therefore, this research intends to be:

1. Problem focused: The focus of this action research project is to increase knowledge sharing within my organization by investigating the factors that influence knowledge sharing and using that knowledge to uncover strategies to improve knowledge sharing and hence resolve the problem of poor knowledge sharing within my organization.

2. Context specific: The research is conducted on a snack food manufacturing company in Nigeria, in which the researcher is founder, owner and managing director. The knowledge generated in this research should also bring about an improvement in the company in such a way that it improves the working lives of all stakeholders in the organization.

3. Participative: Other members of the organization were involved in the research and the communication and interactions between the researcher and these members who contributed their knowledge of the problem to the research data, generated actionable knowledge that was used as a basis of taking action.

4. Change intervention: The outcome of this research is to bring about organizational change in the form of better and improved knowledge sharing across the organization, hence an improvement in the organizations' practices. This organizational change should come through the promotion of organizational learning brought about using Action Research strategies to solve the problem of poor knowledge sharing.

In social constructivism, it is believed that individuals try to make sense of their world by developing an array of subjective meanings of their experiences (Creswell, 2013). Therefore, this research has to be designed in a manner that explores the differences in the individual members understanding of the problem of knowledge sharing. These deeply rooted understandings will come from each individual's personal experience with the problem of knowledge sharing and what it means for them in their own context. Therefore, the research must be designed in a manner that the researcher can gain access to each individual members meaning of the research problem by involving them in the research process. Therefore, the independent and objective observation stance adopted by researchers of the natural sciences is unrealistic (Esterby-Smith et al., 2012) for complex social settings such as these. The participatory nature of the Action Research process suits this scenario and should help fulfil the philosophical position of this research.

The idea that the only way to really understand a social system and bring about change to it, is with the involvement of existing members of that system in the process of inquiry into that system is a key belief shared by most proponents of Action Research. Rather than an objective approach to uncovering knowledge, there is a key belief that the people involved in a given problem affecting their communities, hold a knowledge and understanding about that which affects them, and must be trusted in addressing the issues (Brydon-Miller et al., 2003). Therefore, conducting research on a particular social environment, without a collaboration with the stakeholders of that environment is likely to be unsuccessful (Brydon-Miller et al., 2003). In line with the philosophical position of social constructivism, the involvement by other members in the research, through their experiences with the problem, should give the researcher access to an array of subjective meanings in which to understand the complex nature of knowledge sharing in the organization, as opposed to generating simple ideas (Creswell, 2013).

From the combination of expert knowledge of the researcher with the local knowledge of the stakeholders gained through their democratic involvement in the research process, action is taken and the proceeds of those actions, interpreted and tested by the stakeholders themselves, who are best placed to interpret and test them because they are directly impacted by them (Brydon-Miller et al., 2003). By this process, Action Research is able to produce more factual results than other forms of social science research methods. (Brydon-Miller et al., 2003).

Finally, the action taken in collaboration with those involved in the issue is tied to learning because according to Revan, (2011) increased learning occurs as action occurs. Therefore, Action Research has learning at its core because the belief of Action researchers is that *"there can be no learning without action and, no action without learning*" (Revan, 2011 pg. 85) as in trying to understand complex social processes, learning occurs because attempting to bring about changes to those problems triggers the need to learn about it (Zuber-Skerritt & Perry, 2002).

3.3.2 Action Research Cycles

Action Research is an emergent and iterative process, therefore, although research commences with a stated question, the iterative process means that as the research continues, the focus on the initial question may change (Saunders et al, 2019). This is because, the Action Research consists of cycles that involves the researcher first diagnosing the problem, followed by planning action, taking action and evaluating the results of the action (Saunders et al, 2019), before entering another cycle, where this process is repeated (Lewin, 1948). This repetitive process is captured in an Action Research cycle in Figure 2

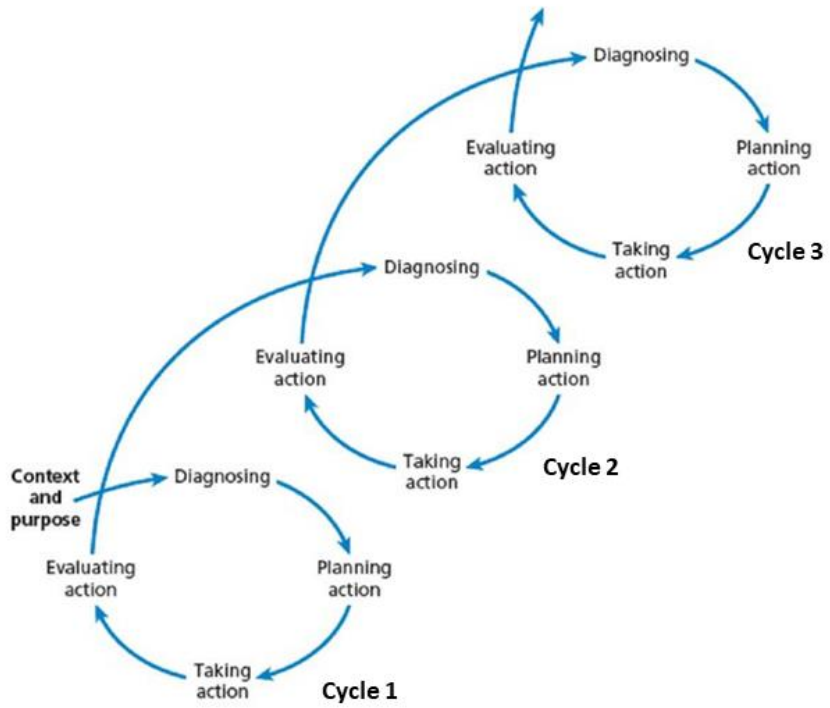


Figure 3. The three cycles of the action research spiral (Saunders et al., 2019).

Coghlan and Brannick, (2014) describe the Action research cycles steps as follows:

Pre-step context and purpose: All action research projects begin with this first pre-step in which the researcher tries to understand the fundamental need for the project and thus tries to answer the question of why change is needed. Also, the researcher tries to understand the landscape he will be operating in, by trying to understand the nature of the external and internal forces that will drive change, as well as what the nature of the collaborative relationship with other participatory members of the research will look like. Finally, the researcher has to determine what change will look like.

Diagnosing: The second step in the cycle involves the constructing of the problem as it is understood by the stakeholders of the research, based on an articulation of planned action to be taken.

Planning Action: This third step in the cycle involves putting together a plan for action as derived from the understanding of the issues gained during the pre-step and diagnosis stage.

Taking Action: This step involves conducting an intervention in the social environment under study by implementing the action plan.

Evaluating Action: This final step in the cycle involves the examination of the results of the action or intervention that was taken to determine if the action taken was in line with how it was planned, if the results are as expected, as well as what was learned that will be used to start another Action Research cycle. Further details of how the action research cycles were designed and implemented are discussed extensively in chapter 3.7.

3.4 Ethics in Insider Action Research

There are several ethical issues that must be considered when conducting research of any kind. Therefore, before the research was commenced, based on the University of Liverpool's policy on research ethics involving human participation, an ethical application for approval of this research had to be made to the university's 'International Online Research Ethics Committee' and approval obtained as can be seen in the approval email in Appendix D. Ethical approval was duly obtained for this research before commencement of the research.

As the author of this research, conducting action research into my own organization, which is the subject of this study, Smyth and Holian, (2008); Holian and Coghlan, (2013) note that there several ethical and credibility issues that need to be considered.

Preunderstanding: 'Preunderstanding refers to such things as people's knowledge, insights and experience before they engage in a research programme' (Gummesson, 2000, pg. 57). As an insider action researcher, who is a part of the organization that I am researching, the preunderstanding that I have is based on the knowledge I have derived from my lived experiences with the culture and people in the organization (Coghlan and Brannick, 2014). My familiarity with the formal and informal social structures of my organization, gives me insights into the behaviours of members, how they interact and build personal and professional relationships while carrying out their duties. This knowledge can be valuable because it gives me an understanding of the informal structures and dynamics at play in the organization, some of which cannot be quantified and easily captured when making an inquiry into the organization for the research purposes, but a knowledge of which may benefit the understanding of the research problem and organizational setting. However, the disadvantages of this preunderstanding may mean that during the interview process, I may exert undue influence on the participant by offering leading questions that steer their responses towards justifying the assumptions and biases which I may hold based on my familiarity with the organization. Also, the preunderstanding I have may cloud my judgement and impede my ability to take an objective view when assessing and critiquing the data emerging from the research due to assumptions I may make as a result of my familiarity with the organization. This could mean that I do not allow the real meaning of the data to emerge as my assumptions may lead me to ascribing meaning to the data that is not factual or true. For example, during the interview of participants, there is a possibility of making assumptions as to the meaning of their responses and as such not dig deeper to uncover what they may truly mean (Coghlan and Brannick, 2014). To reduce the risk of this occurring, during each interview, I recorded the conversations and played them back to myself after the interviews were conducted, and then, I transcribed the interview data. This way, I was able to objectively listen to a conversation between two individuals and allow meaning emerge from the responses I heard, thereby, putting my bias to those responses in check.

Role duality: One of the peculiarities of action research means that the clear line separating the researcher and the researched is not as distinct as other traditional forms of research (Coghlan and Brannick, 2014). Keeping in mind my original role as the managing director of the organization, puts me in a position of power over the research members and it was important to understand the nature of the challenges that were likely to arise from this position of power, when collecting research data from employees. As my job role in my organization has an impact on the lives of other members, the role power plays within these relationships are an issue that cannot be glossed over and must be considered very carefully (Coghlan and Brannick, 2014).

The risk of conducting an interview in this scenario is that employees may have been unwilling to participate in the interview process, for fear of having to express their personal thoughts to the Managing Director, thereby leading to a low number people accepting to be a part of the interview. Also, my position of power may also lead employees to feel coerced to partake in the interview process as they fear some form of retribution from me, if they do not participate. All of these could have detrimental effect for the research and the quality of data generated.

In reality and as I experienced, there is no full proof way of completely eliminating these risks, as Greenwood, et al. (1993) explains, the most the researcher can do is to set the stage for participation by making clear the intent for participation, while also ensuring that participatory activities are built into the research process. However, the researcher must not impose participation on research participants, as this will be unethical (Greenwood, et al. 1993). In recruiting participants for this research, steps were taken to ensure that members of the organization were aware that their participation was not compulsory and any decision made by any member to not take part in the research would not be met with negative consequences to their employment or social standing within the organization. Therefore, I put in place a process of obtaining informed consent from the participants who wished to participate in the research. The process that was used to obtain informed consent is detailed in section 3.6.2. However, the process of obtaining consent did not stop at the stage where consent forms were signed. During the interviewing process, I also made sure to pay attention to the participants verbal and non-verbal ques that showed when they were distressed and uncomfortable in answering any line of questioning, with the intent to stop that line of questioning as the case arose. I also explained to the participants that whatever their responses or views were to the questions being asked, I would not treat them negatively either through passing judgment on them, ascribing right or wrong to their comments or in any other manner that made them feel uncomfortable for providing the comments.

Data management: Research data needs to be purposefully and adequately managed for a piece of research to be considered trustworthy (Smits & Teperek, 2020). As an insider Action Researcher, my research findings may include confidential information about members that participated in the research, other stakeholders of the organization and the organization at large, which must remain private. Conscious about the sensitivity of personal information, I ensured to remove any details from the reporting that could be used to personally identify any member of the organization, thereby, guaranteeing the participants anonymity. For example, rather than using individual names, I ascribed a participant number to each interview participant. Also, the interviews were conducted in a separate room in the organization, with no access by other members of the organization during the interview periods. This was done to further protect the identities of each interview participant from other members of the organization and guard against any adverse effects, both psychological and physical, that they may be exposed to, as a result their participation in the research.

The research data was stored in an offsite location, away from the office building where the data was collected, on a personal password protected laptop, where no other individual had access to it, except the researcher. This provided some level of physical protection for the data from anyone who may try to access the data maliciously for the purpose of viewing the participants personal information.

3.5 Research Methods

Qualitative research

As described in in section 3.2, my philosophical position holds that I believe that truth and reality is subjective and the way we understand our environment is relative to the individual. Hence, my conceptualization, understanding and lived experiences of knowledge sharing within my organization may be starkly different from those of other members of the organization. Although as a member of my organization, my lived experience informs my conceptualization that there is a problem of knowledge sharing within my organization and as such my belief in its impact being detrimental to the success of the organization, this may very well not be the way others in my organization think.

Therefore, I am inquiring into my organizational problem not by imposing my views and beliefs on other members of the organization but by trying to understand and interpret how other members of the organization view the reality of this problem, the nature of the problem and how they interact within the context of the organization. Hence my role within this research has to be that of an observer, trying to interpret the ever-changing social construction around me (Creswell, 2013). With this in mind, a qualitative method of inquiry was best suited to achieve this aim.

Cram & Mertens, (2015) describes qualitative research as an interpretive form of research that sees the researcher located within the social phenomenon under study, with the aim of trying to understand and make sense of the phenomenon, within the context of how members of that society subjectively make sense of that phenomenon. Furthermore, qualitative research should be used when a complex problem needs to be investigated with the aim of gaining a greater understanding of the problem by exploring factors which are not easily measurable (Creswell, 2013).

To commence a qualitative research study, philosophical assumptions are made about the problem under investigation and informed by the use of a theoretical framework, to interpret the meaning that individuals experiencing the problem, give to the problem (Creswell, 2013). Afterwards, data can be collected from research participants in their natural setting through various representative methods such as face to face interviews and meetings (Creswell, 2013), which was used in this research. An emergent process is followed which sees that data analysed to uncover themes that emerge across participants experiences with the problem (Creswell,2013).

Qualitative studies are best conducted when no or partial theories exist about a given phenomenon, from previous research. Hence, in the case of my organisational problem, although the problem of poor knowledge sharing within organizations have been researched in the past and extensively covered in the literature review chapter of this thesis, however, my study will try to understand this problem in the unique context of my organization and hence uncover context specific solutions.

Considering the use of action research as the research principle for this research, the characteristics of a qualitative research method aligns with the principles of action research in the following ways:

- Qualitative data is collected in the natural setting of the participants experiencing the social problem. Action research sees the researcher immerse himself in the natural world of the research participant, observing in close proximity and not from afar. Therefore, qualitative methods of data collection will aid the action researcher in collecting up close and personal data of the subjects of his research and engage in one-on-one interaction with research subjects.

- Action research aims to uncover solutions to problems by collaboration with those being directly affected by the problem. This ensures that solutions to problems are not generic in nature but are context specific and as such may be more successful in ensuring long term change as there is a greater chance of achieving buy-in to the resolution of the problem from members of the organization who collaborated with the researcher.

- Action research also aims to bring power to the less powerful and marginalised in society and conducting qualitative research using representative forms of data collection such as interviews etc, ensure that the voices of those that may not be regularly heard in society, due to the nature of power within their societies, are given a chance to be heard (Creswell, 2013).

3.6 Research Process

3.6.1 Data Collection Method

Typically, qualitative researchers choose between several data collection methods ranging from observations, interviews, participation, and the analysis of documents. However, there are several forms of qualitative study which determine how the researcher will interact with the research participants, how many participants will be ideal for the research and the method the researcher will employ to collect data from participants.

Given my philosophical positioning and choice of research methods, the data collection method I choose to use should give me data with characteristics that provide me insights to the views and opinions of the research participants, thereby, providing me with more knowledge on the problem of knowledge sharing within my organization (Esterby-Smith et al., 2012).

To achieve this, I chose to conduct in depth face to face semi structured interviews as the primary data collection method as it was best placed to provide me with data that gives me insight into the views and opinions of the research participants. After which, meetings in the form of action planning groups were used as a forum to discuss the themes uncovered from the interview data and generate solutions. The interview was structured in a semi-formal way with broad questions asked with the aim of understanding the lived experiences of the research participants in relation to any knowledge sharing issues they may have encountered.

Finally, although participant observation is a popular choice among qualitative researchers, I chose not to conduct participant observations as part of my data collection methods, because, in studies that use participant observations, although the researcher is immersed in the research environment, he does not interfere or interact with the environment he is observing and merely observes, taking notes and recording the behaviour of participants as well as any relevant events (Creswell, 2013). This independent observation will be unrealistic to achieve because, I am an active participant of the setting being observed and my presence in that setting for observational purposes will cause me to interfere or interact consciously or unconsciously. Firstly, since I am the managing director with managerial duties which involve supervision, while observing participants carry out their job tasks, I may be required at intervals to give instruction or interact in some way, in order that they conduct their tasks appropriately. This interaction would have an effect on the social setting being observed in a manner that changes the behaviour of the participants under observation. Secondly, even if I do not interact with the participants, as the Managing Director lurking on the side, observing and recording people's activities, there is an increased chance of a change in behaviour of the participants, as my position of authority and power could elicit behaviour that would otherwise not be the case if I was not present in their social setting.

3.6.2 Data Collection Process

At the time of commencing data collection, the organization has 59 employees across 3 departments of production, administration & human resources, and sales, who all carry out their daily functions from the headquarters of the organization which is located in Lagos, a state in Nigeria.

To ensure participant consent to willingly partake in the research and to ensure the privacy of participant data, a series of steps were followed to recruit the research participants.

Participant recruitment commenced with a written notice about the research being posted on the company notice board with full view and easy access by all members of the organization. This notice described the purpose of the research both as a requirement to fulfil the doctorate degree program of the researcher and also, for the purpose of solving an organizational problem. Additionally, the notice made known the criteria set by the researcher to be fulfilled by those members who wished to participate in the study, while also making clear the criterion that will result in a member being excluded from participating in the research.

The notice also detailed the ways in which the researcher aimed to interact with the research participants using face to face in depth semi-structured interviews and group meeting. It was made clear that this method was the primary data collection method and the only way the researcher planned to collect data from participating members of the organization.

Although there existed a minimal physical and psychological risk to the participant from participating in this research, it was made clear in the notice that all information revealed during their participation, will be confidentially held and also, there would be no detrimental effect to their jobs or organizational standing as a result of their participation. Finally, they were free to pull out of the research at any time they felt under any form of physical risk or psychological risks.

To avoid any form of coercion both real or perceived, it was also made known in the notice that participants who were willing to take part in the research should make first contact with the human resource manager. Upon participant contact, the human resource manager matched each participant against the inclusion criteria set for participation and provided the participants with the participant information sheet, which provided more details about the research. A consent form was then signed by the participant and after which, a date given to the participant for a face-to-face interview with the researcher. Using this process of participant recruitment, 13 research participants willingly volunteered and were successfully recruited for the research. This process of making first contact with human resources was done to reduce the risk of participants feeling pressured or coerced to participate in the research, such that they may feel, if they had to make first contact with the Managing Director. Any questions they needed answered could be more freely put forward to human resources and if they wished to withdraw from participation, they could do so without my knowledge that they ever intended to participate in the first place. Therefore, reducing any perceived fear they may have of a backlash from me.

3.6.3 Population Sample

The determination as to what number of participants to be used in any research study is guided by a variety of factors (Morse, 2000). These factors include but are not limited to topics recently covered in this chapter such as the type and extent of the study being conducted, its philosophical underpinnings and the nature of the phenomenon under investigation, as well as the quality of the data to be collected and the quantity of data to be obtained from each participant, the type of qualitative method the research is designed on, how many times each participant will be interviewed and the use of any shadowed data (Morse, 2000). Although it is impossible to predict the sample size in advance, the following paragraphs aims to argue the case for the sample achieved for this research study.

The total number of participants in the study were 13 (N=13). The participants selected consisted of the total number of participants who accepted and consented to being part of the research, by way of signing and returning the participant consent form and are not the total number of employees in the organization, which at the time of this research stood at 59 people. These participants came solely from the head office of the organization and all participants had been working in the organization for at least one year. All participants nationalities are Nigerian, although not by design, as all employees in the organization are Nigerian nationals. However, the participants are a mixture of several Nigerian ethnic groups.

The participants are both male (N=10) and female (N=3) and this variance between genders is only as a result of the characteristic of the population that agreed to partake in the research and that meet the research participation criteria, rather than any specific reason of the researcher. The proportion of male to female is not representative of the population of the organization as the organization has close to a 50/50 split between male and female employees at any given time.

All 13 participants recruited for the research adequately represent the three departments of the organization, namely; production, administration & human resources, and sales.

Considering that the use of face-to-face interviews as a data collection tool is to gain an insight into the experience of participants from their point of view, it is important to keep the number of participants limited as Onwuegbuzie & Leech, (2007) notes that qualitative researchers must have a concise and manageable sample size as too large of a sample size will inhibit their ability to obtain adequately robust data. Therefore, the emphasis during the interviews was to ensure the participants felt relaxed to discuss and thus give full, vivid accounts of their experiences with the research problem, therefore aiding in the collection of rich data.

Table 1. Research participants

CODE	DESIGNATION	DEPARTMENT	GENDER	LENGTH OF SERVICE
Manager 1	Manager	Administration & HR	M	5 years
Manager 2	Manager	Sales	M	4 years
Manager 3	Manager	Production	M	1 year
Supervisor 1	Supervisor	Administration & HR	F	4 years
Supervisor 2	Supervisor	Administration & HR	M	2 years
Supervisor 3	Supervisor	Production	F	4 years
Supervisor 4	Supervisor	Production	M	4 years
Supervisor 5	Supervisor	Production	M	3 years
Utility officer 1	Utility officer	Administration & HR	F	3 years
Sales Rep 1	Sales Rep	Sales	M	2 years
Sales Rep 2	Sales Rep	Sales	M	1 year
Production officer 1	Production line officer	Production	M	3 years
Production officer 2	Production line officer	Production	M	2 years

It is important to mention that because we are a small organization with few employees, the closeness of the workforce, mean that what may seem like an insignificant piece of personal information, may give away the anonymity of the research participants. Therefore, to ensure anonymity, the details of the participants described in this table could not be expatiated on, to avoid revealing who the participants may be.

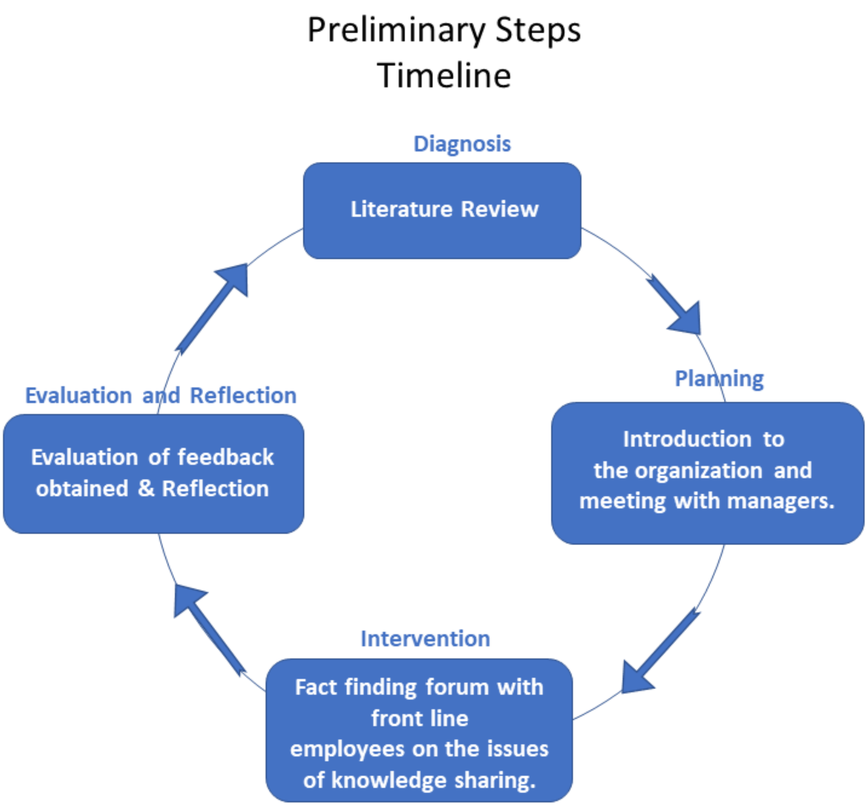
3.7 Action Research Cycle

The Action Research cycle will showcase the process of Action Research the research has taken by detailing the action research process in a distinct cycle.

3.7.1 Preliminary step

A preliminary step occurred with the aim of gaining a better understanding of the nature of the knowledge sharing problems that exist within the organization in real time by discovering the potential causes for the knowledge sharing problems that exists, introducing the concept of knowledge sharing to the organization to facilitate the thinking of the employees and aid their construction of the problem, while also gaining feedback that aided my reconstruction of the problem as I moved forward into the data collection phase in the action research cycle.

Figure 4. Preliminary step.



Activity 1: *Problem diagnosis*- The literature review conducted earlier in the research process was the first activity of the preliminary steps. The literature review process uncovered knowledge about knowledge sharing from existing literature by integrating the findings of previously conducted research on the subject matter. The literature review provided insights into the nature of knowledge sharing in organizations and the major factors that impact knowledge sharing between individuals in organization, which are, the characteristics of knowledge, motivation to share, scenario/opportunities to share and culture of the organization. The literature revealed that though these factors were all important, however, the culture of the organization was the setting in which other factors were given meaning. The literature revealed the complexity of knowledge sharing by providing an insight into the relationship between these factors and how they impact knowledge sharing individually and collectively. This knowledge gained from the literature review process, set the scene for the methodology of research.

Activity 2: *Introduction and Problem diagnosis meetings with senior managers*- To introduce the research into the organization, initial meetings were held with the three departmental managers and specific details of the research scope, time frame and resources commitment were disclosed with the aim of gaining mutual understanding, while also soliciting their buy-in. I subsequently met with each manager individually, to discuss the nature of the problem within their individual departments and any reasonable causes for the problem they were aware of, with the aim of exploring the general background of the problem. All the managers agreed that poor knowledge sharing was a problem worth resolving within the organization. The effects of the problem of a lack of knowledge sharing were evident, as one manager stated *"without adequate knowledge flow, the company cannot grow*".

Activity 3: *Discussion forums with frontline employees*- I held a general discussion forum with all employees about the research that will be undertaken over the number of months that was planned. As the leader of the organization, it was important that employees heard directly from me so as to eliminate any hearsays and conflict that may occur. This discussion forum was held primarily to introduce the concept of knowledge sharing to the frontline employees and to create an awareness and buy-in about the research. The forum also created an environment of openness about the research, in which employees could freely ask questions, which in turn, in my opinion, just from the observation of the occupants of the room, improved the feeling of trust about the research. What was also evident during the forum was that the introduction of the concept of knowledge sharing facilitated the front-line employees thinking about the problems they were facing within the organization and increased their interest in the research, which was later evident in the interview stage of the research.

From the discussion forum, it was clear that frontline members of the organization wanted their voices heard by management and used the forum to express both related and unrelated matters of the research. This adds to evidence that frontline members feel that they are not provided the avenue to pass information and ultimately their knowledge up the organizational hierarchy.

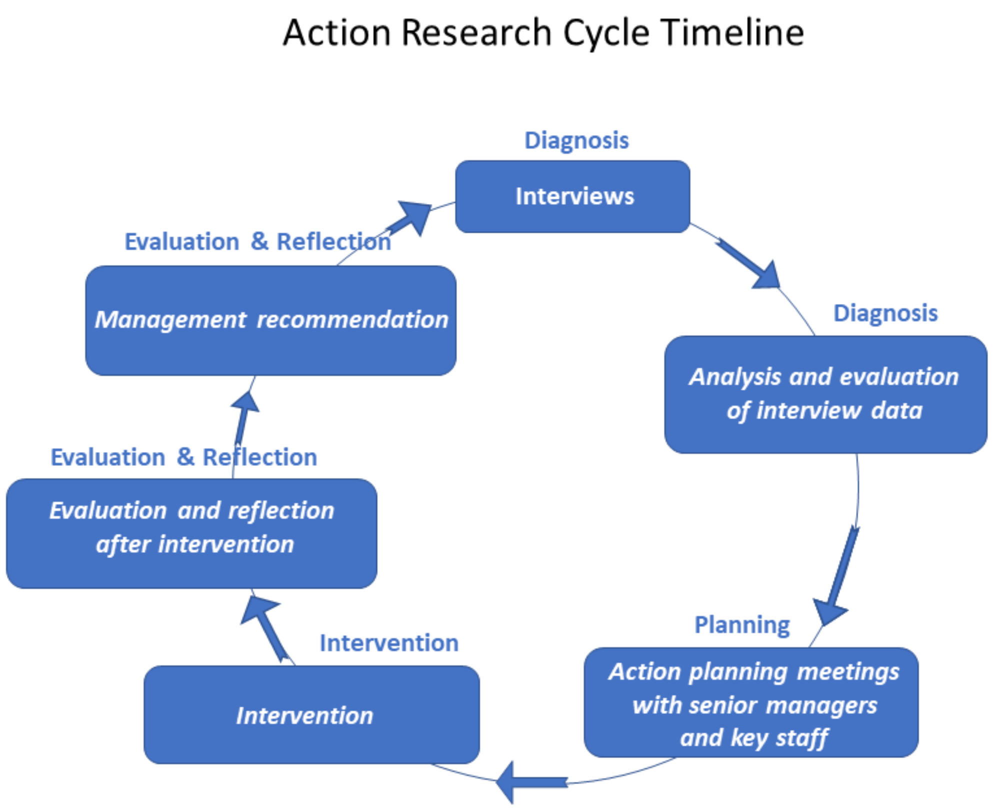
Activity 4: *Feedback evaluation and reflection-* Keeping in mind that the meetings and discussion forum was the first time I had entered into a formal conversational exchange with other members of the organization regarding the problem of poor knowledge sharing within the organization, the feedbacks received helped to reshape my conceptualization of the problem and frame the concept of the problem in a real life setting within my organization. From the discussions, it was evident that poor knowledge sharing among employees both vertically and horizontally along the organizational hierarchy existed and was a problem for the members of the organization and the organization as a whole. However, some of my earlier assumptions about the problem where challenged. For example, prior to commencing the research, I had always assumed that the departmental managers and some key senior staff were solely responsible for poor communication to their subordinates while also withholding their knowledge and not sharing what they know with their subordinates, for the sole purpose of being indispensable to the organization and securing their employment against any future challenges from their subordinates. Therefore, I assumed that other junior members of the organization who formed most of the organization’s members were just victims of poor knowledge sharing within the organization and to address this problem, I had to focus on tackling this issue with a few managers and senior staff. However, as discussions ran along, it became clearer to me that poor knowledge sharing was a systemic problem involving most members of the organization.

