2023

Leadership Strategies to Initiate and Reinforce Knowledge Sharing Among Employees

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
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Walden University
2023

Abstract

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by

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MBA, National Open University of Nigeria, 2015

BSc, University of Lagos, 2002

Doctoral Study Submitted in Partial Fulfillment

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August 2023

Abstract

Knowledge loss due to the exit of experienced employees with critical knowledge results in significant financial and nonfinancial impacts on employees and organizational competitiveness. Business leaders are interested in finding strategies to initiate and reinforce employee knowledge sharing to prevent business failure. Grounded in social cognitive theory, the purpose of this qualitative multiple case study was to explore strategies business leaders in Nigerian oil and gas public sector agencies use to initiate and reinforce knowledge sharing among employees to prevent knowledge loss. The participants were five business leaders in Nigerian oil and gas public sector agencies who successfully initiated and reinforced knowledge sharing among employees. Data were collected through semistructured interviews and a review of organizational documents. Thematic analysis yielded four themes: develop structured mentoring, institute a knowledge-sharing culture, establish open and effective communication, and provide leadership support. A key recommendation is for business leaders to utilize the employee handbook to assist in knowledge sharing. The implications for positive social change include the potential to increase intellectual capital among employees, boost efficiency and overall productivity, and reduce the learning curve cost attributed to employee replacement, resulting in cost savings that organizations can channel toward social projects for the benefit of the host community.

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Dedication

I dedicate this doctoral study to the memories of my father (the Late Mr. Moruf Oshineye), who left us too soon to witness his children's accomplishments. I would also like to dedicate this to my mother, who has always encouraged me to never give up on my aspirations; your faith in me has made this journey possible.

Acknowledgments

I want to express my heartfelt gratitude to my chair, Dr. Erica Gamble, for her relentless support, unwavering guidance, and encouragement during the course of this study. I would also like to thank Dr. Jorge Gaytan, my second committee member, for his time reviewing my study and providing invaluable feedback for improvement, from which I benefitted immensely. Thank you to Dr. Alexandre Lazo and Dr. Denise Land for serving as the university research reviewer and to all the faculty members. I would also like to thank my colleagues for their interactions and contributions; I appreciate the insights you all provided in class. Finally, I want to thank my children, Amira, Amina, Mukhtar, and my husband, for their understanding, patience, and support throughout the duration of this program.

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Section 1: Foundation of the Study

Knowledge sharing is a central and elusive strength that gives an organization a competitive advantage. Knowledge sharing refers to an intentional effort to transfer valuable knowledge from ideas, skills, and experiences about a phenomenon to another person in the organization (Oladipupo & AbdulRahman, 2018; Opesade & Alade, 2021). Researchers have indicated that knowledge-sharing practice could lead to improved service delivery and increased productivity, growth, and organizational performance (Olatokun & Njideaka, 2020; Onifade et al., 2022). Continuous incorporation of new ideas from knowledge-sharing practices is essential to maintaining operational effectiveness (Olan et al., 2022). An organization's lack of knowledge-sharing practice could affect organizational outcomes, efficiency, and continuous improvement. Business leaders in the public sector agencies of the oil and gas industry must show interest in initiating and reinforcing knowledge-sharing practices among employees to prevent knowledge loss for enhancing organizational performance and productivity (Ahmad & Karim, 2019; Ali et al., 2019.

Background of the Problem

The exiting of valuable employees from organizations has extensive implications for organizational outcomes. Organizations face the challenge of knowledge loss because of the inability to capture, document, and use the enormous deposit of knowledge within the organization when an employee leaves with knowledge assets (Ali et al., 2019). To survive the knowledge drain caused by employee turnover, organizations must capture knowledge through knowledge-sharing practices (Ali et al., 2019). Existing knowledge

management literature contends that knowledge assets are sources of organizational performance, such as profitability, competition, and organizational effectiveness (Phaladi & Ngulube, 2022). Given the impact of knowledge loss because of employees exiting, organizations that fail to protect their knowledge assets risk losing them, negatively impacting overall organizational performance (Ali et al., 2019; Massingham, 2018). Knowledge loss could have both financial and nonfinancial implications for various organizations. Massingham (2018) estimated that the economic cost of dealing with knowledge loss problems could be $60 million for a 100-employee organization with a $20 million annual salary budget in a period of 3 years. Besides the economic effects of knowledge loss, Massingham identified nonfinancial consequences such as decreased productivity, work performance, employee morale, efficiency, and effectiveness.

Daghfous et al. (2021) identified knowledge loss as a supply chain risk that could significantly affect an organization's performance. Given the identified effects of knowledge loss, business leaders play a vital role in preserving critical organizational knowledge and preventing loss, regardless of organization size (Mohajan, 2019; Phung et al., 2019). Business leaders must have knowledge sharing strategies in place to prevent knowledge loss.

Problem and Purpose

The specific business problem was that some business leaders in the Nigerian oil and gas public sector agencies lack strategies to initiate and reinforce knowledge sharing among employees to prevent knowledge loss. The purpose of this qualitative multiple case study was to explore strategies business leaders in the Nigerian oil and gas public

sector agencies use to initiate and reinforce knowledge sharing among employees to prevent knowledge loss. The target population consisted of five business leaders from five Nigerian public sector oil and gas agencies who had successfully initiated and reinforced knowledge sharing among employees to prevent knowledge loss.

Population and Sampling

I collected data from five business leaders purposively sampled from five public sector oil and gas agencies within Nigeria's federal capital territory and the South-south geopolitical zone. According to Campbell et al. (2020), researchers could identify and seek eligible participants with experience and knowledge of a research topic of interest through the purposive sampling method. Zong et al. (2021) recommended defining participants' eligibility for data quality and high-quality research. I established eligibility criteria for this research study ensuring I recruited qualified participants. My established eligibility criteria included participants being senior management cadres in a public sector agency in Nigeria's oil and gas industry who had successfully initiated and reinforced knowledge sharing among employees to prevent knowledge loss. I also reviewed organizational documents with relevant information detailing leaders' strategies for initiating and reinforcing knowledge sharing in the workplace to corroborate interview data.

Nature of the Study

Researchers can choose from quantitative, qualitative, and mixed-method approaches for research purposes; I adopted the qualitative method for the study based on the research question. A qualitative researcher explores the meaning individuals ascribe

to the business problem by addressing the *what*, *why,* and *how* questions through interviews, observation, and document analysis to collect data (Alam, 2021). I used the qualitative method to better understand the *what, why,* and *how* of phenomena, which in the study were strategies leaders use to initiate and reinforce knowledge sharing among employees to prevent knowledge loss. In contrast, quantitative researchers seek to ascertain the relationship between variables and outcomes by obtaining and analyzing numerical data (Aschauer, 2021). The mixed method combines the quantitative and qualitative approaches in a single study to investigate complex issues, making it a demanding and rigorous method to conduct and requiring more time, additional expertise, and multiple analyses (Irvine et al., 2020; McKim, 2017). Given the nature of the research problem, the quantitative and mixed methods were unsuitable because I neither ascertained the relationship between variables nor investigated complex issues.

Design approaches under the qualitative method include phenomenological, ethnographical, and case study designs (Durdella, 2019; Tomaszewski et al., 2020). The phenomenological approach is used to focus on lived experience to understand the essence of some phenomenon. In contrast, ethnography is used to focus on in-depth understanding through observation of a group that shares a common culture (Bleiker et al., 2019). Based on my research objective, the phenomenological and ethnographic designs were not appropriate because my research topic was not about exploring the meaning of lived experiences or observing people sharing a common culture. Researchers use the case study design to explore a comprehensive understanding of a complex phenomenon through an empirical inquiry within the natural context (Alam, 2021).

Researchers can conduct a case study as a single case study or a multiple case study (Yin, 2018). Data obtained through multiple case studies are often more compelling and substantial than data from a single case study, making multiple case studies more robust (Heale & Twycross, 2018; Lewis, 2019; Sadeghi Moghadam et al., 2021). I selected the case study design to explore a complex phenomenon in its natural setting. I chose the multiple case study design to collect robust data from different locations to explore knowledge-sharing strategies among employees because of the compelling and substantial evidence from multiple case studies.

Research Question

What strategies do Nigerian oil and gas public sector business leaders use to initiate and reinforce knowledge sharing among employees to prevent knowledge loss?

Interview Questions

1. What is your definition of knowledge sharing?
2. What strategies did you use to initiate and reinforce knowledge sharing among your employees?
3. What strategies have you found to be the most effective?
4. What, in your opinion, constitutes effective knowledge sharing practices?
5. How do you assess the effectiveness of the strategies?
6. What challenges have you experienced in the implementation of these strategies?
7. How have you been able to address the challenges effectively?

8. What methods have you used when practicing knowledge sharing that was unsuccessful and did not yield the desired result?
9. What additional information would you like to share on initiating and reinforcing knowledge sharing among employees to prevent knowledge loss?

Conceptual Framework

Researchers use a conceptual framework to explore phenomena of interest. For this research work, I adopted the social cognitive theory (SCT) as a framework to investigate the phenomena of knowledge sharing among employees. Learning occurs in a social context with dynamic and reciprocal interaction with the environment. Bandura (1986) developed the SCT to extend the social learning theory. In 1960, Bandura explored the dynamic interplay of effect, thought, and action in effecting personal and social change, with modeling and cognitive self-regulation as the key concepts. SCT is an interactional model of causation based on triadic reciprocal determinism, environmental factors, personal factors, and behavior drive as interacting determinants of each other's effects on individual behavior (Bandura, 1986). According to Almuqrin and Mutambik (2021), the basic assumption of SCT is that personal factors and environmental influences determine individual behavior. With an emphasis on social influence, SCT addresses how individuals regulate their behavior through self-regulation and reinforcement to accomplish goal-directed behavior sustained over time (Schunk & DiBenedetto, 2020a). The SCT elements essential in knowledge sharing include self-efficacy, outcome expectations, and environmental factors (Thomas & Gupta, 2022). The logical connections between the SCT theory and this study included using the

framework's fundamental components to explore the phenomenon of knowledge sharing among employees. Therefore, I applied SCT to this study as the conceptual framework through which I explained the concept of knowledge-sharing initiation and reinforcement among employees to prevent knowledge loss.

Operational Definitions

Explicit knowledge: Explicit knowledge is the form of documented or codified knowledge easily transferable to others (Gamble, 2020).

Knowledge loss: Knowledge loss occurs when an individual with valuable knowledge exits an organization (Massingham, 2018).

Knowledge management: Knowledge management is managing an organization's knowledge assets systemically to create value and meet tactical and strategic requirements through processes, strategies, and systems that sustain and improve knowledge creation, storage, and sharing (Yee et al., 2019).

Knowledge sharing: Knowledge sharing is an intentional effort to transfer valuable knowledge from ideas, skills, and experiences gained about a phenomenon to another person in the organization (Oladipupo & AbdulRahman, 2018; Opesade & Alade, 2021).

Outcome expectation: Outcome expectation implies the extent to which people believe their behavior will lead to a particular outcome. (Schunk & DiBenedetto, 2020a).

Reciprocal determinism: Reciprocal determinism refers to a model in which behavior, cognitive and other personal factors, and environmental events operate as

interacting determinants that influence each other bidirectional and are mutually interdependence (Lo Schiavo et al., 2019; Wood & Bandura, 1989).

Self-efficacy: Self-efficacy refers to people's confidence in their ability to mobilize the motivation, cognitive resources, and actions required to control events in their lives (Schunk & DiBenedetto, 2020b; Wood & Bandura, 1989).

Tacit knowledge: Tacit knowledge is the hands-on skills, intuitions, best practices, and particular know-how form of knowledge that people hold in their minds and are difficult to access by others (Gamble, 2020; Mohajan, 2019).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are issues, ideas, or positions taken for granted and viewed as reasonable and widely accepted from the beginning of the study design to the final report (Theofanidis & Fountouki, 2019). My first assumption was that the chosen sample would represent my target population and thus be appropriate for generalizing. My second assumption was that the sample size of five business leaders would be sufficient to obtain enough information to complete the case study. My third assumption was that the participants were experienced with an adequate level of understanding of the knowledge-sharing strategies and had demonstrated success in initiating and reinforcing knowledge sharing among employees to prevent knowledge loss. My final assumption was that participants' responses would be reliable and thoughtful without bias during the interviews.

Limitations

Limitations are potential weaknesses that are usually beyond the researcher's control and closely related to the research design chosen, statistical model constraints, funding constraints, and other considerations (Ross & Zaidi, 2019; Theofanidis & Fountouki, 2019). I complemented my primary data with organizational documentation related to knowledge sharing, and gaining access to these documents was a limitation.

Delimitations

Delimitations address the scope limit and define the boundaries set for research (Mosbah & Wahab, 2021). Delimitations include the choice of objectives, the research questions, the sample size, and the geographic location of the target population under investigation (Theofanidis & Fountouki, 2019). The first delimitation included the geographic location of the target population, which were Federal Capital Territory and the South-South geopolitical zone. The locations were delimitation because I restricted the study to specific geographical areas. The second delimitation was the sample size, which was limited to five business leaders that meet the eligibility criteria. The final delimitation was the selected industry, the oil and gas public sector agencies.