It was also evident in the forums that some employees may use the interview process as an avenue to express their discontent about other organizational matters not relating to knowledge sharing. Therefore, while also ensuring that data was collected in a manner that allowed the participants to freely express themselves and divulge information that would provide a rich set of data for analysis, it was also important that the interview process had some structure, to avoid a derailment of the interview process by participants. Hence, this helped shape the structure of the data collection method that followed and the use of semi structured interview questions.

3.7.2 Action research cycle

The Action Research cycle highlighted in figure 3 commenced with the face-to-face interview for the purpose of data collection with the outcome of this cycle being to use data to inform an intervention strategy and further recommendation for action. Below is a summary of each step taken in the Action Research cycle.

Figure 5. Action Research cycle.



Activity 1: *Interviews*

The face-to-face semi-structured in-depth interview commenced in January 2020 with a 30 minutes interview time forecasted for each participant, however, most interviews went on for close to an hour. Each interview was conducted in a private meeting room at the company headquarters with only myself as the researcher and the interviewee present in the room. The interviews were recorded using an audio recording device and an interview journal was also used to manually take notes of the participants responses to the interview questions. In recording the interview responses on both the audio device and interview journal, a code name was assigned to each participant and hence the interviewees names, age, gender, or job description was not mentioned in the recordings.

Although this research's goals are clear, however, I could not just pose a direct question to the interviewees by asking them to list the factors that are causing knowledge not to be shared freely in the organization or to lay out strategies for the organization to do knowledge sharing better. This is because they may have never previously conceived knowledge sharing as a problem or if they have, they may not even know the solution to this problem. Therefore, the research problem must be broken down into a line of questioning that will be better understood by the interviewees, based on their individual experiences in the organization (Rubin and Rubin, 2004).

As it was clear from the literature review stage that knowledge sharing is a complex phenomenon with several factors and dimensions at play, the interview question was designed in a way that allowed the interviewees the freedom to paint as best as they could, a broad and detailed narrative or story of their views, experiences, feelings, attitudes, and actions as it related with knowledge sharing in order to understand the complete complexity of the phenomenon as they experienced it. I adopted a style of interviewing that Rubin and Rubin, (2004) termed 'responsive interviewing' in which the goal is to draw out details of "what happened?", thereby, producing a depth of responses. Responsive interviewing is used when the researcher is not looking to draw out definitive answers from the interviewees, rather the aim is to encourage the interviewees to express how they understand their experiences (Rubin and Rubin, 2004). Therefore, the main interview question was designed to focus on the research problem and to allow interviewees to speak freely in story form about their experiences and understanding and then, from their stories, without forcefully trying to take control of the conversation (Rubin and Rubin, 2004), I guided them using focused follow-up questions to provide further depth by way of explanations, on any information I particularly sought after from their responses. This led to the formulation of the main interview question as follows:

"Briefly describe your experience with knowledge sharing since you joined this organization".

However, variations to this question were also used for some participant who required further clarifications of the question. This question was framed in a manner that encouraged a conversation with the interviewees and largely allowed them the free hand to structure their own responses to the question. The question is framed to understand the feelings and attitudes of participants to the idea of knowledge sharing and any organizational structures or features that may exist to facilitate or discourage knowledge sharing.

Also, this line of questioning is in keeping with the social constructivist philosophical principle underpinning this research, as my aim was to understand the way the individuals experiencing the phenomena have constructed and made sense of their reality about the phenomenon and then try to interpret that reality. The nature of this interview question and the broad responses it was designed to elicit, fed into that objective.

With this initial question, there started to be a surfacing of the challenges being faced by the interviewees with regards to knowledge sharing within the organization. As answers were given to the initial broad question, I allowed those answers to inform the follow up questions that enabled a more detailed exploration of important concepts that were being uncovered from the interviewee's responses.

However, asking follow up questions in a manner that gave too much significance to the question may unwittingly coerce the participant to place too much emphasis on the concept under investigation, in a manner that causes a reinforcement of theirs or my bias. Therefore, although some concepts that were uncovered in the literature review process were also emerging during the interview process and hence important to investigate further by the use of follow up questions, it was important to avoid forcefully steering the interview myself.

A setback I experienced during the interview was some hesitation and unwillingness by a few participants to explore some topics in great detail and provide more detailed answered that would aid in better analysis of the problem. It is my opinion that this unwillingness did not stem from an unwillingness to fully participate in the interview process or disclose certain information, however, it may have stemmed from some interviewees being uncomfortable disclosing certain information. For example, discussions about topics related to the nature of the relationship between an interviewee and his/her manager, provided a challenge for some interviewees. When asked why they hesitated to provide more information on questions that related to their subordinates, their responses were centred around not wanting to reveal any information that would have negative consequences for their superiors and in turn reflect badly on the interviewee and his/her standing in the organization.

Although it had been made clear to interviewees that any information they provide will be treated confidentially and will in no way be used to as the basis of retribution on them or any other employee, I had anticipated that some interviewees might still hold back some information due to fear of retribution. In my opinion, there is no way to eliminate this fear completely and hence its effect on the data collection process, however, one of my roles during the interview was to keep reassuring the interviewees of the very low risk associated with their action to participate in the research and, to stop any line of questioning that they felt uncomfortable with.

These issues described in the preceding paragraphs although only occurring in a small number of participants provided a challenge of obtaining data that fully captured and uncovered the subjective views of the participants in question with regards to the problem of knowledge sharing within the organization.

Immediately the interviews were concluded, transcribing the audio recordings commenced and once this was done, a review of the interview recordings and notes were conducted with the aim of reviewing my interview techniques to ensure that I had not coerced or unduly steered the interview along a predetermined path. Also, the mapping of emerging themes commenced from the analysis of the interview data recorded and some interview participants were contacted to clarify or shed some more light on remarks they had made during the interview, which may not have been clearly captured by the audio recording.

Activity 2: *Analysis and evaluation of interview data*: The audio data from the recorded interviews were first transcribed word-for-word into a written format and the main themes noted as they emerged using a manual coding (Strauss and Corbin, 1998; Charmaz, 2014) procedure in which I would look through the data line by line, highlighting segments to identify meanings of what was being said by the interviewee. Manually going through the data also helped me identify areas that needed further depth in the interviewee response and areas I needed to explore further, which led to contacting some participants to provide further clarity on certain points. This initial process helped me ensure that I looked through every piece of transcript data before subsequently inputting the data into the NVIVO data analysis software which was used as the main data analysis tool for coding.

As will be detailed in chapter 4 section 2, through the use of coding tools, the interview data was compiled and categorised into themes for easy analysis and to uncover the trends in the data. The vast amount of data revealed several factors causing poor knowledge sharing in the organization, and showed the complex interlinked nature of these factors as they all contributed in varying degrees to the problem. However, if a realistic solution was to be uncovered and implemented, then the organization needs to focus on immediately tackling one or two factors that would bring in the most buy-in from its members. If improved, would simultaneously have an impact on the improvements of other factors that are not directly tackled. Thereby saving the management time and resources in trying to tackling the resolution of several factors.

Activity 3: *Action planning meeting with managers and key subordinates:* With the information generated from the interview data analysis and the emerging themes that resulted, an action planning group comprising of myself, senior managers and key subordinates involved in the research process was put together to discuss the data emanating from the research, its meaning and what should be done to improve knowledge sharing, given the evidence now at hand. All the members of this group consisted of all interview participants that had already consented to be part of the research, so a new participant recruitment did not have to take place. Also, I felt it necessary to involve already interviewed participants because it was the data that emerged from their interviews that formed the bases of the discussions that would be had in the group. Therefore, I could get further depth and clarity on several themes that I needed to explore further. However, I made sure to inform the participants not to discuss their involvement in the interview stages with other participants, while in the group meeting. Thereby maintaining anonymity of who participated in the interview stages. I acted only in a moderator's roles during the meeting by first sharing the nature of the data that was beginning to emerge from the research and then opening the floor to discussions, only stepping in to ask questions when I needed clarity on aspects of the discussions that were taking place. This moderator role I played was important because firstly, it reduced the risk of influencing the outcomes of the discussions and secondly, it helped the group stay focused on the topic and not drift to other discussions about other organizational issues that are not relevant to the research.

The members of this Action planning group suitably represented the larger intra organizational groups of senior, mid-level and junior organizational members in which they belong because it was important to select members that represented each of these intra organizational groups since the interview data revealed that individuals experienced knowledge sharing differently at different levels of the organization.

Therefore, to further make sense of the data and come up with solutions that would be practical across the organization, it was important that a representation of all voices was involved in this action group. This group became involved in the cycle of planning, taking action, observing the effects of those actions and reflecting on the outcomes. Activity 3 is explored in detail in chapter 5, section 5.2.

Activity 4: *Intervention:* Chapter 5 section 2 will detail how the research data informed my decision to take action and intervene in my organization to try to improve knowledge sharing. This action involved my direct intervention in making some personal communication and reporting behavioural changes within the organization communication and reporting structure. The effects of this intervention went further to inform longer term actions that must be taken to improve the culture of knowledge sharing within the organization.

As the data analysis continued and themes emerged that focused the narrative of some of the factors that affected the organizations members ability to share their knowledge, these themes were shared with participants of the Action planning group for discussion. As discussions continued, it became evident from the conversational leanings of most members in the group that of the variety of factors being discussed, the communication and reporting style of the Managing Director was a pressing problem that needed to be tackled first, keeping the timeframe of the research in mind. Two members of the group, a manager, and a supervisor both suggested that a first step to intervene be taken by the Managing Director in the form of allowing all communications regarding work functions to flow in strict adherence to the organizations reporting hierarchy standards for a period, to see its impact on the organization and knowledge sharing. Subsequently, intervention occurred in a simple process of personally and consciously making the effort to allow communication and reporting be done in line with the organizations reporting hierarchy standards. Ensuring that all job-related communication and reporting needs in the form of questions, enquiries, daily task reporting, information needed to resolve task problems etc and all other work-related information needs by junior subordinates be only directed at their immediate superiors and vice versa.

Activity 5: *Evaluation and reflection of intervention*: The evaluation and reflection of the intervention was done personally as an insider researcher and together as an action research group. Since the intervention was done by focusing on one factor that emerged from the data as being impactful on knowledge sharing in the organization, it was easier to focus our evaluation and reflections on the results of this single intervention. It was clear from the outcome of the intervention the individuals cannot easily change their behaviours overnight and do knowledge sharing better immediately. This knowledge meant that further intervention action needed to be taken to steer individuals to engage in knowledge sharing and kick start the process of adopting a knowledge sharing culture. It was also clear that the factors that impacted knowledge sharing are interlinked, as although the intervention was on communication and reporting styles, elements of power and trust also impacted upon how we communicated in a manner that hindered knowledge sharing. Lastly, it was also evident that as the founder and managing director of the organization, my style of communication and reporting had a detrimental impact on knowledge sharing in the organization.

Activity 6: *Management recommendation and closing meetings-* Through the analysis and evaluation of the research data as well as the evaluation of the outcome of the intervention, a recommendation for future action was made as a next step to management action, once the research and thesis writing stage is over.

The gap of knowledge still existing in the organization and the individual reluctance by members of the organization to bridge that gap portrays the complex nature of knowledge sharing and the difficulty in improving it. This means that further intervention needs to be taken in the medium term to force a kick start of the knowledge sharing process and start the change of the culture to one that does knowledge sharing better. Therefore, it is recommended that a knowledge broker be introduced to the organization with an immediate task of physically taking knowledge from where it is held, to where it is needed. Thereby, facilitating the knowledge sharing process (Ward et al., 2009).

3.8 Data Analysis

In this section, I will be detailing my approach to the analysis of the data collected from participants in the interview exercise. I will outline the reasons behind my choice of data analysis technique, using examples, I will also detail the steps of my analysis, the coding process and eventually, I will explain the findings that culminated from the analysis and what they mean for the research.

For the analysis of the data collected, I chose to use the constant comparative method of analysis, which, using an example, I will go through in further detail in section 4.4. My choice of data analysis techniques was based on the need to best interpret and explain the significant amount of data collected during the data collection process and present a credible intervention strategy to tackle the phenomenon of a lack of knowledge sharing in my organization.

3.8.1 Constant Comparative Method

The constant comparative method adopts a mixed or combined format of analysis by combining coding and the development of theory (Glaser, 1965). Although the constant comparative method is largely used by grounded theorists, I believe that some of its techniques hold true for an action research study such as this. This is because, grounded theorists and action researchers have similar purposes as they both aim to interpret a social phenomenon and inductively deduce an understanding from that given context. However, the deviation in both these research methods become apparent at the culminating point of the analysis. The grounded theorists aim is to develop a theory from the data collected (Glaser and Strauss 1967), however, the action researchers aim is to develop an intervention plan for practice, that is grounded in the data collected (Rolfe 1996). Rolfe, (1996) notes that although there is still a culmination in theory in the action research method, however, this theory is localised to the practice under study. I relied on the constant comparative method because it outlines a clear technique and sequence for managing data in a manner that is thorough and gives credibility to the resulting conclusions and intervention plan.

3.8.2 Familiarization with the data

Early on during the data collection process, I started to familiarise and refamiliarize myself with the data by reading the text-based data I had recorded in my journal, re-reading the interview transcripts and, playing back and listening to the voice recordings of the interviews after each interview and subsequently, over the preceding days and weeks. These refamiliarization exercises lasted the duration of the research from the onset of the data collection process. I continued this process throughout the duration of the research.

This was important as reading back through the transcripts of individuals interviews, the relationships between each individual's lived experiences with one another started to become apparent and painted a clearer picture of the status quo of knowledge sharing from the eyes of the individual and also the collective organization. At some point, it was akin to reading about a story but from multiple perspectives of the same incident.

3.8.3 Coding

Creswell, (2013) advocates that as a qualitative researcher, my approach to coding the data must stem from my aim of uncovering the meaning that the participants have about the problem of knowledge sharing within the organization and not the meaning that I as the researcher make from the issue. Therefore, the first step in uncovering the meaning behind the data is to uncover themes within the abundantly rich data I have collected which highlight the participants perspective of the issue of knowledge sharing within my organization. I achieved this through the use of a coding process that aided in organising the data by the use of codes, which means to label and categorise all the data, so that each code may reflect the various emerging themes contained in the data.

Firstly, as I read through the interview transcripts, I utilised an open coding process (Strauss and Corbin, 1998), using a manual coding procedure in which I would manually make highlights by underlining key sentences on the interview transcript. I highlighted key emerging themes and grouped these together into core categories or phenomenon in my memo. These core categories represented key themes emerging from the data. I used manual coding initially, as my initial analysis of the data was aimed at understanding the general impression, perception or conceptualization of the idea of knowledge and the factors that cause knowledge not be shared within the organization. With the open coding process, these concepts were then categorized into themes based on their similarities and named to reflect their underlying meaning as it relates to knowledge sharing. By no means was this open coding a final coding process. However, at this stage, everything had been looked at and the open coding was sufficient to draw up core categories that formed the foundation of theory (Strauss and Corbin, 1998) and fundamentally painted a broad picture of what was happening with knowledge sharing within the organization and the key phenomenon to explore further.

After the initial categorization, it became evident that I needed to expand my understanding of the nature of the core categories or core phenomenon identified in the open coding process. It was clear that these core phenomena did not come to being on their own and also, did not exist in isolation of themselves as interacting with the data and recalling my interactions with participants I gleaned that there was more to these core phenomena. This meant going back into the data and using the Axial coding method with the aid of a qualitative analysis computer software called NVIVO, to explore further categories and understand how these categories are linked to the set of core phenomenon identified earlier. Axial coding according to Strauss and Corbin, (1990) was the best fit for me because the characteristics of the categories it identifies i.e., causal conditions, strategies, intervening conditions and consequences, mirrored how I wanted to understand my data further. I needed to understand what kind of relationships existed between categories and the core phenomenon, in particular, what caused these core phenomena and how did they come to be, how do members of the organization interact with and handle the core phenomenon, how do members of the organization try to influence the core phenomenon and what context the phenomenon occurred. NVIVO was more capable at sorting and organising the more complex data collected from the research participants. Thereby, removing the laborious and time-consuming nature of the coding process at this stage.

Using the Axial coding aided my analysis of the data to improve my understanding of how, why, where and when knowledge was not being shared within the organization because it was able to reveal the complex interlinked nature of categories and how they influenced one another to cause the problem under investigation.

The final stage of the coding process was in the refining of the categories that emerged from the Open and Axial coding process, in which a process of selective coding (Strauss and Corbin, 1998) was used as an integrating tool to group the categories that reflected a central theme in the data into a core category.

3.8.4 Theme/Category Development

To help develop the categories, I relied on guidance from my research questions and themes that emerged from my literature review. The constant comparative method was then used to conduct the analysis by following these key steps below:

Example of Constant Comparison and coding process in my analysis:

Step 1. Provisional codes were created from meanings arising from statements in the responses of participants in the interview transcript.

What is key in the constant comparison method is that when each incident is coded and added to a category, the researcher must compare that newly coded incident to previously coded incidents in the category, before coding of other incidents continues (Glaser, 1965). The results of constantly comparing these incidents are that the full spectrum of the dynamics of the category starts to emerge as the conditions that fuel or diminish that category starts to be understood, the relationship between that category and other categories become obvious as well as other characteristics of the category start becoming clearer to see (Glaser, 1965).

Figure 6. Inductive categorization

Inductive categorization:

Involved reading the interview transcripts to identify initial themes that are emerging.

Example of criteria for inclusion into a category:

Q. Just generally how has been your experience of knowledge sharing in the organization personally.

Supervisor 1 rresponse:

Personally, in the [organization] the sharing of the knowledge is kind of secretive in the [organization] because most people most of us, we do what we know, we don't really transfer it to others like letting others know. We try to keep it to ourselves and in the [organization] it has not been helping at all. Everybody is just trying to like it's a kind of competitive, competition stuff so everybody wants to keep what they know to themselves, which I believe is not helping the organisation.

Internal competition and Rivalry

Q. What has been your experience with knowledge sharing? Or Knowledge Management how people share knowledge in the [organization]. Personally, as you have experienced it.

Supervisor 5 response:

I would say it is a Nigerian thing. Transferring knowledge. Because we are taught that knowledge is power. So, they believe when they share knowledge. They are actually empowering the person.

And for me, It's a very big problem. And that is why there is no business in Nigeria. Indigenous business That has lasted over 50 years. So, I believe the reason why people don't really share knowledge in the organization, is the fear of the unknown. Because they don't want to really empower the person, because they feel the person will do better if he has that knowledge. So, for instance in the marketing aspect, they feel that if you know what they know, it is an added Advantage for you. So, I feel they want you to discover it by yourself.

Fear of a loss of power

Once the categories were assigned, I looked back and forth between each category to ensure that the statements contained within them, shared similar meanings. In summation, this first step involved comparing statements and categorizing them.

In constantly comparing statements in the categorizing of for example, a 'Fear of a loss of power', the properties of the category started to emerge. For example, it was found that some members of the organization who had a fear of losing power to other members, were specifically afraid that their loss of power would lead to a loss in their political advantage. It also became clear under what conditions the fear of a loss of political advantage can occur.

Step 2. Category Refinement

As the data analysis process continues, the researcher must progress from the comparison of new coded incidents with previously coded incidents, to the comparison of incidents to manifesting properties of the category in which that incident belongs to (Glaser, 1965).

For example, from comparing statement to statement in the first stage, under the fear of a loss of power, it was found that members of the organization who feared losing power, specifically were concerned about what the loss of power would mean to their political advantage. Therefore, in the category refinement process, once it was discovered that the loss of political advantage was an important factor to the fear of a loss of power, I could understand how the fear of a loss of political advantage affects the fear of losing power.

Figure 7. Category refinement

Code	Example
Political Advantage	**Manager 1**: *"Because some people feel once they have a particular knowledge, which they feel other people don't have, they tend to feel that without them, the organization cannot survive".* **Supervisor 4**: *"So everybody wants to be on top I am saying I am the one that do this this is my work I am the one that do it so you are not supposed to know how I achieve it".* **Production officer 1**: *"Some of all he operators that have trained cannot handle it. He will not allow them to call us when [the supervisor] goes there and sees, he will take his phone and send a message to the Managing Director and make someone feel like they don't know what he is doing".* The interviewee is trying to explain incidents that occur in which when there is a breakdown in a machine, the shift supervisor deliberately refuses to draw the attention of the maintenance supervisor, rather, the shift supervisor would place a call directly to the Managing Director, to report the incident, thereby creating an impression in the mind of the Managing Director that the maintenance supervisor does not know how to do his job. Therefore, putting himself in a better light than the maintenance supervisor.

Step 3. Exploring the relationships that exist across categories

The coding process is refined further and codes that exhibit similarities are grouped under one core category. For example, codes that related to the Power of the individual such as political advantage and employment security were grouped under the core category of 'Power'. This is detailed out in Table 2 section 4.6.

3.9 Conclusion

This chapter has so far articulated the methodological choices I have made for this research process. Being informed by the literature review phase, I needed to design a research methodology that would see the factors that impact knowledge sharing informed and investigated through the meanings given by those who have experienced the problem of knowledge sharing in the organization. This was important because this research positions itself to uncover how the factors that impact knowledge sharing do so in the specific context of the organization, so as to inform the generation of a solution to the problem. Therefore, to begin with, the ontological and epistemological position in which the research is framed and which forms the philosophical position of the research design is 'Relativism' and ''social constructivism'' (Creswell, 2013) respectively. This philosophical position takes the view that truth and reality are subjective and its meaning is unique to the individual. This approach ensures that I design the research in a manner that understands the problem from the perspective of the individual members who have experienced it. This in turn, will mean that solutions to the problem can emerge from participants and be applicable to their specific context.

CHAPTER 4- FINDINGS

The main objective of this research is to improve knowledge sharing among individual members of my organization. To achieve this, the research seeks to understand the reasons why knowledge is not being shared within my organization by investigating the factors that influence knowledge sharing. These findings will then be used to inform action that need to be taken to improve knowledge sharing and ensure that the organization does knowledge sharing better.

To gain an understanding of why knowledge is not being shared freely, it was important to examine how the research participant, viewed, experienced, and engaged with knowledge sharing in the organisation as such the key fay factors that impacted knowledge sharing in the organization.

This chapter showcases the findings generated by the research methods.

4.1 Primary Findings

Firstly, and importantly, the data revealed that there was an understanding of what knowledge sharing is and means to individuals and the organization at large. This was important, as it made clear for the research that the research participants understood the topic under investigation and could conceptualise it. The responses of many of the research participants made clear that the usefulness of the information as it pertained to job/tasks was what differentiated effective knowledge sharing within an organization from the regular communication of non-job/task specific information. Therefore, it was evident that the majority of the participants understood that in withholding useful information relating to jobs/tasks from their colleagues, this would be considered not sharing their knowledge. Therefore, the existence of idle chats or communication in the workplace that had no relevance to job/tasks or other organizational aspects, in their view and in this case, was not considered under the scope of effective knowledge sharing. For example:

Manager 2 (Sales) expressed that,

"Knowledge sharing is all about the information one person wanted to pass across to the other person, either in a team or a person in another department."

Another participant Sales Rep 1, mentioned that,

"They don't want to empower the person; they feel that the person might do better if he had that knowledge. For instance, in marketing, they believe if you know what they know and add it to what you know, it is an added advantage for you"

Responses like these made it evident that the participants understood what knowledge sharing was and the type of useful information that constituted knowledge.

Some responses of the participants provided evidence of a support of literature in regards to knowledge sharing and growth as covered in the literature review. For example, the argument made by Witherspoon et al, (2013) that knowledge is the most important factor in ensuring the sustained growth of an organization was evident as participant Manager 1 (Administration & HR) expressed that,

"when you hold on to a particular information and you don't want to share it, that organization without your contribution, seems to remain stagnant. It is about the growth of the organization; how does the organization grow without you being around? Can other people also move things forward when you are not around?"

In addition, another participant Manager 2 (Sales) expressed that,

"Knowledge sharing encourages the smooth running of the company."

"There is a particular course in which the company is pursuing, if knowledge is not readily or gotten in the way it was supposed to be, it may cause a deviation from our course"

The responses of these participants, attribute some level of usefulness to knowledge in trying to achieve a given aim. With knowledge in this case being considered useful information, the question then becomes, how do participants characterise 'usefulness'?

Therefore, reflecting on usefulness in this case as the data is being analysed, should reveal how, why and when participants choose to use or not use their knowledge in useful ways, to achieve meaningful outcomes for themselves or the organization. Therefore, in my opinion, knowledge is akin to a loaded gun that must be pointed in a given direction with the individual holding the gun, deciding whether or not to squeeze the trigger. The coding process must then be used to analyse the data and uncover all factors surrounding the decision to point the gun at any given target, as well as the factors that influence the choice to squeeze or not squeeze that trigger.

The coding process resulted in the identification of eight factors represented in categories that affect the sharing of knowledge within the organization and as such highlight some of the reasons why knowledge is not being shared. Using a final process of selective doing (Strauss and Corbin, 1998), these eight categories developed with earlier coding process were then refined into a final group of three core categories based on how similar they were to one another and therefore, reflected the organizational dimensions at the play with regards to knowledge sharing within the organization. Table 2 represents these three core categories and their constituent factors.

Table 2. The three core categories and the constituent factors.

CORE CATEGORIES	SUB CATEGORIES	ILLUSTRATIVE QUOTES
POWER	POLITICAL ADVANTAGE	**Sales Rep 1:** *"But I believe it might be if I know what he knows, he believes or they might believe that, is he going to be the manager? If this guy knows everything I know. So where is the Superiority?"*
	EMPLOYMENT SECURITY	**Manager 1 (Administration & HR):** *"The idea of people thinking when maybe they share with their subordinates what it takes to tackle a particular problem, they feel that their job is at risk. That before you know it they can be let go and somebody else will now take over their job".*
CULTURE	LEADERSHIP STYLES	**Utility officer 1:** *"I believe it is his leadership style. From where I'm coming from, I am coming from [a larger company]. In [a larger company] all they do is I am your boss you have to do this. You have to do that. In fact, it gets to a point where they insult us. Because we are contract staff, they abuse us they insult our generation. Because they want results. So, I think I believe that is what he wants. He wants that strict method so that he can get results." The interviewee was stating that the authoritative leadership style he experienced in his previous place of employment is similar to the authoritative leadership style of his current manager.*
	IDENTIFICATION	**Utility officer 1**: "*The thing is once we come into this place, be it whatever tribe you may be, there is this one goal we have in our mind. That is we are working as a family. If you are Hausa, Boy or girl, you just have to obey the instruction given to you. And we work as a family. Now, the way it is here now when they come, they know yes, they are coming to work. Now you now have this friendship with them the way*

		you interact with them is friendly. As one family, so there is nothing like any conflict. Because they are working towards the goal and we are working as a family". **Sales Rep 1***: "I don't want to sound attacking but the thing is when I came to the organization, I looked around I was looking for the mission statement and I couldn't find it".*
	REMUNERATION PRACTICES	**Supervisor 3(Production):** *"The old technician is angry that they brought in this new technician from nowhere and the salary they are paying him is higher than him that is teaching the new technician the job was earning [a higher salary]. The new technician is earning [a higher salary] while him, the old technician is earning [a lower salary]. So, because of that he tends to restrict some knowledge."*
	TRAINING PRACTICES	**Sales Rep 2:** *"So, the issue of logistics again causes an issue so madam called me that fine, if I will be supplying, then the customer should pay but if the girl in the shop should pay the girls should pay for Logistics. At a point I was confused I don't know what to do. I don't know maybe if I should keep on picking stock from [a market territory] shop two prospects that want to test run the market or you go and meet my dealer in [a market territory]. So, at the point I am in the middle and I don't know what to do."*
	RECRUITMENT PRACTICES	**Manager 1(Administration & HR):** *"The most challenging one is the sharing of knowledge. For those people that don't have it. That cannot be developed. The company can easily do away with them and get people that will fit in."*
PROCESS	COMMUNICATION AND REPORTING	**Supervisor 4 (Production):** *"The reason is being that before the production manager came in we have always been reporting to the MD directly, so when the production manager came in and there has not been any restriction from your own end to say ok report directly to the production manager and the production manager report to the MD, which is a break in the communication flow". This makes the point that going through the production manager can seem like a break in the flow of communication.* **Supervisor 2 (Administration & HR)**: *"Quite alright I would say knowledge sharing in [this organization] as a whole has been in one direction. One direction in the sense that it is always from the top management down to the junior staff. Also, I feel that sometimes, there is room for everybody to air their view, when it comes to learn or to getting to express yourself well, in terms of doing your job. So sometimes, in this place, we try to follow one direction, maybe one process. Whereby carrying out our duties, sometimes, one will want to say ok let us go the other way round, but if you do it like that, it will look as if you are doing the wrong thing".*

Power constitutes the factors that were evident on an individual level that reflected the individual motivation for knowledge sharing within the organization. **Culture** reflected those broader unwritten and intangible factors that were systemically evident across the entire organization that led to the current state of knowledge sharing. **Process** is concerned with those organizational processes that are embedded in how the organization functioned, that also influenced knowledge sharing.

4.1.1 POWER

The data showed that participants understood that knowledge was embodied in useful information and knowledge sharing occurred when such useful information is passed from one person or group to another within the organization. However, what was also clear was that there was evidence that participants used this knowledge as a tool to wield power through unique ways and for several reasons, within the organization.

This research revealed that power had a major influence in why and how employees used knowledge in the organization. It is widely evident in the literature of knowledge management that the individual determines, through his own motivations, when and how they choose to share knowledge (Henttonen et al, 2016) thereby, wielding enormous power within the organization in the process. This research has revealed that two motivating factors of ***political advantage*** and **employment security** both influence on participants decisions to share their knowledge and how participants choose to use the knowledge that was shared to them by others.

By far the overriding theme across all participants was their belief that knowledge was not shared effectively across the organization because of a fear of a loss of the power they hold through their political standing within the organization. In this case, the knowledge giver fears that his political power and standing would be eroded, if he does not hold on to the source of that power, which in this case, is the specific tacit knowledge about job tasks that he holds.

As described in the literature review, there have been arguments made that an individual can use their knowledge as a source of power to dominate or exert control over others and their surroundings, thereby refusing to share that knowledge as they fear that such an action could lead to the loss of that power and dominance (Gupta & Govindarajan, 2000; Kim & Mauborgne, 1998).

This was especially true with members of the organization who had unique job task which they alone were required to do. Usually, the nature of their jobs mean that they utilize specific skills which take years to master or they possess some knowledge that other members of the organization cannot easily get their hands on. For example, the type of tacit knowledge that a packaging machine operator would have, takes years to acquire and master, as this knowledge comes from experience on the job and can't easily be passed to a new employee through company operational manuals. Therefore, the willing involvement and cooperation of existing machine operators is necessary if such know-how is to be passed to a new employee, recruited to operate such a machine.

Evidently, some employees in this category feel that to share their knowledge is to lose some semblance of power they hold; therefore, the knowledge giver feels a sense of dispensability to the organization. As Manager 1 put it, these employees deicide that the best way to secure their standing in the organization is to "*hold the company to ransom*" by ensuring they remain powerful within the organization.

The following series of statements by various participants, gives evidence that a fear of a loss of power, by losing political standing, leads to a lack of knowledge sharing in the organization.

For example, Manager 1 (Administration & HR) expressed that,

"Some people feel that once they have knowledge that other people don't have, they tend to feel that without them, the organization cannot survive". "They know something that other people don't know and with that they feel so important, and they believe that as a result of that, the organization can always rely on them, as without them, the organization cannot move forward".

Supervisor 4 (Production) expressed that:

"So, for instance the person that is on night shift if they do something or maybe there is something that happens the next in the morning shift will not know what exactly, how did they fix this thing? Which is not supposed to be. So, everybody wants to be on top I am saying I am the one that do this this is my work I am the one that do it so you are not supposed to know how I achieve it. Which is not supposed to be so or they will say ok it is my department it is not

your department and since it is my department you are not supposed to know what is going on in my own department and I don't think that is helping at all"

It is evident that a sense of importance and influence is important to some individuals with critical knowledge in the organization and hence, ensuring that such knowledge stays locked away in their minds, will ensure that political influence and hence, retain their importance within the organization. Also, the example given by Supervisor 4 is a clear example of actions taken to protect political standing and hence protect their power within the organization, as a member of the organization in trying to remain "on top" is willing to withhold critical operational information from his peers, to the detriment of the smooth running of the organization.

Also, in addition to securing power through political standing and influence within the organization, while interviewing several candidates, a picture emerged that a fear of a loss of power also manifested itself through acts of withholding knowledge to secure employment. Hence, the need to stay employed within the organization and not lose their jobs, led to some employees using their knowledge as a defensive tool to fend off possible rivals from taking their place. Evidently, some employees operated with an invisible psychological wall around their job tasks, ensuring that no knowledge about how they performed their jobs leaked to their peers, ultimately resulting in friction and rivalry among key staff.

Husted & Michailova, (2002) note that most people use their knowledge in performing their job roles and as a result of such knowledge, may be positively advanced or appraised during the course of their employment with the organization. Therefore, sharing that knowledge with other members of the organization might see that member who shares their knowledge, cause the advancement of others, at his expense. Thereby, causing the knowledge sharer to withhold his knowledge. Confirmation of this was also found in the responses of some of the participants. For example, a participant expressed that, when he was employed and started working for the organization, his manager did not take the time to show him the 'ropes' and instead, left him to his own devices. He believes that his manager was afraid to share his intrinsic knowledge because his manager was afraid that as the new recruit developed, he may lose his job to him. Therefore, meaning that the employment of the new organizational member and inclusion in the company from the first day, leads to a withholding of knowledge from a manager, a fear of losing his employment.

The participant Sales Rep 1, expressing this thought by saying:

"I think and I believe that if I know what he knows, he believes or they might believe that is he going to be the manager? if this guy knows everything that I know. So where is the superiority?".

Manager 1 stated that:

"Over time, since I joined the organization, I have discovered that there has been a problem of knowledge sharing. From those that are placed in charge down to the subordinates. The idea of people thinking when they maybe share with their subordinates, what it takes to tackle a particular problem, they will feel that their job is at risk. Maybe before you know it, they can be let go and someone else will take over their job. Some people tend to hold on to some information, when it comes to running an organization".

4.1.2 ORGANIZATIONAL CULTURE

The empirical data points to the existence of some elements of organizational culture that have influenced the behaviour of employees to not share their knowledge. Cultural elements such as leadership style, identification and organizational practices of training, recruitment and renumeration have been identified and will be discussed below.

Leadership style: Leadership style was regularly mentioned across participants as having an impact on their ability to share and also receive knowledge from other members of the organization. Culturally, Nigeria has a more autocratic style of leadership in society, which is characterised by leaders issuing orders and followers, following those orders without question or independent thought. In the workplace however, this form of leadership style when exhibited by people in leadership positions has been said to reduce the level of feedback and interaction from followers in my organization. This view was expressed by both participants who have been in leadership positions either as managers, supervisors or team leaders, as well as participants who have always been in a position of a follower.

Examples were given that showed the contrast in how knowledge was received less by employees under the leadership of an autocratic leader and more by those employees under the leadership of a more democratic or laissez-faire leader, who led by motivating and encouraging his followers. This was in line with the findings of Le Ba Phong et al., (2018) who argues that every leadership style affects employees in a unique way as it has an impact on motivation and attitude to work. Which eventually impacts their knowledge sharing behaviour.

This was especially true in the production department, in which the autocratic leader who barked out orders and was less inclined to listen to the opinions or suggestions of his followers or involve them in the decision-making process, found it difficult to transfer knowledge to subordinates as subordinates were largely unwilling to absorb what he had to say because they did not feel endeared towards that leader. However, the less autocratic leader had a friendlier demeanour and his subordinates felt a great sense of endearment towards him and as such were more willing to listen to what he had to say about their jobs, tasks and how to improve performance etc. This leader also received greater feedback from his subordinates as he provided the avenue to receive that feedback and encouraged it.

For example, Utility Officer 1 expressed that "*For this knowledge that I am sharing now with my junior staff. And I am the kind of person that has passed through higher authorities and I've seen the way they handle people which I never want to be a part of a bad leadership.*

So, I will use myself to compare and I will say yes. This is the way I can handle people. Most days, I interact with the Junior staff. I build up a relationship with them that friendship with them. We share knowledge, whatever based on their work, what they do not know. They will bring it up. I would say this is the way to do it. We resolve it.

I never want to be a part of bad leadership.

I have always wanted to have a good reputation for myself. So that is why. I know how to relate with them the Junior stuff."

Utility Officer 1's aim to have a leadership style centred on interaction with the subordinates, building relationship and securing a good reputation as being a good leader goes in line with a leadership style that promotes trust and mutual respect as noted by Politis, (2001), which in turn should encourage knowledge sharing, rather than a more autocratic leadership style that reduces knowledge sharing (Politis, 2001).

Also, Sales Rep 2 who has a direct line manager expressed his decision to not communicate or share information with his direct line manager, rather, often preferring to communicate with his direct supervisor instead. When probed, it was revealed that this decision was as a result of the difference in management or leadership style between the supervisor and the manager. The supervisor has a free style and often welcomes feedback, on the other hand, the experience he has had with his line manager has led him to believe that his line manager has a stricter style of leadership, often being critical, wanting a more formal approach to discussions and not really entertaining feedback.

Sales Rep 2 expressed that *"From where I'm coming from, I am coming from [my previous employer]. In [my previous employer] all they do is I am your boss you have to do this. You have to do that. In fact, it gets to a point where they insult us. Because we are contract staff, they abuse us they insult Our Generation. Because they want results. So, I think I believe that is what he wants. He wants that strict. Method so that he can get results."*

My personal experience with the direct line manager of Sales Rep 2, gives me the understanding of the perspective of this participant. The manager can often demand for complete allegiance to his mode of operations and if not given, his subordinates can often be shunned, yelled at, and dismissed. This manager often has the highest labour turnover rate of any department within the organization. However, Sales Rep 1, who also shares the same line manager with Sales Rep 2 although expressing the existence of knowledge sharing issues with his manager, however, on the topic of the leadership style, sees the managers approach as being both positive and negative for him.

Sales Rep 1 notes that "*The conservative manager. You need to discover things yourself because he will never reveal it to you. You have to discover it and it really has helped me in my job. Because most times things I do, I discovered them".*

Sales Rep 1 also made note that: *"It is inherent. It might be from the experience he has had before so I think it is his style. But for a young sales guy like me. We want to explore we want to discover things. We want to try new things. But having a conservative manager doesn't help us fulfil our potential. Because a man walks by his instincts. Tried this person tried this area but you need guidance and that is why most times I call the admin manager, to ask him some if he was in that position What would he have done? Then such a customer is asking for this. What do you do? I might call him sometimes to know. Just to make sure I am being in the right".*

However, there is still evidence that a harsher leadership style causes knowledge not to be shared within our organization as information flow from the bottom of the organization to the top of the organization is often hindered by this style of leadership. Manager 1, described his belief that information is shared better when he applies a softer, less aggressive form of leadership. He believes that from his experience, a more autocratic leadership style discourages the bottom-up information flow and hampers the smooth running of the organization.

Identification: Johnson et al. (1999) notes that identification occurs when the interests of an individual and those of the organization align, creating one new identity. A lack of alignment of interests can in turn lead to a lack of knowledge sharing because members of the organization feel a certain distance between them and their organization due to contrasting goals. In other words, why would an employee choose to share their knowledge and work in line with the goals of my organization, if they do not identify with it?

Firstly, and surprisingly, at a fundamental level most participants interviewed were not aware of the vision and mission statement of the company. Therefore, they do not even have an idea of why the company is in existence and what it intends to achieve. The data reveals evidence of two sets of identities existing within my organization. The identities are manifested through the goals of the organization on one hand, which is reflected in what I as the owner-manager would like the organizational values and beliefs of the organizational members to be and on the other hand, the vision of its individual employees within the organization on the other hand. Therefore, there is little to no unified and accepted stated corporate vision and in turn, there is a lack of unified actions among the employees taken to achieve that goal. Hence, individuals withhold their knowledge in contributing to the goals of the organization as they do not feel like they are a part of it (Kankanhalli et al, 2005). The lack of a shared vision is evident in the responses of multiple participants as reflected in the following response:

Supervisor 2 (Administration & HR)- “*So that is another thing I wanted to communicate to you. For me I don't even know if we have a vision or a mission statement, I have not come across it and I asked [My boss] he was just smiling at me. I feel that it is something that the staff needs to know we need to have a mission statement and a vision statement so that we will work towards that direction so that will be guided in our everyday work so it is something that we all need to know but since I have been in this company since I joined, I don't know our mission I don't know our vision”.*

While on the other hand, although only mentioned by one participant, it was revealed that the vision and mission of the company was known by all, however, it was a lack of adequate knowledge to achieve that vision and mission that saw employees not align with the vision and mission.

Manager 1 (Administration & HR)- “*Everybody seems to know the direction in which the organisation is going because we all have to do our part to move the company in that direction. Some persons because of things they don't know tend to divert the way the direction of the company should go because they don't know one or two things how to move the company forward. Because if we all are supposed to contribute our part if some persons are lacking in knowledge, it can affect everything”.*

Utility Officer 1, although not accepting that she knew or understood the vision or mission of the company, however, argued that there was a sense of togetherness and working to meet the same goals among members of the organization. She noted as such; *"The thing is once we come into this place. Be it whatever tribe you maybe. There is this one goal we have in our mind. That is we are working as a family. If you are Hauser. Boy or girl, you just have to obey the instruction given to you. And we work as a family. Now, the way it is here now when they come, they know yes, they are coming to work. Now you now have this friendship with them the way you interact with them is friendly. As one family, so there is nothing like any conflict.*

Because they are working towards the goal and we are working as a family. She went further to remark that, *"We Are All One We are all United".*

The corporate vision of the organization gives the organization and its members a defined purpose of being and as a result, dictates the values of the organization and its members Gold et al. (2001). The lack of a visible organizational vision and its effect on the current values and belief system at work in the organization that does not favour knowledge sharing, may be attributed to my influence as owner-manager. It is evident that very little is known about the corporate vision which I put in place when founding the company and as such, the values of knowledge sharing which I hoped for, are missing and have been replaced by individually determined values of the organization's members.

Identification only occurs if the interests of the organization and those of the individual align. Therefore, if most members of the organization do not even know what the interests of the organization are, how then can they be certain that they are indeed aligning their interests with those of the organization at a fundamental level. Therefore, although the interests of the employees seem to align and cause a cooperative working environment to meet their needs as they see it, is that environment the kind of environment the organization intends to be? I do not think it so, as if it was, then knowledge bottlenecks may not exist, as information will flow in a manner that sees the organization meet its goals.

Organizational Practices

Organizational practices *"are the most visible symbols and manifestations of a culture" (*De Long & Fahey, 2000 pg. 115). In other words, practices are the observable actions that reflect the way things are done in the organization, and, in the case of knowledge sharing, reflects what is prioritised by the organizational culture that hinders or promotes knowledge sharing (De Long & Fahey, 2000). Practices dictate how people interact and as such, practices provide a direct route to changing knowledge sharing behaviours among members of the organization (De Long & Fahey, 2000 pg. 115). Therefore, practices set the tone for an organization's culture.

Recruitment and selection practices: Participants at the management and supervisory level of the organization, felt that they struggled to transfer their knowledge to their subordinates and colleagues because some individuals were not capable of receiving and using that information in any meaningful way to enhance their jobs because those individuals did not have the required basic skills for their jobs. It was suggested that these basic skills could not be improved by training as these individuals were not qualified to the position within which they were recruited by the organization and which they currently held. Therefore, the recruitment process of the organization did not do a good job in ensuring employee-job fit.

Manager 1 (Administration & HR) expressed that,

"*some people are just untrainable and can't learn, so may be incapable of transferring and receiving the knowledge required to competently do their jobs".*

"*the most challenging one is the sharing of knowledge. For those people that don't have it. That cannot be developed. The company can easily do away with them and get people that will fit in".*

However, is there a possibility that this participant does not have the required skills to transfer his knowledge adequately and in a manner that will easily be received by the knowledge receiver? It may be inaccurate to take his comments at face value.

On the other hand, if his perception is reality, the fact that some members of the organization may be perceived to be incapable of utilizing the knowledge that was passed to them by others, seems to cause knowledge not to be shared. For example, when pressed on the issue of not sharing his knowledge as a manager to his subordinate, Manager 2(Sales) expressed the following: *"someone is very active and is ready to do whatever to serve and do his best in order to achieve a goal. Along the line, he discovered that another person is not walking in the same direction, as a result, knowledge has been passed before, and eventually someone is unable to get a good result from there, then I will be asking myself, why do I bother myself to share this knowledge?"*

To explain, Manager 2(Sales), admitted to willingly not sharing his knowledge since some of his subordinates whom he had shared his knowledge with in the past, were not capable or qualified to effectively use the knowledge to their benefit, in the fulfilment of their jobs. Therefore, the negative results of this experience, hindered him from sharing his knowledge with them anymore. It is also evident from the interviews conducted with some of his subordinates that this particular manager has all but given up on sharing his knowledge with them.

Further evidence of this point was made by Supervisor 3(Production) who expressed a similar experience when trying to share knowledge with some subordinates, stating that:

"So, a few of them are ready to learn like in the popping department now. When you want to come in and show them what to do, a lot of them are able to take that information and use it while some of them don't want to learn. They feel as if they know what to do and at the end of the day they don't do as well and then they go."

The data and my experience within the organization does show some evidence of some employees not having the required prerequisites to fit into their jobs. This may have some impact on knowledge sharing as some members may not have the required skills to use knowledge given to them in the manner that is intended and therefore, discourage the knowledge giver from giving that knowledge in the future. However, from my experience within the organization, this is not a systemic problem. On the other hand, it is important to recognize that although it may not be systemic in my opinion, it still has an impact on how the managers and other members that experience it behave and chose to share their knowledge. This is because if they perceive it to be true, then it will affect their behaviour as they will take actions in line with their perception of reality.

As described in the literature review section, Fong et al., (2011) states that to ensure organizations recruit employees that fit with their knowledge sharing philosophy, recruiters must design their selection process in a manner that ensures that only those individuals with the tools to share knowledge are recruited. Therefore, it is also important that I analyse my role as owner-manager, in relation to the issue of recruitment and its relationship with subject matter, as revealed in the responses of certain interview participants. These isolated issues of employee-job fit occurred because early on in the life of our organization, as the Managing Director, I personally handled recruitment of new personnel and at the time, I was more concerned about getting the company started and recruiting who I could afford, rather than being too concerned about their experience and credentials.

Poor recruitment processes are highlighted by a participant who feels that the process should be improved to ensure better recruits are selected.

Supervisor 3 (Production)*: "I think that we the supervisors need to be part of employing these people during the interview. To interview them because we know the work and we know the kind of people that we are looking for that can do the job. So, it will be good because normally they just employ people and give them to us and we are not involved in the process. And when those people come, we find that they are not ready for the work. Some of them they come, they work and you don't see them again. I feel that we need to be part of it so that we can select the people that we know that once we are telling them what to do. They will be able to do it."*

Looking back, it is evident that I did not follow such intricate selection and recruitment steps, when I personally recruited employees for the organization. As a small medium sized company with a limited financial budget, we could not afford employees that were at the top in their industry and had the required technical skills for the job. Therefore, I believed that we should focus on employing people who showed a desire to work and get them the technical skills needed through a process of internal training. However, the above comments speak to the importance of involving the supervisors in the recruitment process because their involvement would make them aware of the financial limitations and other considerations that led to the decision to recruit certain individuals.

Remuneration practices: It was evident that whenever the company recruited a new departmental employee at a higher pay grade than those already in the department, there was hesitation by those existing employees on a lower pay grade to freely share their knowledge with this new employee. To summarise participant S7's quote on this, he states that if a new employee A earns higher than an existing employee B, who employee A should be supervising on a job, then, this higher pay signifies that employee A should be more skilled than employee B. Therefore, employee B chooses not to share his knowledge on the job with employee A, whenever he is approached by employee A for some advice or direction because employee B feels that employee A should know better or have more skills than he does.

When discussing the effects of the company's recruitment policy on the knowledge sharing actions of existing employees to new employees, Manager 1 (Administration & HR) expressed that:

*"Being human, the sales person on ground if he or she happens to know that this new person that is coming is going to be earning higher than he or she, there will be a problem. That new person that is coming in, he (*the old staff*) is meant to take that person around, show that person the way things are done. Just because he or she knows that the new person is going to be earning more than him, there will be problem. He will now hold on to certain this thing(*knowledge*)".* Going further to say that the new recruit will not fit into the organizational system because key knowledge is held from him by those individuals who he out-earns.

This apparent rivalry and non-corporation among members of the organization due to differences in remuneration, could explain why team work has never been fostered within the organization. As a working member of the organization myself, I have always wondered why teamwork was never embraced by all members of the organization. It was evident through several incidents that as an organization, whenever we tried to foster teamwork and reduce intra team and inter team rivalries, these actions were always met with a brick wall of non-corporation by some members of the organization. Cabrera & Cabrera, (2005) states that teamwork can facilitate knowledge sharing because individual members of the team are forced to depend on each other to complete critical tasks.

Varied remuneration can be traced back to how the organization recruited early on in its infancy. As described previously in this chapter, due to limited finances, 'ready-made' individuals who had the technical skills for the job could not be afforded. As a result, individuals were recruited based on a perceived desire to work and then were trained on the job. However, as the company grew in stature and finance, 'ready-made' individuals with the required skills became affordable and demanded higher remuneration than those employees who now currently worked in the organization but were still being trained on the job.

Training practices: On the other hand, it was suggested that there were some members of the organization who could not understand, interpret, and utilise basic tacit knowledge being transferred by their managers, however, their utilization of such knowledge to perform daily tasks was very poor and had not improved since their employment because of a lack of internal training and developmental policies by the organization. Hence, knowledge sharing with these individuals could be improved if the organization implemented regular training exercises.

When pressed to know the type of knowledge members of his department held back from sharing, Supervisor 4 (Production) alluded to the fact that some basic statistical calculations that he would make on a daily basis as a part of his reporting to senior management was not taught to him by the company, rather, he was only able to make such calculations due to his previous study in university. Stating that on the other hand, his fellow colleagues who did not go to university, had a very difficult time in making such calculations and hence making accurate reports, due to the fact that they didn't have the required knowledge to do so. What this leads to is a withholding of information or the sharing of inaccurate information within the organization.

Supervisor 4 (Production) expressed that:

"*Ok, for instance, let me see when calculating average weight of the product, before now we do it manually, which is someone is being assigned to weigh it. It got to a certain time, we stopped doing that even the person that was assigned to do it, it was only one particular person and if you pick someone else to say go and do this thing, that person does not know what to do because the person that was doing it before has not transferred the knowledge to him, saying this is how you do it you weigh, you record it and so on.*

As the Managing Director, this particular situation has been known to me, however, I always assumed that the reason for inaccurate reports or a lack of reporting in this case was only because some personnel deliberately held back some critical information from being shared because of personal gains or just a general unwillingness to share, in contravention to the company policy. However, it became clear from the interviews that some employees lack the skills to transfer certain knowledge due to a lack of training from the company, among other factors.

Clearly in the example given by Supervisor 4 (Production), there exists a lack of self-confidence or self-worth in his abilities on the part of the intended knowledge giver, who in this case is supposed to put together a production report, resulting in the lack of confidence to send inaccurate data and as a result makes up supposedly accurate figures or completely omits those figures from his report entirely. Cabrera & Cabrera, (2005) notes that when an employee is given adequate training, it produces a sense of self-assurance in their abilities, and encourages then to share their knowledge better.

The lack of training within the organization also means that there is no opportunity for an employee who has the required knowledge, to increase the quality of the tacit knowledge he possesses through the act of transferring it to other members of the organization, by training (Garra Bach Ouerdian et al, 2019).

The detrimental effect to knowledge sharing that a lack of training brings about can also be seen when the organization recruits new employees.

Sales Rep 2 expresses his experiences as a new recruit and his frustration at not knowing what to do on the job as knowledge about his job role and how to go about his daily tasks, had not been passed on to him through a medium of formal training when he joined the organization.

"There was a time I asked [My boss] what is my job? Is it to push the product in [a territory] today in the market? or is it to look for prospects? It was the point he said my job is not to push the product in [a territory] to the market or to look for prospects that he will send me a job description I waited for some time, it died down nothing happened again".

In this scenario, it is clear that even a basic job description had not been issued to the participant to facilitate his knowledge of what his job entailed. The act of training employees encourages dialogue between the trainer and trainee as trainees can share the issues they experience in the front line, while performing their jobs and also, receive adequate feedback on effective ways to solve these issues (Fong et al., 2011 and Ipe, 2003).

4.1.3 PROCESS

Communication and Reporting Style: As per the organizations reporting policy, work related reporting should be in line with the order of authority as indicated on the organizational hierarchy. Therefore, subordinates who are tasked with certain job functions must report only to their immediate superiors and vice versa. However, managers especially expressed that they purposely and regularly hold back sharing their knowledge with subordinates and the Managing Director because reporting by their subordinates is not being done in line with the organizations reporting policy. Nigeria ranks high on Hofstede's power distance dimension, which means that there is a steep hierarchical order in society. However, in my organization, as the Managing Director, I have encouraged the direct communication between junior members and myself, without the presence of their managers. The managers expressed that this action demotivates them to share knowledge as they feel that their subordinates are getting directives directly from me and I am getting feedback directly from their subordinates. Thereby, cutting the managers out of the communication and reporting chain and unwittingly side lining them from a key knowledge sharing process.

Supervisor 1 (Administration & HR) notes that: *"when the supervisors want to talk directly to the owner of the company without carrying along their manager in the department, I see that the manager might not know what is going on, and for the supervisor not carrying the manager along and talking to the owner of the company directly, makes it look as if the supervisor is superior to the manager or has the same right as the manager".*

Manager 1 expressed that,

"*In a situation where the a manager or a supervisor sometime, he or she is supposed to direct the subordinate in things they are supposed to do, then whatever information the subordinate needs should flow down from the supervisor or manager, but in a situation whereby the owner of the company is speaking directly to the subordinate and the manager feels that he or she is being side lined in some aspects, can create tension in the organization and make the manager or supervisor to hold back what he or she would have shared with the subordinate to ensure that things are ok".*

Sales Rep 1, clearly expressed a link between the fear of a loss of power by senior managers which results in very little knowledge flowing downward from them, through the organization, and the direct communication style (between the managing director and junior employees) that is presently the norm in the organization.

The participant expressed that,

"In some multinational companies, the manager's job is not threatened by the success of the subordinate because the management [most senior management] view it like it is part of the manager. But in organizations where there the subordinate has easy access to the management [most senior management], it is easier for the management to see who is actually performing and that is where the fear comes from".

Therefore, in this case, the performance of an individual subordinate can be assessed at any time by myself as the Managing Director of the organization. This is casually done regularly through my constant and direct communication with the subordinates, without going through their individual manager. I accept that this happens a lot, as my direct and open style of communication means that I actively seek to form personal relationships with every employee of my organization and this means that I am opportune to track their progress within the organization during our interactions. Therefore, if an individual is performing particularly well and stands out of his team, I would get to know at once, through the course of my day.

I have chosen this form of communication style due to my personal democratic leadership style and also due to the small size of my organization in which I want to preserve a harmonious, tight knit and family focused organization. However, it has been revealed by some managers and some subordinates that my open communication leads to a breakdown in the relationship between manager and subordinates, leading to a breakdown in knowledge sharing.

Being a part of the organization and therefore a part of the problem under investigation, I must reflect on my own involvement in creating the problem of knowledge sharing and this issue of my communication style is important to reflect upon. Upon reflection, I find that I personally may not trust the decision-making ability of certain managers and the accuracy of information I may receive from them. Hence, I feel the need to bypass these managers and go directly to the individual employee who is dealing directly with the specific issue that needs addressing at that time.

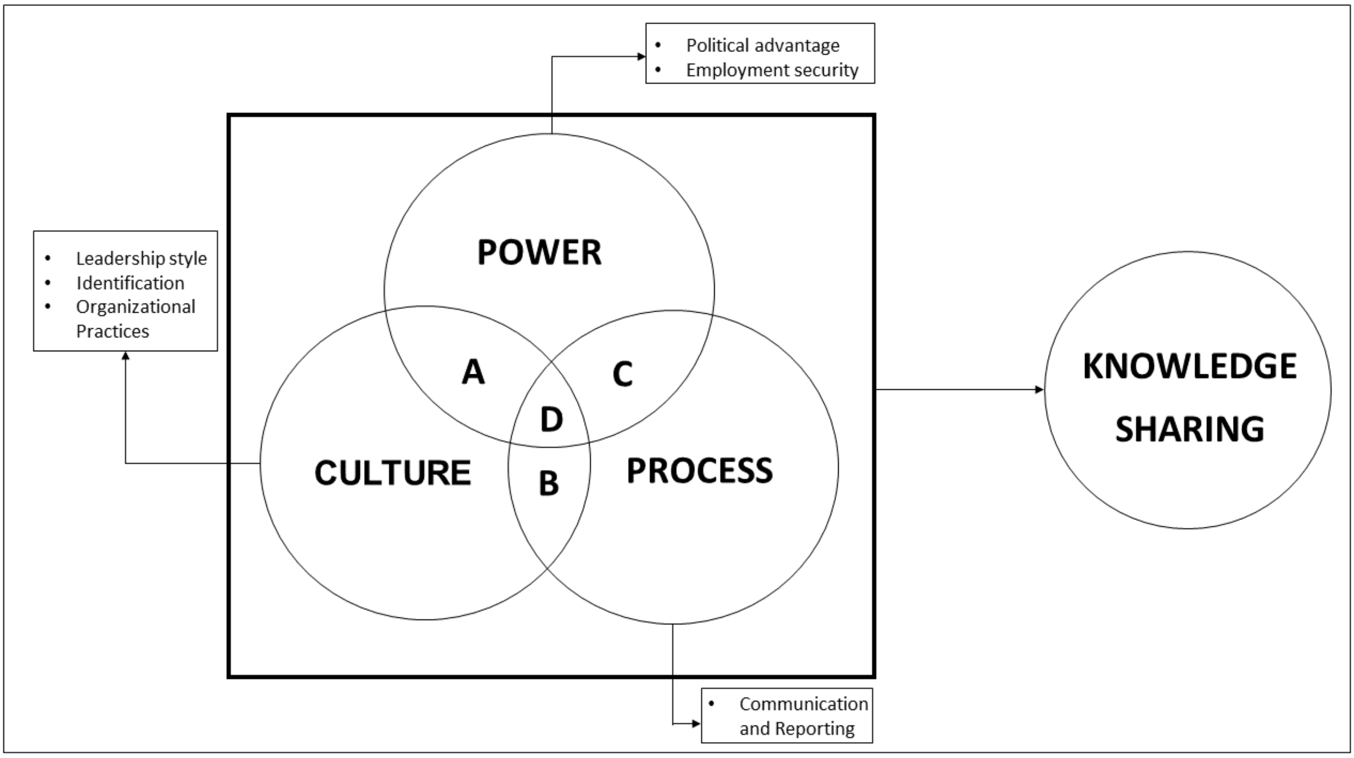
4.2 Knowledge sharing model

From the literature reviewed, two things were clear, firstly, there exist major factors that impact knowledge sharing within an organization and these factors often interact in a manner that impact knowledge sharing in a complex way (Ipe, 2003).

Moving on from the literature review to collect data, what the empirical data from this research has shown is that in my organization there are specific factors of Power, Culture and Process that affect knowledge sharing individually, as well as impact on each other in a specific manner that impacts knowledge sharing in a complex manner, leading to poor knowledge sharing in my organization.