Significance of the Study

Contribution to Business Practice

This study is significant because the results of the study have the potential to influence business leaders and human resource practitioners to implement people management practices that will create an enabling environment for knowledge sharing, thereby preventing knowledge loss. The willingness to share knowledge and engagement

in knowledge-sharing practice may translate to increased intellectual capital among employees, which can boost organizational performance by stimulating innovation and growth (Xia et al., 2021). Furthermore, implementing the study findings may reduce the learning curve cost attributed to employee replacement, resulting in cost savings for the organization.

Implications for Social Change

The findings from this study may have implications for positive social change, including strategies that business leaders may use to better manage knowledge sharing among employees in the organizational environment. Knowledge sharing impacts creativity, learning, and performance among employees in organizations (Ahmad & Karim, 2019; Ro et al., 2021). This may have work-related effects on team climate and employees' life satisfaction while cutting costs and trial time (Ahmad & Karim, 2019). The contribution to positive social change may include the potential impact of positively influencing the community by building an organic learning culture and sharing relevant and beneficial knowledge among groups. These collaborations can be used to break knowledge barriers and improve community knowledge to stimulate the creation of new ideas leading to novelty and enhanced ways of doing things. The effort is to stimulate the idea into communities of practice embedded in Nigeria's vast network of the oil and gas public sector by building collective knowledge to improve organizational performance, employees' efficiency, process efficiency, and cost reductions.

A Review of the Professional and Academic Literature

I found a lack of literature on strategies for initiating and reinforcing knowledge sharing among employees by leaders in Nigeria's public sector agencies in the oil and gas industry. In the literature review, I explored the strategies some leaders in the public sector of the oil and gas industry deployed to initiate and reinforce knowledge sharing among employees to prevent knowledge loss. The findings of this study could be a relevant and recent addition to the existing literature in the field of knowledge sharing in Nigeria. Because literature reviews establish the foundation for academic inquiries, scholars should adequately plan the literature review process to gain a deeper understanding of the research question (Xiao & Watson, 2019). In the following sections, I review the SCT and the conceptual framework as the lens to view the phenomenon of knowledge sharing among employees. I discuss the concept of knowledge sharing and some dimensions, and conclude with a summary and transition section.

I searched for scholarly articles on knowledge sharing in multiple databases such as Emerald Insight, SAGE Journal, ScienceDirect, Taylor and Francis Online, and the Thoreau multi-database search from the Walden Library. The keywords I searched in the databases include *knowledge sharing, knowledge management, knowledge sharing motivation, knowledge-sharing behavior, social cognitive theory, and self-efficacy. Other search terms were outcome expectation, personal, environmental, knowledge hiding, knowledge hoarding, learning organization,* and *organizational learning.*

To comply with Walden University's requirement of using peer-reviewed sources, I used the Ulrich Web Global Serials Directory feature in the Walden University Library

database to ascertain the peer-reviewed articles. Of the 229 references, 196 (86%) are peer-reviewed, and 182 (79%) are publications within the 2019-2023 period. The literature review contains 100 references, with 75 (75%) references published within the 2019-2023, and 86 (86%) are peer-reviewed. Some of the older articles were the seminal works of theorists on the conceptual framework and other alternate theories.

Social Cognitive Theory

The conceptual framework that I used to support this study was the SCT. Bandura (1986) introduced the concept of SCT as an extension of the social learning theory (SLT). SLT derives from the idea that people learn from their interactions with others in a social context encompassing observation, attention, memory, motivation, and modeling (Rumjaun & Narod, 2020). The general principle of SLT is that people learn from one another through observation, imitation, and modeling (Middleton et al., 2018). SLT considers learners active information seekers and aggregators based on their cognitions and beliefs, proactively influencing the learning stages of the what, why, when, where, and how of individuals' learning rather than passively absorbing knowledge from environmental inputs to the best of their ability (Bandura, 1978).

The SLT evolved into the SCT with the addition of self-efficacy as the vital construct, placing greater emphasis on each person being the primary agent in control of their own life (Schunk & Usher, 2019). According to Schunk and Usher (2019), SCT has a focus on addressing human psychological perspectives on how they function, emphasizing the influence of their social environment on learning, motivation, and self-regulation. Learning in this context is within the SCT, which emphasizes individual

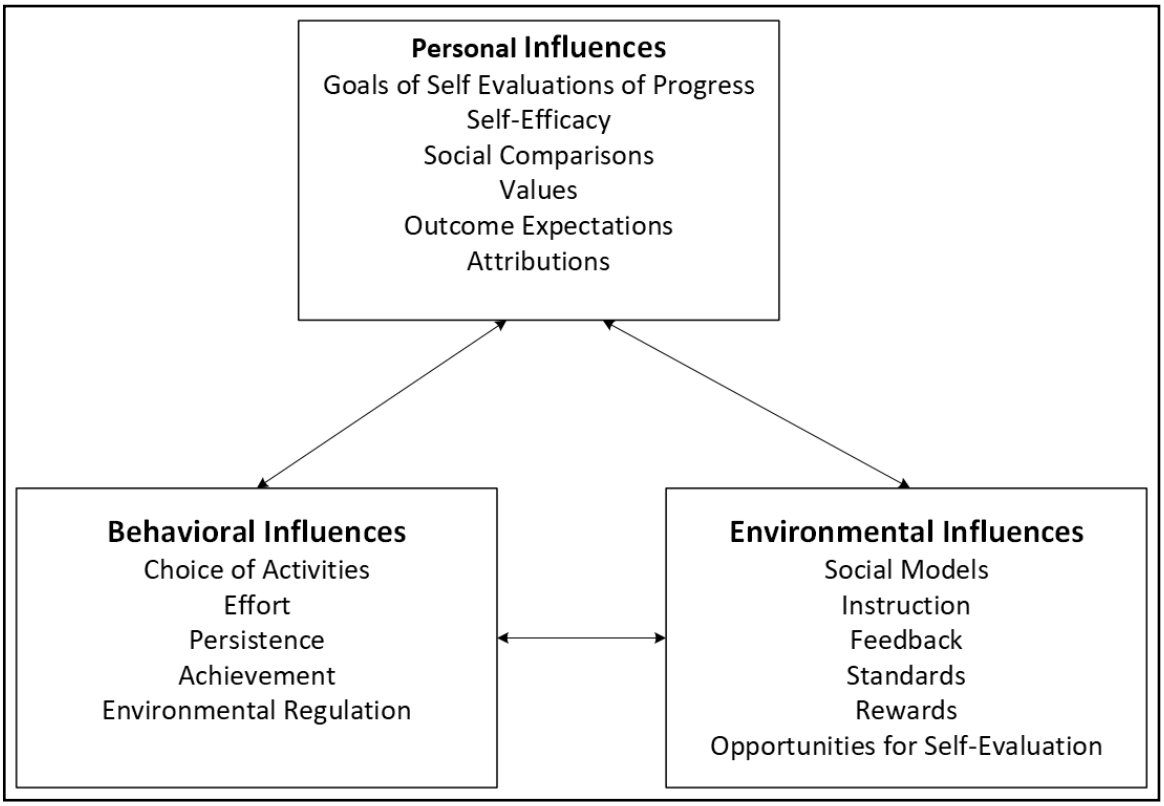
interaction paving the way to skills learning, strategies, beliefs, attitudes, and rules (Xu et al., 2020). Similarly, personal regulating of activities underlines the idea of human learning, which occurs within social environments, while the motivating factors are learning about the appropriateness, importance, and consequence of actions (Middleton et al., 2018). These confine individuals to act within the ambit of their capabilities and beliefs toward the expected outcomes of their activities (Schunk & Usher, 2019). Organizations should provide enabling environments where employees have constant interactions with one another to have a chance to share knowledge and experience.

Bandura (1986) provided a comprehensive overview of human cognition in the context of social learning, focusing on cognitive concepts. Xu et al. (2020) noted that individuals learn behaviors and cognitive strategies by observing the behavior of others and the results. Bandura proposed an internal principle termed *triadic reciprocal determinism*. According to Lo Schiavo et al. (2019), triadic reciprocal determinism refers to a conceptual and analytical model frequently used in research that uses SCT as a theoretical framework, representing a bidirectional connection between an individual's behavior, personal influence, and the environment. The triadic reciprocal determinism conceptualized human behavior as a dynamic, triadic, mutual interaction of emotional, behavioral, and environmental factors (Almuqrin & Mutambik, 2021; Anwar et al., 2019). Thus, SCT exemplifies human functioning from an encompassing perspective with the continuous reciprocal interaction between personal factors, environmental factors, and human behavior (Anwar et al., 2019). Engaging leaders could stimulate and reinforce motivated behavior among employees for desired organizational performance

by considering all relevant factors, including personal and environmental factors. Figure 1 is the diagrammatic representation of the reciprocal interaction of behavior, emotional, and environmental (situational) factors.

Figure 1

The Reciprocal Interactions Between Environment, Person, and Behavior



Note. The figure highlights some elements of personal, environmental, and behavioral influences adapted from "motivation and social cognitive theory" (Schunk & DiBenedetto, 2020a).

SCT has several applications. According to Bandura (1988), the medical and clinical settings recorded most of the early research on social cognitive motivation. Some researchers have expanded the scope to other aspects, such as education, health, and

businesses (Schunk & DiBenedetto, 2020a). In recent studies, researchers applied SCT as a contemporary motivation theory to explain knowledge sharing (Thomas & Gupta, 2022). Several scholars utilized the social cognitive approach to understand the different effects of knowledge sharing in various contexts, such as the agri-food sector (Fait et al., 2019), micro-enterprises (Duarte Alonso et al., 2019), ecotourism industries (Xu et al., 2020), global software development organizations (Anwar et al., 2019), and institutions of higher education (Almuqrin & Mutambik, 2021; Phung et al., 2019). The various application of the SCT presents its usefulness in exploring practical business problems in diverse contexts (Middleton et al., 2018).

Researchers applied SCT to expand knowledge of determinants that influence knowledge sharing (Thomas & Gupta, 2022). The constructs of SCT include reciprocal determinism, observational learning, outcome expectations, self-efficacy, motivation, and reinforcement (Schunk & DiBenedetto, 2020b; Xu et al., 2020). In line with the tenets of SCT, an individual's behavior can result from cognition of that social environment, and the environment influences particular actions in individuals (Thomas & Gupta, 2022). Organizations should ensure that the work environment is balanced so that interactions of employees' personal factors will produce the desired behavior. Understanding the influence of the SCT determinants in the organizational context will guide leaders in instituting measures to encourage and promote knowledge sharing among employees by imparting a sense of confidence, trust, and openness to share ideas (Mohajan, 2019).

Reciprocal Determinism

Reciprocal determinism is the central concept in SCT that specifies a detailed analysis of the role one's behavior plays in a social environment. Bandura (1978) described reciprocal determinism as the dynamic and continuous mutual interaction between cognitive factors and environmental and behavioral influences. The cognitive factors refer to an individual set of learned experiences, ability, character, emotions, perception, motivation, and awareness judgment (Schunk & DiBenedetto, 2020a; Xu et al., 2020). The environmental influences involve the external social context, including social models, instruction, feedback, standards, and rewards (Schunk & DiBenedetto, 2020a). The behavioral influences are the response to stimuli to achieve goals. Wood and Bandura (1989) noted further that in the context of reciprocal determinism/interaction in social settings, entities/persons are vulnerable objects controlled neither by ecological forces nor entirely free individuals who can do whatever they choose. Personal and environmental factors influence and determine individual behavior (Almuqrin & Mutambik, 2021; Middleton et al., 2018). For example, Middleton et al. (2018) noted that personal factors influence how individuals model and reinforce actions observed in others, influencing the behaviors that individuals exhibit in specific situations. Thus, employees will be willing to share knowledge with others subject to personal and environmental factors. Business leaders need to support employees' personal goals with the appropriate environmental settings that will encourage employees to share knowledge and experiences among themselves willingly.

Employees' conceptions, behavior, and environments are reciprocal determinants of each other. Institutional reciprocal mechanisms provide means for changing institutions and the conditions of life, as there is the opportunity for people to shape their destinies (Bandura, 1978). The mutual interaction can play out at varying levels of complexity ranging from the individual level to the interactive functioning of organizations and societal systems (Lo Schiavo et al., 2019). Bandura (1978) considered people partially free as they shape future conditions by influencing their courses of action. Organizations need to support employees' personal goals with the appropriate environmental settings that will encourage employees to share knowledge and experiences among themselves willingly.

Environmental Influences

Social interaction within the context of SCT refers to the environment as an agent that can influence an individual's behavior. Such environmental influences include social pressure or other unique organizational characteristics (Xu et al., 2020). Anwar et al. (2019) classified the environmental factors into physical and social dimensions in their study on global software development organizations to investigate knowledge sharing behavior. The physical entities in the organization that may have an impact on the employees are referred to as the *physical environment*. According to Anwar et al., the physical environment in an organization may influence the employees' knowledge sharing behavior, including geographical distance and time zone differences, while linguistic distance is a social factor. Organizations might be able to enhance employees'

knowledge sharing intention and behavior through the creation of a good organizational environment.

Various environmental factors influence employee behavior. According to Xu et al. (2020), environmental factors refer to the tangible and intangible internal/external environment. For instance, environmental influences may include organizational climate (Al-Kurdi et al., 2020; Wang et al., 2019; Xu et al., 2020). Al-Kurdi et al. (2020) found that organizational climate strongly influences employee knowledge sharing. Similarly, Xu et al. (2020) concluded that employees would share and integrate knowledge in a good organizational climate to promote competitiveness. Wang et al. (2019) stated that the corporate environment affects interpersonal relationships between employees, employee groups and the organization, internal processes, an open system, and rational objectives. Environmental influences may also include socially modeled effects, influencing individual motivational processes and outcomes (Schunk & DiBenedetto, 2020a). Other environmental influences, such as family, networks, work, and events, may influence whether that individual engages in the behavior (Almuqrin & Mutambik, 2021). Environmental influence is a decider of individuals' capacity and learning ability within the workforce to be impacted by knowledge sharing by leadership strategies on concept analysis of SCT within the organization's structure.

Personal Influences

Personal influence is an essential determinant of employee behavior. Schunk and DiBenedetto (2020a) described personal influences as processes that instigate and sustain motivational outcomes, including cognitions, beliefs, perceptions, and emotions**.** Bandura

(1988) further posited that personal factors like perceptions, feelings, predispositions, and demographic and biological characteristics influence the probability an individual adopts and practices a specific behavior and the environment around them. The conceptual development leads to the analysis of outcome expectation and self-efficacy concerning the personal influence using the SCT framework to explain the motivation of social learning cognitive of persons as below.

Outcome Expectations. Outcome expectation refers to the anticipated consequences of a person's behavior. Before engaging in the behavior, people anticipate the consequences of their actions, which can influence the successful completion of the behavior. Outcome expectations are one's beliefs about the expected outcomes of actions (Schunk & DiBenedetto, 2020a). Schunk and DiBenedetto (2020a) considered outcome expectations to be critical motivational factors because people are motivated to engage in actions when they believe they will lead to desired outcomes. Outcome expectations can sustain desired actions over long periods when people believe that their actions will eventually produce the outcomes they desire (Gerbin & Drnovsek, 2020). While expectancies are from previous experience, expectations are subjective to the individual and focus on the value placed on the outcome to be the inspiration and motivation of embarking on such action, either positive or negative (Anwar et al., 2019). Employees will engage in knowledge sharing when the fulfillment of value placed on anticipated outcomes is certain. Business leaders can play a role in improving employee expectations to influence positive behavior.

Self-Efficacy. Self-efficacy can motivate employees to exhibit the desired behavior. The concept of self-efficacy is integral to Bandura's (1986) SCT, and studies have proved its influence on employees' knowledge-sharing behavior. The self-efficacy belief system, according to SCT, is the foundation of human motivation, influencing a person's thought patterns, emotions, and actions (Bandura, 1988). According to Ghazi et al. (2018), the construct of self-efficacy is a unique component of SCT. Self-efficacy is an internal factor in triadic reciprocal determinism and influences positive behavior (Wulandari & Muafi, 2021). Business leaders should promote strategies to boost self-efficacy in employees.

Theoretically, self-efficacy causally influences expected outcomes of behavior. Self-efficacy assesses one's ability to perform specific activities, including estimates of skills, adaptability, creativity, and ability to maintain self-control under stress (Bandura, 1986). Hardaningtyas (2020) defined *self-efficacy* as individual beliefs and confidence in one's ability to execute and complete a task. Wulandari and Muafi (2021) referred to self-efficacy as an individual's belief in their ability to carry out specific tasks vital in shaping a person's response to environmental influences. Pradesa et al. (2019) added that employees that are more confident about their ability to do a task are likely to be more dedicated to their jobs. Naotunna and Zhou (2018) considered self-efficacy a more central and widespread self-regulation mechanism. Employees with high self-efficacy will be able to control their level of function and have the confidence to share knowledge and experience with other colleagues.

The concept of self-efficacy has a connection with knowledge-sharing practices. Safdar et al. (2020) conducted a systematic review of the literature to investigate the relationship between self-efficacy and knowledge sharing. Safdar et al. found that self-efficacy positively and significantly affected knowledge sharing in most reviewed studies. Safdar et al. maintained that self-efficacy enhances skills and confidence among individuals, which, in turn, helps the individual to play a vital role in improving knowledge sharing among people. Furthermore, researchers noted that individuals with high self-efficacy are institutional assets and can help their organizations improve knowledge-sharing activities (Safdar et al., 2020).

Similarly, in a recent study, Almuqrin and Mutambik (2021) found self-efficacy emerging as one of the most important predictors of knowledge-sharing activities. According to Bandura (1988), human competency requires skills and self-belief in one capability to use those skills well, while higher confidence in abilities encourages people to share more knowledge. Since boosting self-efficacy is essential for enhancing knowledge sharing, Safdar et al. (2020) advocated deploying maximum resources, such as dedicated training to equip individuals to improve self-efficacy. Boosting employees' self-efficacy may affect the knowledge-sharing capabilities of employees.

Behavioral Influences

The choice of actions, efforts, perseverance, accomplishment, and environmental rules are key motivational outcomes of behavioral influences (Schunk & DiBenedetto, 2020a). Behavioral competence refers to a person's ability to perform a behavior using their knowledge and skills. Using the reciprocal interaction model, the behavior serves as

a motivational outcome that influences an individual's motivation to perform an action (s) or activities related to the expectation that leads to accomplishment. The other's behaviors serve as indications for observers' actions (Wulandari & Muafi, 2021). The assertion establishes the fact comparing individuals with lesser motivation and those with higher motivation to succeed decide to engage in activities, exert effort, and persist on time-consuming tasks, with a high level of optimism to regulate environmental factors to stimulate success (Burmeister et al., 2020). Business leaders could help sustain employees with higher motivation to share knowledge through reinforcements.

Employees will engage in knowledge-sharing behavior if they understand what to accomplish and how to achieve it. Schunk and Usher (2019) gave insight into the empirical support of behavioral influences. Majorly, self-efficacy is a case, using employees with lower self-efficacy, and those who feel more efficient about learning and performing well are more eager to choose to engage in activities, spend effort and persist on challenging tasks, and achieve higher levels of results (Schunk & Usher, 2019). These outcomes serve as individual behavior driven by motivation, which positively influences or affects learners' self-efficacy and helps sustain motivational outcomes.

A previous study on self-regulation has shown similar outcomes relating to self-efficacy using environmental regulation as key internal motivational processes on self-evaluations of progress, which become behavioral influences (Schunk & DiBenedetto, 2020a). The idea gives insight to individuals or persons that choose a behavior efficaciously in learning and will probably establish effective environments to achieve the learning mechanisms for productive management of time (Burmeister et al., 2020;

Schunk & Usher, 2019). Organizations must ensure that the internal and external factors in the work environment can influence employees' likelihood of repeating positive behavior.

Motivational behavior outcomes help people to sustain goal-directed actions. The behavior influences the accomplishment, and the environmental rule serves as a critical motivational outcome of expectations (Thomas & Gupta, 2022). The main point of SCT is to explain how individuals regulate their behavior through control and reinforcement to accomplish goal-directed behavior that can be sustained over time (Almuqrin & Mutambik, 2021). Bandura (1986) considered that an individual's behavior influences and is influenced by social cognitive and personal characteristics. Behavioral influence is the fundamental means by which employees or individuals can contribute to applying knowledge, innovation, and optimization of organizational successes (Anwar et al., 2019). With the central theme of the SCT being the individual's thoughts and feelings, the environment, and the behavior itself, business leaders must understand the basics of social context and the application of suitable motivation and reinforcements that will stimulate the desired knowledge-sharing behavior in employees that can be sustained over time (Anwar et al., 2019).

Alternative Conceptual Frameworks

In addition to the SCT, I reviewed two other behavioral models to determine their suitability in addressing the phenomenon of knowledge sharing. According to Almuqrin and Mutambik (2021), knowledge sharing as behavior comes from various perspectives. I studied the theory of reasoned action (Fishbein & Ajzen, 1975) and the theory of planned

behavior (Ajzen, 1991). I examined the alignment of these theories with the research question to ascertain their suitability as the conceptual framework for this study.

Theory of Reasoned Action

Researchers can apply the theory of reasoned action to behavioral concepts. The view of the theory of reasoned action (TRA), developed by Fishbein and Ajzen (1975), is a behavioral change model that explains behavioral intention. TRA relates to attitude, belief, intention, and behavior (Hatane et al., 2021). According to the tenets of TRA, two factors influence the employee's choice to engage in the behavior, which is the employee's attitude and the subjective norm in the form of perceived social pressure (Ng, 2020). As a result, the TRA predicts behavioral intention, an intermediate step between predicting attitude and behavior, because it separates behavioral intention from behavior. Bekoe et al. (2018) noted that intention is viewed as the best instrument to predict individual behavior; the stronger intention, the higher possibility of someone to involve in a particular behavior and conversely. In line with the assumption of TRA, some factors can limit the impact of perspective on behavior.

The TRA was designed originally to predict voting behavior; thus, it is most effective when applied to behaviors under an individual's voluntary control but could be better at explaining the behavior beyond the individual's control (Hatane et al., 2021). Further studies have shown that the assumption of perfect volitional control of TRA severely limited the theory's ability to deal with challenging behaviors, which may prevent people from acting on their intentions (Sok et al., 2021). Even if individuals are highly motivated by their attitudes and subjective norms if behaviors are not entirely

under voluntary control, they may not perform the behavior because of intervening environmental conditions (Sok et al., 2021). Therefore, the application of TRA is ideal for single-instance activity but may not be suitable for predicting ongoing or recurrent behavior, such as employee knowledge-sharing activities, which is expected to be a continuous developmental process.

Theory of Planned Behavior

The theory of planned behavior (TPB) grew from the assumption about human behavior in the view of reasoned action (TRA). Ajzen (1985) presented the theory as an extension of the TRA with the addition of perceived behavioral control. Both approaches, TPB and TRA, presented that understanding a person's behavioral and normative beliefs and the social norms of the society in which they live determine a person's behavioral intentions and attitudes toward a specific behavior (Hatane et al., 2021). Both theories consider the individual's perspective, social norms, and perceived behavioral control as accurate predictors of behavioral tenacities.

The main difference between TPB and TRA is that TPB is used to better understand a person's actual attitudes, which result in physical behavior (Ajzen, 2020). The most crucial consideration is behavioral intent. Adding perceived behavioral control, which considers whether a person truly believes in control over the behavior they want to perform, is the primary reason the TPB is more accurate (Hatane et al., 2021). The TPB is in three components: an individual's attitude, perceived behavioral control, and society's subjective norms, all of which influence an individual's intention and, ultimately,

behavior (Sok et al., 2021). Attitude toward the behavior refers to how positively or negatively a person evaluates the target behavior.

The three antecedents to intentions are from beliefs, such as behavioral beliefs, normative beliefs, and control beliefs (Ajzen, 1991). In contrast, subjective norm refers to perceived social pressure to perform or not perform the behavior (Ajzen, 1991). Perceived behavioral control relates to the ease and difficulty the individual believes can perform the behavior (Ajzen, 2020). Combining a person's attitude and opinion with perceived control of the behavior and society's subjective norms, the theory of planned behavior influences a person's behavioral intention, leading to the behavior (Oladipupo & AbdulRahman, 2018). In addition, organizations can enhance employees 'knowledge sharing by improving employees' attitudes towards subjective norms and perceived behavioral control.

According to the tenets TPB, employee intentions will predict knowledge sharing provided the employees have voluntary control over knowledge-sharing behaviors. Employee intentions toward engaging in knowledge-sharing behaviors can improve by assessing employee beliefs about subjective norms and perceived behavioral control and implementing interventions to increase positive attitudes toward the knowledge-sharing behaviors (Nguyen et al., 2019b; Opesade & Alade, 2021). Depending on the thoughts, individuals' attitudes and perceived behavioral control can positively or negatively influence their intention and behavior. In some cases, someone with a negative attitude and the idea of having no control over the action is less likely to act.

Furthermore, if members of society condemn an action, it will have a negative impact on a person's intention to carry out the act. Opesade and Alade (2021) concluded that a positive relationship exists between attitude, subjective norms, perceived behavioral control, openness to experience, agreeableness, and knowledge-sharing behavior. Employees whose personality traits tend towards openness to experience and agreeableness will share their knowledge more readily than those whose personality traits do not. Similarly, Oladipupo and AbdulRahman (2018) identified perceived behavioral control as having the strongest influence on knowledge sharing intention. Researchers have applied the features of TPB to address knowledge sharing behavior, however, there are instances where intentions do not necessarily predict actual behavior (Ajzen, 2020), hence, my choice of not employing TPB as the framework of this study.

Organizational Knowledge and Knowledge Sharing

Identifying and managing organizational knowledge can aid in the improvement of organizational performance. A basis for identifying improvements in the organizational processes is the sharing of administrative information across employees (Kovačić et al., 2022). Business leaders must recognize and manage the various knowledge assets present within a company to create high-performing organizations and correlate the information with other organizational strategies (Ibidunni et al., 2018). Ahmad and Karim (2019) considered knowledge sharing one of the crucial activities in corporate operations because of the multiple outcomes it generates toward achieving organizational success. Knowledge sharing is a deliberate practice in which participants disseminate or exchange existing knowledge while acquiring new knowledge through

critical thinking, explanation, clarification, and reflection from various perspectives (Javaid et al., 2020). Researchers have identified knowledge sharing as an integral component of the knowledge management system that involves transferring beneficial task-related knowledge among employees to create organizational values (Javaid et al., 2020). When employees engage in knowledge sharing within an organization, the ability becomes a source of competitive advantage, improving performance and enhancing organizational learning, innovation, and good decision-making practices (Ruparel & Choubisa, 2020). Organizational leaders must promptly identify what constitutes critical organizational knowledge and immediately devise means of managing such knowledge through knowledge sharing in the organization effectively.