The findings above informed by the empirical data from this research, paint a complex picture of knowledge sharing in my organization. There is evidence that the factors of Power, Culture, and Process, affect knowledge sharing in my organization and determine the level to which individuals in the organization are willing to share their knowledge. Most importantly, however, these factors do not impact knowledge sharing in isolation, instead they are connected and interlinked and have a relationship with one another, thereby impacting knowledge sharing in a complex nonlinear way. Informed by the literature review and insights from the empirical data of this research, the conceptual framework of knowledge sharing in my organization has been developed and shown in Fig 8. This model portraying the nature of the interactions between these factors is important because it will have direct implications for the development of practical and workable solutions aimed and improving knowledge sharing in the organization by creating a more dynamic and realistic action-oriented solution plan. This is because, action targeted at improving knowledge sharing by addressing one factor may automatically lead to a positive or negative outcome in another factor which it is linked to and therefore, may have an impact on the effectiveness of the action taken.

Figure 8. A model of knowledge between individuals in my organization.



Power - Culture (A): Factors associated with Power, have a significant and direct influence on culture within the organization and both collude to shape the knowledge sharing environment. Along the Power and Culture categories, it is clear that in a bid to gain political advantage and also secure their jobs, some employees, especially managers, employ a more authoritative leadership style and try to dominate their subordinates. In the process, knowledge is withheld by both parties as on the one hand, for example, managers do not give their subordinates enough useful information about job tasks for fear that this knowledge will arm them to one day have the skills to take over their jobs, while on the other hand, the hostile environment created by an authoritative form of leadership discourages subordinates from sending useful information in the form of feedback about their experiences on the job to their managers. This authoritative style of leadership also creates a fear of employment security on the part of the subordinates as they feel that their contributions are not valued by their managers and they could be let go and replaced at any time.

Power also evidently has a connection with identification in this case because the longing for individual political advantage by members of the organization creates an environment that prioritises individual advancement, thereby, creating an identity of the individual, that is at odds with the intended organizational identity which prioritises the advancement of all, together.

The state of organizational practices such as remuneration, recruitment and training which seem to have had an impact on knowledge sharing have also been impacted by power dynamics with relation to how I as the Managing Director of the organization made decisions about these organizational practices, that no other employee had the power to object or check my decision making. For example, although with good intentions at the time, considering the limited capital we had at the founding of the company, I chose to recruit some employees without the necessary skillset for the roles they were being assigned, ultimately leading in some cases in their inability to share their knowledge and in other cases, in an inability to utilise the knowledge that was being shared with them in a manner that was intended by the knowledge giver. I also chose to remunerate some employees based on my personal judgments, which ultimately as the research has revealed, impacted the wiliness to share knowledge by those who felt that their higher skillset should mean that they earned more in remuneration.

All of these mean that, it may be possible that implementing strategies that can successfully address and improve employee attitudes towards how we use Power within the organization, can perhaps help to resolve cultural factors as well.

Culture – Process (B): Cultural factors also create challenges in some organizational processes such as communication, as well as communication also having a significant impact on culture. Researchers have indicted the strong link between culture and communication, as for example, Pacanowsky and O'Donnell-Trujillo (1982) described culture as being a remnant of the process of communication. Schall (1983), makes a good case for this as she explains that since people in a system interact through the use of both verbal and nonverbal communication mediums, these forms of communication carry meaning and when repeated over and over again, these meanings become patterns and these patterns subsequently spread through the system and become valued, which when linked with other patterns, make up the parts of a belief system, which form the culture of that system. It is my opinion that this relationship can be seen clearly in the data so far. As the Managing Director, the method of direct communication I employed with the junior employees created a different set of value systems that was at odds with the entrenched value system of indirect communication that was the normal practice and expectation of the senior management team. Therefore, creating a conflict within the organizational culture and adverse reactions from some senior managers, who lost their identification with the new culture that I had instigated. Consequently, resulting in those senior managers removing themselves from the knowledge sharing process and withholding the knowledge they should have been sharing with their subordinates.

On the other hand, the data has shown that a culture of authoritative leadership style that exists among senior management, did have a detrimental effect on some of their subordinates, as it negatively impacted the willing upwards communication of those subordinates, consequently, affecting knowledge sharing from subordinates to their superiors.

The organizations culture of recruiting without knowledge sharing in mind have seen some members of the organization without the required skills to communicate and share their knowledge effectively. For example, the recruitment of some members who did not go through formal education and are not literate, and therefore, do not have key communication skills such as the ability to write reports, cannot document and pass on reports on their daily tasks to their superiors, thereby inadvertently not sharing their knowledge on what went on in their units or departments at any time. The practice of little to no training in the organization, also means that some members are not provided with the opportunities to be in a setting where knowledge is shared with them, thereby depriving them of the knowledge they need to keep performing to the standards that their jobs require. Henttonen et al, (2016) notes that individuals hold significant power in the knowledge sharing process because by their own motives they must decide on how and by what means they want to share their knowledge to others within the organization. Therefore, if these individuals do not have the required knowledge or are not equipped with the skills or know-how to make such knowledge sharing decisions, the probability that they feel they have the power to participate in the knowledge sharing process is slim.

Power - Process (C): The connection between some factors of Power and those of Process is also evident as the data collected shows that employment security i.e. fear of losing their jobs, leads some members of the organization to seek to secure their jobs by manipulating the communication process in a bid to control the flow of critical and valuable knowledge to other members of the organization they feel may be a threat to their jobs, thereby, making themselves more valuable and potentially indispensable to the organisation. Also, the significant power wielded by the Managing Director, impacted the communication and reporting process of the organization by the action of engaging in direct communication and reporting with employees, who otherwise were supposed to be accessed only through their immediate superiors. This action cut off some managers out of the communication chain, causing their subordinates to withhold key information from them and negatively impacting knowledge sharing across the organization.

Point (D): The interconnection of all three themes of power, culture and process can be seen in point D of figure 3. From the prevailing data, at this point D, it is my belief that factors that affect knowledge sharing form a chain of events that together, lead to poor knowledge sharing in the organization. For example, from the data collected, there is evidence that a fear of a loss of employment leads to manipulation of power dynamics in an attempt to ensure employment security. As a result, members of the organization looking to manipulate power dynamics for their own advantage take advantage of a more autocratic leadership style (a cultural dynamic), using this as a tool to better wield power and in turn, this leads to breakdowns in the communication channel (a process dynamic) along the organizational hierarchical chain and ultimately, fuelling poor knowledge sharing among members of the organization. The reverse is also the case, whereby poor communication as evidenced in the case of the Managing Director bypassing appropriate managers and communicating directly with a manager's subordinate, has the effect of creating a sense of job uncertainty in the eyes of the manager, as a fear of not being relevant ensues. Evidence shows that his attitude and approach to leadership towards his subordinate is affected for the worse as feeling marginalised by the direct communication between the Managing Director and his subordinate, he grapples with his own position within the organization (an issue of identification) and acts out by withholding relevant information from his subordinates.

There is also evidence that the pre-existing autocratic leadership style (a cultural dynamic) leads individuals in the position of power to naturally feel a sense of entitlement in their positions. The sentiment as described by one participant is 'I am the boss and you must obey'. This top-down view of leadership, is naturally reflected in the top-down communication and reporting style (a process dynamic) that follows and in turn, evidence shows that individual managers feel a sense of threat to their jobs (a power dynamic), when some subordinates push back on this form of leadership. Ultimately, creating an internal rivalry between manager and subordinate. In response to this, knowledge sharing is reduced as both the manager and subordinate, create a moat of knowledge around their jobs to make themselves more valuable than the other, and ultimately, less dispensable than the other.

Informed by the literature review and insights from the empirical data of this research, the conceptual framework has been developed. This research has not uncovered new factors that influence knowledge sharing. However, as a refinement from the literature review, what this research has done is in the uncovering of the specific factors that impact knowledge sharing in my organization and the empirically backed evidence that shows the specific nature of how these factors are interconnected in the context of my organization. This is where the literature gap lies, in the absence of literature uncovering the factors that affect knowledge sharing in my organizational context. With this knowledge sharing model, it has become clearer the factors at play in knowledge sharing in the organization and which point action can be taken to intervene and encourage the organization to start doing knowledge sharing better.

The analysis so far has shown the very large and complex nature of knowledge sharing within the organization with multiple factors at play across several broad themes. Therefore, uncovering a global or one size fits all solution becomes tricky and somewhat unrealistic. However, the interconnection between several factors, could pose an opportunity for a step-by-step solution.

Keeping in mind that the aim of this research is to uncover a solution and implement it within a given time frame, it may be more realistic to focus on a smaller segment of the larger themes and factors that have emerged from the data collection process. Hence, narrowing the focus to recommending strategies that aim at resolving the issues that arise at point D where the three segments connect, may prove more fruitful in the scope of this thesis.

However, although it is evident that there is a link between all three themes of power, culture and process, how they are linked through the three identified factors of communication and reporting, leadership styles and employment security show further evidence of some complexity i.e., which factor is the starting point in any interlinked chain of events. Having an answer to this may aid in implementing a solution-based strategy because a strategy that addresses one of these three linked factors, may likely produce a domino effect, by in turn affecting the other factors simultaneously in ways that ensure knowledge is shared better within the organization.

On the other hand, not categorically knowing a starting factor, may not be so detrimental to my quest for a solution as it means that I may have multiple angles to attempt to solve this problem from and in turn, multiple strategies and hence multiple opportunities to take action to get it right. Which in my view, should increase my chances of success in resolving this problem. However, to go down this route and show proof of resolution of the problem, will require a timeframe much longer than that set aside for this thesis. Therefore, I must decide which of the three factors to address first i.e., the first domino.

By a process of elimination based on the practicality of implementation of an intervention strategy, given the time frame of the research, I chose to take action to intervene in my organization by intervening to resolve the issues in communication and reporting under the process category.

In my opinion, it would not be practical to start with leadership style because, from the interview process, most complaints about leadership styles were made by junior employees who have superiors. Therefore, tackling leadership styles first may create the impression that only the managers or supervisors are being targeted for change, thereby there is a possibility that this may cause resentment among the managers or supervisors and make the road to resolving the problem more challenging as they may withhold their support to the change initiative.

With regards to fear of employment security, to address this, I would need to address employment security in relation to the specific nature of fear that each individual has. This is because fear is a factor that lies intrinsically within each individual and therefore, what constitutes the resolution of one's fear may not be the same for another. Thereby, making an intervention strategy more complicated in the time frame of the research. Also, the research does not generate data to uncover the specific characteristics or dimensions that constitute the fear being felt by the participants e.g., how and why the individual is afraid of losing his job. Data I feel would be important in addressing an individual's fear concerns. The research only uncovers in what context the individual is afraid of losing employment i.e., the loss of employment to another member of the organisation.

Communication and reporting on the other hand are a process driven factor that the organisation has the resources to immediately start tackling and improving, hence, making it an easier starting point in the intervention process. Also, another advantage to focusing on communication and reporting is that given that the data has uncovered the impact I have had in the current state of communication and reporting, I can immediately start to make personal changes to my approach to how I communicate officially with members of the organization, thereby, making an immediate start to attempting to solve the problem. In line with my thinking, it emerged in the action planning group that the state of communication and reporting was the most pressing to tackle.

4.3 Action planning group meetings

After the initial data collection from the interviews and the interview data analysis, I set up an action planning group consisting of managers, supervisors, and junior employees, to meet and discuss the themes emerging from the data analysis, further exploring as a group, the complex dynamics of these themes and the challenges they have posed within the organization. The aim of this action planning group meeting was to create a discussion forum that would inform an intervention strategy that could be implemented to improve knowledge sharing. The group meetings were attended by all the participants from the interview process as identified in Table 1, page 43. However, for the purpose of confidentiality, each member of the group meetings was not informed about other members participation in the interview process. So as far as they were concerned, the group consisted of randomly selected participants. I particularly chose this same group of participants because firstly, the participants represented members from all levels of the organization. This was important because data from the interview revealed that individuals experienced knowledge sharing differently at different levels of the organization. For example, when it came to the experiences of leadership and how it impacted knowledge sharing, it is evident that most managers did not have much to say about this, on the other hand, the junior employees lived experiences with their managers, made them a 'treasure trove' of information on leadership. If we were going to come up with a solution that was realistic and impacted everyone as best as possible, then a diverse contribution to the discussions was essential. Secondly, since the data we were discussing emanated from this set of individuals, it would be useful to further explore the data with the same minds that generated it, with the aim of gaining further insight into their thinking.

There were 3 group discussions held over the period of a month with each lasting over an hour. Two of the meetings were held prior to the intervention action and one meeting was held after the intervention, to evaluate the effectiveness of the action. I participated in the meetings in the role of a moderator or facilitator by posing questions and ensuring that the group discussions stayed within the bounds of the topic at hand, only stepping in to ask questions when I needed clarity on aspects of the discussions that were taking place. This was important because, employees can often use forums like these as an opportunity to express their concerns or opinions about other organizational topics that are not relevant to this research, thereby taking up valuable time. Also, acting only in a moderators' capacity reduced the risk of influencing the outcomes of the discussions.

In the two meetings prior to the intervention, the three major themes of power, process and culture were discussed along with the exploration of the factors that impacted them, with group members further expressing how these factors impacted them individually. As a group, there was an agreement that the lack of knowledge sharing had become a significant problem in the organization that deserved attention to resolve immediately. The group was reminded that given the time frame of the research and in the short term, we could not immediately tackle all three dimensions. With this in mind, it emerged from suggestions made by members of the group, that it would be worthwhile to focus on communication and reporting as this was very pressing to them at that time. It was clear from the discussions that the breakdown in communication between key members of the organizational hierarchy was central to how the members of the group experienced poor knowledge sharing at the time. Therefore, the decision was made by the group to focus on communication and reporting.

Examples were given of how I as the Managing Director regularly bypassed the managers and instead chose to communicate directly with their subordinates on official matters, thereby also encouraging some subordinates to bypass their managers and seek communication on official matters directly with the managing director. This action automatically removed the managers from the communication chain and therefore, restricted critical information from reaching them, as well as not giving them the opportunity to pass information that they would otherwise have done if they were brought into the 'loop.' Some members of the group suggested that the reason for this communication and reporting issues may be a lack of trust between members of the organisation. For example, it was mentioned that a lack of trust by individual A in the abilities of individual B to perform his job properly, led to individual A choosing to bypass normal communication channels with individual B, and as a result not share his knowledge because it was believed that individual B does not have the ability to use that knowledge as expected. Some members of the group felt that the bypassing the normal communication channels may be occurring due to a fear of the knowledge holder that the individual he passed the information to may use that information and the knowledge gained to gain an advantage over them in the work place.

Therefore, what was immediately needed to address the current state of communication and reporting, was an increased trust and confidence between members of the organization that each member can do their jobs without purposefully trying to impact another member negatively or gain some form of advantage over him. For example, some members of the group suggested that as the Managing Director, I needed to trust more in the abilities of the managers and give them a freer hand in working with their subordinates, to achieve the organizations goals.

4.4 Taking Action

From the analysis of the data, subsequent development of knowledge sharing model and information gathered from the group discussions, it became evident that I personally made a significant contribution to the creation of the problem of knowledge sharing within the organization by my action of actively breaking the expected hierarchical communication and reporting process by constantly bypassing departmental managers and communicating directly in an official capacity with their subordinates instead. For example, I would seek departmental reports from junior employees, rather than from their managers. I would invite junior employees for departmental meetings to discuss key operational issues, without the presence of their managers. I would openly seek solutions to departmental issues from junior employees, rather than their managers.

Upon deep reflection of why I would take such actions, it became clear to me that I did not have trust or confidence in some managers enough to rely on the operational information they would present me or in their ability to perform given tasks to standard. Hence, I would prefer to micromanage and deal directly with the employees, who are closer to the source of the operational information and hence would be better placed to give me reliable information or handle tasks in line with my direct mandate. This action in itself caused two things to happen. Firstly, it became apparent to the junior employees that I had no trust and confidence in their managers and hence, these employees would withhold information from their managers and prefer instead to pass that information directly to me. Therefore, further depleting said manager of useful operational information and in turn increasing my lack of confidence in them for not possessing the required operational knowledge needed to perform well in their jobs.

Secondly, as time went on, these managers would ultimately be terminated by the organization due to their lack of involvement in key operational matters, as a result of their lack of knowledge about said matters. Hence, there was evidently a high departmental manager turnover in the organization.

I did notice the withholding of information from the managers by their subordinates, however at the time, I did not count myself and my actions as part of the reasons for this. Therefore, whenever a new manager was recruited, I would make it clear to his/her subordinates, that they must act differently this time and ensure not to leave the manager out in the cold. However, perplexing to me at the time, as time went on, the same issues would arise again.

My involvement in this knowledge sharing problem has been a great revelation to me as prior to the start of this research process, I did not think that I had any part to play in the creation of the problem. Rather, my bias at the time, led me to point the finger of blame to the managers and some other members of the organization. Seeing that my involvement in the creation of the problem required a simple action on my part and as a scholar-practitioner, who would benefit instantly if the situation improved, I immediately took action to change my behaviour and monitor the results as the research was ongoing. Hence, during the data analysis phase of the research, in one of the action planning meetings with the departmental managers and their subordinates, I acknowledged the part I played in the organizational problem and I informed the employees that the correct lines of communication and reporting will be followed going forward. The feedback obtained during this meeting made clear that indeed there was a perceived lack of trust in the abilities of the managers and it was also revealed that this lack of trust came from both the Managing Director and their subordinates.

However, it would be difficult to quit ‘cold turkey’ a pattern of behaviour that I have been exhibiting from the founding of the organization. We are a small organization and as an entrepreneur, I have consciously and unconsciously found myself at the centre of every activity, constantly micromanaging in the pursuit of perfection. However, help came in the form of my unavoidable absence from the company on a day-to-day basis due to personal issues I was dealing with at the time which kept me away from the office for a prolonged period. Therefore, my lack of office time helped to physically keep me away from those scenarios that I would have found difficult to stop myself from getting involved in and subverting the hierarchical communication lines.

During this period, I had to force or manufacture confidence and trust on my path for the managers and leave them to deal with their departments in line with the goals we had set ourselves, ensuring that official communication and reporting lines were followed which mandated that subordinates passed all official communications directly to their superiors and vice versa. This way, I was not involved in seeking official information, or issuing directives to superiors who were not immediately below in the organizational hierarchy. A series of events occurred as time went on.

Firstly, interaction between the managers and their subordinates increased, especially during problem solving incidents. In the past, I would be contacted by the managers subordinates to help resolve issues that may occur during their work day. For example, when there is a production machinery breakdown, I would be contacted by the production supervisors for ideas and suggestions to deal with the breakdown or if a major customer has some complaints, I would be contacted to help resolve the complaint by the sales representative, who is a subordinate to the sales manager. However, during this period, since these subordinates were mandated that the first line of communication should be their managers, they were forced to learn a new behaviour by bringing their managers into the information sharing process, thereby leading to increased interaction and increased knowledge sharing as was evident in the reduced length of time it took to resolve these problems than in the past.

Some subordinates did struggle to overcome the process of bypassing their managers as it was not initially easy to unlearn a behaviour they have engaged in for years. There were some initial drawbacks as it was clear that one influential subordinate became disgruntled due to not having direct access and influence with the Managing Director during this period. Upon interaction with this individual, it was revealed that my decision to place the manager between us in terms of communication has been interpreted as a new found lack of trust I may have for the said individual. The feeling was that not being able to constantly reach out to me first with information regarding their daily tasks, I was being misinformed by their managers and hence, their "good works'' were not being seen and appreciated by me. This ultimately led to a fall in motivation as became evident in their decreased interaction and a general unwillingness to carry out mundane tasks effectively anymore. Ultimately and irrecoverably leading to a fall in said individual subordinates' job performance, which unfortunately led to the dismissal from employment of that individual. This feeling of a lack of trust was not isolated to one individual, as I also tabled the issue to two other employees at supervisory level, who confirmed that they also felt the same way, however, from my further explanation of my motives for taking this decision not the bypass the manager, I felt that they understood and dealt with my decision differently.

Secondly, learning also increased among members of the organization as more effort was made to collaborate and think critically about the nature of problems that arise in the organization and how to resolve them, rather than constantly relying on the solution-based ideas of one man, the Managing Director. Evidence of this increased learning and greater collaboration can be seen daily on the organization's internal social media platform, which is used as an avenue for communication and ideas exchange. In the past, on this platform, most discussions relating to problem solving would be led by me, however, since I took a step back, issues are brought up by other members of the organization, ideas generated by them, with solutions implemented and followed up by the Managers. This led to faster problem solving and also the increased quality of solutions. An example of this would be the daily maintenance briefs, which in the past were always held in a physical face to face meeting with the managers, machinery operators and members of the maintenance team. The meetings would always be chaired by me as the managing director with the aim of identifying machinery maintenance issues, discussing solutions, implementing those solutions and following up to ensure those issues don't arise again. In the past, I can say that participation by other members of the meeting group is usually forced and not free flowing. I would have to coax ideas out of participants to encourage more information to generate better maintenance solutions. Also, if I was absent, these meeting would never hold and no other member of the meeting group would voluntarily call for or participate in a meeting and carry out their defined functions. On the other hand, with the social media platform, voluntary participation without me taking the first step at generating ideas has improved. It seems individuals have become more comfortable in expressing themselves more on this technology enabled platform. Also, there are no defined meeting times as once problems arise, any member of the group can inform the group via a message on the platform, automatically calling a meeting to discuss and garner immediate participation from others.

However, as the months went by, although some positive effects as mentioned above have been observed, the increased interactions within the group as noted earlier in my intervention, gradually devolved into managers and their subordinates reengaging in withholding valuable information from each other. Although not as severe as before my intervention, however, it appears that some less valuable information is shared, to fulfil the new found spirit of knowledge sharing, while more valuable information is withheld during interactions of key members. From my observation and interaction with key individuals involved in this behaviour, the exercise of stepping back, in an attempt to encourage more interactions between other members of the group, while actively monitoring their progress, has created a sort of arena whereby individual employees feel the need to outshine their counterparts with the knowledge they hold, as the Managing Director looks on. In other words, individuals are looking to use their knowledge about key operational matters to win points with the Managing Director, by withholding that knowledge from their counterparts, to ensure that I see that this knowledge came from them alone.

For example, in group discussions, as ideas are being generated to solve particular operational problems, it has been observed that some members of the group hold back from making meaningful contribution to the discussions, however, at the same moment those group discussions are ongoing, those same members privately send messages to me, expressing their insights into how the problems could be resolved. Also, there have been incidents where a group of employees tasked with the analysis of an issue and the generation of a solution report back with very little useful information. However, at the same time, privately, one or two members of the group, meet me to offer useful information pertaining to the resolution of that same issue.

Lastly, through my intervention, I noticed the visible gap in the downward sharing of organizational level corporate information that would usually flow directly from the Managing Director to members of the organization. Information on organizational policies and procedures that would normally guide individuals on what is expected of them, changes that are taking place within the organization etc. With my withdrawal, there was no other source for the dissemination of this information. Therefore, although certain information about the company may be physically stated in corporate documents, not much is done to communicate this information and ensure that it transcends documents in any concise manner, into the minds and hearts of its members. Therefore, in my absence, the diffusion of knowledge of organization level policies and procedures suffered even more.

It is understandable that knowledge sharing has not yet been fully embraced, as it takes time to unlearn behaviours. Upon discussion with individual employees there is a paradigm shift in thinking along knowledge sharing lines that will take time to happen and cause employees to willingly share their knowledge without any external influence. There are deep seated concerns of trust, power and job security that cannot be satisfactorily addressed in a few short months but instead, as these matters deal with complex interpersonal dynamics at play in the relationship between the knowledge giver and the knowledge receiver and will require a much longer-term action to address. Therefore, in chapter 5, I will make further recommendations of future action that must be taken by management going forward.

4.5 Summary

Upon reflection of my research process so far, I have realised that I came into the research with some bias and assumptions of the cause of poor knowledge sharing within my organization. Although I set out to understand why knowledge is not being shared properly, at the time, I strongly believed that the sole cause of poor knowledge sharing was a fear of a loss of employment by the knowledge giver. Therefore, in my mind, the organizational problem would have been simple enough to resolve, since one factor was responsible for its cause. However, the empirical data from the research has revealed the very complex nature of knowledge sharing within my organization and although a fear of a loss of employment is a factor in this, it is by no means that straight forward or simple and therefore, a solution to the problem of poor knowledge sharing is multifaceted. One of those faces would have to be mine as the owner-manager, as I have also found that I have contributed to poor knowledge sharing, giving further evidence of the complexity of knowledge sharing and especially, the conscious and unconscious power that the individual plays in sharing knowledge. I must therefore, keep on critically reflecting and evaluating my role in my organization to avoid an unconscious self-sabotage of my efforts in bringing about positive change.

I have found that three major themes of Power, Culture and Process influence how employees choose to share their knowledge, when they share their knowledge and to what extent that knowledge is shared. Under the power theme, individuals use the political status their jobs or positions of responsibility gives them as a tool to manipulate knowledge by withholding key information from others, in a manner that protects their positions of influence within the organization. Thereby creating an ever-increasing power base for the knowledge haves, thus securing their position within the organization by ensuring that they remain the go-to individuals, as key knowledge of job tasks and day to day organizational activities is kept locked away in their minds. Ultimately, creating an ever-dwindling power base for the knowledge have nots, who as a result of not having adequate knowledge to do their jobs effectively, perform poorly, have less political influence within the organization and are thus vulnerable to organizational exit.

I also found that when it comes to the effect of culture on knowledge sharing, factors of leadership style, certain organizational practices of how we train, renumerate and recruit employees, as well as the sense of identification employees feel, have the most significant influence on individual attitudes to knowledge. I found that as an owner-manager my leadership style and leadership actions from the onset of the founding of the organization, had an impact on the culture of the organization in a manner that caused individuals to withhold their knowledge from their colleagues. This can be seen in how my communication style subverted the normal communication channels by cutting key managers out of the communication process, the absence of a visible corporate vision that contributed to a corporate culture of fear and individualism, that set the stage for a culture that places little value in knowledge sharing and as such, is at odds with the positive knowledge sharing culture, that I intended, at the founding of the organization.

Also, evidence shows that the autocratic leadership style prevailing in the organization discourages both the top down and bottom-up sharing of knowledge. However, this style of leadership may be largely borne from the larger societal leadership style that prevails in the country and therefore, created ample grounds for poor knowledge sharing to thrive. While in the case of identification, the disparity between the goals of the employees and the goals of the organization created a misalignment of ideologies between an organization that wants to champion the advancement of the group and the self-interested, individual only advancement ideology of some members of the organization. Therefore, the behaviour of withholding sharing their knowledge with others, manifested in those that identified with self-interested behaviours over the group interests. This misalignment of ideologies, evidence shows, was largely as a result of a failure by the organization to clearly communicate its goals by the way of vision and mission to all members of the organization. Thereby, creating an environment that left members to come up with their own goals and focus on them.

I have also found that the current state of some organizational practices such as how the organization recruits, renumerate, and trains its employees all play different but significant roles in influencing knowledge sharing attitudes and actions within the organization and practices such as this may need to be remoulded to prioritise knowledge sharing. This is because, their impact on the attitude and behaviours of members to share their knowledge is immediate and tangible.

The nature of communication and reporting at several levels of the organization as the data shows significantly impacts knowledge sharing. For example, at the organizational level, even the communication of the corporate vision, mission and other organizational policies to employees is very little and ineffective, thereby, allowing for members to create sub cultures within the organization, fuelled by their own vision of the organization and their places in it, and leading them to take actions that do not advance knowledge sharing. Secondly, communication and reporting styles among members of the organization are used as tools to purposefully and deliberately withhold knowledge in some cases and in other cases, it has a secondary effect on knowledge sharing as a result of other factors that occurred first.

It is evident that the interrelation between the three themes of Power, Culture and Process have indeed conspired in the generation of the problem of a lack of knowledge sharing and this interrelation may most likely also be relevant in the generation of a successful intervention to this problem.

CHAPTER 5- Analysis, Discussions and Researcher reflections

5.1 Introduction

I commenced this action research study as a means to generate a solution for the problem of poor knowledge sharing among members of my organization. As I am currently a practitioner in the organization, my knowledge of the problem was founded on my experience as a member of the organization. From this experience, it was evident that knowledge was not being shared willingly, easily or freely among members of the organization as there were knowledge gaps littered across departments within the organization. These knowledge gaps resulted in poor individual performances as some members didn't exhibit the appropriate knowledge necessary to do their jobs properly.

This was the nature of the problem I started with and as I collected data, the problem became more obvious and its root, more complex. Although the empirical data from this research has revealed that employment security, leadership styles and communication and reporting have impacted knowledge sharing in my organization, it was decided by the action planning group to focus on taking action to intervene in improving some aspects of the process of communication and reporting that we were used to in the organization. As detailed in section 4.4, in intervening and taking action to improve communication and reporting, some improvement in knowledge sharing between individual members was recorded, however, the action taken did not completely resolve the problem of knowledge sharing and as such, I will make recommendations to management for the need to take further action aimed at resolving the problem going forward and after this research project has been concluded.

The recommendations proposed to management will detail the solution driven steps to be taken, informed by the actionable knowledge that has resulted from this research, to hopefully improve the level of knowledge sharing within the organization. Still with a focus on communication and reporting, the recommendations will be aimed at taking specific action to improve the communication and reporting in the organization with the aim of improving knowledge sharing between individual members.

5.2 Analysis and Discussions

The data collected during the interview process shows a complex intertwining of the major themes of power, culture and process and the observations and outcomes of this small-scale intervention shows further evidence of this link. However, keeping the focus on the findings from the action I took and my intervention, it is evident to me that my habit of bypassing the departmental managers and communicating directly in an official capacity with their subordinates evidently affected how power was manipulated in the organization to achieve personal agendas, which ultimately contributed to the poor knowledge sharing we experience. In the first part, as the Managing Director with the ultimate decision making and unquestionable political power in the organization, by bypassing the managers, I used my position and power to interfere with the chain of command in order to ensure that the tasks I wanted done were carried out to the standard I wanted them done. Ultimately, making the managers feel redundant and irrelevant within the organization, with a reasonable fear of a loss of their jobs. In trying to counter the effects of my actions on their jobs and not wanting to lose said job, it appears that the managers also used their positions to acquire more political power to ensure they remain relevant within the organization. They did so by withholding valuable information from their subordinates as such information created a moat of knowledge around the managers, in an attempt to make themselves the only purveyors of such information and as such, indispensable to the organization.