Type of Organizational Knowledge

Various forms of organizational knowledge exist. Organizational knowledge can be classified as tacit, implicit, and explicit (Onifade et al., 2022). Individuals and groups typically use implicit and explicit to achieve organizational objectives (Ibidunni et al., 2018; Kovačić et al., 2022). Kovačić et al. (2022) considered explicit knowledge as the documented form of organizational knowledge that also serves as a base for creating tacit. Individuals and groups in organizations codify explicit knowledge that they store in a knowledge management setup (Ibidunni et al., 2018). According to Ibidunni et al. (2018), organizations often develop sustaining cultures and orientations based on the effective utilization of explicit knowledge. The use of technology has improved the codification and storage of explicit knowledge (Olayemi & Olayemi, 2021). Employees

can now have quicker access to task-related information required for decision-making and execution of tasks.

Aside from the explicit knowledge that organizations document in the form of policy, manuals, and procedural guides readily available for employees, a tacit understanding of the experience and cognitive expertise resides with the employees (Onifade et al., 2022; Yeo, 2020). Tacit knowledge possessed by individuals and groups involves intuitive ideas and experiences created from the routine activities of employees (Ibidunni et al., 2018; Kovačić et al., 2022). In most cases, tacit knowledge is an undocumented experience acquired by employees in the cause of performing tasks and based on identified problems (Ononye & Igwe, 2019). Sharing tacit knowledge is challenging because those who desire to capture and replicate the knowledge would have to pass through similar experiences as those who possess such tacit knowledge (Phaladi & Ngulube, 2022). According to Wang and Yang (2015), tacit knowledge, estimated to represent 80% of organizational knowledge, remains challenging to transfer. The risk is that such critical knowledge with exited employees leaves a vacuum within an organization (Ali et al., 2019). Consequently, business leaders must design strategies to reduce the loss of critical knowledge to the barest minimum.

Managing organizational knowledge requires a deliberate effort. Kovačić et al. (2022) noted that management of all knowledge could be through collecting knowledge from activities and creating a platform for sharing with organizational employees per the tasks they are performing. Ibidunni et al. (2018) concluded that because organizational knowledge resides in humans, managers should concentrate on group-tacit knowledge

and individual-explicit knowledge as the most strategic organizational knowledge for improving performance.

Organizations are often exposed to the challenge of knowledge loss based on the inability to exchange, capture, document, and apply the enormous deposit of knowledge within the organization. There should be an effective knowledge-sharing strategy for a knowledge management system for an organization to be successful (Fait et al., 2019). The efforts are channeled on four major factors that influence the knowledge-sharing process in an organization, which include the nature of knowledge, motivation to share, opportunities to share, and culture of the workplace environment (Faccin et al., 2019; Olayemi & Olayemi, 2021). This further spurn the implication of knowledge loss to the organization when knowledge sharing is not part of the culture.

The Implication of Knowledge Loss to Organizations

Knowledge loss has far-reaching consequences for various types of organizations, both financially and nonfinancially. Businesses largely depend on information and knowledge; the accidental and non-accidental loss of any information can affect business owners. Data loss may relate to the cost of recovering information and the financial losses resulting from significant information loss (Yarovenko et al., 2021). Even though putting a number to the loss can be difficult, some researchers attempted to quantify the loss in both large and small organizations. According to a study of Fortune 500 companies, the annual cost of lost knowledge is approximately $31.5 billion, primarily because of inadequate knowledge management practices such as creating, sharing, and capturing knowledge (Wang & Noe, 2010). For a 100-employee organization with a $20

million annual salary budget, Massingham (2018) estimated the financial cost of addressing the problems caused by knowledge loss to be $60 million. Besides the economic impact of knowledge loss, Massingham identified nonfinancial impacts to include decreased productivity, work performance, employee morale, efficiency, and effectiveness. Daghfous et al. (2021) identified knowledge loss as a supply chain risk that could significantly influence the performance of an organization. Daghfous et al. confirmed that managing organizational knowledge could have prevented financial losses. Consequently, business leaders must implement knowledge management practices to preserve critical organizational expertise and to avoid loss, regardless of the organization's size.

Benefits and Barriers to Knowledge Sharing

Researchers attributed benefits to knowledge-sharing practices in an organization. Knowledge and experience-sharing activities are beneficial, especially in supporting individual and organizational performance (Ahmad & Karim, 2019; Olayemi & Olayemi, 2021). Researchers identified organizational benefits, including enhanced innovative work behavior, improved competitive advantage, and contribution to creativity, learning, and performance (Ahmad & Karim, 2019; Muneer, 2019; Ononye & Igwe, 2019). Other identified impacts include a positive contribution to team building and job and life satisfaction.

Organizational Benefits

The impact of knowledge sharing continued to attract the attention of researchers because of the importance of organizational competencies in a competitive era. Several

researchers also attributed the organizational benefits to knowledge-sharing practices among employees (Ahmad & Karim, 2019). Promoting knowledge sharing contributes to innovative employee behavior while providing better access and application of knowledge with a reduced tendency to repeat mistakes, faster problem-solving, development of new business opportunities, and creating competitive advantage (Ruparel & Choubisa, 2020). Vandavasi et al. (2020) examined the relationship between knowledge sharing and individual innovative behavior. Vandavasi et al. maintained that employees are encouraged to learn new skills and be creative through knowledge sharing. Similarly, Al-Ahmad Chaar and Easa (2020) demonstrated the mediating role of knowledge sharing in promoting new business ideas, processes, and products. Al-Ahmad Chaar and Easa evaluated the relationship between transformational leadership and innovation. Muneer (2019) opined that knowledge sharing enables a company to build proficiency for innovation, thereby advancing faster than competitors do. Upward-looking organizations must ensure that knowledge sharing among employees is on an ongoing basis.

The exchange of knowledge among workers can enhance innovation. Innovation is critical to organizational capabilities for gaining and maintaining a competitive advantage, while tacit knowledge sharing among workers is vital to creativity (Castaneda & Cuellar, 2020; Rumanti et al., 2018). In business, innovation refers to the decisions, activities, and practices that bring an idea to fruition to generate business value. Modern infrastructure, technology, and economic resources help facilitate innovation, but knowledge sharing among workers is essential (Castaneda & Cuellar, 2020; Wang et al.,

2016). Wang et al. (2016) demonstrated how knowledge sharing improves firm performance by increasing innovation and intellectual capital. In the systematic literature review to gain more insight into the relationship between knowledge sharing and innovation, Rumanti et al. (2018) discovered that tacit knowledge sharing is critical to innovation. In addition, contributions, communication, interaction within an organization, and personality affect organizational innovation. These contributions, communication, and interaction constitute knowledge donation and acquisition activities (Ononye & Igwe, 2019; Rumanti et al., 2018). Thus, innovation relies heavily on worker-to-worker knowledge exchange. Managers can set priorities when leveraging knowledge sharing to achieve performance goals (Mohajan, 2019; Wang et al., 2016). Knowledge donation and knowledge collection predominantly influence knowledge sharing on innovation.

Organizations reposition to become sustainable, address current business challenges, and meet future needs. According to Roy et al. (2018), organizational sustainability is gradually set as the "new normal" in business and operations management. Castaneda and Ramírez (2021) maintained that knowledge is a significant resource for achieving organizational objectives and supporting sustainability. As organizational sustainability focuses on managing new knowledge of ideas and practices that can expand the business to meet future expectations and needs, knowledge sharing supports the accomplishment of such organizational goals (Castaneda & Ramírez, 2021). In achieving sustainability of performance and human resource systems, there should be a connection to sharing knowledge among different designs that make up the organization. Roespinoedji et al. (2020) concluded that developing strong

communication-based knowledge-sharing channels among management and employees enhances a sustainable organization's economic and environmental performance indicators.

The emerging quest for sustainable organizations requires new collaborative strategies and shared resources. Knowledge sharing can contribute actively by improving the development and implementation of new technologies and environmental practices to achieve sustainable performance (Muñoz-Pascual et al., 2019). Muñoz-Pascual et al. (2019) further recommended that firms constantly adopt sharing knowledge to sustain their competitiveness and sustainable growth. Among other factors affecting small and medium enterprises development, researchers considered knowledge sharing an essential contributor to developing small and medium enterprises with a long-term relationship with sustainable performance and competitiveness (Meflinda et al., 2018). Besides, small and medium enterprises greatly benefit society through their contribution to economic growth. According to Meflinda et al. (2018), knowledge sharing positively affects small and medium enterprises' performance and sustainability strategies. Sharing knowledge stimulates employees to think critically and creatively, creating new knowledge (Meflinda et al., 2018). In another related study by Khan and Afsar (2021) on determinants of innovation capabilities in the small and medium enterprises context, the findings showed a direct impact of knowledge sharing on innovation capabilities and other vital determinants such as technological and operational managerial and transactional capabilities.

Knowledge sharing contributes to a firm's innovation performance through employees' collaboration and sharing of knowledge, ideas, and experience. Having a work environment that promotes knowledge sharing culture might motivate employee knowledge sharing (Halisah et al., 2021; Muneer, 2019). The organizational size of micro, small and medium enterprises facilitate knowledge sharing as working together in small teams enables sharing of critical knowledge for improving innovation performance and product development (Tassabehji et al., 2019). Several researchers have attributed many positive organizational outcomes to knowledge sharing; one of such qualities is the potential to address sustainability/business continuity concerns (Ali et al., 2019; Muneer, 2019). Mojarad et al. (2020) maintained that business leaders instituting knowledge sharing across organizations would ensure continuous learning and become a learning organization.

Knowledge Sharing Barriers

Although researchers have attributed many positive organizational outcomes to employee knowledge sharing, some impeding factors affect knowledge-sharing behavior. Van Sang Do et al. (2019) conducted a literature review on knowledge sharing and identified time as a barrier to knowledge sharing. Van Sang Do et al. explained that knowledge sharing could be time-consuming when the recipient cannot comprehend the knowledge content because of the difference in educational level, thereby putting time pressure on the sharer. Besides, a lack of time, motivation, and effort to knowledge sharing is another barrier (Mohajan, 2019). Employees will be unwilling to share knowledge if they perceive that knowledge sharing will reduce the impact negatively on

their authority, respect, influence, and recognition (Van Sang Do et al., 2019). Chatterjee et al. (2021) noted that the ease and complexity of the knowledge content would affect sharing of such knowledge. Depending on the knowledge seeker's assimilation rate, knowledge sharing may be counterproductive.

Different categories of barriers to knowledge sharing exist. In their study of public sector information and communications technology project teams, Karagoz et al. (2020) identified the enablers and barriers to knowledge sharing among the project teams and found 13 barriers grouped into individual, organization, and technology. Karagoz et al. identified a lack of time and trust in knowledge sources making up the individual category. The organizational category constitutes the most barriers: poor or no knowledge management strategy, lack of reward system, unsupportive culture, poor staff retention, limited resources, external business unit competition, restricted communication, and knowledge flow, hierarchical organizational structure, and extensive business unit size (Karagoz et al., 2020). Lack of technical support and IT system/requirement mismatch constitutes the technology barrier (Oliveira & Pinheiro, 2022). Understanding the various factors that could hinder knowledge sharing would provide the basis for business leaders to seek solutions to address such barriers.

Researchers identified factors impeding employee knowledge sharing, including the generational gap among workers. Tang and Martins (2021) suggested that the generational gap between older and younger workers could challenge knowledge transfer in the workplace resulting from human resources practices. Tang and Martins involved banking professionals identified a lack of mutual understanding among older and younger

workers as an impediment to knowledge sharing because of less interaction. In a similar study, Halisah et al. (2021) focused on social dilemmas in knowledge sharing and identified other factors, such as knowledge-sharing culture and performance climate. Halisah et al. found that organizations with negative knowledge-sharing culture and a competitive performance climate resulted in low intention to share knowledge; such culture is counter-productive to knowledge sharing. Another possible social dilemmas factors are that employees hoard valuable knowledge to maintain privileged status and position power (Ruparel & Choubisa, 2020). Such behavior includes knowledge withholding, knowledge hoarding, knowledge hiding, and social loafing (Halisah et al., 2021). Organizations should have in place human resource practices that will support knowledge-sharing practices.

The form of interaction among employees based on the organizational structure could be a barrier to knowledge sharing. Sheerin et al. (2020) conducted a study on female managers working in two different workplace contexts in investment banking dominated by men and human resources females dominate. From the survey result, Sheerin et al. suggested that gender imbalance affects the approaches to language, communication, and knowledge sharing based on the different forms of interaction in the two contexts. In addition to the factors highlighted, Sheerin et al. concluded that organizational context is an essential factor in the case of knowledge sharing and gendered practices. Other factors that could impede knowledge sharing include a lack of trust, motivation, negative organizational culture, an inappropriate reward system, a lack of management support, and an organizational structure that does not support knowledge

sharing among staff (Mohajan, 2019; Olayemi & Olayemi, 2021; Vanhala, 2019). Considering the factors highlighted, business leaders could design a human resource system that can possibly address the concern for knowledge-sharing practices to thrive.