The research data so far and the consensus from the group meetings make it clear that trust between members is a big factor when it comes to how they choose to approach their official communication and reporting behaviours. For example, interview data revealed that some managers deliberately do not share knowledge with their subordinates by communicating necessary directives to them, because they do not trust their subordinates to use that knowledge as they intend. Also, the research findings have also revealed that as the Managing Director, the lack of trust I have in some managers to perform their jobs in a manner that I feel would accomplish desired results, sees me bypass them to communicate and give instructions directly to their subordinates.

The outcome of the intervention also makes it clear that trust cannot be built overnight to change the behaviour of members in a manner that sees them improve how they choose to engage in official communication and reporting to share information and therefore knowledge as expected. Therefore, as the intervention has proved that we cannot manufacture trust overnight, it is my opinion that we implement a mechanism that can cause knowledge to be transferred, in an environment where a lack of trust means that people do not voluntarily engage in knowledge sharing. Therefore, it is my opinion that as a next step, the most realistic action to take is to create a bridge between the knowledge giver and knowledge receiver using a third party. A third party whose role would be to daily facilitate the knowledge transfer between the knowledge giver and the knowledge receiver by stepping into the communication channels and facilitating the communication and reporting of official information within the organization, so that a lack of trust between individuals will not prevent the knowledge getting to where it is needed. As a next step, my recommendation for immediate action is to create the role of a knowledge broker within the organization, whose job will be to take the form of a coordinator of knowledge and facilitate the flow of information and the knowledge it contains, from those who have it, to those who need it to perform their daily tasks. This individual will answer the title 'Knowledge Coordinating Officer' or KCO.

In the past, in my role as owner-manager, I have had some success acting in a similar capacity as I had often found myself in a position of a knowledge coordinator, whereby I had to actively solicit information from key members, organise that information and convey that information to other members who need it and who would not have received that information if I had not stepped in. I also had to regularly educate some members about how to properly use their knowledge in group problem solving settings, while actively engaged in problem solving. Those actions temporarily ensure that information and hence knowledge flowed as required.

5.3 Recommendation

At this point in the research, as the concept of knowledge brokering became relevant to the organizational problem, I went back to the literature to uncover insights on knowledge brokering.

There is a gap between knowledge producers and those who require the knowledge being produced and this has been a persistent problem in the transfer of knowledge (Ward et al., 2009; Obstfeld, 2005). The bridging of this gap has become the focus of several researchers in the knowledge management field. One of the methods derived by researchers to close this knowledge gap is the concept of 'knowledge brokering'. Knowledge brokering is considered a knowledge transfer intervention and is a method that can be used to facilitate the process of putting knowledge into action (Ward et al., 2009). According to Marsden, 1982, a brokerage model, is the process "*by which intermediary actors facilitate transactions between other actors lacking access to or trust in one another*", (Marsden (1982, p. 202) is considered brokerage. Knowledge brokering then becomes the process of facilitating the sharing of knowledge between various individuals in the same group or organization, between groups or organizations and across groups or organizations (Glegg and Hoens, 2016).

Ward et al., (2009) research on the structure and process of knowledge transfer interventions using knowledge brokering as a method is quite insightful to my organizational problem. It was evident from their work that the producers of knowledge and the users of that knowledge may exist in different realities and as such they may not share a common language, belief or values (Caplan, 1979). Therefore, it becomes understandable that neither party may be suitably placed to transfer knowledge between them, as there is no commonality for the interpretation and understanding of that knowledge (Ward et al., 2009). To facilitate the development of such a commonality, an intermediary is needed. In knowledge brokering, those intermediary actors mentioned by Marsden, (1982) who facilitate transactions are termed knowledge brokers.

These knowledge brokers facilitate knowledge sharing by acting as a link between individuals, groups or organizations. They act to improve interactions between these various parties that lead to a shared understanding of the issues at hand, and achieve this through the use of a shared language to improve communication among the parties, while also, simultaneously, improving the meaningfulness of existing knowledge, so that it can be better applied in the given context (Hargadon, 2002). As a result, knowledge brokering is a useful tool in organizational learning and innovation as it deals with the process of how individuals use this brokered knowledge within the organisation to increase learning and ultimately innovation (Hargadon, 2002).

According to Ward et al., (2009), in intervening to facilitate the transfer of knowledge, knowledge brokers can take action in three ways. Firstly, the broker focuses on managing the activities that participants engage in, as they create, spread and use knowledge. This type of broker is termed a '*Knowledge manager'.* Secondly, the broker focuses on improving the interface between knowledge generators and knowledge users. This type of broker is termed a '*Linkage agent'.* Thirdly*,* the broker focuses on training the users of knowledge so as to improve their access to available knowledge. This type of broker is termed a *'Capacity builder'.*

In reality, it may not be easy to draw the lines between these 3 broker roles, as in the case of my organization the broker will act in several of these capacities as knowledge manager, linkage agent and capacity builder, depending on the specific scenario. However, keeping in mind that knowledge transfer is extremely complex, it is my recommendation that initially in the life of the KCO, the knowledge broker focuses on acting solely as a linkage agent. The recommendation of the knowledge broker commencing as a linkage agent is based on the following:

Firstly, in determining how feasible the recommendation of creating a knowledge broker role is, it is unrealistic to expect a brokerage mediation relationship to exist in every transactional based activity among individual members of the organization, i.e., on the individual level. The field is too vast and the knowledge management tasks to perform are significant. There are hundreds if not thousands of these types of individual transactions taking place every day, and expecting a broker to step into all of these transactions in a manner that is effective, is unrealistic and not feasible. If the KCO is going to be successful, then his workload must be manageable. Therefore, initially, the broker should be placed at the organizational level in which he can facilitate the sharing of corporate information and knowledge between the organization as one party and all members of the organization as the second party to the transaction and vice versa, thereby, initially focusing his knowledge broking capacity as a linkage agent and helping to improve communication along the organizational hierarchy. This is useful for the facilitation of the knowledge sharing of the organizational vision, mission and also organizational policies and procedures that will be designed to change the posture of individual members of the organization to a pro knowledge sharing stance, thereby, gradually instituting a culture of knowledge sharing on the individual and group levels. This therefore is a linkage brokerage role, that will see the KCO tasked with taking on activities that will foster the flow of corporate level information from the organizational level to individual members in a manner that helps to foster the relationships between knowledge giver and knowledge receiver.

Secondly, the KCO will be a full-time role and will be recruited from outside the current pool of organizational members. Although an internal recruitment, thereby having an existing member of the organization who understands the current organizational dynamics fill that role, may prove speedier, however, I am concerned about the idea of neutrality. Currently, the internal tussle for political advantage is too high among members and appointing an existing member with pre-existing relationships to this role may unwittingly provide another means for that member to gain an advantage over his peers or superiors, thereby subverting the reasons for appointing a KCO. Therefore, it is my recommendation that recruitment be done externally and an individual that has not been tainted by the current political climate in the organization, tasked to perform this role. What this means, is that the knowledge broker will be inexperienced with regards to the roles, tasks and functions of my organization and its members, therefore, may not perform well if taking the task of managing knowledge flow or capacity builder as the management of knowledge may be handled better by someone with experience of ongoing affairs. Therefore, to commence his role as a linkage agent by connecting knowledge givers with knowledge users may provide the simpler entry way into the organization and may also make the KCO more effective initially.

The knowledge broker role will be an independent role, outside the other departments of the organization and the KCO's duties will not be overseen by any of the departmental managers and will report directly to the board of directors. This direct reporting is important to give the KCO easy access to information at all levels of the organization and also protection from any form of retribution directed his way from senior members of the organizations management team.

The daily activities of the KCO will be to:

1) Improve the access of all members to corporate information by acting as the intermediary between the source of that information and those members that need the information. In doing so, the KCO also provides interpretation and sense making of corporate information, while assisting members in their application of corporate information as the need arises (Glegg and Hoens, 2016).
2) Improve communication by organising group activities such as in group meetings aimed at increasing the physical interface and interaction of members. Such interactions should encourage more dialogue and increased feedback for the furtherance of knowledge (Glegg and Hoens, 2016).
3) Organise and implement training sessions aimed at teaching members methods that can improve their knowledge sharing behaviours.
4) Being the first point of call for enquiries and feedback from other members of the organization for matters relating to knowledge sharing issues.

For example, the knowledge broker can accomplish these activities by ensuring the proper dissemination of written or verbal communication of policies and policy changes, organizing and conducting the training of employees in relation to the adoption of organizational policy and procedures that are geared towards improving knowledge sharing, conducting the induction and orientation of new employees into the organization to forester the understanding of the organizational identity and culture etc.

The knowledge broker will be brought in to reduce the knowledge differential between those that have it and those that need it to perform their daily tasks and kick start the organization on the process of learning a new behaviour i.e., knowledge sharing behaviours. Therefore, initial success should take the form of a workforce that is equipped with a greater knowledge and understanding of organizational level information such as policies and procedures, goals of the organization etc. Such that all members of the organization have the required information to work towards one common goal.

However, how do we know that we are learning new behaviours of knowledge sharing as an organization and hence determine that the knowledge broker is being successful? Trying to determine when an organization is learning is a difficult process because learning is not visible to the naked eyes (Janus, 2016). What is visible then, are only the results of learning embodied in the actions taken by those who have learned or acquired new knowledge, rather than the learning process itself (Schwandt and Marquardt, (1999) as cited in Janus, 2016).

Therefore, to assess the success of the knowledge brokerage intervention, I will monitor the outcomes of projects and job tasks in an effort to determine if intended goals were achieved as needed. Janus, (2016) notes that since knowledge sharing is intended to improve organizational processes within a project, then it can be argued that the success of that project in line with its objectives is a barometer to measure the success of the knowledge sharing program integrated into that project. In the case of my organization, we will use our standard organizational qualitative and quantitative measures of job performance to compare the outcomes of jobs and tasks conducted after the introduction of the knowledge broker, with similar jobs and tasks performed prior to the commencement of the knowledge brokerage intervention. Therefore, the variance or lack thereof of the values of these measures or indices, should be suitable in gauging the success of the knowledge broker intervention on the performance of jobs.

Also, prior to the introduction of the KCO a benchmark survey will be conducted to ascertain the opinions of the employees as to the ease of accessing new knowledge, using that knowledge to perform their roles and contributing to the knowledge sharing process. Once the KCO is introduced, surveys will be conducted once a year using the same parameters as the benchmark survey, and results used for comparison with the benchmark survey, as a means to ascertain the impact of the KCO.

Action that needs to be taken in the long term:

At some point in the long term, since we plan on being a knowledge sharing company, with a knowledge sharing culture, a longer-term plan will be to also increase identification of the organizations' members by actively planning to design a recruitment system that focuses on recruiting those individuals who are naturally predisposed to knowledge sharing, thereby, achieving a better employee-organization fit than we currently have and improving the organizational culture of knowledge sharing. According to Chatman, (1991) and Fong et al., (2011) an organization wanting to instil a culture of knowledge sharing, must first identify, select and recruit individuals that fit in with this philosophy. Our organization cannot immediately lay off all those individuals that do not currently fit in with our knowledge sharing agenda as this will cause severe operational disruptions. Therefore, this recruitment plan must be done gradually and as the opportunity arises, in the longer term.

5.4 Reflection

The research process so far has revealed some key information about my organizational practice and my role as a member of my organization. I started off this research with the assumption that a significant portion of the cause of the inadequate knowledge sharing we experienced could be solely attributed to other members of the organization. However, although the research has shown that indeed other members bear some blame, what has also become apparent with regards to knowledge sharing is that as the owner and managing director of the organization, I have a great influence on the organization and its members and this influence has also contributed to the problem of knowledge sharing.

It is evident that there are two organizational environments at play here. First is the organizational environment that I believed to have existed before this research. As has become evident during this research phase, this organization existed in my thoughts and not in reality. In this organization, I was just the managing director and hence the effects of my actions were limited to my role as the managing director of an organization. My actions with regards to how I did my job and ran the organization were confined to my role as though I was given this mandate by my superiors i.e., the board of directors and if these actions were going against the mandates of the organization, other members of the organization would have the confidence and courage to speak up to either myself or my superiors and my actions will be checked and corrected. Hence, if this wasn't happening, then my actions were acceptable and the business of the day could go on as usual.

Second, is the organization that exists in reality. In this organization, I am both the owner and managing director. In reality, this is a very different organization than the first. In this organization, I do not have any superiors, I do not have any other stakeholders to check and review my actions and the "buck" stops with me. Consequently, creating an organizational environment that revolves around me and my decision making. In this real-world organization, there is a fear and hesitation on the part of other organizational members to bring my actions or inactions to the table of discussion and therefore, issues that arise as a result of those actions or inactions go unaddressed, while I fruitlessly search for the culprits.

In the previous chapter, it was discussed that the point at which the three core categories of power, culture and process meet, encapsulates their interlinked complexity and uncovering how these factors are linked in my organization, would be significant in developing a solution. Although there may be other actors or mediums of this link, the narrative so far has revealed my presence at the heart of the interlink between power, culture and process. I am evidently, a medium of this link between these three categories as the power ingrained in my position has been wielded using a style of leadership that has influenced the process of individual communication and reporting, in a manner that has seen me use knowledge as the tool to dominate these three categories. In other words, members of the organization seeking to secure their employment or secure political advantage by ensuring that they gain recognition from the individual with the ultimate power within the organization, were more than willing to accept and participate in a culture of leadership that fuelled the process of direct communication and reporting with them.

Therefore, though not a long-term solution, the inclusion of a knowledge broker will go some way in ensuring that at least from the dissemination of knowledge from the organizational or corporate level, my personal involvement in the dispersing of information will be buffered. Therefore, limiting the effects of my bias on how that information is used or not used. Once organizational policies and procedures are set and agreed by the board, the broker will act as a medium of connecting such information to all members of the organization, ensuring members have access to that information and most importantly understand how to use that information properly. For example, if the organizational policy about the proper flow of information down the organizational hierarchical chain was disseminated in such a way that every member of the organization understood the importance of this policy and its direct implications for the organization and their places in it, it may not have been so easy for me to bypass the managers and share information directly with their subordinates to the detriment of knowledge sharing.

My intervention shows that the power dynamics within the organization with regards to knowledge withholding actions being taken to gain power and secure employment by individuals has not changed. The fear of a loss of employment is still palatable and my physical withdrawal during the period I feel created uncertainty that further caused some members to try to gain more power to secure their jobs. For example, in a discussion with a manager and a key supervisor, it was revealed that the key supervisor had discussed the possibility of a separate department being created for him, not under the jurisdiction of his manager. However, my intervention may not only be the cause of the increased scramble for job security as this may also be impacted by the larger uncertainty created by the effects of Covid-19 and the layoffs that have occurred due to the downturn in the economy.

There has noticeably been an improvement in knowledge sharing as a result of a more collective leadership style and collective decision making that resulted in my intervention. Although as described earlier, we still face considerable challenges, however, at least, members involved in this experiment where we all discuss using the social media platform have shown a willingness to corporate and discuss more. Although, as revealed earlier, the types of information divulged during these discussions are less than optimal but the case can be made for improved dialogue and collective decision making.

This also means that knowledge sharing was improved as communication and reporting improved but the need to want to gain recognition from me as the managing director led to an erosion of some of the gains earlier made. For example, participants kept withholding key information to the group and instead, preferred to divulge this information only to me, while divulging what I would term ‘participatory information’ to the group i.e., information shared that could be seen as sharing knowledge but the quality of information being shared is of no real consequence to the problems trying to be resolved by the group.

It is important to keep in mind that we may not be able to completely eliminate the craving for recognition but we can perhaps create mechanisms that use the craving for recognition to improve knowledge sharing in line with the organization’s goals. For example, mechanisms can be put in place to ensure that the managers are the sole administrators of employee reward systems for good performance. This way, it creates an incentive for the employees to channel their attention for recognition to their managers, as they know that the sharing of valuable information with their managers for the improvement of the organization, if tied to performance parameters, can be directly recognised and rewarded by them and not the managing director.

With all that said, it has become very evident to me that knowledge sharing is very complex. Therefore, practically, it is not easy to define a sole solution that would see the organization do knowledge sharing better. It will have to be a series of different solution driven actions that must be taken continuously and over an extended period of time. This is because; to quote a proverbial saying, ‘’there are lots of ways to skin a cat’’, however, in the case of knowledge sharing in my organization, while skinning this cat, we shockingly find that the cat has turned into a king cobra. The question then immediately becomes, how do you skin a king cobra? Therefore, there may always be the problem of taking action, that action either causing change that further action is needed to tackle or revealing another dimension to the problem that a different action is required to tackle.

CHAPTER 6- CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter will summarise the process undertaken during the research and the outcome of the research. While doing so, it should also demonstrate the impact the research has had on me as an insider researcher, my personal learning that has taken place, and also the impact and learning that has taken place within the organization at large. Concluding with a discussion on the implications of the research for the larger management community, limitations of the study and future research needed.

Empirical evidence from available research on organizational development, agree that knowledge continues to be that intangible organizational asset that can create innovation and provide an organization with a competitive edge in its marketplace (Foss & Pedersen, 2002; Spender & Grant, 1996). Therefore, capturing and transfer of that knowledge across the organization from those that have it to those that need it must also be considered (Hinds et.al, 2001). Therefore, as an owner-manager in my organization, with the aim of growing that organization and ensuring that it succeeds in the marketplace and achieves its goals, the importance of this research to my individual managerial aims, the aims of my organization and the management community at large, cannot be understated.

At its most basic definition in an organizational context, knowledge sharing is the sharing of information and experience relevant to the context of the organization, by an individual in an organization, to other individuals in that organization (Wang, 2004). The somewhat simple flow of information and experience from one individual to another has huge ramifications on the organizations ability to survive in its marketplace, by creating competitive advantage through using knowledge to innovate (Nonaka, 2007; Gruenfeld, et al, 2000; Liu et al, 2019). By this definition and understanding, as an active and experienced member of that organization, my organisational problem was evident to me.

My experience in my organization exposed me to the effects of the inadequate levels of knowledge sharing that was the norm in my organization. The lack of transfer of information and experience created bottlenecks at all levels of the organization and was evident in how little information some employees had about their job tasks and their deficiencies in the required knowledge to perform those tasks effectively. Therefore, the aim of this research was to achieve two things. Firstly, to understand the reasons why knowledge is not being shared within my organization by investigating the factors that influence knowledge sharing. Secondly, to use the results of this investigation to uncover strategies to improve knowledge sharing and ensure that the organization does knowledge sharing better, to contribute to the organisational development of the company.

6.2 How the research was conducted

The preliminary steps of the research began with the problem conceptualization and diagnosis phase in which from my experience as an insider in the organization, I commenced a provisional conceptualization of the problem of poor knowledge sharing within my organization and engaged in a critical review of the literature to help shape the conceptualization of the problem and to uncover knowledge that will to inform the next steps. Although I chose knowledge sharing as the topic for this research, it is also important to state that the problem of knowledge sharing in my organization was not conceptualised by myself alone. In my role as the managing director of the organization, this issue of poor knowledge sharing has been brought up for discussion by other members of the organization over the years and has been a historic challenge for the organization.

The planning phase commenced with an introductory meeting into the organization with senior managers, in which the purpose of the research was explained and the plan for the research explored. This collaborative planning process aided in the efficient allocation of organizational resources in a manner that would ensure the time and manpower needed for the research did not detrimentally interfere with the daily operations of the organization but would still allow the research to fulfil its objectives. This was followed by a forum held with all members of the organization to explain the purpose of and involvement in the research. This forum provided members an avenue to express their general awareness and views on the subject of knowledge sharing in the organization. Finally, the evaluation step consisted of an evaluation of the literature and information obtained from the forum, all of which helped improve my understanding of the problem and also helped to shape the type and manner of questions that would be asked during the interview phase.

The action research cycle commenced with the further diagnosis of the problem through the use of a qualitative inquiry of face-to-face individual interviews to obtain first hand, on the ground data that was unique and tailored to my organization. The intent was to try to understand the phenomenon of knowledge sharing through the first hand lived experiences of other members of my organization, therefore, understanding the reasons why knowledge was being hoarded by those who possessed key knowledge and also, uncovering those factors that could encourage more knowledge sharing within my organization. The next phase continued as a planning phase and in the spirit of continuous collaboration, once the data from the interview phase was gathered, sorted and analysed, it was used as the basis of the action planning meeting that followed, in which a group consisting of key members of the organization were presented emerging themes of the data that was emerging from the research. The purpose of this group meeting was to discuss the complex nature of the data emerging from the research, create more awareness of how deep rooted the problem was, and to stimulate conversations that could potentially bring up suggestions that would aid in formulating a working strategy for intervention. All of these together would form the basis of an intervention strategy that is intended to solve the organizational problem of poor knowledge sharing, and ensure that members of the organization did knowledge sharing better.

The literature review, empirical data from the data collected and results of the intervention, revealed that knowledge sharing is very complex and the knowledge sharing behaviours in my organization are not influenced by a single factor, rather they are influenced by the interrelation and interconnectedness of a series of factors.

6.3 Overview of the research findings

The aim of this research was to achieve two things. Firstly, to understand the reasons why knowledge is not being shared within my organization by investigating the factors that influence knowledge sharing. Secondly, to use the results of this investigation to uncover strategies to improve knowledge sharing and ensure that the organization does knowledge sharing better, to contribute to the organisational development of the company. The following sections will discuss how these research questions were addressed in the research.

The First Research Question

In addressing the first research question, i.e., to understand the reasons why knowledge is not being shared within my organization, a conceptual model was developed using existing literature to uncover the factors that influence knowledge sharing between individuals in organizations. This conceptual model was then refined using empirical data from this research to develop a bespoke knowledge sharing model, tailored to my organization. Using this model, it was uncovered that the major factors that influence knowledge sharing in my organization, and cause the organization to do knowledge sharing poorly are Power, Culture and Process. These factors impact knowledge sharing individually but also interact to impact knowledge sharing in complex ways, thereby, supporting the view of the literature that knowledge sharing is often a complex process.

Power

At a fundamental level, Nonaka, (2007) argues that all new knowledge is born by an individual. Also, since knowledge must flow from one individual to another, the consideration of the complexity of interpersonal dynamics i.e., how individuals relate to one another (McDermott, 1999, Carter & Scarbrough, 2001) cannot be ignored. Therefore, what this means is that the individual is at the heart of the knowledge sharing process and must be considered. This centrality therefore grants the individual with enormous power in the knowledge sharing process and success or failure of knowledge being passed from one person to another largely lies in his hands.

In a broad sense, the available literature largely comes to the same conclusion that individuals do indeed use their knowledge to wield power in a bid to achieving their own personal goals. Szulanski, (1996), attributes the fear of a loss of privilege or superiority a motivating factor as to why knowledge is not shared freely within organizations. In the case of my organization, the managers fear of a loss of their superiority and privilege in their positions as managers were indeed triggered by my actions when I pushed them aside, potentially providing them with the motive to withhold what they knew from their subordinates, as they tried to maintain their superiority, privilege, and power that their positions gave them.

I discovered that power contained in the individual in regards to knowledge sharing is significant. Most importantly, how the individual chooses to wield that power contributes to the success of failure of knowledge sharing in the organization. The understanding of this power is critically important in understanding why knowledge is not being shared, while also being key to understanding how knowledge could be shared better. Most individuals in my organization evidently used their tacit knowledge and knowledge gained by their positions within the organization, as a tool to maintain or acquire political power for the purpose of gaining political advantage over other members of the organization and advancing whatever agenda they had at that point.

As the owner-manager of the organization, my position provided me with significant power which unknown to me, I used to subvert the traditional knowledge sharing process by bypassing departmental managers, in a bid to ensure the job performance of their subordinates. In turn, to secure their employment and influence, some managers also used the power derived from their positions to cling on to their knowledge and ensure it remained solely inside their heads. This created an overreliance on them and the increased power this brought, made them indispensable, as some tasks could not be easily performed unless they were personally involved. My actions also created a sense of entitlement among the supervisors, who relished the opportunity to have the ear of the Managing Director. Therefore, to gain favour in my eyes, promote their standing and power within the organization and diminish the importance, influence and ultimate power of their managers, some supervisors withheld valuable knowledge from their managers and preferred instead to share that knowledge directly with me. It appeared that knowledge sharing therefore, was as an unprofitable thing to do at the individual level, as it would mean that some members would give up some degree of the power, influence and control they held if they shared their knowledge freely.

Going into this research, although I did not understand explicitly the concept of power as I now do, I did understand how significant the influence of the individual was in the knowledge sharing process as early on, I attributed a possible cause of the organizational problem to the actions of other influential individual members in the organization i.e., the managers. Notably, though not conceived from any hard data, rather just my experience at the time, I had referred to the actions of the managers in withholding valuable information as they tried to make themselves indispensable to the organization. Although it appears my assumptions were somewhat right, what I did not understand were the factors that led the managers to engage in such behaviours and in particular, the personal impact of my actions on their behaviour. The research has revealed that as the most powerful individual in the organization, my actions contributed to the creation of a culture of withholding knowledge for political gain and therefore, made it a logical behaviour for managers and other staff to withhold their knowledge as this was what the culture demanded of those members who wanted to survive in their jobs and protect their positions and employment. Therefore, going forward, I must make it a habit to reflect on the potential impact on knowledge sharing in the organization, of future actions l may take.

Culture

The culture of the organization can be seen in its core values, philosophies, and organizational practices (Cameron and Quinn, 2006; McDermott and O'Dell, 2001). The research revealed that the culture of this organization is an individualistic competitive culture, where members place great value in using their knowledge as a weapon to advance their individual agendas in a dog-eat-dog fashion, with the aim of maintaining their positions of power and influence in the organization.

This research uncovered that some elements of this organizational culture such as the leadership style, identification levels and organizational practices of the organization such as recruitment, training, and remuneration, all influenced to varying degrees, the advancement of this organizational culture, by creating and fuelling an environment where knowledge is not shared easily.

In the case of leadership, there is a prevailing autocratic style of leadership among managers in the organization that is characterised by a strict top-down preference for the flow of information, and an unwillingness by superiors to receive or act on feedback flowing upwards from subordinates. The data collected largely showed a displeasure among subordinates who are at the receiving end of this type of leadership and who react by not feeling the need to participate in the information sharing process because they feel that whatever knowledge they wish to contribute will not be accepted, considered, or appreciated by their managers. It also became clear as my intervention exercise went on, that the feeling of wanting to be heard, could also have contributed to the motives of the subordinates in their clamour to have the ear of the Managing Director, whenever I decided to bypass their managers and communicate directly with them. This leadership style led to a culture that stifles feedback and as such limits the flow of information upwards along the organizational hierarchy.

There is little research on the relationship between autocratic leadership style and knowledge sharing behaviours in organizations. However, as in the case of my organization, the literature does suggest that the impact of leadership on employee motivation to share knowledge is widely accepted as true. Researchers such as Politis, (2001) and Le Ba Phong et al., (2018) have argued that leadership styles that value followers and encourage their participation will encourage those followers to share their knowledge more freely, as against autocratic leadership styles which stifle knowledge sharing.

Although not having found much material supporting this in the literature, it was evident from my research that the link between leadership styles and knowledge sharing may be indirectly linked through the concept of power dynamics, as members seeking to gain influence and shore up their power base, may find the characteristics of autocratic leadership a more advantageous tool to achieve this aim. Therefore, the cause of poor knowledge sharing under an autocratic leader may be the pursuit of power.

The autocratic leadership style in my organization is a nationally dictated cultural factor as previously discussed in section 2.2.3 and to isolate and change it within the organization is a complex and very long-term endeavour and may not be an exercise worth venturing into. This is because members of the organization exist in a larger society outside the organization with societal norms that may supersede or have a larger impact on their behaviours than those of the organization where they spend a few hours a day.

The other factor in culture that was evidently linked to knowledge sharing within the organization was the lack of a single shared vision within the organization and therefore a shared interest was lacking, leading to an individualistic culture. Johnson et al., (1999) explained that there is no identification if an organization's interests and the individual interest do not align. This lack of identification can indeed lead to knowledge not being shared adequately, as members of the network do not feel accepted, leading to a withdrawal from social interactions with others and thus do not feel the need to share what they know with other members of that network (Nahapiet and Ghoshal, 1998 and Koranteng and Wiafe, 2018). The failure of the organization to convey its vision and mission to its members contributed to this lack of identification between some members and the organization. Knowledge as a valuable commodity was used to advance individual goals, without members willing to give up that valuable commodity for the fulfilment of the larger goals of the organization as there were no cultural pressures to do so.

The research also uncovered that some aspects of the organization's recruitment policy detrimentally impacted knowledge sharing. In some cases, employees did not have the required prerequisites for the jobs they held and therefore, from the onset, were not capable of receiving and using knowledge in a manner intended by the knowledge giver, which contributed to the knowledge giver refraining from sharing his knowledge with such individuals. Thereby creating a culture of a lack of trust that sees those with knowledge refrain from sharing their knowledge because they do not trust that it will be used as they intended.

It is therefore evident that the recruitment policy of the organization needs to ensure that person-job fit is achieved on every recruitment.

Also, it was identified that not enough training was conducted within the organization to help employees improve their ability to share knowledge. There is evidence that some employees did not feel confident enough to transfer their knowledge as they felt that such knowledge was not good enough and thus, they may be looked down on by potential knowledge receivers if they tried to share that knowledge. According to Cabrera & Cabrera, (2005), this lack of self-confidence can be remedied by training which will increase the self-assurance of the individual and cause him to feel confident enough to share what he knows.

Lastly, the remuneration practices of the organization were also uncovered to be significantly detrimental to knowledge sharing. One key issue was that the organization would often pay different wages to multiple employees partaking in the same job role. This meant that employees who had important tacit knowledge that should be transferred to their peers but then found out that they earned less than those peers, would react by withholding such knowledge. The withholding of knowledge was even greater when it was believed that the would-be knowledge receiver earned more because he was supposed to be more technically competent with greater skills than the employee who had the tacit knowledge to give. This flaw in remuneration is directly linked to the inadequate recruitment process of the organization, as there is no well-structured recruitment process that ensured that employees were recruited in a manner that facilitated the organization's goals.

Importantly, it has become clear through this research that as owner-manager and founder of the organization, I had a great influence on the culture of the organization, which created an environment in which the individualistic competitive actions taken by some members appeared logical to them. For example, my leadership actions with regards to how I chose to communicate with subordinates, contributed an environment of untrustworthiness and caused managers to act in individualistic ways that fuelled poor knowledge sharing. Also, as the ultimate leader and founder of the organization, my inability to convey a singular organizational vision and shared goals, created the grounds for members to determine their own vision and act in individualistic competitive ways to achieve their own defined goals.

Being aware of my impact on organizational culture is important going forward as this knowledge should make me more aware of the potential impacts of my actions and involvement in the organization on the knowledge sharing culture going forward.

Process

The research also revealed that communication and reporting, a factor attributed to organizational process, had a significant role to play in the poor state of knowledge sharing within the organization.

The state of communication and reporting within the organization was particularly inhibitive to knowledge sharing. Communication and reporting was used as a tool by members of the organization to stifle knowledge sharing as communication in both verbal and written forms is by its very nature, a vital means of passing on information and knowledge. Communication was largely a top-down affair with managers at the top of the organization rarely seeking feedback or engaging in dialogue with their subordinates. Without information flowing from the bottom to the top, valuable knowledge about key organizational events such as customer feedback, technical machinery operational data and on the job employee challenges were missed, to the detriment of the organization. This type of communication practice can be attributed to the steep hierarchical nature of the Nigerian culture at large, where individuals at the top are imbibed with power and authority and hence, may not feel the need to look down and seek information or support from those they have power over.

As the Manging Director, with the best of intentions in trying to go around this strict hierarchical system and see for myself what was going on at the bottom tiers of the organization and ensure that our operations run smoothly, by communicating directly with the subordinates and bypassing the managers, the problem of knowledge sharing was exacerbated. The managers reacted by withholding their knowledge from flowing from the top to the bottom of the hierarchy, while their subordinates stopped trying to pass information to them, rather preferring to pass that information directly to me. Therefore, my actions invertedly created a culture in which withholding one’s knowledge was appropriate.

The second research question

To achieve the second research aim, i.e., to uncover strategies to improve knowledge sharing and ensure that the organization does knowledge sharing better, to contribute to the organisational development of the company, the results of this research investigation informed and guided and intervention by the way of action taken to try to set the organization on a path to improving how its members shared knowledge.

Using the conceptual knowledge sharing model highlighted in figure 8 in Chapter 4.2 as a basis for taking action, I decided to intervene by making changes to how I as the owner-manager engaged in official communication and reporting with other members of the organization. I ceased all direct official communications and reporting with members of the organization who had departmental managers and ensuring that communication and reporting went through their managers instead. With the understanding that given the interlinked nature of the factors that affect knowledge sharing in my organization, it was my hope that resolving one factor would lead to the resolution of other interlinked factors to communication. For example, it was my hope that changing my communication style would improve the feeling of trust the managers felt, thereby improving their sense of belonging and identification with the company, which should in turn reduce any fears they may have of not being wanted and losing their jobs, which ultimately, will encourage them to increase their knowledge sharing with their subordinates.

Initially, knowledge sharing did show signs of improvement but not enough to say that we had now transformed into a knowledge sharing organization. Therefore, a recommendation that further action be taken with the introduction of a knowledge broker into the organization, who will be initially tasked with playing the role of a linkage agent by ensuring that the communication interface is improved between the knowledge giver and the knowledge user within the organization.

The literature has proved several links between communication and knowledge sharing behaviours, however these have largely been done by analysing communication indirectly through its use in leadership styles, teamwork and culture to influence knowledge sharing behaviours in organizations. For example, De Vries et al., (2010) argues that transformative leaders with supportive communication styles inspired by their charisma, had greater success in encouraging their followers to increase both their knowledge collecting and donating behaviours. Gara Bach Ouerdian et al, (2019) also argues that increasing teamwork leads to increased knowledge sharing as a result of members of that team having to increase their communication as they attempt to cooperate more to solve problems together. With regards to culture, Wilkesmann et al., (2009) notes that in countries that rank high on Hofstede, (1980) power-distance scale such as Nigeria, people at the lower end of the hierarchy rarely get the chance to share their knowledge as they fear penalties from stepping out of line. Therefore, it becomes understandable why I received significant participation and eagerness from those members subordinate to the managers, when I actively engaged in direct communication with them, as I was presenting their best case for getting their voices heard. The steep hierarchy can also explain the managers dismay at my actions as culturally, this would have been seen as somewhat taboo.

However, my approach to this type of direct communication with subordinates and willingness to receive feedback from them although influenced by wanting to get the job done as discussed in Chapter 5, was also influenced by my Laissez-faire/democratic style of management, which sees me want to place more decision making in the hands of my subordinates, going as far as ensuring that I communicate and deal directly with the last man or woman actually performing the final task in the chain of command. Unfortunately, this style is a great contrast to the existing autocratic style of management and leadership in Nigeria and hence will always be a shock to some members of the organization.

The intervention plan although improving some aspects of knowledge sharing, did not resolve the situation in its entirety. Therefore, it was the case in this research that after two Action Research cycles, the organizational problem was not resolved completely. Since Action Research is an ongoing process, there will be more cycles of planning, action and reflection that need to be taken in the long term, to resolve the organizational problem.

From this point, the introduction of the 'Knowledge Coordinating officer' (KCO) as a solution-based plan going forward is based on my perspective of the resulting analysis of the data and the outcome of the preliminary intervention I already took. However, in the time available for the research, it is not feasible to introduce my stated plan into the organization and empirically monitor the outcome of the intervention, and, subsequently use this data as a part of this thesis. However, once implemented, I would like to do more in the future to empirically monitor and assess what the outcome of the intervention and see if it has improved knowledge sharing in the short term and subsequently, determine if there are any improvements in our long-term performance in the achievement of our organizational objectives of profitability, competitive edge, and market share.

With this in mind and in line with the recommendation made in chapter 5, the next step should be to immediately create and fill the new position of knowledge broker, which will be named knowledge coordinating officer (KCO). To ensure respect and compliance for the KCO by other members of the organization, the KCO will be positioned and supported by senior management through an empowering job description and job function that will allow him/her to transcend departmental and hierarchical boundaries to immediately lead and enforce the knowledge sharing initiatives in relation to communication and reporting, going forward. The KCO will focus on ensuring corporate or organizational level information is disseminated and explained to members of the organization and will be the first point of call to deal with concerns, complaints, enquiries, and all forms of feedback to corporate information by members of the organization. This will ensure that key organizational information such as the vision, mission, policies, and procedures of the organization, as well as key events, that are key to building a unified culture that supports knowledge sharing is always shared with all members of the organization.

The KCO will also be involved in intra and inter departmental group meetings and will stand as a neutral third party to facilitate, observe and monitor the level of information sharing taking place in the meetings and taking initiatives to help integrate teams better, using information. To aid this, the organization will implement the use of the Microsoft Team application software to aid in the interactions of group members. Microsoft Team application will create an open and easily accessible platform in which members can interact and be exposed to important information emanating from key discussions. With the interactive features in the application, the KCO will be able to quickly facilitate group meetings through group chats so that critical departmental and organizational issues are discussed quickly even without in person meetings. Also, the file sharing and storing feature of the application should also improve the sharing of information among members of the group and ensure all members can easily locate key information. File sharing frequency can also be easily monitored by the KCO and used as an indication of the frequency of information flow.

The use of Microsoft Team application will aid in the monitoring and collection of key indices that can be used by the KCO and myself to measure the effectiveness of knowledge sharing initiatives, such as the frequency of each individual's participation and contribution in group discussions, the frequency of questions being posed by subordinates to supervisors or managers and vice versa, the frequency in which the information provided has been useful in bringing about the resolution to problems etc.

Since the advent of the corona virus pandemic, there has been a proliferation and greater acceptance of the use of communication tools that eliminate the daily need for face to face in person interactions. Manufacturing companies in Nigeria are required to limit the number of employees in the factories at any given time and ensure adequate spacing during meetings therefore, the use of remote online communication channels is being used more. Prior to the pandemic, members of my organization have had exposure to online communication tools as we have used the mobile phone application 'Whatsapp' for group meetings and video conferences in the past. Therefore, I do not envision that there should be much of a problem in adapting to a new and more tailored communication software. The use of online communication devices will benefit and help improve communication within the organization because due to the pandemic, not all organizational functions need to be carried out in person at the factory building anymore to reduce the risk of spreading the coronavirus. For example, the sales team are not required to report for daily in person meetings at the factory building anymore as this is now mostly done remotely.

The KCO will also be present and a part of the team that takes newly recruited employees through their orientation and training process, ensuring that these new members are presented with the information and knowledge resource that will see them understand the nature of the organization and their roles in it, while also making them aware of knowledge sharing resources and best practices that are expected of them as they join the organization. This will help combat on day one, any contrary information they may receive from other members of the organization that continue to resist knowledge sharing initiatives.

However, it is also important for the KCO not to operate as a dictator in a closed system in which knowledge sharing behaviours are forced as this will not be sustainable. For a behavioural change, knowledge sharing cannot be forced and must be done voluntarily by each member of the organization. Therefore, in this spirit, this KCO led initiative must be done in consultation with the staff body, their opinions sought and their participation solicited and encouraged. This way, we can maintain an open and continuously innovative system that sees the best knowledge sharing ideas generated and implemented in the organization. This collaborative effort helps in bridging the power gap between the top, middle and bottom tiers of the organizational hierarchy by encouraging participation and inclusion of junior members of the organization in the decision-making process, hopefully, further helping the knowledge sharing initiatives.

With the KCO being very visible in the organization and being a key part of the environment going forward, the consciousness of our members should be increased towards knowledge sharing, increasing participation in knowledge sharing and hopefully, causing a culture change to a knowledge sharing culture, so that one day, we can say ‘knowledge sharing is what we do here’.

6.4 Learning

First Person Learning

This Action research process of planning, taking action, observing and reflecting that has been followed throughout this research has greatly benefitted me and my organization by aiding our learning on the subject of knowledge sharing. Learning has occurred because the Action research process has involved me as the researcher engaging in research on a social system which I am actively and functionally a part of and gaining managerial soft skills while doing so. My active membership in this social system both as researcher and participant meant that the exploration of social issues of interaction and relationships between members of the system and the system at large, led to a participation between the researcher and other members of the group, due to the fluid boundaries that exist between myself as a researcher, as a member of the social system and also other members of the social system that make up my organization (Bawden, 1991). This meant that as social issues were explored, the understanding and learning that occurred were automatically tied to the actions we took to bring about change to the issues (Zuber-Skerritt & Perry, 2002).

Personally, through the process of this research I have seen myself transform into a more critically reflective individual. I have become more aware of the role I played in the problem and in the process, I have become more comfortable in critiquing myself and my actions as a manager and founder of the organization. For example, prior to conducting this research, I looked at the organisational problem solely from my lived experiences and this carried with it a lot of biases and assumptions as to the nature of knowledge sharing in my organisation, what the cause of the knowledge sharing problem was and what would be the potential solution to the problem. As stated at several points in this thesis, I initially regarded knowledge sharing, as a problem, solely amongst other members of the organisation below me in organisational hierarchy. Secondly, I assumed that the problem was caused solely by a fear of a loss of employment by the managers and largely felt that any solutions would have to come from dealing with their irrational fears and forcing them to share their knowledge in some way. These assumptions played a big role in the unsuccessful actions I took to address this problem over the years. For example, laying off managers and others unwilling to share their knowledge as I felt that a replacement would participate freely in knowledge sharing. Only to have that replacement not freely and willingly sharing his knowledge and engaging in behaviours similar to his predecessors.

Learning came as my assumptions about the nature of the problem were challenged as the collection of data commenced. I gained valuable insights into the lived experiences of other members of the organisation and it quickly became clear that I was also one of the players causing knowledge not to be shared freely in the organization, while also revealing some of the real reasons why knowledge was not being shared by members of the organization. The exposure of my biases and assumptions in my decision making and seeing the detrimental effects this has had on my organisation taught me the importance of critical reflection and analysis, while also improving my ability to be flexible in how I approached the conceptualization of problems.

I have also seen the value of taking a more collaborative and consultative approach by finding out from employees what's going on, rather than assuming I already know the nature of things. As a manager what this means for me personally is the understanding that a collaborative effort in problem solving is important to draw out nuances that I may not see personally but that are seen by others in the organization. In the case of this research, such nuances were drawn out from the data collected through the collaborative involvement of others in the organization. Thereby improving my understanding of how I saw the problem and increased my learning. Therefore, I plan to adopt a more consultative and collaborative approach to my style of management going forward.

6.5 Second person learning

The participatory nature of action research has meant that other members of the organization had the opportunity to be a crucial part of the research and this involvement meant that they too may have been changed in some way as individuals and as a group. Organizational learning occurred through this process as meetings were conducted in the form of an action planning group which was formed and consisted of myself, senior managers and other members who held key positions within the organization and who all participated in the research process. This group provided an avenue to meet, discuss and together, resolve the problem of knowledge sharing while the research process went on and was informed by the emerging data from the research. Within the group, members were actively involved in the process of planning, taking action, observing the effects of those actions and engaging in critical reflection on a daily basis. This process resulted in the development of soft skills for myself and other members of the organization involved in the research process. The soft skills we have learnt as a group of managers in the organisation are the abilities to re-align the focus of the management to resolving knowledge sharing issues, motivating and encouraging employees to actively participate in knowledge sharing and actively engaging in the recreation of new organizational beliefs and values. These soft skills learned have been beneficial to facilitating the process of change that we are currently going through, as we try to do knowledge sharing better.

Organisational learning also came when I decided to take action after data was collected by, reducing my participation in the day-to-day internal communication process of the organisation and also attempting a more open communication style with relevant members of the organisation, using an internet based, mobile application for communication. As an organization, the actions of some individuals in response to my intervention showed that learning had occurred. For example, in subsequent group meetings aimed at resolving critical operational issues, there was increased contribution of information to the group, by members who in the past would refrain from speaking. Although I do not currently have hard data by means of a survey or interview, however, from my participation with other members on a daily basis, it is observable that junior employees involved in group meetings feel greater confidence in expressing their views and opinions about any topic on hand. Also, there appears to be a growing belief among junior members of the organization that I have greater confidence in the abilities of the managers, considering the significant length of time that has elapsed since my communication intervention and in that time, I have not reneged on my actions.

Such a monumental action in the context of our organization, has further highlighted the importance of knowledge sharing within our organization and therefore, realigned the focus of management to tackling this issue, by taking a first step of introducing a knowledge broker role into the organization. Hopefully, this can start the process of redefining the values and beliefs of the organization in line with knowledge sharing, so that knowledge sharing becomes the cornerstone of what we do at our organisation.

However, organizational learning is a continuous process especially with a complex social phenomenon like knowledge sharing. Although the consciousness of members of the organisation has been increased towards the importance of knowledge sharing, there is still some resistance to the idea of knowledge sharing as evident in the problems that resulted from the action that I took to address the issues of communication. It appears that there may always be members of the organization that seek to use their knowledge to gain power and improve their standing in the organisation. As an organization, we must increase the process of redefining the values and beliefs system in the organization and create a culture of knowledge sharing, as it is my opinion that a cultural change may have the more far reaching and long-lasting effect that is needed to ensure knowledge sharing is instituted and remains long term. A cultural change must take place as culture is a major factor in what forms the attitude of individuals and attitude is a key factor that directly determines that individual's behaviour in society (Henttonen et al, 2016). Therefore, if the culture leads to members of the organisation having a positive attitude towards knowledge sharing, then individuals will act positively towards sharing their knowledge (Bock & Kim, (2002); Ruy et al, 2003).

At the onset of the research, the plan was to use data from the research to come up with a solution driven strategy to improve knowledge sharing within my organization and see the organization do knowledge sharing better. This strategy was to be implemented and the results empirically monitored to understand how the intervention impacted the problem, all within the timeframe mandated for the research by the university of Liverpool. However, in early 2020, the world was hit with the Covid-19 pandemic and a new social and economic reality for organizations was forced on us. We were not prepared for the detrimental effects this singular event would have on our organization and a fight or flight mechanism for organizational survival was triggered. Well, I chose not to flee and as the Managing Director, I spent the majority of my time in 2020 and 2021 fighting through the myriad of unforeseen problems to keep the organization alive, all the while still working hard to complete my research and thesis. I fight till this day as the effects of Covid-19 still remain and have been compounded with a new economic downturn caused by the increase in food prices that have stemmed from the current Russia-Ukraine war in Europe. Being in the food industry and relying on grain from that part of the world, the detrimental effects to our business are such that we must now find new ways of ensuring our survival.

6.6 Contributions of this Thesis

The study makes a significant contribution to the management knowledge available for managers and owner-managers of SMEs in Nigeria by educating them on the factors that may possibly impact knowledge sharing in their organizations and specific actions to take to improve knowledge sharing in their organisations. Although this research cannot claim to have discovered completely new factors, as these factors uncovered had largely been identified across existing literature on knowledge sharing, however, the significance of these factors in the context of a Nigerian SME had not been previously identified.

Also, most literature on knowledge sharing have often looked at how the knowledge sharing factors impact knowledge sharing individually. However, in the context of my organization, my research shows very clearly how the factors of Power, Culture and Process combined, interact and reinforce each other to impact knowledge sharing between individuals in an organization. This is important in how managers should understand knowledge sharing as a concept going forward.

Using Action Research methods, this research uncovered specific actions that need to be taken to improve knowledge sharing in the specific context of my organization and this has previously never been discussed in existing literature on knowledge sharing in organizations as Action Research was designed to produce context specific results and not a generalisable result. It is therefore my opinion that it is this specificity of context that gives this research its uniqueness. Therefore, it is my belief that owners and managers of other SME organizations in Nigeria can look to the methods employed in this research, apply it to their own organizational context and produce results that will also be specific to them.

Also, this study informs owner-managers especially about how their positions imbibe them with significant power and influence and how that power is often used to hinder knowledge sharing consciously or unconsciously, especially as it relates to influencing the culture of their organizations. For example, as this research has shown, through the power they wield, in their bid to ensure individual members carry out their job tasks in line with the owner-managers directives or wishes, the act of directly engaging in formal communications and reporting with subordinates in a manner that side-lines the managers, creates an environment of distrust between middle managers and their subordinates, and can causes knowledge not to be shared freely. From my regular interactions with other SME owner-managers in my day-to-day life, this action of taking control to engage directly with subordinates in a bid to 'get the job done' is a recurring theme in Nigeria and therefore this research should inform them of the adverse consequences of what may be thought of as a harmless action.

For those change managers in organizations who struggle with low levels of identification among its members, this research will also bring an awareness that their members being used to setting their own priorities may not initially understand the importance of knowledge sharing to the organization as they may have existed for far too long in an environment that puts selfish interests first. Therefore, they must approach organizational change in a slow and steady diplomatic manner, so as to encourage buy-in from all or most members of the organization and not enact instant broad and sweeping change initiatives that may alienate and demotivate members and cause their performances to drop in such a manner that the normal business of the day may be put in jeopardy.

Although context specific in this case, and specifically for this reason, it is my view that my research can add to the current body of management knowledge and play its role in providing managers in Nigeria and other parts of the world with practical information on knowledge sharing in SME organizations especially with insight into its relationship to power, culture and organizational processes.

On the nature of culture in organizations, a key thing to note is that, being British educated, and managing an organization in a Nigerian culture that places high importance in a strict hierarchical organizational culture, it was evident that my Western leadership style which saw me bypass the strict hierarchical order and communicate directly with whoever I felt could get the job done properly, had unintended consequences that caused managers to refrain from sharing their knowledge, as they saw my actions as being a treat to their status in the organization.

Also, managers should as a matter of great importance, be aware of the complex relationships that exists between the factors that affect knowledge sharing and therefore be aware of the near impossibility of tackling one factor with the expectation of having an isolated effect. Therefore, managers must be conscious of how these factors impact one another in practice as the knowledge sharing model developed in this research shows. The understanding of this interconnectedness of the factors that impact knowledge sharing is crucial in the development of any knowledge sharing programs in practice.

6.7 Limitations of this research

A key limitation of this research is in the applicability of its results. Since Action Research strategy was used for this study, the results it produces are highly context specific to my organization and therefore cannot be expected to be the same results that would be derived if applied to another body of study. This is one key limitation of the Action Research strategy as Action Research is designed to investigate a social problem in a specific context and emerge with actionable social knowledge for that context (Greenwood and Levin, 2007). This means that although managers of organizations can draw on the methods used in this research, the knowledge sharing model derived from this research may not be applicable in understanding the factors affecting knowledge sharing in their organisations and therefore, taking action to improve knowledge sharing in their organizations based on this model, may prove ineffective.

Secondly, the results of this research were drawn from the analysis of data from a relatively small number of research participants and as such may differ if a larger number of participants were used. Unfortunately, the participants used for this research were what was available for the research at the time and therefore, the research had to make do with what was at its disposal.

6.8 Further research

One of the aims of this research was to identify factors that affect knowledge sharing in my organization. However, the statistical significance of these factors to knowledge sharing was not uncovered to show the relative relevance or impact of each factor to the way knowledge is shared in the organization. To know the relative impact of each factor in a statistical way is important because for an SME with limited resource constraints, when faced with organizational problems, managers must consider which areas to allocate resources that would give them a greater chance of resolving that organizational problem. Be it financial resources, human capital or time that will be allocated to resolve an organizational problem, allocating these resources in one area, may mean that those resources are not available to be used in another area of the organization.

Therefore, if it can be ascertained that one factor impacts knowledge sharing more than another, it may mean that if addressed would get the firm to engage in the most knowledge sharing. Therefore, to minimise the risk of failure in resolving the problem, resources can be allocated accordingly. In relation to this research, this is the area that is lacking and further scholarly research needs to be done in this area.

REFERENCES

Alavi, M., Kayworth, T.R. and Leidner, D.E. (2005), "An empirical examination of the influence of organizational culture on knowledge management practices", Journal of Management Information Systems, Vol. 22 No. 3, pp. 191-224

Alexander Serenko (2020) 'Knowledge sabotage as an extreme form of counterproductive knowledge behavior: the perspective of the target', Journal of Knowledge Management, 24(4), pp. 737–773. doi: 10.1108/JKM-06-2019-0337

Al-Kurdi, O. F., El-Haddadeh, R. and Eldabi, T. (2020) 'The role of organisational climate in managing knowledge sharing among academics in higher education', International Journal of Information Management, 50, pp. 217–227

Allen, D.G., Shore, L.M. and Griffeth, R.W. (2003), "The role of perceived organizational support and supportive human resource practices in the turnover process", Journal of Management, Vol. 29 No. 1, pp. 99-118.

Alsharo, M., Gregg, D., & Ramirez, R. (2017). Virtual team effectiveness: The role of knowledge sharing and trust. Information & Management, 54(4), 479e490.

Andrews, K.M. and Delahaye, B.L. (2000) 'Influences On Knowledge processes In Organizational Learning: The Psychosocial Filter', *Journal of management studies*, 37(6), pp. 797–810. Available at: https://doi.org/10.1111/1467-6486.00204

Argote, L. and Ingram, P. (2000), "Knowledge transfer: a basis for competitive advantage in firms", Organizational Behavior and Human Decision Processes, Vol. 82 No. 1, pp. 150-169

Argyres, N. (1996) 'Evidence on the Role of Firm Capabilities in Vertical Integration Decisions', Strategic Management Journal (John Wiley & Sons, Inc.), 17(2), pp. 129–150

Argyris, C. and D. Schön (1991). Participatory action research and action science compared. Participatory action research. W. F. Whyte. Newbury Park CA, Sage.

Baker, M., M. Baker, J. Thorne, and M. Duntell. 1997. "Leveraging human capital." J. Knowl. Manage. 1 (1): 63–74.

Bakkenes, I., Vermunt, J. D., & Wubbels, T. (2010). Teacher learning in the context of educational innovation: Learning activities and learning outcomes of experienced teachers. Learning and Instruction, 20, 533–548.

Bakker, M., Leenders, R. T. A. J., Gabbay, S. M., Kratzer, J., & Van Engelen, J. M. L. (2006). Is trust really social capital? Knowledge sharing in product development projects. The Learning Organization, 13(6), 594−605.

Bakker, M., Leenders, R.T.A.J., Gabbay, S.M., Kratzer, J. and Engelen, J.M.L.V. (2006), "*Is trust really social capital? Knowledge sharing in product development projects*", The Learning Organization, Vol. 13 No. 6, pp. 594-605.

Barney G. Glaser (1965) 'The Constant Comparative Method of Qualitative Analysis', *Social Problems*, 12(4), pp. 436–445. doi: 10.2307/798843.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17, 99–120.

Barney, J. B. 1991. "Firm Resources and Sustained Competitive Advantage." Journal of Management 17 (1): 99–120

Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational rewards systems. Journal of Leadership and Organization Studies, 9(1), 64−76.

BAWDEN, R. J. (1991) 'Systems thinking and practice in agriculture', *Journal of dairy science*, 74(7), pp. 2362–2373

Bennet, A. and Bennet, D. (2004), ''The partnership between organizational learning and knowledge management'', in Hosapple, C.W. (Ed.), Handbook on Knowledge Management, Springer, New York, NY, pp. 439-55.

Bock, G. and Kim, Y.G. (2002), "Breaking the myths of rewards: an exploratory study of attitudes about knowledge sharing", Information Resources Management Journal, Vol. 15 No. 4, pp. 14-21.

Bock, G.-W., Zmud, R. W., Kim, Y.-G., and Lee, J.-N. (2005) "Behavioral Intention Formation in Knowledge Sharing: Examining the Roles of Extrinsic Motivators, Social-Psychological Forces, and Organizational Climate," MIS Quarterly (29:1), pp. 87-111.

Bolino, M.C. (1999), ‘‘Citizenship and impression management: good soldiers or good actors?’’, Academy of Management Review, Vol. 24 No. 1, pp. 82-98.

Boden, A. *et al.* (2012) ‘Knowledge sharing practices and the impact of cultural factors: reflections on two case studies of offshoring in SME’, *Journal of software: evolution and process*, 24(2), pp. 139–152. Available at: https://doi.org/10.1002/smr.473.

Bordia, P., Irmer, B. E., & Abusah, D. (2006). Differences in sharing knowledge interpersonally and via databases: The role of evaluation apprehension and perceived benefits. European Journal of Work and Organizational Psychology, 15(3), 262−280.

Brush, C. and Vanderwerf, P.A. (1992), ‘‘A comparison of methods and sources for obtaining methods estimates of new venture performance’’, Journal of Business Venturing, Vol. 7, pp. 157-70

Brydon-Miller, Mary, Davydd Greenwood, and Patricia Maguire. 2003. “Why Action Research?” Action Research 1(1): 9–28.

Buckley, S., & Jakovljevic, M. (2013). Knowledge management innovations for interdisciplinary education: Organizational applications. Hershey, PA: IGI Global.

Burgess, D. (2005), ‘‘What motivates employees to transfer knowledge outside their work unit?’’, Journal of Business Communication, Vol. 42 No. 4, pp. 324-48

Cabrera, A. and Cabrera, E. (2002), “Knowledge sharing dilemmas”, Organisation Studies, Vol. 23 No. 5, pp. 687-710.

Cabrera, A., Collins, W. C., & Salgado, J. F. (2006). Determinants of individual engagement in knowledge sharing. International Journal of Human Resource Management, 17(2), 245e264.

Cabrera, E.F. and Cabrera, A. (2005), “Fostering knowledge sharing through people management practices”, The International Journal of Human Resource Management, Vol. 16 No. 5, pp. 720-735.

Cameron, K.S. and Quinn, R.E. (1999), Diagnosing and Changing Organizational Culture, Addison-Wesley, Reading, MA

Canals, A. (2021) 'To hoard or to share?: Strategic management of knowledge and ICTS in complex economic systems', Intangible Capital, 17(2), pp. 148–172. doi: 10.3926/ic.1358.
Cardoni, A., Dumay, J., Palmaccio, M. and Celenza, D. (2018), "*Knowledge transfer in a start-up craft brewery*", Business Process Management Journal, Vol. 25 No. 1, pp. 219-243.

Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. Academy of Management Journal, 50(5).

Carter, C. and Scarbrough, H. (2001) 'Towards a second generation of KM? The people management challenge', Education + Training, 43, pp. 215–224

Cavaliere, V., Lombardi, S., & Giustiniano, L. (2015). Knowledge sharing in knowledge intensive manufacturing firms. An empirical study of its enablers. Journal of Knowledge Management, 19, 1124–1145.

Charmaz, K. (2014) *Constructing Grounded Theory*. London: SAGE Publications, pp. xxi–xxi.
Chatman, J. A. (1991). Matching people and organization: Selection and socialization in public accounting firms. Administrative Science Quarterly, 36, 459–484.

Chen, C.J. and Hung, S.W. (2010), "To give or to receive? Factors influencing members' knowledge sharing and community promotion in professional virtual communities", Information & Management, Vol. 47 No. 4, pp. 226-236.

Chen, I. Y. L., Chen, N.-S., & Kinshuk (2009). Examining the Factors Influencing Participants' Knowledge Sharing Behavior in Virtual Learning Communities. Educational Technology & Society, 12 (1), 134–148.

Cheung, S.Y., Gong, Y., Wang, M., Zhou, L. and Shi, J. (2016), "When and how does functional diversity influence team innovation? The mediating role of knowledge sharing and the moderation role of affect-based trust in a team", Human Relations, Vol. 69 No. 7, pp. 1507-1531

Chiu, C.-M., Hsu, M.-H., &Wang, E. T. G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. Decision Support Systems, 42(3), 1872–1888.

Coghlan, D. and Brannick, T. (2014) *Doing action research in your own organization / David Coghlan & Teresa Brannick.* 4th ed. Los Angeles: SAGE.