Knowledge Sharing and Knowledge Hiding

Some employees exhibit knowledge hiding for best-known reasons rather than engaging in sharing knowledge. Despite various incentives to promote knowledge sharing, employees remain reluctant to share their knowledge but rather engage in knowledge-hiding (Connelly et al., 2012). Connelly et al. (2012) established knowledge hiding as a distinct construct from potentially related behaviors such as knowledge hoarding, knowledge sharing, counterproductive workplace behaviors, and others. Connelly et al. maintained that knowledge hiding is more than just a lack of sharing. Although the two constructs may appear very similar, the motivations for knowledge hiding and a lack of knowledge sharing are very different. Knowledge hiding could result from pro-social factors, instrumental reasons, and employees' laziness. At the same time, a lack of knowledge sharing, on the other hand, can be caused by an absence of the knowledge itself (Connelly et al., 2012).

In understanding knowledge hiding further, Gagné et al. (2019) emphasized that while knowledge sharing and hiding are viewed as opposite behaviors, these behavioral clusters each have their dynamic and are motivated differently. While knowledge sharing is primary motivation by meaning and enjoyment, knowledge hiding is encouraged by external pressures (Gagné et al., 2019). Consequently, Nguyen et al. (2022a) observed that knowledge hiding frequently resulted in significant negative consequences and that

research on knowledge hiding is limited. Nguyen et al. further discovered that role conflict, job insecurity, and cynicism positively affect knowledge-hiding behavior to examine antecedents and consequences. Knowledge-hiding behavior negatively affects job performance and mediates the antecedents of knowledge hiding on job performance (Ruparel & Choubisa, 2020). However, Ruparel and Choubisa (2020) found that transformational leadership moderated the impact of role conflict on knowledge hiding. Invariably, business leaders can play a positive role with the right leadership style.

Knowledge hiding could have a detrimental impact on organizational performance. Ruparel and Choubisa (2020) summarized the antecedents and consequences of knowledge hiding in a retrospective narrative review of studies on knowledge-hiding behaviors. Ruparel and Choubisa discovered negative relationships between knowledge-hiding behaviors and construct behaviors among individuals and team creativity. The negative behaviors include psychological ownership of tasks, interdependence in dyadic relationships, innovative workplace behaviors, ethical transformational leadership, and individual temperament (Ruparel & Choubisa, 2020). Ruparel and Choubisa advocated using human resource development activities to encourage prosocial behavior and organizational citizenship among employees to reduce knowledge-hiding behaviors. Human resource professionals must support business leaders in building and implementing strategies that discourage employees from hiding knowledge and information from colleagues.

Managers need to be intentional in understanding the nuances of knowledge hiding. Pereira and Mohiya (2021) added that the motivations for exhibiting these

behaviors could be very different. People who express knowledge sharing have pro-social intentions, whereas people who hide their knowledge have anti-social choices (Ahmad & Karim, 2019). The intentional nature of knowledge hiding and the broader scope of possible methods of knowledge hiding represent other fundamental differences between knowledge hiding and knowledge hoarding.

Employees are frequently hesitant to share knowledge because of various reasons. According to Pandey et al. (2021), employees may be unwilling to share experiences because of various personal, organizational, job-related, and coworker-related factors. Instead, employees may engage in knowledge-hiding behaviors such as evasive hiding, playing dumb, and rationalized hiding (Connelly et al., 2012), which impedes effective knowledge sharing. To identify the causes of knowledge hiding, some researchers identified subjective factors such as knowledge-based psychological ownership, distrust perception, and interpersonal gap (Ghani et al., 2020; Pereira & Mohiya, 2021). Aside from organizational climate, objective factors identified include knowledge complexity and task-relatedness. While previous research focused on individual differences (i.e., the prominent five personalities) and situational factors (complexity of knowledge), Zhao and Xia (2019) identified negative affective states and moral disengagement as potential contributors to knowledge hiding. Understanding the various factors contributing to employees' knowledge-hiding behavior may position business leaders to develop a functional strategy to prevent or address knowledge-sharing concerns.

Knowledge Sharing Approaches

Given the importance of knowledge sharing, researchers are interested in studying strategies to improve the quality of employees through knowledge sharing. Knowledge sharing can influence organizational, team, and individual variables (Ahmad & Karim, 2019). Several studies attempted to identify the antecedent variable that fosters team knowledge sharing (da Silva et al., 2022). Business leaders might need to take a holistic approach to address knowledge-sharing concerns considering personal and environmental influences to attract the desired behavior.

Enabling Organizational Culture

Organizational culture reflects employees' values, beliefs and behaviors, and a negative culture will affect strategy implementation. Several studies emerged, emphasizing having a knowledge-sharing culture as a fundamental strategy. Singh (2018) recommended that business leaders emphasize developing proper sharing culture within the organization by incorporating practices that foster employee knowledge-sharing behavior. A knowledge-sharing culture will motivate employees to share approaches and fulfill personal and organizational motives. Similarly, Baharun et al. (2021) maintained that building an employee-centered knowledge-sharing culture that is inspirational, interactive, motivating, and fun would enable the exchange of experience and knowledge. From another perspective, Mathrani and Edwards (2020) itemized cross-functional team culture, management involvement, and the use of supporting tools as strategies for knowledge sharing. Mathrani and Edwards suggested that knowledge-sharing techniques built within management culture make knowledge sharing transparent and easy to access.

Employees can develop a collaborative mechanism through a management culture that is open and transparent with a two-way flow at all levels of the organization. Such knowledge sharing may create a solid knowledge base containing valuable and new information that employees could use to develop knowledge and skills for organizational development.

Communication Policies

Compelling communication impact employee motivation and improving communication is key to a culture of openness that facilitates knowledge sharing. Organizational communication is one of the most effective strategies for an organization to achieve successful innovation by accepting and sharing new ideas and approaches (Koo et al., 2022). According to Koo et al. (2022), knowledge sharing can be through communication between individuals and departments within an organization. Employees can spread the importance of knowledge sharing within the organization through formal and informal contact. Researchers advocated for organizations to promote open and transparent employee communication to facilitate knowledge sharing. Roespinoedji et al. (2020) concluded that developing strong communication-based knowledge-sharing channels among management and employees enhances favorable economic and environmental performance, indicators of a sustainable organization. Muneer (2019) further asserted that having a platform with a quick free flow of the correct information might drive the transient advantage economy. Managers communicating tasks and deliverables for focused action and goal achievement could be a form of knowledge sharing. Organizations should have a mechanism that encourages open and effective

communication within the organization so that employees can reach out and receive attention and equally share ideas.

Implementation of a Knowledge Management System

Instituting a knowledge management system will provide a medium to reinforce knowledge sharing among employees. Knowledge management involves putting a system in place to manage an organization's knowledge assets for value creation and improved organizational performance (Gope et al., 2018; Yee et al., 2019). According to Yee et al. (2019), knowledge management entails procedures, plans, and frameworks that sustain and improve knowledge creation, storage, and sharing. With a functional knowledge management system, employees might be encouraged to contribute to success by sharing knowledge. Gope et al. (2018) suggested that organizations should implement knowledge management systems and tools to retain knowledge so that future employees can capitalize on it to generate new knowledge. Business leaders can reinforce knowledge sharing among employees by implementing a knowledge management system that is functional.

Interpersonal Relationship

Interaction among employees is an effective strategy employed in promoting knowledge-sharing behavior. Higher levels of engagement with knowledge-sharing practices correlate with the strength of interpersonal relationships, which intensify and improve knowledge-sharing quality (Tang & Martins, 2021). Baharun et al. (2021) emphasized the need to promote mutual interaction between all levels, leaders, and employees, to achieve the desired knowledge sharing. Baharun et al. advocated using

information and communication technology in the form of social media as a medium for communicating, interacting, and socializing among organization members to eliminate the limit of space, time, and place. Similarly, Mathrani and Edwards (2020) maintained that personal interaction often exchanges knowledge. The interactions include in-person meetings, phone calls, emails, and rapid technological development tools such as emails.

Motivation and Reward

Researchers attributed motivation to influencing individual work behavior. According to Thomas and Gupta (2022), motivation explains the various types of behavior people exhibit because it affects their actions. Knowledge-sharing behavior is not an exception in a behavioral concept. Tang and Martins (2021) identified knowledge-sharing challenges at the different levels of motivation/lack of motivation. Tang and Martins maintained that the needs and expectations of employees might be the reasons for displaying knowledge-sharing behavior. Mohajan (2019) identified three potential motivations behind knowledge-sharing altruism, reciprocity, and reputation. The three concepts attribute to possible inspiration and knowledge sharing. Selflessness refers to displaying selfless concern without anticipating any returns. However, in reciprocity, a similar response can happen, while reputation refers to a high degree of recognition from sharing knowledge. It is imperative for business leaders to understand the motivation behind knowledge-sharing behavior.

Understanding what motivates employees to share knowledge allows managers to drive processes that advance such behavior for positive organizational outcomes. Employees are motivated for sharing and hiding their understanding. In a meta-analysis

study, Nguyen et al. (2019b) concluded that intrinsic and extrinsic motivational factors were associated with higher levels of knowledge sharing; however, the effect was more significant for intrinsic motivation. Besides intrinsic and extrinsic motivation, Gagné et al. (2019) demonstrated the role of motivating work design in knowledge sharing. According to Parker et al. (2017), work design is a crucial antecedent of most of the significant dependent variables, such as absenteeism, presenteeism, productivity, well-being and strain, job satisfaction, organizational commitment, job performance, and creativity. The work design also has a significant impact on knowledge sharing. The research by Gagné et al. showed that work design influences the motives to share knowledge, primarily indicating that job autonomy and cognitive job demands influence knowledge sharing and discourage knowledge hiding. Accordingly, the design of employment is vital when setting up a knowledge management system that will encourage the right kind of motivation to share knowledge (Gagné et al., 2019). Managers must try to consider work design along with motivation when developing strategies that promote knowledge sharing.

Employees who generate, distribute, and apply knowledge play a critical role in an organization's ability to leverage knowledge effectively. Employees who can share expertise and build on the understanding of others can leverage knowledge thereby contributing to organizational effectiveness (Olayemi & Olayemi, 2021). Individual motivation plays a crucial role in enabling knowledge sharing. Knowledge sharing is a behavior that can bolster with a variety of incentive techniques. Dewayani et al. (2020) suggested interventions to enhance information exchange and develop a supportive

culture of incentives, rewards, and recognition. Dewayani et al. discovered a significant effect of intrinsic and extrinsic motivation on knowledge sharing. The intrinsic motivation factors identified include developing self-capacity, increasing recognition, interest in work challenges, and increasing achievement motivation. In contrast, extrinsic motivation factors include payroll, promotion systems, positive interactions between coworkers, and policy implementation.

Additional factors may influence the success of motivation. Although prior research revealed the importance of motivation in predicting knowledge sharing, the results were inconsistent (Nguyen et al., 2019b). Nguyen et al. (2019b) investigated the effects of a broad set of motivational factors on knowledge sharing and potential individual and contextual factors that influence motivational effectiveness in knowledge sharing. Besides the effect of intrinsic and extrinsic motivation on knowledge sharing, individual characteristics, organizational contexts, and cultural contexts all serve as important boundary conditions (Nguyen et al., 2019b). By considering these other factors, business leaders could potentially maximize motivational effectiveness in reinforcing employees' knowledge sharing.

Leadership Behavior

Conventional knowledge is the implementing knowledge sharing could enhance firm performance, intellectual capital, and an organization's innovation. However, getting the most out of knowledge sharing will necessitate management's commitment to believing in and driving the practice. Management support and leadership are the drivers of organizational critical success factors, such as promoting team affiliation and a

trustworthy environment that motivates employees to share organizational knowledge (Lo et al., 2021). According to Singh et al. (2021b), knowledge sharing drives innovation, and top management support is necessary for knowledge-sharing practices. Agrifoglio et al. (2020) indicated an association between upper management knowledge value, knowledge sharing, open innovation, and organizational performance is a critical role of top management in promoting beneficial knowledge-sharing practices.

The findings of Agrifoglio et al. (2020) also showed the importance of improving and developing strategies and policies that consider the nature and typology of knowledge-sharing processes amongst healthcare professionals in terms of practices. The study demonstrated how management could contribute to improving overall organizational performance through the creation of favorable work conditions where knowledge sharing can thrive. Galeazzo and Furlan (2019) found that transformational leadership affects the use of knowledge-sharing mechanisms that, in turn, positively relates to problem-solving orientation behavior. Management must play a role in encouraging employees' problem-solving orientation behavior, which is a prerequisite for generating new knowledge based on organizational learning.

Top management support knowledge sharing by creating a supportive climate, sharing knowledge with employees, providing support and encouragement for knowledge sharing among employees, and providing facilities for knowledge sharing. Business leaders play a critical role in institutionalizing knowledge sharing for organizational effectiveness. Mohajan (2019) stressed the importance of top management in organizations facilitating the knowledge-sharing system, encouraging staff to exchange

information among organizations, and being truthful in sharing knowledge exhaustively to build the organizations. According to Dewayani et al. (2020), employees' willingness to engage in tacit knowledge sharing might be influenced by the perception of top management support. For example, top management support favorably influences information sharing through sharing valuable knowledge among employees, supporting and encouraging knowledge sharing among employees, and providing employees with facilities for knowledge sharing (Dewayani et al., 2020). Dewayani et al. found that top management support positively impacts knowledge sharing.