Coghlan, D. and Brydon-Miller, M. (2014) *The SAGE encyclopedia of action research / general editors, David Coghlan, Mary Brydon-Miller.* Edited by D. Coghlan and M. Brydon-Miller. Los Angeles: SAGE.

Cohen, W.M. and Levinthal, D.A. (1990) 'Absorptive Capacity: A New Perspective on Learning and Innovation', *Administrative Science Quarterly*, 35(1), pp. 128–152. Available at: https://doi.org/10.2307/2393553.

Collins, C.J. and Smith, K.G. (2006), "Knowledge exchange and combination: the role of human resource practices in the performance of high-technology firms", Academy of Management Journal, Vol. 49 No. 3, pp. 544-560.

Connelly, C. and Kelloway, E. (2003), "Predictors of employees' perceptions of knowledge sharing cultures", Leadership &Organization Development Journal, Vol. 24 No. 5, pp. 294-301.

Constant, D., Kiesler, S., and Sproull, L. (1996) "The Kindness of Strangers," Organization Science (7:2), pp. 119-135

Cook, K. S., Cheshire, C., Rice, E. R. W., & Nakagawa, S. (2013). Social exchange theory. In Handbook of social psychology (pp. 61–88). Springer

Coughlan, P. *et al.* (2021) 'Exploring and Exploiting the Dynamics of Networks in Complex Applied Research Projects: A Reflection on Learning in Action', *British journal of management*, 32(4), pp. 1440–1455. Available at: https://doi.org/10.1111/1467-8551.12482.

Coun, M. M. J. H., Peters, P. C. P. and Blomme, R. R. J. (2019) '"Let's share!" The mediating role of employees' self-determination in the relationship between transformational and shared leadership and perceived knowledge sharing among peers', European Management Journal, (4)

Coun, M. M. J. H., Peters, P. C. P. and Blomme, R. R. J. (2019) '"Let's share!" The mediating role of employees' self-determination in the relationship between transformational and shared leadership and perceived knowledge sharing among peers', European Management Journal, (4)

Creswell, J. W. (2013). Qualitative Inquiry & Research Design: Choosing among Five Approaches (3rd ed.). Thousand Oaks, CA: SAGE

Creswell, John W. (2017). 4th Edition. "*Qualitative Inquiry and Research design (international student edition) Choosing among five approaches.* John W Creswell. 14 London: SAGE Publications

Cummings, J. N. (2004). Work groups, structural diversity, and knowledge sharing in a global organization. Management Science, 50, 352-364.

Dahlin, K. B., Weingart, L. R., & Hinds, P. J. (2005). Team diversity and information use. Academy of Management Journal, 48, 1107–1123.

Davenport, T. H. and Prusak, L. (2000) '"Working Knowledge: How Organisations Manage What They Know"', Dallas Business Journal

David W. De Long and Fahey, L. (2000) 'Diagnosing Cultural Barriers to Knowledge Management', *Academy of Management perspectives*, 14(4), pp. 113–127. Available at: https://doi.org/10.5465/ame.2000.3979820

Dessi, C. *et al.* (2014) 'How small family-owned businesses may compete with retail superstores: Tacit knowledge and perceptive concordance among owner-managers and customers', *Journal of small business and enterprise development*, 21(4), pp. 668–689. Available at: https://doi.org/10.1108/JSBED-02-2014-0025.

De Vries, R. E., Bakker-Pieper, A., & Oostenveld, W. (2010). Leadership = communication? The relations of leaders' communication styles with leadership styles, knowledge sharing and leadership outcomes. Journal of Business and Psychology, 25, 367–380

Desouza, K.C. and Awazu, Y. (2006), "Knowledge management at SMEs: five peculiarities", Journal of Knowledge Management, Vol. 10 No. 1, pp. 32-43.

Eisenberger, R., J. Cameron. 1996. Detrimental effects of reward: Reality or myth? Amer. Psych. 51 1153-1166

Emna Gara Bach Ouerdian, Nizar Mansour, Abdallah Al-Zahrani & Amal Chaari (2019) Promoting knowledge sharing in Tunisian KIFs through HRM Practices. The mediating role *of human capital and learning climate, The International Journal of Human Resource Management, 30:16, 2321-2359, DOI: 10.1080/09585192.2017.1322117*

Empson, L. (2001) ‘Fear of Exploitation and Fear of Contamination: Impediments to Knowledge Transfer in Mergers between Professional Service Firms’, *Human relations (New York)*, 54(7), pp. 839–862. Available at: https://doi.org/10.1177/0018726701547003.

Espinilla, M, Martínez, FJ, Martínez, L & De Andrés, R (2012). ‘A 360-degree performance appraisal model dealing with heterogeneous information and dependent criteria’, Information Sciences, 222, pp. 459–471.

Everd Jacobs and Gert Roodt (2007) ‘The development of a knowledge sharing construct to predict turnover intentions’, Aslib Proceedings, (3), p. 229

Farhan Ahmad and Muhaimin Karim, (2019) "Impacts of knowledge sharing: a review and directions for future research", Journal of Workplace Learning, Vol. 31 Issue: 3, pp.207-230

Flinchbaugh, C., Li, P., Luth, M.T. and Chadwick, C. (2016), “Team-level high involvement work practices: investigating the role of knowledge sharing and perspective taking”, Human Resource Management Journal, Vol. 26 No. 2, pp. 134-150

Fong, C. H., & Ooi, K. B., Tan, B. I., Lee, V. H., Chong, A. Y. (2011). AHRM practices and knowledge sharing. International Journal of Manpower, 32, 704–723.

Ford, D. P., & Chan, Y. E. (2003). Knowledge sharing in a multi-cultural setting: A case study. Knowledge Management Research & Practice, 1(1), 11−27.

Ford, D., Myrden, S.E. and Jones, T.D. (2015), “Understanding ‘disengagement from knowledge sharing’: engagement theory versus adaptive cost theory”, Journal of Knowledge Management, Vol. 19 No. 3, pp. 476-496.

Foss, N. J., & Pedersen, T. (2002). Transferring knowledge in MNCs: The role of sources of subsidiary knowledge and organizational context. Journal of International Management, 8(1), 49−67

Foss, N.J., Husted, K. and Michailova, S. (2010), “Governing knowledge sharing in organizations: levels of analysis, governance mechanisms, and research directions”, Journal of Management Studies, Vol. 47 No. 3, pp. 455-482.

Gabriel Szulanski (1996) ‘Exploring Internal Stickiness: Impediments to the Transfer of Best Practice Within the Firm’, *Strategic Management Journal*, 17, pp. 27–43.

Glegg, S. M. and Hoens, A. (2016) ‘Role domains of knowledge brokering: A model for the health care setting’, *Journal of Neurologic Physical Therapy*, 40(2), pp. 115–123. doi: 10.1097/NPT.0000000000000122.

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. Journal of Management Information Systems, 18(1), 185-214.

Gould, R.V. & Fernandez, R.M., 1989. Structures of mediation: A formal approach to brokerage in transaction networks. Sociological Method, 19, pp.89-126.

Grandori, A. (1997). ‘Governance structures, coordination mechanisms and cognitive models’. Journal of Management and Governance, 1, 29–42.

Grant, A. M. (2008). The significance of task significance: job performance effects, relational mechanisms, and boundary conditions. Journal of Applied Psychology, 91(1), 108–124.

Grant, R. M. (1996). Toward a knowledge-based theory of the firm. Strategic Management Journal*, 17(S2), 109–122.*

Gray, R. (2008). How it feels to work here: Improving organizational climate, the international journal of knowledge. The International Journal of Knowledge Culture and Change Management Annual Review, 8(9), 85–91.

Greenwood, D. (2007) ‘Pragmatic action research’, International Journal of Action Research, 3 (1+2): 131–148.

Greenwood, D. J. (2007) 'Pragmatic Action Research', International Journal of Action Research, 3(1-3)

Greenwood, D. J., Whyte, W. F. and Harkavy, I. (1993) 'Participatory Action Research as a Process and as a Goal', Human Relations, 46(2), pp. 175-192.

Greenwood, D.J. & Levin, M. (2007) Introduction to action research. 2nd ed. Thousand Oaks, California: Sage.

Grossman, R., & Salas, E. (2011). The transfer of training: What really matters. International Journal of Training and Development, 15, 103–120.

Gruenfeld, D., Martorana, P. and Fan, E. (2000), "What do groups learn from their worldliest members? Direct and indirect influence in dynamic teams", Organizational Behavior and Human Decision Processes, Vol. 82 No. 1, pp. 45-59

Gummesson, E. (2000) Qualitative Methods in Management Research (2nd edn). Thousand Oaks, CA: Sage.

Gupta, A. K., & Govindarajan, V. (2000). Knowledge management's social dimension: Lessons from Nucor Steel. Sloan Management Review, 42(1), 71−80.

Guzzo, R.A. and Noonan, K.A. (1994), ''Human resource practices as communications and the psychological contract'', Human Resource Management, Vol. 33 No. 3, pp. 447-62.

Haldin-Herrgard, T. (2000). Difficulties in diffusion of tacit knowledge in organizations. Journal of Intellectual Capital, (4), 357–365. https://doi.org/10.1108/ 14691930010359252.

Hansen, M. T., Nohria, N., & Tierney, T. (1999). What's your strategy for managing knowledge? Harvard Business Review, 77(2), 106−116

Haradhan Kumar Mohajan (2019) 'Knowledge Sharing among Employees in Organizations', Journal of Economic Development, Environment and People, 8(1), pp. 52–61. doi: 10.26458/jedep.v8i1.612.

Haradhan Kumar MOHAJAN (2019) 'Knowledge Sharing among Employees in Organizations', Journal of Economic Development, Environment and People, 8(1), pp. 52–61. doi: 10.26458/jedep.v8i1.612.

Harel, R.; Schwartz, D.; Kaufmann, D. (2021) Sharing knowledge processes for promoting innovation in small businesses. *European. Journal. Innovation Management*, *24*, 1860–1882.

Hargadon, A.B., 2002. Brokering knowledge: Linking learning and innovation. Research in Organizational Behaviour, 24(July), pp.41–85.

Hart, E. (1996) 'Action research as a professionalizing strategy: issues and dilemmas', *Journal of advanced nursing*. Accepted for publication 5 May 1995, 23(3), pp. 454–461. Available at: https://doi.org/10.1111/j.1365-2648.1996.tb00006.x.

Harzing, A.-W., & Feely, A. J. (2008). The language barrier and its implications for HQ-subsidiary relationships. Cross Cultural Management: An International Journal, 15(1), 49–61.

Hauke, A. (2004), ‘‘Polish culture facilitation or impediment for knowledge transfer? The impact of national culture on knowledge transfer from a network approach perspective’’, paper presented at Intercultural Knowledge Research and Intercultural Knowledge Management, Eisenstadt.

Hendriks, P. (1999) ‘Why share knowledge? The influence of ICT on the motivation for knowledge sharing’, *Knowledge and process management*, 6(2), pp. 91–100. Available at: https://doi.org/10.1002/(SICI)1099-1441(199906)6:2<91::AID-KPM54>3.0.CO;2-M.

Henttonen, K., Kianto, A. and Ritala, P. (2016), “Knowledge sharing and individual work performance: an empirical study of a public sector organisation”, Journal of Knowledge Management, Vol. 20 No. 4, pp. 749-768.

Hinds, P. J., Patterson, M., & Pfeffer, J. (2001). Bothered by abstraction: The effect of expertise on knowledge transfer and subsequent novice performance. Journal of Applied Psychology, 86, 1232−1243.

Hofstede Insights, 2019, accessed, 14 October, 2019, https://www.hofstede-insights.com

Hofstede, G. (1980), “Culture and organizations”, International Studies of Management & Organization, Vol. 10 No. 4, pp. 15-41.

Hofstede, G. (2001), “Culture’s recent consequences: using dimension scores in theory and research”, International Journal of Cross-Cultural Management, Vol. 1 No. 1, pp. 11-17

Holian, R. and Coghlan, D. (2013), “*Ethical issues and role duality in insider action research: challenges for action research degree programmes*”, Systemic Practice and Action Research, Vol. 26 No. 5, pp. 399-415, doi: 10.1007/s11213-012-9256-6.

Huber, G. P., (2001), "Transfer of Knowledge in Knowledge Management Systems: Unexplored Issues and Suggested Studies," European Joumal of Information Systems (10), pp. 72-79.

Hussein, ATT, Singh, SK, Farouk, S & Sohal, AS (2016), ‘Knowledge sharing enablers, processes and firm innovation capability’, Journal of Workplace Learning, 28(8), pp. 484–495.

Husted, K., & Michailova, S. (2002). Diagnosing and fighting knowledge-sharing hostility. Organizational Dynamics, 31(1), 60−73

Ipe, M. (2003). Knowledge sharing in organizations: A conceptual framework. Human Resource Development Review, 2, 337–359.

Ipe, M. (2004), "Knowledge sharing in organizations: an analysis of motivators and inhibitors", paper presented at the Academy of Human Resource Development International Conference in the Americas, 3-7 March, Austin, TX, available at: https://eric.ed.gov/?q=ED491481&id=ED492196

Isabel Ma Prieto Pastor, Ma Pilar Pérez Santana & Celia Martín Sierra (2010) Managing knowledge through human resource practices: empirical examination on the Spanish automotive industry, The International Journal of Human Resource Management, 21:13, 2452-2467, DOI: 10.1080/09585192.2010.516596

Jack A. Nickerson and Todd R. Zenger (2004) 'A Knowledge-Based Theory of the Firm: The Problem-Solving Perspective', Organization Science, 15(6), p. 617. doi: 10.1287/orsc.1040.0093.

Janus, S. (2016) *Becoming a knowledge-sharing organization: a handbook for scaling up solutions through knowledge capturing and sharing*. World Bank Group.
Janz, B. D., Colquitt, J. A., & Noe, R. A. (1997). Knowledge worker team effectiveness: The role of autonomy, interdependence, team development, and contextual support variables. Personnel Psychology, 50, 877–904.

Jarnagin, C. and Slocum, J.W. Jr (2007), "Creating corporate cultures through mythopoetic leadership", Organizational Dynamics, Vol. 36 No. 3, pp. 288-302.

Javidan, M. and House, R.J. (2001), "Cultural acumen for the global manager: lessons from project GLOBE", Organizational Dynamics, Vol. 29No. 4, pp. 289-305.

Johnson, W. L., Johnson, A. M., and Heimberg, F. (1999), "A Primary and Second Order Component Analysis of the Organizational Identification Questionnaire," Educational and Psychological Measurement (59^), pp. 159-170.

Kang, S., Morris, S., and Snell, S. (2007), 'Relational Archetypes, Organizational Learning, and Value Creation: Extending the Human Resource Architecture,' Academy of Management Review, 32, 1, 236–256.

Kang, Y.J., Kim, S.E. and Chang, G.W. (2008), "The impact of knowledge sharing on work performance: an empirical analysis of the public employees' perceptions in South Korea. intl", Journal of Public Administration, Vol. 31 No. 14, pp. 1548-1568.

Kankanhalli, A., Bernard, C.Y.T. and Wei, K.-K. (2005), "Contributing knowledge to electronic knowledge repositories: an empirical investigation", MISQuarterly, Vol. 29 No. 1, pp. 113-143.

Kankanhalli, A., Tan, B. C. Y. and Kwok-Kee Wei (2005) 'Contributing Knowledge to Electronic Knowledge Repositories: An Empirical Investigation', MIS Quarterly, 29(1), pp. 113–143. doi: 10.2307/25148670.

Käser, P.A.W. and Miles, R. (2002), "Understanding knowledge activists' success and failures", Long Range Planning, Vol. 31 No. 5, pp. 9-28.

Kavanagh, M.H. and Ashkanasy, N.M. (2006) 'The Impact of Leadership and Change Management Strategy on Organizational Culture and Individual Acceptance of Change during a Merger', *British journal of management*, 17(S1), pp. S81–S103. Available at: https://doi.org/10.1111/j.1467-8551.2006.00480.x

Kelly, H. and Thibaut, J. (1978), Interpersonal Relations: A Theory of Interdependence, John Wiley & Sons, New York, NY.

Kim, W. C., & Mauborgne, R. (1998). Procedural justice, strategic decision making, and the knowledge economy. Strategic Management Journal, 19(4), 323−338.

Ko, D.-G., Kirsch, L.J. and King, W.R. (2005), "Antecedents of knowledge transfer from consultants to clients in enterprise system implementations", MISQuarterly, Vol. 29No. 1, pp. 59-85.

Koranteng, F. N. and Wiafe, I. (2018) 'Factors that Promote Knowledge Sharing on Academic Social Networking Sites: An Empirical Study', Education and Information Technologies

Kosiorek, D. and Szczepańska, K. (2016) 'Relationships between organisational culture and human resource management', *Jagiellonian Journal of Management*, 2(3), pp. 205–215.

Kulkarni, U.R., Ravindran, S. and Freeze, R. (2007), “A knowledge management success model: theoretical development and empirical validation”, Journal of Management Information Systems, Vol. 23 No. 3, pp. 309-347, doi: 10.2753/mis0742-1222230311.

Kwahk, K.Y. and Park, D.H. (2016), “The effects of network sharing on knowledge-sharing activities and job performance in enterprise social media environments”, Computers in Human Behavior, Vol. 55, pp. 826-839.

Lagerstrom, K., & Andersson, M. (2003). Creating and sharing knowledge within a transactional team e the development of a global business system. Journal of World Business, 38(2), 84-95.

Lai, H.M. and Chen, T.T. (2014), “Knowledge sharing in interest online communities: a comparison of posters and lurkers”, Computers in Human Behavior, Vol. 35, pp. 295-306

Lam, A. (2000). Tacit knowledge, organizational learning and societal institutions: An integrated framework. Organization Studies, 21(3), 487-513

LE BA PHONG, LEI HUI and THAN THANH SON (2018) ‘How Leadership and Trust in Leaders Foster Employees’ Behavior toward Knowledge Sharing’, Social Behavior & Personality: an international journal, 46(5), pp. 705–720

Lessard, Donald R., and Srilata Zaheer. (1996) “Breaking the Silos: Distributed Knowledge and Strategic Responses to Volatile Exchange Rates.” *Strategic Management Journal* 17, no. 7 (1996): 513–33.

Li, V., Mitchell, R. and Boyle, B. (2016) ‘The divergent effects of transformational leadership on individual and team innovation’

Liebowitz, J. (2003). A knowledge management strategy for the Jason organization: A case study. Journal of Computer Information Systems, 44(2), 1−5.

Lim, B. C., & Klein, K. J. (2006). The team mental models and team performance: A field study of the effects of team mental model similarity and accuracy. Journal of Organizational Behavior, 27, 403–418.

Lim, D. and Klobas, J. (2000), “Knowledge management in small enterprises”, The Electronic Library, Vol. 18 No. 6, pp. 420-32.

Lin, H., & Lee, G. (2006). Effects of socio-technical factors on organizational intention to encourage knowledge sharing. Management Decision, 44(1), 74-88.

Lin, H.-F. (2007), ''Effects of extrinsic and intrinsic motivation on employee knowledge-sharing intentions'', Journal of Information Science, Vol. 33 No. 2, pp. 135-49.

Lin, H.F. and Lee, G.G. (2004), "Perceptions of senior managers towards knowledge-sharing behaviour", Management Decision, Vol. 42 No. 1, pp. 108-25.

Linda Argote, Bill McEvily and Ray Reagans (2003) 'Managing Knowledge in Organizations: An Integrative Framework and Review of Emerging Themes', Management Science, 49(4), p. 571.

Lindenberg, S. (2003). 'The cognitive side of governance'. Research in the Sociology of Organizations, 20, 47–76

Liu, N. C., & Liu, M. S. (2011). Human resource practices and individual knowledge-sharing behavior – An empirical study for Taiwanese R&D professionals. International Journal of Human Resource Management, 22, 981–997.

London, M. (2000) 'Job Feedback: Giving, Seeing and Using Feedback for Performance', Review of Public Personnel Administration, p. 68.

Lu, L., Leung, K., & Koch, P. T. (2006). Managerial knowledge sharing: The role of individual, interpersonal, and organizational factors. Management and Organization Review, 2, 15–41.

MacCurtain, S., Flood, P.C., Ramamoorthy, N., West, M.A. and Dawson, J.F. (2010), "The top management team, reflexivity, knowledge sharing and new product performance: a study of the Irish software industry", Creativity and Innovation Management, Vol. 19 No. 3, pp. 219-232

Maravilhas, S. and Martins, J. (2019) 'Strategic knowledge management in a digital environment: Tacit and explicit knowledge in Fab Labs', *Journal of business research*, 94, pp. 353–359. Available at: https://doi.org/10.1016/j.jbusres.2018.01.061

Margit Osterloh and Bruno S. Frey (2000) 'Motivation, Knowledge Transfer, and Organizational Forms', Organization Science, 11(5), p. 538

Marsden, P.V., 1982. Brokerage behaviour in restricted exchange networks. In Marsden, P.V. & Lin, N., eds. Social structure and network analysis. London: Sage Publications. pp.201-218.

Marshall, J., 1999. Living life as inquiry. Systemic Practice and Action Research, 12(2), pp.155–171.

Matusik S. F., Hill C. L. (1998). The utilization of contingent work, knowledge creation, and competitive advantage. *Academy of Management Review*, 23(4), 680-697

McDermott, R. (1999), "Why information technology inspired but cannot deliver: knowledge management", Sloan Management Review, Vol. 41 No. 4, pp. 103-117

McDermott, R. and O'Dell, C. (2001), "Overcoming cultural barriers to sharing knowledge", Journal of Knowledge Management, Vol. 5 No. 1, pp. 76-85.

McTaggart, R. (2002) 'Chapter 1: Action Research Scholar: The Role of the Scholar in Action Research', *Counterpoints (New York, N.Y.)*, 183, pp. 1–16

Meyerson, D., and Martin, J. Cultural change: An integration of three different views. Journal of Management Studies, 24, 6

Minbaeva, D. (2007). Knowledge transfer in multinational corporations. Management International Review, 47(4), 567−593.

Min-Ling Liu, Chieh-Peng Lin, Sheng-Wuu Joe, & Kuang-Jung Chen, (2019), 'Modeling knowledge sharing and team performance : The interactions of ethical leadership and ambidexterity with politics and job complexity', Management Decision, (7), p. 1472

Morgan, G. (1980) 'Paradigms, metaphors, and puzzle solving in organization theory', *Administrative Science Quarterly*, 25 (4), pp.605-622

Morgeson, F. P., & Humphrey, S. E. (2006). The work design questionnaire (W.D.Q.): developing and validating a comprehensive measure for assessing job design and the nature of work. Journal of Applied Psychology, 91(6), 1321–1339.

Mu, J., Peng, G., & Love, E. (2008). Interfirm networks, social capital, and knowledge flow Journal of Knowledge Management, 12(4), 86–100.

Muhammed, S. and Zaim, H. (2020), "Peer knowledge sharing and organisational performance: the role of leadership support and knowledge management success", Journal of Knowledge Management, Vol. 24 No. 10, pp. 2455-2489, doi: 10.1108/JKM-03-2020-0227.

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital and the organizational advantage. Academy of Management Review 23 (2): 242 -266.

Nonaka, I. (1994) 'A Dynamic Theory of Organizational Knowledge Creation', *Organization science (Providence, R.I.)*, 5(1), pp. 14–37. Available at: https://doi.org/10.1287/orsc.5.1.14.

Nonaka, I. (1994), ''A dynamic theory of organizational knowledge creation'', Organization Science, Vol. 5 No. 1, p. 14.

Nonaka, I. (1994). The dynamic theory of organizational knowledge creation. Organization Science, 5(1), 14-37.

Nonaka, I. (2007) 'The Knowledge-Creating Company', HARVARD BUSINESS REVIEW, p. 162.

Nonaka, I. 1994. A dynamic theory of organizational knowledge creation. Organization Science, 5: 14 37.

Nonaka, I. and Takeuchi, H. (1995) *The knowledge-creating company : how Japanese companies create the dynamics of innovation / Ikujiro Nonaka and Hirotaka Takeuchi.* New York ;: Oxford University Press.

Nonaka, I., Toyama, R. and Konno, N. (2000), "SECI, Ba and leadership: a unified model of dynamic knowledge creation", Long Range Planning, Vol. 33 No. 1, pp. 5-34.

Northouse, P.G. (2021) *Leadership: theory and practice*. Sage Publications.

Obstfeld, D. (2005) 'Social Networks, the Tertius Iungens Orientation, and Involvement in Innovation', *Administrative Science Quarterly*, 50(1), pp. 100–130. doi: 10.2189/asqu.2005.50.1.100.

Omotayo, F. O., & Babalola, S. O. (2016). Factors influencing knowledge sharing among information and communication technology artisans in Nigeria. Journal of Systems and Information Technology, 18(2), 148–169.

Osterloh, M. and Frey, B.S. (2000), "Motivation, knowledge transfer, and organizational forms", Organization Science, Vol. 11 No. 5, pp. 538-550.

Oswald, S. L., & Jahera, J. S. (1991). The influence of ownership on performance: An empirical study. *Strategic Management Journal*, **12**(4), 321– 326.

Ouakouak, M.L. and Ouedraogo, N. (2018), *"Fostering knowledge sharing and knowledge utilization: the impact of organizational commitment and trust"*, Business Process Management Journal, Vol. 25 No. 4, pp. 757-779, doi: 10.1108/BPMJ-05-2017-0107

Oxford Learner's dictionary, 2023, Oxford University Press, www.oxfordlearnersdictionaries.com, accessed 14th April 2023.

Ozlati, S. (2015) 'The Moderating Effect of Trust on the Relationship between Autonomy and Knowledge Sharing: A National Multi-industry Survey of Knowledge Workers', Knowledge & Process Management, 22(3), pp. 191–205.

Pacanowsky, M. E., & O'Donnell-Trujillo, N. (1982). Communication and organizational cultures. Western Journal of Speech Communication, 46(2), 115–130.

Pandey, J. et al. (2021) 'Technology-enabled knowledge management for community healthcare workers: The effects of knowledge sharing and knowledge hiding', Journal of Business Research, 135, pp. 787–799. doi: 10.1016/j.jbusres.2021.07.001.

Park, S, & Rainey, H 2012, 'Work motivation and social communication among public managers', International Journal Of Human Resource Management, 23, 13, pp. 2630-2660

Pearce, C. L. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. The Academy of Management Executive, 18(1), 47- 57.

Pee, L. and Lee, J. (2015), "Intrinsically motivating employees' online knowledge sharing: understanding the effects of job design", International Journal of Information Management, Vol. 35 No. 6, pp. 679-690.

Perotti, F. A., Ferraris, A., Candelo, E., & Busso, D. (2022). The dark side of knowledge sharing: Exploring "knowledge sabotage" and its antecedents. Journal of Business Research, 141, 422–432.

Pierce, J. L., & Gardner, D. G. (2004). Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. Journal of Management, 30, 591−622.

Podrug, N., Filipovi´c, D., & Kovaˇc, M. (2017). Knowledge sharing and firm innovation capability in Croatian ICT companies. International Journal of Manpower, 38(4), 632–644.

Polanyi, M. (1966). The tacit dimension. London: Routledge Kegan Paul.

Politis John D. (2001) 'The relationship of various leadership styles to knowledge management', Leadership & Organization Development Journal, (8), p. 354

Politis, J. D. (2002). Transformational and transactional leadership enabling (disabling) knowledge acquisition of self-managed teams: The consequences for performance. Leadership & Organization Development Journal, 23(3), 186.

Prahalad, C. K., & Gary, H. (1990). *The core competence of the corporation, Harvard Business Review* (pp. 79–91)

Putnam, R. D. (1995). Tuning in, tuning out: The strange disappearance of social capital in America. PS: Political Science & Politics, 28(4), 664–684.

Quinn, J.B., Anderson, P. and Finkelstein, S. (1996) 'Leveraging Intellect', *Academy of Management perspectives*, 10(3), pp. 7–27. Available at: https://doi.org/10.5465/ame.1996.9704111471

Raelin, J.A. (2003) Creating leaderful organizations: how to bring out leadership in everyone. San Francisco: Berrett-Koehler

Revans, R. (2011) *ABC of Action Learning*. Farnham: Routledge. Available at: https://doi.org/10.4324/9781315263533.

Reychav, I. and Weisberg, J. (2010), "Bridging intention and behavior of knowledge sharing", Journal of Knowledge Management, Vol. 14 No. 2, pp. 285-300.

Rezaei, G. et al. (2016) 'Relationship among culture of excellence, organisational performance and knowledge sharing: proposed conceptual framework'. Available at: https://search*ebscohostcom.liverpool.idm.oclc.org/login.aspx?direct=true&db=edsbas& AN=edsbas.B1C4A6 D&site=eds-live&scope=site*

Rezaei, M. (2018), “Islamic accounting laws or Islamic laws in accounting”, European Journal of Islamic Finance, No. 11, doi: 10.13135/2421-2172/2631.

Rezaei, M., Giovando, G., Rezaei, S. and Sadraei, R. (2022), “*What are the fundamental knowledge-sharing drivers of small family businesses in the restaurant and fast-food industry?*”, British Food Journal, Vol. 124 No. 7, pp. 2149-2178.

Rivera-Vazquez, J. C., Ortiz-Fournier, L. V. and Flores, F. R. (2009) ‘Overcoming cultural barriers for innovation and knowledge sharing’, Journal of Knowledge Management, 13(5), pp. 257–270.

Rolfe, G. (1996) Going to extremes: action research, grounded practice and the theory-practice gap in nursing. Journal of Advanced Nursing 24 1315-1320

Rousseau, D.M. and Greller, M.M. (1994), ‘‘Human resource practices: administrative contract makers’’,Human Resource Management, Vol. 33 No. 3, pp. 385-401.

Rubin, H.J. and Rubin, I.S. (2004) *Qualitative Interviewing: The Art of Hearing Data*. 2nd edn, *Qualitative Interviewing (2nd ed.): The Art of Hearing Data*. 2nd edn. Los Angeles: SAGE Publications Inc. Available at: https://doi.org/10.4135/9781452226651.

Rudy Ruggles (1998) ‘The State of the Notion: Knowledge Management in Practice’, California Management Review, 40(3), p. 80. doi: 10.2307/41165944

Ruppel, C. P.. and Harrington, S. J. "Spreading Knowledge through Intranets: An Analysts of the Organizational Culture Leading to Intranet Adoption and Use." IEEE Transactions on Professional Communications {44.^), 2001. pp.37-52.

Ruy, S., Ho, S.H. and Han, I. (2003), “Knowledge sharing behaviour of physicians in hospitals”, Expert Systems with Applications, Vol. 25, pp. 113-122.

Ryu, C., Kim, Y.J., Chaudhury, A. and Rao, H.R. (2005), “Knowledge acquisition via three learning processes in enterprise information portals: leaning-by-investment, learning-by-doing, and learning-from-others”, MIS Quarterly, Vol. 29 No. 2, pp. 245-278.

Saunders, M.N.K., Lewis, P. and Thornhill, A. (2019) *Research methods for business students / Mark Saunders, Philip Lewis, Adrian Thornhill.* Eighth edition. Harlow, England: Pearson.

Sawng, Y. W., Kim, S. H., & Han, H. -S. (2006). R&D group characteristics and knowledge management activities: A comparison between ventures and large firms. International Journal of Technology Management, 35(1–4), 241−261.

Schall, M. S. (1983) 'A Communication-Rules Approach to Organizational Culture', *Administrative Science Quarterly*, 28(4), pp. 557–581. doi: 10.2307/2393009.

Schein EH. Organizational culture and leadership: a dynamic view. San Francisco, CA: Jossey-Bass; 1985.

Schein, E.H. (2010), "Organizational culture and leadership", 4th edn, Jossey-Bass Business and Management series, San Francisco. CA.

Schulz, M. (2001), "The uncertain relevance of newness: organizational learning and knowledge flows", Academy of Management Journal, Vol. 44 No. 4, pp. 661-681.

Schwandt, David R., and Michael J. Marquardt. 1999. Organizational Learning: From World-Class Theories to Global Best Practices. Boca Raton, FL: CRC Press.

Seok-Young Oh (2019) 'Effects of organizational learning on performance: the moderating roles of trust in leaders and organizational justice', Journal of Knowledge Management, (2), p. 313

Seung Hyun Han, Gaeun Seo, Seung Won Yoon, Dong-Yeol Yoon (2016) 'Transformational leadership and knowledge sharing : Mediating roles of employee's empowerment, commitment, and citizenship behaviors', Journal of Workplace Learning, (3), p. 130

Sirmon, D.G. and Hitt, M.A. (2003) Managing Resources: Linking Unique Resources, Management, and Wealth Creation in Family Firms. Entrepreneurship Theory and Practice, 27, 339-358.

Smits, D.A.B. and Teperek, M. (2020) 'Research data management for master's students: From awareness to action', *Data science journal*, 19(1). Available at: https://doi.org/10.5334/dsj-2020-030.

Smyth, A. and Holian, R. (2008) 'Critical issues in research from within organisations', in P. Sikes and A. Potts (eds), Researching Education from the Inside. Abingdon: Routledge, pp. 33–48.

Snoek, M., & Volman, M. (2014). The impact of organizational transfer climate on the use of teacher leadership competencies developed in a post-initial master's program. Teaching and Teacher Education, 37, 91–100.

Spender, J.C. (1996), "Making knowledge the basis of a dynamic theory of the firm", Strategic Management Journal, Vol. 17 No. 2, pp. 45-62.

Spender, J.C. and Grant, R. (1996), "Knowledge of the firm: overview", Strategic Management Journal, Vol. 17 No. 2, pp. 5-9.

Srivastava, A., Bartol, K. M., & Locke, E. A. (2006). Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance. Academy of Management Journal, 49(6), 1239−1251.

Staples, D. S., & Webster, J. (2008). Exploring the effects of trust, task interdependence and virtualness on knowledge sharing in teams. Information Systems Journal, 18(6), 617e640.

Stenmark, D. (2001), "Leveraging tacit organizational knowledge", Journal of Management Information Systems, Vol. 17 No. 3, pp. 9-24.

Straub, D., Loch, K., Evaristo, R., Karahanna, E. and Strite, M. (2002), ''Toward a theory-based measurement of culture'', Journal of Global Information Management, Vol. 10 No. 1, pp. 13-23.

Subramaniam, Mohan, and Mark Youndt. 2005. The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal* 48: 450–63.

Suppiah, V. and Sandhu, M.S. (2011), "Organizational culture's influence on tacit knowledge-sharing behaviour", Journal of Knowledge Management, Vol. 15 No. 3, pp. 462-477

Supyuenyong, V., Islam, N. and Kulkarni, U. (2009) 'Influence of SME characteristics on knowledge management processes: The case study of enterprise resource planning service providers', *Journal of enterprise information management*, 22(1-2), pp. 63–80. Available at: https://doi.org/10.1108/17410390910922831

Swart, J ; Kinnie, N; van Rossenberg, Y; Yalabik, Z., 2014. Why should I share my knowledge? A multiple foci of commitment perspective. *Human Resource Management Journal,* 24(3), pp.269-289.

Swart, J. et al., 2014. Why should I share my knowledge? A multiple foci of commitment perspective. Human Resource Management Journal, 24(3), pp.269–289.

Teece, D., G. Pisano, A. Shuen. 1997. Dynamic capabilities and strategic management. Strategic Management J. 18(7) 509–533.

Tesavrita, C. *et al.* (2017) 'Intra-organizational and inter-organizational knowledge sharing in collaborative learning process: A conceptual framework for SME', in *2017 4TH INTERNATIONAL CONFERENCE ON INDUSTRIAL ENGINEERING AND APPLICATIONS (ICIEA)*. NEW YORK: IEEE, pp. 187–191. Available at: https://doi.org/10.1109/IEA.2017.7939204.

Thorpe, R. and Holt, R. eds., 2008. *The SAGE Dictionary of Qualitative Management Research*. Vol. 0. London: SAGE Publications Ltd. Available at: https://doi.org/10.4135/9780857020109

Tsai, W. (2001). 'Knowledge transfer in intra-organizational networks'. Academy of Management Journal, 44, 996–1004.

Tuyet-Mai Nguyen, et al. (2019) 'Motivation and knowledge sharing: a meta-analysis of main and moderating effects', Journal of Knowledge Management, (5), p. 998.

Uden, L., Ting, I.-H. and Corchado, J. M. (2019) Knowledge management in organizations : 14th International Conference, KMO 2019, Zamora, Spain, July 15{u2013}18, 2019, proceedings. Springer (Communications in computer and information science: 1027).

Vigoda, E. (2002), "Stress-related aftermaths to workplace politics: the relationships among politics, job distress, and aggressive behavior in organizations", Journal of Organizational Behavior, Vol. 23 No. 5, pp. 571-591.

Vincenzo Cavaliere and Sara Lombardi (2015), 'Exploring different cultural configurations: how do they affect subsidiaries' knowledge sharing behaviors? Journal of Knowledge Management, Vol. 19 No. 2, (2), p. 141-163

Wang, S. and Noe, R. A. (2010) 'Knowledge sharing: A review and directions for future research', Human Resource Management Review, 20, pp. 115–131.

Ward, V.L., House, A.O. & Hamer, S., 2009a. Knowledge brokering: Exploring the process of transferring knowledge into action. BMC Health Services Research, 9(12), pp.1–6

Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. MIS Quarterly, 35–57.

Weiss, L. (1999). Collection and connection: The anatomy of knowledge sharing in professional service. Organization Development Journal, 17(4), 61-72.

Wilkesmann, U., Fischer, H. and Wilkesmann, M. (2009), "Cultural characteristics of knowledge transfer", Journal of Knowledge Management, Vol. 13 No. 6, pp. 464-477.

Witherspoon, C. L. (1) *et al.* (no date) 'Antecedents of organizational knowledge sharing: A meta-analysis and critique', *Journal of Knowledge Management*, 17(2), pp. 250–277. doi: 10.1108/13673271311315204.

Witherspoon, C.L., Bergner, J., Cockrell, C. and Stone, D.N. (2013), "Antecedents of organizational knowledge sharing: a meta-analysis and critique", Journal of Knowledge Management, Vol. 17 No. 2, pp. 250-277.

Wollan, M.L., Sully de Luque, M.F. and Grunhagen, M. (2009), "Motives for helping: exploring cultural influences on extra-role behavior", Multinational Business Review, Vol. 17 No. 1, pp. 99-119.

Yao, L.J., Kam, T.H.Y. and Chan, S.H. (2007), "Knowledge sharing in Asian public administration sector: the case of Hong Kong", Journal of Enterprise Information Management, Vol. 20 No. 1, pp. 51-69.

Yew Wong, K. and Aspinwall, E. (2004) 'Characterizing knowledge management in the small business environment', *Journal of knowledge management*, 8(3), pp. 44–61. Available at: https://doi.org/10.1108/13673270410541033

Zander, U., & Kogut, B. 1995. Knowledge and the speed of transfer and imitation of organizational capabilities: An empirical test. Organization Science. 8: 78-92.

Zheng, W., Yang, B., McLean, G.N., 2010. Linking organizational culture, structure, strategy, and organizational effectiveness: mediating role of knowledge management. J. Bus. Res. 63 (7), 763–771. https://doi.org/10.1016/j.jbusres.2009.06.005.

Zuber-Skerritt, O. and Perry, C. (2002) ‘Action research within organisations and university thesis writing’, *LEARNING ORGANIZATION*, 1 January, pp. 171–179.

APPENDIX A- Participant Invitation Notice

PARTICIPANT INVITATION NOTICE

Dear Invitee,

I kindly seek your participation in a doctoral research study that I am conducting titled: **Encouraging knowledge sharing behaviours in a Nigerian SME, an action research inquiry**. The purpose of this research is to understand why knowledge is not being shared properly in our organization and to uncover solutions that can help us share knowledge better. The completion of this research study is a requirement for the successful completion of the degree of Doctor of Business Administration at the University of Liverpool.

The study will see participants take part in a face-to-face interview and group meetings with the researcher, as these are the primary data collection method for this study and the only ways data will be collected from participants. Participation is completely voluntary and participants can withdraw from the study at any time you choose if you feel under any physical or psychological risks, or do not feel the need to continue your participation. Participation or refusal to participate in this study will not lead to any negative or detrimental effects to members jobs or standing in the organization. Participation in this study is anonymous and any personal information that can easily identify a participant will not be included in the thesis.

Kindly note that the criteria to participate in this study are as follows:

- You have no acute health condition that will mean that you are not regularly present at work for the minimum working hours required by the organization.
- You have been an employee for more than 6 months and are no longer on your probationary period.
- You work within an organizational department.
- Your work role does provide you with an opportunity to interact with other colleagues on a regular basis during the work day.

If you would like to participate in the study, kindly contact the human resource manager to collect a participant information sheet which will provide you with more details about the research.

Thank you for your time.

Sincerely,

Oziegbe Ehimuan

Managing Director and Doctoral Student

APPENDIX B- Participant information sheet

UNIVERSITY OF LIVERPOOL

PARTICIPANT INFORMATION SHEET

Encouraging knowledge sharing behaviours in a Nigerian SME, an action research inquiry.

1. Invitation Paragraph

You are being invited to take part in a research study. Contained in this information sheet is all available information about the purpose of the research and the part you will play in it. Please take some time to go through this information and if needed, more information will be provided at your request.

You are not required to make a decision on the spot as you can take this information sheet away and review the information in your own time. Your decision to participate in this study should be 100% voluntary.

Thank you for your time.

2. What is the purpose of the study?

The study aims to identify the reasons why knowledge is not being shared within the organization. Therefore, leading to its ultimate purpose of bringing about the organizational changes needed to improve knowledge sharing within the organization, by uncovering ways in which knowledge can be shared better. For knowledge to be shared better, all members of the organization must learn to share knowledge better. Therefore, the research is aimed at encouraging organizational learning through the collaboration of members of the organization in order to improve each member's knowledge sharing behaviours in a manner that improves innovation and organizational performance. To improve the organization, we must all do it together as members of the organization and therefore, learning must take place in a collaborative manner.

1. Why have I been chosen to take part?

You have been invited because you fit into the following group:

1) You are a current employee of the company.
2) You have been an employee for more than 6 months and are no longer on your probationary period.
3) You work within an organizational department.
4) You work in a managerial/supervisory or subordinate role.

2. Do I have to take part?

Participation in this research is 100% voluntary and upon the completion and submission of the consent form, it will be concluded that you have voluntarily and without coercion decided to take part in this research. However, if at any time you decided to withdraw from the research, you will be allowed to do so.

Secondly, it is important that you are aware that although the research is being conducted by the managing director of the organization, he is doing so as a part of the requirements for the fulfilment of his Doctoral studies. It is also important to keep in mind that you are not required to take part in the research and there will be no positive or negative impact on your job status or position within the organization, if you decline to take part in the research.

3. What will happen if I take part?

Taking part in this research means that you will be involved in a learning process with the researcher and other participants in which collaborative learning will take place to bring about change and solve the organization's problem.

Taking part in this research means that you will be required to participate in face-to-face interviews and group meetings with the researcher. The interviews should last approximately for 30 minutes and will be conducted in a private meeting room in the company headquarters or an offsite location that the participant may feel more comfortable with.

Only the research participant and the researcher will be present in the interview room and privacy will be assured. Your responses to the interview questions will be recorded with an audio recording device, transferred and stored in a secure data base in the researcher's computer.

Research participants will also be required to take part in one or more meetings and group discussions. These meetings and groups discussions will take place in private meeting rooms in the head offices of the company. These meeting and group discussions will be chaired by the researcher and will be attended by those research participants scheduled for the meetings. The purpose of these meetings and group discussions will be to fact find and pool ideas regarding the organisational problems undergoing research, conduct critical analysis and gather feedback, while also making decisions about plans of action at several stages during the research.

All of these procedures will be carried out by the researcher who is Oziegbe Ehimuan and holds a role as the Managing Director of the company.

1. How will my data be used?

> "*The University processes personal data as part of its research and teaching activities in accordance with the lawful basis of 'public task', and in accordance with the University's purpose of "advancing education, learning and research for the public benefit.*
>
> *Under UK data protection legislation, the University acts as the Data Controller for personal data collected as part of the University's research. The [Dr Ali Rostron, Director of Studies: Online Msc in Human Resource Mnagament, University of Liverpool Management School, Room G60, Chatham Street, Liverpool L69 7ZH, United Kingdom, +44(0)1517957405, email: A.Rostron@liverpool.ac.uk] acts as the Data Processor for this study, and any queries relating to the handling of your personal data can be sent to [Dr Ali Rostron, Director of Studies: Online Msc in Human Resource Management, University of Liverpool Management School, Room G60, Chatham Street, Liverpool L69 7ZH, United Kingdom, +44(0)1517957405, email: A.Rostron@liverpool.ac.uk].*
>
> *Further information on how your data will be used can be found in the table below*".

How will my data be collected?	Audio recording, meeting notes, field journals.
How will my data be stored?	Data will be stored in physical journals and electronically. All electronic data will be stored in the password protected personal computer of the researcher and all journals and notes will be stored under lock and key in the private location that only the researcher has access to.
How long will my data be stored for?	The data will be stored for no less than 5 years.
What measures are in place to protect the security and confidentiality of my data?	Only the researcher will have access to the data and the devices in which the data is stored is password protected.
Will my data be anonymised?	Personal information will be anonymised using a coding system in which unique codes will be assigned to participants. The code sheet which contains the link of each code to the participants, will be stored securely in a remote location and only accessed by the researcher. All participant data will be published in a form that ensures that participants can not be identified by the information provided in the research.
How will my data be used?	Data obtained during the research will only be used for research purposes on this research and will not be passed on to third parties except in the form of the final research paper.
Who will have access to my data?	Only the researcher will have access to the unanalysed data collected from the participants. When this data is used in the final paper, personal information will be anonymised and analysed data contained in the research will be read by the public.
Will my data be archived for use in other research projects in the future?	No.
How will my data be destroyed?	All physical notes will be shredded after 5 years and all electronic data will be wiped from the electronic device it was stored on.

1. Expenses and / or payments

All participants are currently available in the research environment and therefore, there will be no need to transfer a participant between locations. The researcher does not foresee and expense to the participant for participating in this research.

1. Are there any risks in taking part?

It is possible that the researcher may experience psychological risks such as anxiety or guilt as participants may become uncomfortable volunteering information about themselves or their work colleagues. If this arises at any point during the research, participants must inform the researcher immediately as the participant may not want to continue.

Also, the researcher in this case is the Managing Director of the company and as such there may be perceived risks of negative consequences that may arise as a result of the power wielded by the Managing Director over their jobs etc. The participants should be aware that there are no negative consequences that will arise to them as a result of the unique position of insider researcher the Managing Director has in this research. This research is designed and intended to only bring about positive outcomes for the organization by encouraging learning together for the improvement of knowledge sharing within the organization.

2. Are there any benefits in taking part?

The benefits to the participant lie in the benefit of the research. This research is aimed at creating change that will improve knowledge sharing to improve the company's performance. The improvement of company's performance will lead to a better working environment and improved job stability of which the participant will benefit. With this in mind, there will be no gifts or compensation to participants for participating in the research. There will also be no reimbursement costs such as travel expense to the participant.

3. What will happen to the results of the study?

The results of the study will be used in the completion of a thesis paper, which will be used in the fulfilment of the requirements of a Dr of Business Administration program at the university of Liverpool. It is possible that this paper would be published in a peer reviewed publication and made available in conferences.
The results will not identify you as a participant except it is your wish that you are identified.
Also, copy of the paper can be sent to you as a participant if the participant wishes

4. What will happen if I want to stop taking part?

You can withdraw your participation from this research at any time and without explanation by sending an email with your intention to withdraw to the researchers' email, oziegbe.ehimuan@online.liverpool.ac.uk.

Please keep in mind that all data collected up until the point of withdrawal can be destroyed and not used as part of the research, if you wish it to be.

1. What if I am unhappy or if there is a problem?

For any complaints about the research, please contact the principal investigator (*Dr Ali Rostron, Director of Studies: Online Msc in Human Resource Management, University of Liverpool Management School, Room G60, Chatham Street, Liverpool L69 7ZH, United Kingdom, +44(0)1517957405, email: A.Rostron@liverpool.ac.uk)*

However, i*f your complaint remains and you need further assistance with your complaint, please contact the Research Ethics and Integrity Office at ethics@liv.ac.uk. When contacting the Research Ethics and Integrity Office, please provide details of the name or description of the study (so that it can be identified), the researcher(s) involved, and the details of the complaint you wish to make.*

The University strives to maintain the highest standards of rigour in the processing of your data. However, if you have any concerns about the way in which the University processes your personal data, it is important that you are aware of your right to lodge a complaint with the Information Commissioner's Office by calling 0303 123 1113."”

2. Who can I contact if I have further questions?

If you have further questions, please contact the researcher Mr Oziegbe Ehimuan, +234816312555, Email: Oziegbe.ehimuan@online.liverpool.ac.uk. You can also contact *Dr Ali Rostron, Director of Studies: Online Msc in Human Resource Mnagament, University of Liverpool Management School, Room G60, Chatham Street, Liverpool L69 7ZH, United Kingdom, +44(0)1517957405, email: A.Rostron@liverpool.ac.uk.*

APPENDIX C- Participant consent form

Participant consent form

Research ethics approval number:
Title of the research project: Encouraging knowledge sharing behaviours in a Nigerian SME, an action research inquiry.
Name of researcher: Mr Oziegbe Ehimuan

Please initial box

1. I confirm that I have read and have understood the information sheet **dated** [ ] for the above study, or it has been read to me. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that taking part in the study involves participating in recorded interview sessions, being observed while carry out daily tasks in the field and meetings. ☐
3. I understand that my participation is voluntary and that I am free to stop taking part and can withdraw from the study at any time without giving any reason and without my rights being affected. In addition, I understand that I am free to decline to answer any particular question or questions. ☐
4. I understand that I can ask for access to the information I provide and I can request the destruction of that information if I wish at any time prior to anonymization. I understand that following the point of anonymization I will no longer be able to request access to or withdrawal of the information I provide. ☐
5. I understand that the information I provide will be held securely and in line with data protection requirements at the University of Liverpool until it is **fully anonymized** and then deposited in the **university digital repository** for sharing and use by other authorised researchers to support other research in the future. ☐
6. I understand that signed consent forms and audio recordings, interview transcripts, field observation and meeting notes will be retained in a password protected computer hard drive in the sole possession of the researcher until a minimum of 5 years after the research is concluded. ☐
7. I agree to take part in the above study. ☐

______________________	__________	____________________
Participant name	Date	Signature
______________________	__________	____________________
Name of person taking consent	Date	Signature

Contact details of lead researcher:
Oziegbe Ehimuan
KM42, Lekki Epe Expressway, Lagos, Nigeria.
08164312555
oziegbe.ehimuan@gmail.com

Open data and data sharing

I understand that the information I provide will be held securely at the University of Liverpool until it is **fully anonymised** and then deposited in **the university of Liverpool digital repository** for sharing and use by other authorised researchers to support other research in the future.

I understand that other authorised researchers may use my words in publications, reports, webpages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.

I understand that personal information collected about me that can identify me, such as my name or where I live, will not be shared beyond the study team.

Audio / video recordings

I understand and agree that my participation will be audio recorded and I am aware of and consent to your use of these recordings for the following purposes:

To create an accurate record of the interviews conducted for data gathering purposes.
For transcribing the interviews.

Storage of documents

I understand that signed consent forms and original audio recordings, audio transcripts and field observation notes will be retained in a password protected personal computer with sole access of the researcher for a minimum period of 5 years.

I understand that a transcript of my interview will be retained for a minimum of 5 years before it is destroyed.

Exclusion criteria

I understand that I must not take part if:

1. I am unable to provide informed consent
2. I have an acute health condition that will mean that I am not regularly present at work for the minimum working hours required by the organization.
3. I have worked with the company for less than 6 months and not yet confirmed as a full member of the organization.
4. My work role does not provide me with an opportunity to interact with other colleagues on a regular basis during the work day.

Risk to participants

I understand that taking part in the study has

Psychological risks: Participants may feel a sense of anxiety in participating in the research and disclosing confidential information about themselves or their colleagues. Participants may also feel a sense of anxiety if they feel that they will be negatively affected by participating in the research or by the outcome of the research.

It is important to note that these are perceived risks and the research is designed in a manner that will reduce these risks be ensuring confidentiality in participation.

Affording participants, the opportunity to receive a copy of the report

The information you have submitted will be published as a report; please indicate whether you would like to receive a copy.

Confidentiality of the data

I understand that my responses will be kept strictly confidential. I give permission for members of the research team to have access to my fully anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.

These codes will ensure anonymity as participants names and contact information will not be included in the body of the research. The code sheets that link to the participants will be stored privately in a secure location and only be accessed by the researcher.

Disclosure of criminal activity

I understand that the confidentiality of the information I provide will be safeguarded and won't be released without my consent unless required by law. I understand that if I disclose information which raises considerations over the safety of myself or the public, the researcher may be legally required to disclose my confidential information to the relevant authorities. ☐

Use of quotes and fully identifiable information

I agree that my information can be quoted in research outputs such as journal articles and reports. ☐

I would like my name used and I understand and agree that what I have said or written as part of this study will be used in reports, publications and other research outputs so that anything I have contributed to this project can be recognised. ☐

I agree that my real name can be used for quotes. ☐

Health-related findings in research

I agree for my GP to be contacted if any unexpected results are found in relation to my health. ☐

Re-contacting participants for the purpose of inviting them to take part in future studies

I agree to being contacted at a later date and invited to take part in future studies. I understand that I am only agreeing to receive information and I am under no obligation to take part in any future studies. If you decide not to consent to being contacted in the future it will not have any influence on your involvement in this particular research study. ☐

I agree to being contacted at a later date and invited to take part in future studies of a similar nature. ☐

APPENDIX D- Ethics approval

From: Ron Fisher <ron.fisher@online.liverpool.ac.uk>
Sent: 02 July 2019 12:00
To: Oziegbe Ehimuan <oziegbe.ehimuan@online.liverpool.ac.uk>; Rostron, Ali <A.Rostron@liverpool.ac.uk>
Cc: Dionisia Tzavara <dionisia.tzavara@online.liverpool.ac.uk>; Barbara Wilczek <barbara.wilczek@online.liverpool.ac.uk>; Jim Hanly <jim.hanly@online.liverpool.ac.uk>; George Mastorakis <george.mastorakis@online.liverpool.ac.uk>; Antigone Kyrousi <antigone.kyrousi@online.liverpool.ac.uk>; Lorenzo Lucianetti <lorenzo.lucianetti@online.liverpool.ac.uk>; Ron Fisher <ron.fisher@online.liverpool.ac.uk>; Susan Greener <susan.greener@online.liverpool.ac.uk>; Thomas Matheus <thomas.matheus@online.liverpool.ac.uk>; Rostron, Ali <A.Rostron@liverpool.ac.uk>; David Fogarty <david.fogarty@online.liverpool.ac.uk>; Ghaith Abdallah <ghaith.abdallah@online.liverpool.ac.uk>; Helena Forsman <helena.forsman@online.liverpool.ac.uk>; Andrea Gorra <andrea.gorra@online.liverpool.ac.uk>; Anna Lupina-Wegener <anna.lupina-wegener@online.liverpool.ac.uk>; Meghann Drury-Grogan <meghann.drury-grogan@online.liverpool.ac.uk>; Mark Loon <mark.loon@online.liverpool.ac.uk>; Shaukat Ali <shaukat.ali@online.liverpool.ac.uk>; Yusuf Nulla <yusuf.nulla@online.liverpool.ac.uk>; Alison Hollinrake <alison.hollinrake@online.liverpool.ac.uk>
Subject: Ethics application approved

Dear Oziegbe Ehimuan

I am writing to you on behalf of the DBA Research Ethics Committee. I am pleased to confirm that you have obtained research ethics approval for your work.

By copy of this email I invite your Doctoral Thesis Supervisor to complete the associated section in the grade center of your Thesis BB class (please, see attached file with guidelines to complete the process, and if you have any questions do let me know).

Additionally, I am attaching the formal approval from the research ethics committee for your records. Please also find attached the final version of the ERF where approval is marked.

I wish you the very best for your DBA thesis.

Regards

Dr Ron Fisher

APPENDIX E- Interview guide

INTERVIEW GUIDE

Date: ……………………
Time: ……………………

Title of research: Encouraging knowledge sharing behaviours in a Nigerian SME, an action research inquiry.
Interview location: ……………………………………….….
Participant Code: ……………………………………………..
Interviewer: ………………………………………………………
Job designation: ………………………………………………._

Introduction

Thank you for volunteering to participate in this interview. The interview should not last longer than 30 minutes and I would like you to feel relaxed and at ease because nothing you say here will be used against you in any way that is of detriment to you. Please feel free to stop me at any time if you need further clarifications to the questions being asked.

Main interview question:

Briefly describe your experience with knowledge sharing since you joined this organization.

Topics to be discussed for greater depth:

- How would you describe knowledge sharing?
- What is your assessment of the state of knowledge sharing in the organization?
- Is there a difference between how you have experienced knowledge sharing in this organization compared to others you have worked in the past?
- What is the nature of your interactions with your manager or subordinates?
- What is the nature of the relationship between you and those superior or subordinate to you?
- How easy has it been for you to share what you know with others in the organization?
- Do you feel the need to share what you know?
- Are there avenues to share what you know?
- Do you receive all the necessary information you require to do your job?
- Are there instances where you felt the need to withhold what you know from others?
- Are there instances you felt others withheld what they knew from you?
- Do you know the vision and mission of the company?
- Can you relate to the vision and mission of the company?
- How would you describe the culture of the organization?

APPENDIX F- Group discussion guide

GROUP DISCUSSIONS GUIDE

Date: ……………………
Time: ……………………

Title of research: Encouraging knowledge sharing behaviours in a Nigerian SME, an action research inquiry.
Meeting location: …………………….…………………….
Number of participants in attendance: ………………
Participant codes: ………………………………………………
Meeting Moderator/Chair ………………………………….

Introduction

Let me begin by thanking you all for volunteering to participate in this group discussion. We will be focusing on some specific topics that are informed by data emanating so far from the research process.

During the discussions, please feel free to speak up and offer your ideas as you see fit. Also, if anyone wants to expand on or counter and idea brought up by someone else, that is fine and will be accepted. Kindly note that from time to time, if the discussions are going astray from the topics we are focusing on, I may have to step in to guide us back to the intended topics, so that we can make efficient use of the limited time we have for these discussions.

Main objectives of the meeting:

1) To reveal to the participants the factors that are emerging from the research which impact knowledge sharing in the organization.
2) With the knowledge of these factors, to together, determine what key areas to take action to address the issues to improve knowledge sharing.

Guidelines to be followed during the discussions:

I appeal that you keep information confidential and not discuss the things anyone says in the group outside. If you are to discuss outside, kindly do not disclose the participation of other members and their personal information.

I want everyone to feel free to express yourselves and share your opinions as our combined thoughts would increase the quality of the discussions and any potential solutions.

If there are to be disagreements, please I appeal for you to keep it respectful and cordial as we are all here to achieve the same aims.

Please raise your hands if you want to make a contribution and I will call upon you.

If at any point you do not feel comfortable to speak or comment, kindly indicate and you will be excused.

Are there any questions?

Topics to be explored during the discussions:

- The state of knowledge sharing in the organization as revealed by the data collected so far.
- How do participants feel about the accuracy and authenticity of the factors that have been identified by the research to impact knowledge sharing in the organization?
- How do participants feel about their roles in the knowledge sharing problem?
- How do participants feel about my role as the Managing Director in the knowledge sharing problem?
- What are their suggestions about implementable intervention strategies to address the factors discussed?
- How realistic will such solutions be?
- What time frame do they think a plan of action to tackle some of the problems associated with the factors highlighted can be implemented?
- How may such solutions be embraced by themselves and other members of the organization?

Closing remarks

Thank you everyone for attending these discussions and for your help in participating in trying to uncover a solution to this organizational problem. All the information you have provided will be extremely valuable as the research process goes on. I appreciate the time you have given to this project.