A leader's interest in knowledge sharing could spur employees' competence and confidence and increase their potential to share knowledge and experience with others. Su et al. (2021) highlighted the importance of employee knowledge sharing in promoting business development and demonstrated the impact of ethical leadership on knowledge sharing. Su et al. concluded that leadership style affects employee knowledge sharing behavior through a study that revealed the positive effects of ethical leadership on employee knowledge-sharing behavior. Leaders' sense of corporate responsibility motivates followers to share knowledge with colleagues without fear and hesitation to attain organizational goals (Chaman et al., 2021). Management support encourages employees to engage in knowledge-sharing practices.

Business leaders who seek to promote knowledge-sharing practices among employees by initiating and reinforcing knowledge-sharing strategies to prevent knowledge loss and enhance organizational performance in their respective organizations could benefit from the illustrations in this literature review. Scholars and researchers

interested in understanding the enablers, benefits, barriers, and approaches to knowledge sharing among employees could gain better insight from this literature review. This literature review also presents an understanding to advance further research. Knowledge-intensive organizations such as oil and gas must prevent knowledge loss, which may influence employee efficiency to remain competitive. Finally, inefficiencies can cause employee frustration, unnecessary delays in output delivery, and an overall loss of productivity, all of which can significantly affect organizational performance and sustainability issues.

Transition

In Section 1, I presented the foundation of the study, which included the problem's background, the problem, and purpose statements. In the foundation of the study, I provided a summary of the implication of knowledge loss and the rationale for prevention. Other components of this section include the nature of the study, the interview questions, the conceptual framework, and operational definitions. Furthermore, Section 1 contains assumptions, limitations, delimitations; significance; and the review of professional and academic literature supporting the research problem's rationale.

In Section 2, I restated the purpose statement and expanded on the first-section components, including participant eligibility criteria, research method and design, and population and sampling. In addition, I documented new narratives, such as my role as a researcher, ethical research, data collection instrument, data analysis, study validity, and reliability, and concluded with a summary and transition paragraph. In Section 3, I will present my research findings and their application to professional practice. I will also

discuss the study's implications for social change. I will highlight recommendations for action and further study, document my reflection on the doctoral journey, and present my conclusion.

Section 2: The Project

In this section, I highlight the details of the research methodology, beginning with a restatement of the purpose statement, followed by a description of my role as the researcher. I provide an in-depth rationale for the research method and design. I discuss the population and sampling, the ethical considerations, the data organization technique, and the data analysis. I also provide measures to ensure the reliability and validity of the study. I conclude the section with a transition and a summary paragraph.

Purpose Statement

The specific business problem was that some business leaders in the Nigerian oil and gas public sector agencies lack strategies to initiate and reinforce knowledge sharing among employees to prevent knowledge loss. The purpose of this qualitative multiple case study was to explore strategies business leaders in the Nigerian oil and gas public sector agencies use to initiate and reinforce knowledge sharing among employees to prevent knowledge loss. The target population consisted of five business leaders from the Nigerian public sector oil and gas agencies who had successfully initiated and reinforced knowledge sharing among employees to prevent knowledge loss.

Role of the Researcher

The researcher coordinates the qualitative research process and plays a vital role at every stage. McGrath et al. (2019) and Clark and Vealé (2018) identified the researcher as the primary instrument of data collection using their experiences, competencies, and abilities in the data collection and analysis process. Rumman and Alheet (2019) identified the researcher's competencies as critical mind and perseverance in carrying out the

specified role. The skills required include understanding a problem, developing others' understanding of the problem, good writing skills, and clear communication (Rumman & Alheet, 2019). Johnson et al. (2020) and Soh et al. (2020) elaborated on the need for the researcher to play an active role in sourcing and preparing participants, coordinating the research process, and managing any issues that may arise during the process. The researcher's participatory role necessitates that the researcher is adequately prepared for the data collection. As the primary research instrument in this study, my responsibilities included recruiting participants, developing interview questions, conducting interviews, embracing objectivity in analyzing data, and mitigating bias throughout the process. To ensure a structured, consistent, and seamless interview process, I created an interview protocol as a guide (see Appendix A), which included the interview questions.

Transparency in a research process could signal the rigor and quality of the research, and the researcher must observe this throughout the research process. Transparency about the researcher's position and potential biases and assumptions is vital in evaluating the quality of qualitative research and demonstrating the trustworthiness of the research (Fusch et al., 2018; Reid et al., 2018). Clark and Vealé (2018) opined that researchers should engage in reflective and interpretive thinking by minimizing and disclosing personal assumptions and biases during data collection and analysis to ensure an accurate presentation of the phenomenon. The highlighted insights imply that the researcher must disclose existing preferences to maintain an objective approach. According to Johnson et al. (2020), the researcher could develop the research question

based on personal experience, real-life observations, or events in the researcher's environment.

I did not have any personal relationship with any participants. However, my interest in exploring knowledge-sharing strategies among employees to prevent knowledge loss arose from the knowledge gap I observed over time whenever valuable employees left a specific role or an organization with work-related knowledge and experience. Employee exit often results in knowledge loss that negatively affects organizational activities; therefore, understanding the strategies for preventing knowledge loss steered my interest in this study.

As a researcher, I upheld high-standard research ethics and protected the participants' privacy and confidentiality throughout the research process. Under three fundamental principles, including respect for persons, beneficence, and justice, *The Belmont Report* includes basic ethical principles and guidelines on managing human participants in research studies (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). Ethical conduct refers to moral principles and values incorporated into the research process (Johnson et al., 2020). According to Brothers et al. (2019), the respect for persons principle entails obtaining an individual's consent to participate in research and not forcing them, while the beneficence principle has a focus on the researcher keeping participants from harm's way, and the justice principle requires the researcher to consider participants for available benefits. I understood the three principles of ethical requirements. I abided by the ethical requirements by ensuring that I obtained the participant's informed consent to participate

in the research, kept the participant from harm's way, and considered the participant for available benefits. I also followed the rules by seeking ethical approval for this study from Walden University's Institutional Review Board (IRB).

Researchers must mitigate bias by addressing their position in the research. Researchers should exhibit critical thinking that is unbiased (Rumman & Alheet, 2019). Mackieson et al. (2018) considered reflexivity important in minimizing potential bias. Reflexivity implies that researchers are aware of potential influence in the process of the research (Johnson et al., 2020; Mackieson et al., 2018). The researcher mitigates bias through the data collection methods appropriate for the study design (Fusch et al., 2018). Combining document analysis with other data collection approaches may reduce the potential biases experienced in a study (Holmes, 2020; Slettebø, 2021). According to Narayan (2019), implicit bias is an unconscious bias that is part of humans. To address the concerns of implicit bias in my research, I remained objective in managing the impact of implicit bias. I conducted my interviews with participants from other organizations within the sector, augmented with document analysis, and reported only findings and facts and not opinions, read for content, and presented unbiased data to increase objectivity and add credibility to the study.

The researcher anchors the interview process, a critical source of data collection for case study research. Successful interviews start with careful planning that considers the focus and scope of the research question (McGrath et al., 2019). Part of the planning included having an interview protocol. The structured interview protocol is a written guide that includes the predetermined interview questions, the process for member

checking, and other interviewing intricacies (Hoover et al., 2018). The interviewing procedure should be consistent across participants to elicit responses to the exact phrasing and as a quality assurance measure (Tavory, 2020). Consequently, interview protocol contributes to reliability and validity of research because the researcher adopts a uniform and consistent approach during the interview process (Zairul, 2021). Therefore, I prepared an interview protocol (see Appendix A), which I used for the interview process, including interview questions for data collection. I used the interview protocol to guide the interview process.

Participants

Qualitative researchers must identify the appropriate and knowledgeable participants best suited to respond to the interview questions to answer the study's central research question and achieve quality in a research study. The participants must have been exposed to and have first-hand knowledge of the subject under investigation (Rutberg & Bouikidis, 2018). Cypress (2019) noted that research participants are crucial to quality research because they are the source of data. Zong et al. (2021) linked data and research quality to define participants' eligibility criteria. Selecting a sample population in qualitative research starts with ascertaining eligibility to partake in the study based on the research question. In line with the recognized importance of recruiting suitable participants, I set the following eligibility criteria for study participants:

1. The participant must have held a managerial position with decision-making authority in a public sector oil and gas agency.

2. The participant had to be working in the Nigeria Federal Capital Territory or the South-South geopolitical zone, which were the settings for this study.
3. The participants had to be successful in using strategies to initiate and reinforce knowledge sharing among their employees to prevent knowledge loss.

Gaining access to research participants who may have insights and experiences of the research topic will result in research quality. Peu et al. (2020) emphasized the importance of researchers identifying constituted authorities, obtaining consent, and negotiating access to the research location and participants to gain continuous access. To identify participants, I selected five public sector oil and gas agencies in Nigeria with operations in the Federal Capital Territory or the South-South geopolitical zone. To gain access to participants, I contacted the human resources managers through the Human Resource Forum, a professional association, to obtain a list of organizational leaders and used purposive sampling to identify the study participants. After obtaining Walden University's IRB approval, I presented a brief summary of my project to the potential participants through the human resource managers to draw the participants' interest in the study and started building rapport before the interview.

Maintaining contact with study participants is vital to achieving a meaningful research process after the interview. Singh et al. (2021a) recommended regular contact and interaction with participants to build rapport with them. Franco and Yang (2021) also advised researchers to interact with participants frequently and develop bonds based on

shared interests, trust, and respect. Researchers can develop effective working relationships with study participants by considering the significance of interaction in relationship building (Singh et al., 2021a). I used physical and virtual methods, such as emailing participants, making phone calls, and having one-on-one meetings to develop bonds based on shared interests, trust, and respect, maintaining a relationship with the study participants.

Selecting the right participants for a study is critical. According to Reagan et al. (2019), having a robust recruitment strategy is important to a successful research study, but recruiting participants for research can be challenging. Researchers can target participants that meet the established specific criteria and has direct knowledge of the research subject matter (Steils & Hanine, 2019; Verma & Verma, 2020). My goal was to explore strategies some leaders used to initiate and reinforce knowledge sharing among employees to prevent knowledge loss. I ensured that the eligibility criteria for participant selection produced participants who had successfully initiated and reinforced knowledge-sharing strategies. The same eligibility criteria also applied to choosing all participants.

Research Method and Design

Choosing the appropriate research methodology necessitates some essential considerations. Researchers determine the research method and design to employ based on the research question. Rutberg and Bouikidis (2018) classified research methods into three broad categories: quantitative, qualitative, and mixed methods. Rutberg and Bouikidis also identified several research designs associated with each process, including case studies, phenomenological, ethnography, and narrative associated with the

qualitative method. I chose the qualitative method with a multiple case study design for this study and present an explanation for the choice in the following subsections.

Research Method

Among the three research methods, I adopted the qualitative method for the study based on the research question. Alam (2021) described the qualitative method as a means of exploring the meaning individuals ascribe to a business problem through interviews, observation, and document analysis to collect data. Amin et al. (2020) stated that researchers use the qualitative approach to interpret the experiences and actions of people and groups in various contexts. An in-depth understanding of the participants' experiences is required, emphasizing meaning and insights by addressing *what*, *how*, and *why* questions related to phenomena (Yin, 2018). Using open-ended questions as a data collection technique, researchers use qualitative methods to understand better human thoughts, beliefs, perceptions, feelings, and opinions (Amin et al., 2020; Busetto et al., 2020). The researcher can use open-ended questions and interview subjects in semistructured interviews, often in the participant's natural setting, providing a rich narrative to answer the research question (Rutberg & Bouikidis, 2018). The qualitative method was appropriate for this study because my goal was to gain an in-depth understanding of participants' experiences, emphasizing meaning and insights by addressing *what, how,* and *why* questions related to the phenomenon under investigation, which for this study was the strategies that business leaders in the Nigerian oil and gas public sector agencies used to initiate and reinforce knowledge sharing among employees to prevent knowledge loss.

Depending on the research question, some researchers could adopt the quantitative method. According to Rutberg and Bouikidis (2018), researchers use the quantitative method to gather numerical data to define the relationship between variables and outcomes and generate hypotheses. The quantitative method often involves using standardized questionnaires or experiments to collect numeric data (Epp & Otnes, 2020). Quantitative researchers employ structured techniques that anticipate a limited set of responses and generate quantifiable data already in the form of counts and measurements (Epp & Otnes, 2020). The statistical analytical outcome of data becomes generalizable (Godwin et al., 2021). As a result, the quantitative method was unsuitable for the study because I neither gathered numeric data to define the relationship between variables and outcomes nor generated hypotheses.

The mixed method is another way a researcher can attempt to understand a phenomenon. In mixed methods, researchers combine qualitative and quantitative methods in one study to make conclusions beyond the scope of one method (Guetterman et al., 2019). Grieve and Olivier (2018) indicated that one drawback of using the mixed method is that it requires the researcher to have extensive knowledge of quantitative and qualitative methods. According to Yin (2018), the mixed method is often more challenging to execute than studies involving single methods. Grieve and Olivier concluded that using the mixed method could reduce the quality of the combined quantitative and qualitative data, substantially extending the study's completion time. The mixed method is appropriate when researchers use qualitative and quantitative research methods to test a hypothesis or theory (Guetterman et al., 2019). The mixed method was

unsuitable for this study because my research question did not require combining research methods, interpreting numeric data, and testing hypotheses.

Research Design

Qualitative researchers have the flexibility to decide on the research design to adopt for their study based on the data collection methods. The various qualitative research designs to investigate phenomena include case studies, phenomenological, ethnography, and narrative (Durdella, 2019; Tomaszewski et al., 2020). The case study design used is to understand a complex phenomenon through an empirical inquiry within the natural context (Alam, 2021). Hancock et al. (2021) noted that the case study design is one of the most widely used methods due to the flexibility and opportunity to use multiple sources of evidence as data. I chose the case study over other qualitative designs. Researchers can conduct a case study as a single case study or a multiple case study (Yin, 2018). A single case study involves only one subject, while a multiple case study involves two or more subjects (Yin, 2018). Data obtained through multiple case studies are often more compelling, substantial, and reliable than data from a single case study, making multiple case studies more robust (Heale & Twycross, 2018; Lewis, 2019; Sadeghi Moghadam et al., 2021). Therefore, I chose the multiple case study designs over the single case study to obtain more compelling data, as the qualitative multiple case study design was appropriate for an in-depth understanding of organizational leaders' strategies to initiate and reinforce knowledge sharing among employees to prevent knowledge loss.

Other research designs I considered have features that make them not suitable for this study. The phenomenological research focuses on lived experiences shared by multiple individuals to understand the meanings and interpretations they ascribe to some phenomenon (Engward & Goldspink, 2020; Townsend et al., 2019). The phenomenological design was unsuitable, as I did not study participants' lived experiences. Another research design is ethnography. Researchers use ethnography to explore human behavior and social activities that share a common culture or community over a specific period through participants' observation (Bleiker et al., 2019; Cubellis et al., 2021; Harris, 2019). Ethnography was not a suitable option for the study because I did not seek to observe participants or explore social activities or cultural issues. The narrative inquiry elaborates on participants' stories in the form of journals relating to a phenomenon (Harper et al., 2020). The narrative approach was inappropriate for this study because I was not studying participants' life stories and experiences.

Given my primary data collection and analysis instrument, obtaining sufficient and quality data is critical to achieving data saturation. Johnson et al. (2020) described data saturation as an essential part of the research process, a common rigor standard in qualitative studies. Data saturation occurs when no new emerging information from data collection, new codes are not feasible, and new themes are not emerging (Guest et al., 2020; Hlady-Rispal et al., 2021; Johnson et al., 2020). To achieve data saturation in this study, I collected and analyzed data through semistructured interviews with qualified participants supplemented by organizational documents as a secondary source of evidence and conducted member checking with participants to validate data

interpretation. I reached data saturation when information from interviews became repetitive and additional information to address the research question no longer emerged.

Population and Sampling

The population for this research consisted of five business leaders purposively sampled from public sector oil and gas agencies within the Federal Capital Territory or the South-South geopolitical zone in Nigeria. In qualitative research, population sampling purposively includes the most suitable participants in the most appropriate context for addressing the research question (Johnson et al., 2020). With purposive sampling, researchers can target participants who meet specific criteria and have expertise in the research topic (Campbell et al., 2020; Johnson et al., 2020; Moser & Korstjens, 2018). Purposive sampling was appropriate for this study because I limited my participants to those that aligned with the research question and met established participation criteria for this study.

The researcher will require a sufficient sample size for data adequacy to accomplish research quality. Determining the proper sample size is a crucial component of research design (Lahman, 2021). Making the wrong decision on sample size could affect the data quality (Guest et al., 2020). According to Johnson et al. (2020), determining the final sample size mainly depends on having sufficient opportunity to gather relevant data until no new information emerges from data collection. When new coding is not possible, and no new themes are emerging, data saturation has been reached (Guest et al., 2020). Researchers need to consider concurrent data collection and analysis such that the results of the ongoing analysis will inform continuing data collection

(Johnson et al., 2020). I recruited and interviewed five qualified participants with experience in knowledge sharing, used methodological triangulation with organizational documents as a secondary data source, and implemented the member-checking procedure by asking participants to validate the interpretation and adequacy of the data.

In engaging the qualified participants, I used a face-to-face or Zoom semistructured interviewing approach to gather information from the participants who had successfully initiated and reinforced knowledge-sharing strategies among employees to prevent knowledge loss in their respective agencies. Alam (2021) advised that researchers choose knowledgeable participants, experienced and with a deep understanding of the phenomenon under investigation. Qualitative researchers should consider the interview setting carefully, prioritizing the participant's convenience, privacy, and preference (McGrath et al., 2019; Moser & Korstjens, 2018). The setting and location selected for an interview may influence the participant's and the researcher's engagement quality (McGrath et al., 2019). By implication, researchers should consider participants' preferences to optimize data collection. After receiving IRB approval, I approached the participants to choose their preferred mode, location, and time, guiding the interview process.

Ethical Research

Ethical issues in research are bound to arise, especially where it involves human participants as subjects, and researchers are duty-bound to conduct ethical research. Concerns about research ethics are global (Morton, 2022). To ensure compliance in conducting ethical research, institutions set up IRBs to review applications for

scholarly research to determine whether the proposed research is ethically appropriate (Morton, 2022). Before researchers engage participants for data collection, the IRB must approve a proposed study in line with *The Belmont Report's* requirements for research involving human participants. Dankar et al. (2019) regarded *The Belmont Report* as a monumental document that has served as the foundation for institutional research policies, with requirements including respect for participants, protection from any harm, and fair treatment. The ethical principles guide researchers in conducting research to ensure the protection of human dignity and rights, which include respect for confidentiality and privacy. I followed *The Belmont Report's* three principles for research involving human participants by ensuring respect for participants, their protection from harm, and fair treatment. As a result, I requested and received the IRB's approval for my study with the number 03-20-23-1053865.

Obtaining informed consent from the participant is a vital requirement that serves as a form of permission to engage the participant. According to Dankar et al. (2019), informed consent should include a thorough explanation of the research's purpose, the participant's involvement, the potential participant's ability to understand the information, and their voluntary decision to participate. The informed consent form also includes disclosure of the risk and benefits of the research, a privacy statement, sample interview questions, and detailed information on how to withdraw from the study (Barwise et al., 2019). I commenced participant recruitment after obtaining IRB approval. Upon obtaining IRB approval, I contacted the potential study participants by telephone for familiarization. During the telephone conversation, I introduced myself and gave an

overview of the study. I followed the call with an introductory email to the participants (see Appendix B) that included an informed consent form with detailed research information, participation requirements, and consent to participate in the study. Upon comprehending the research information and the participants indicating interest in participating in the study, participants consented by replying to the email with the words, "I consent". For the participants that opted for the Zoom interview, I emailed the informed consent form, research information, and other participation requirements, for which participants indicated consent by replying with the words, "I consent". According to Barwise et al. (2019), participants should voluntarily consent to partake in the study by signing the consent form after fully understanding the risks and benefits of the study. There was an option on the form for participants to withdraw from participating at any time and without having to give a reason by contacting me by phone, sending an email, or providing a written statement of withdrawal. Participants were informed that there would be no negative consequences if they decided to withdraw from the study. Financial incentives could be an effective strategy for promoting participation in research studies; however, researchers rarely employ the practice due to concerns about their ethics, sustainability, and public acceptability (Gross & Bettencourt, 2019; Smith et al., 2019). Finally, I did not offer participants any financial incentive but will share a copy of the findings of this study with them.

Part of the researcher's ethical responsibility is to ensure the privacy and confidentiality of the participants. Johnson et al. (2020) recommended that researchers must take necessary care to protect the confidentiality of the participants at all stages of

the research process and prevent them from harm related to the concerns of respect and dignity. I ensured to keep all participants' and organizations' information confidential. To ensure participants' privacy, I assigned unique identifiers, labeled P01, P02, P03, P04, and P05 to all participants. For the respective organizational names, I labeled them as A01, A02, A03, A04, and A05 for this study. Meyer (2018) stated that the researcher must keep the data for a sufficient duration after publication to allow for data verification. In compliance, I will securely store all electronic data and hard copy documents that might arise from this study for 5 years beyond the approval of the study. After 5 years, I will delete all study-related data and documentation, shred all paperwork, and permanently erase all computer recordings and other electronic data files relating to the study.

Data Collection Instruments

I am conducting a multiple case study for in-depth and intensive research. Several data collection instruments are available for the researcher to use in case study research. The researcher is the primary data collection instrument in qualitative studies and may use several mechanisms for data collection (Johnson et al., 2020; Kandade et al., 2021). Researchers using the case study design can incorporate and combine evidence from multiple sources, including interviews, organizational documents, archival records, physical artifacts, and participant observation, to corroborate and enhance findings (Alpi & Evans, 2019; Yin, 2018). As the primary data collection instrument in the study, I was responsible for recruiting the participants that met the eligibility criteria, designing the open-ended questions to interview business leaders, recording interviews with

participants' permission, transcribing data, conducting member checking, and analyzing data.

This study's second data collection instrument was semistructured interviews per the interview protocol (see Appendix A) and organizational documents. Mirhosseini (2020) and Tavory (2020) noted that semistructured interviews are the best approach to address lived experiences because participants can fully express their perspectives and experiences. Semistructured interviews involve interactive discussions between the participant and the researcher that reflect conversational exchanges in a real-world setting (Mirhosseini, 2020). I conducted face-to-face or Zoom semistructured interviews with participants to understand their strategies to initiate and reinforce knowledge sharing among employees to prevent knowledge loss, using prepared open-ended questions and adhering to the interview protocol. I sought participants' permission to record the interview session for accurate transcribing and to ensure the validity of the collection process remained intact. I asked the participants follow-up questions for clarification and elaboration of details. I conducted member checking with the participants before analyzing the data. Asking questions, rephrasing, and being an active listener are practical actions for a qualitative researcher to use during interviews to validate that the findings are accurate and honest (Iivari, 2018; Prior, 2020). In addition to interview data, organizational documents might serve as a rich data source and complement other data sources (De Andrade et al., 2018; Yin, 2018). The document review may substantiate the data gathered and enable me to achieve methodological triangulation. I reviewed and extracted relevant information from documents readily provided by participants and used

a document information template (see Appendix C) to record pertinent information from the organizational documents.

As the primary data collection and analysis tool, the researcher is responsible for establishing the study's credibility. Brear (2019) noted that reviewing the transcribed information with the participants enhances the accuracy of a study. The practice of member checking is a standard of quality that researchers use to confirm the credibility of participant responses by checking for completeness and accuracy (Johnson et al., 2020; Prior, 2020; Slettebø, 2021). I used member checking to enhance reliability and strengthen the validity of my study. After transcribing the interview responses, I scheduled a second session for member checking by requesting participant validation of my data interpretation to prevent misrepresentation. I conducted methodological triangulation by comparing the interview data with evidence obtained from my review of organizational documents and determined that data alignment had occurred.

Data Collection Technique

Adopting the appropriate data collection technique will contribute to the quality of the research. Stickley et al. (2022) stated that properly establishing a research question and selecting a suitable method to address the research question is critical in every qualitative study. Researchers must establish proper alignment of the data collection technique with the research question, given that the research question drives the data collection (Johnson et al., 2020). Focus groups, structured, semistructured, or in-depth interviews, accounts, a document study, observations, artifacts, and reflective journaling are data collection techniques in qualitative research (Busetto et al., 2020; Farghaly,

2018; Flynn et al., 2019). It is the researcher's responsibility to ensure compliance with IRB standards before collecting data from participants. In this study, to explore leadership strategies to initiate and reinforce knowledge sharing among employees to prevent knowledge loss, I aligned semistructured interviews with document reviews for data collection to address the research question after gaining IRB approval.

Qualitative researchers choose semistructured interviews as a data collection technique to explore a phenomenon from the participant's perspective through personal interactions with the participants. Researchers identified semistructured interviews as the most common qualitative data collection technique, through which the researchers engage the participant in a conversation using open-ended questions to gain valuable insights into a participant's viewpoint, thoughts, and information on a phenomenon (Castleberry & Nolen, 2018; DeJonckheere & Vaughn, 2019; McGrath et al., 2019). According to DeJonckheere and Vaughn (2019), researchers using semistructured interviews have the flexibility to ask follow-up questions and engage with participants, allowing participants to give detailed information about their experiences during data collection. I collected data using the semistructured interview as my primary data source, asking open-ended questions per the interview protocol (see Appendix A).

Phillippi and Lauderdale (2018) stated that note-taking helps increase trustworthiness, encourages researcher reflection, identifies bias, and helps facilitate preliminary coding. During the interview, I took detailed notes and recorded participants' responses and reactions, such as body language and nonverbal gestures that were meaningful. According to Schneider et al. (2019), researchers can use audio recordings to

capture the information missed during note-taking. To facilitate transcribing and to capture the entire discussion, I sought participants' permission to audio record the interview session, which was held at a time and venue of participants' convenience. I informed each participant about follow-up interviews for member-checking purposes.

Conducting semistructured interviews has several implications that make it the data collection technique of choice. The semistructured mode of an interview opportune researchers to maintain the natural flow of the conversation with participants, sustain participants' motivation, and stimulate their interest, thereby gleaning richer and more in-depth exchange of information from the interview session (Heath et al., 2018; Husband, 2020). Secondly, semistructured interviews allow participants to speak freely; researchers can accumulate data to explore and make sense of the findings (Cassell & Bishop, 2019; Husband, 2020). The interview mode also presents an opportunity to expand on answers with probing questions to explore specific issues, making semistructured interviews a flexible approach to gaining rich insights into a phenomenon (Husband, 2020). Thus, interviewers can connect and engage in a conversation with participants and potentially expand on the scope of information to be collected. The semistructured interview approach has some drawbacks. Yin (2018) expressed concern about the inability to determine if the participants would give honest responses during the semistructured interview. McGrath et al. (2019) also noted that semistructured interviews could be biased, time-consuming, and strenuous because of the time required to transcribe interviews and analyze data. Another challenge is coordinating the interview and ensuring that the questions maximize data collection (Bearman, 2019). Novice

researchers must know the topic to formulate the right questions to ask participants (Hoover et al., 2018; Tavory, 2020). Researchers must be prepared to coordinate the interview professionally and in the face of uncertainty. I made sure that I had prepared the appropriate interview questions to optimize data collection and was well prepared to coordinate the interview.

Relevant organizational documents could serve as a second data collection technique. A review of organizational records could serve as rich data sources with various applications, including corroborating and validating evidence obtained from other sources, supporting the triangulation of data, and increasing trustworthiness (De Andrade et al., 2018; Siegner et al., 2018; Yin, 2018). Using organizational documents to validate other data sources would necessitate the researcher to develop a document review protocol for a uniform review process. I prepared a document information template (see Appendix C) to request relevant organizational documents and record findings. One of the benefits of reviewing organizational documents is that the data are available on-site and may not require much effort to access (Lukyanenko et al., 2019). Secondly, document reviews are cost-effective and a stable data source (Lukyanenko et al., 2019). However, identifying the proper documents to review and the possibility of incomplete information, as records might not provide the level of detail required by the researcher, can pose significant challenges in implementing document analysis (Haenssgen, 2019). I ensured I reviewed the documents provided willingly by participants and extracted the information that supported the interview data using the document information template. I requested to keep a copy of the company documents for use during data analysis.

I employed member checking to validate the accuracy of the data collected to prevent misrepresentation. Transcript review and member checking are means by which participants review and adjust transcribed materials and the researcher's interpretation to ensure accuracy (Husband, 2020; Lukyanenko et al., 2019; Slettebø, 2021). Transcript review and member checking assist researchers in achieving quality in data collection, analysis, and research findings, and it is an excellent source for ensuring the study's credibility (Slettebø, 2021). However, the process could be laborious, given the verbatim data transcribing and the subsequent transcript review. I performed member checking by sharing my interpretation of participants' responses with them to check for accuracy and completeness with their experiences during the follow-up interview.

Data Organization Technique

Researchers generate a wide range of data from numerous sources during the data collection. Organizing research data is essential to ensuring the trustworthiness of the research findings (Cypress, 2019). Implementing methods to organize and secure data for safekeeping, easy retrieval, and confidentiality is key to the study. My data organization technique included assigning an alphanumeric code for each participant's audio-recorded interview, such as P01, P02, P03, P04, and P05. I also created password-protected files for each participant, with the date and time of the interview, informed consent, and interview transcription on my computer. I backed up the data in a password-protected USB flash for safekeeping.

I organized data generated from research to aid storage and easy information retrieval. Yin (2018) advised using word processing or qualitative data analysis software

to sort and analyze data. According to Maxwell (2021), researchers evaluate their interview notes, examine their journal notes, input data into qualitative analysis software, and validate the data during the data organization step. The NVivo software, which has a standard filing protocol, serves as a further backup system and a tool for data analysis (Cypress, 2019). Hence, I used NVivo software for qualitative data management and analysis and ensured data were password protected. I will comply with Walden University's 5-year data retention policy by securely storing all electronic documents on my password-protected computer and keeping physical records in a locked filing cabinet, such as my notes and organizational documents. I confirm that I will permanently erase and destroy all data related to this research after the required retention period.

Data Analysis

The data analysis stage follows the data collection phase. Although in some qualitative studies data collection and data analysis run simultaneously with the findings of the analysis, guiding future data collection and conclusions drawn throughout the study (Farghaly, 2018; Johnson et al., 2020). Triangulation is vital in data analysis because it involves using multiple data sources to confirm interpretations, assertions, and themes and enhance the reliability of study conclusions (Fusch et al., 2018; Johnson et al., 2020). Researchers use triangulation to check for validity by converging information from multiple data sources. The following are the four types of triangulation: data, investigator, theory, and methodological triangulation (Abdalla et al., 2018; Amin et al., 2020; Fusch et al., 2018). Methodological triangulation is an approach that researchers can use to enrich and improve the trustworthiness of data collected by minimizing bias,

strengthening the analysis process, and aiding a deep understanding of a phenomenon of interest (Heesen et al., 2019; Jentoft & Olsen, 2019). The methodological triangulation method was the best option for the study because I collected data within the same period using semistructured interviews combined with organizational document analysis to ensure the research was rich, robust, and comprehensive. I used semistructured interviews and organizational document analysis as the two data sources. I conducted methodological triangulation by comparing the interview data with evidence obtained from my review of organizational documents and determined that data alignment had occurred.

Researchers are responsible for analyzing and interpreting the data, even with the helpful assistance of software in coding, sorting, and organizing the data elements. Data analysis is interpreting the information collected through interviews, observations, and the review of written and visual documents to identify ideas and determine patterns and themes (Haenssgen, 2019; Raskind et al., 2019). I utilized Yin's (2018) thematic analysis model for data analysis. Yin's data analysis model includes the following steps: compile the data, disassemble the data, reassemble the data, interpret the data, and finalize the data. Accordingly, I compiled the transcribed interview data, organized documents into a consistent and organized format, and became familiar with the emerging ideas relating to the research question. After compiling the data, I disassembled the data. Disassembling the data refers to separating the data to create a meaningful grouping (Castleberry & Nolen, 2018). Disassembling data defines coding. Coding is the transitory step between

data collection and analysis, where raw data becomes sortable (Busetto et al., 2020; Clark & Vealé, 2018).

Researchers use data analysis software to sort, organize and manage data, ensure data analysis robustness, and provide evidence of data saturation (Cypress, 2019; Elliott-Mainwaring, 2021; Johnson et al., 2020). In line with Yin's (2018) data analysis model, including compiling, disassembling, reassembling, interpreting, and finalizing the data, I used the NVivo software to organize data and assign initial codes to recurring patterns. I used NVivo to group codes to determine themes. After disassembling the data, I reassembled the data and put the code into context to create themes.

According to Nowell et al. (2017), the researcher must demonstrate alignment between the emerging themes from data analysis, the extant literature, and the underlying conceptual framework. I categorized the data based on themes related to Bandura's (1986) SCT, the components of the conceptual framework, and knowledge-sharing strategies. Following reassembling is the interpretation of data. I reviewed the data until I could define associated characteristics and completely understood what the data represented. I compared the identified strategies for initiating and reinforcing knowledge sharing among employees to prevent knowledge loss during the literature review stage, including new studies published since writing the proposal with the data analysis themes and alignment with SCT framework determinants, including personal factors and environmental factors influencing employee behavior. In the last step, which requires finalizing the data, I explained the study's findings based on the results.

Reliability and Validity

Reliability and validity are relevant criteria for establishing the quality or rigor of a research outcome. According to Kyngäs et al. (2020), reliability is obtaining the same findings in a repeated study for dependability and consistency. Impliedly, reliability refers to obtaining the same conclusions when the research design is replicated; thus, it helps reduce errors and biases. The validity ensures the accuracy of measures and analysis so that findings can be generalized (Kyngäs et al., 2020). Qualitative researchers consider credibility, transferability, dependability, and confirmability to establish reliability and validity in studies (Amin et al., 2020; Hulme et al., 2022; Johnson et al., 2020). Researchers must meet the quality criteria so readers and users can draw valid and reliable conclusions from such studies. I described below how I established the trustworthiness of the study through reliability and validity.

Reliability

The concept of reliability is one of the requirements of quality doctoral research throughout the research process. Reliability addresses the soundness of the research methodology (Hair et al., 2019). Reliability measures include consistency, dependability, and possible replicability of the research process to produce similar outcomes (Rose & Johnson, 2020). According to Yin (2018), researchers can achieve reliability by keeping accurate documentation of the research process (e.g., case study database and chain of evidence) and using an interview protocol where questions are defined and clarified. According to Rose and Johnson (2020), qualitative researchers should carefully consider implementing strategies to achieve a reliable outcome. To achieve reliability, I

implemented member checking, maintained an accurate record of the research process, and used NVivo for data analysis. I conducted member checking by requesting participants to verify the accuracy of my interpretation of the interview recording to confirm the correctness of my data interpretations after transcribing.

Researchers could achieve a reliable outcome by improving the study's dependability. Dependability refers to the trustworthiness of the study's findings (Farghaly, 2018). To ensure dependability, the researcher should maintain an audit trail, exhibit reflexivity, and state the research methodology to enable readers to establish that the proper research procedures were followed for future research replication (Amin et al., 2020; Johnson et al., 2020). Using qualitative analysis software ensures a consistent analysis process that could strengthen the dependability of the study findings (Alam, 2021; Swygart-Hobaugh, 2019). Researchers could combine member checking, transcript review, and effective data analysis software to achieve research dependability and reliability (Prior, 2020). I maintained an audit trail of the research process and conducted member checking by requesting participants to verify the accuracy of my interpretation of the interview recording to confirm correctness of my data interpretations and used NVIVO, a computer-assisted analysis software, for data analysis.

Validity

Validity in research involves how the researcher could accurately present study findings. Validity refers to applying the appropriate instrument to assess a phenomenon with rigorous application to ensure robust data analysis, the accuracy of interpretation, and the trustworthiness of the study inferences (Andrade, 2018; Collingridge & Gantt,

2019; FitzPatrick, 2019). Validity is an essential criterion to measure a research study's quality and acceptability. FitzPatrick (2019) suggested several terms for what validity constitutes: credibility, transferability, confirmability, trustworthiness, dependability, authenticity, rigor, soundness, plausibility, goodness, and quality assessment. I considered credibility, confirmability, transferability, and data saturation for the research validity.

Credibility

Researchers must exhibit truthfulness in the research process to present credible findings. Researchers can achieve credibility of research with honest and transparent reporting of how biases and other possible confounders, such as the researcher's training and experience, were recognized and addressed throughout the study processes, such that the outcome accurately represents the actual value of the research process (Farghaly, 2018; Johnson et al., 2020). Amin et al. (2020) recommended triangulation, member checking, and reflexivity as applicable techniques to ensure credibility. Qualitative researchers must triangulate with various sources, conduct member checking, and deliberately mitigate potential bias. I ensured credibility by conducting methodological triangulation by comparing the interview data with evidence obtained from my review of organizational documents and determined that data alignment had occurred and conducted member checking by requesting participants to verify the accuracy of my interpretations of their recorded interview responses.

Transferability

Researchers should rigorously facilitate the research process to make the findings transferable. Transferability refers to the degree to which study findings are transferable to other settings or contexts (Farghaly, 2018). Researchers can communicate transferability in research by providing a thick description of the research processes from data collection, the context of the study such as the geographical location of the study, details of participants, and the time frame of the data collection and analysis to study findings (Amin et al., 2020; Forero et al., 2018; Johnson et al., 2020). Consequently, researchers can attain transferability through a thick and rich description of the research proceedings and findings (Amin et al., 2020; Johnson et al., 2020). To facilitate the transferability of my study's findings to other settings, I comprehensively described the entire research process, including assumptions and the study's context.

Confirmability

By adhering to rigorous standards, qualitative researchers can assure the confirmability of research outcomes. Confirmability refers to the accuracy of the findings of the study, solely derived from participants' perspectives, and the result could be through confirmation and corroboration by other researchers (Farghaly, 2018; Forero et al., 2018). To ensure the research's confirmability, a researcher must demonstrate reflexivity and neutrality by minimizing the influence of personal views on the result (Amin et al., 2020; Forero et al., 2018; Johnson et al., 2020). Forero et al. (2018) and Moser and Korstjens (2018) recommended that researchers could use several approaches to achieve confirmability, including self-reflection, methodological triangulation, and

member checking. To remain neutral and ensure my findings are devoid of the researcher's inherent influences, I used and adhered to the criteria of rigor, member checking, and methodological triangulation. I conducted methodological triangulation by comparing the interview data with evidence obtained from my review of organizational documents and determined that data alignment had occurred. I conducted member-checking interviews to confirm that my interpretations of the views the participants expressed in their discussions were thorough and accurate.

Data Saturation

Attaining data saturation means that qualitative researchers have collected sufficient data for analysis. Saturation generally means that the researcher has gathered adequate data for accomplishing the research objectives when no new information, theme, concept, or idea on the research topic is emerging from the data collection process (Alam, 2021; FitzPatrick, 2019). In qualitative research, there is no means of accurately predicting sample size (Braun & Clarke, 2022). The concept of data saturation is a common standard of rigor for data collection used to determine the sample size and completeness necessary to make valid conclusions (Alam, 2021; FitzPatrick, 2019; Johnson et al., 2020). According to Alam (2021) and Sebele-Mpofu and Serpa (2020), data saturation plays a vital role in sampling, research process, and analysis, enhancing research quality. Considering the flagship role of data saturation in ensuring validity, I achieved data saturation by collecting sufficient data until no new information emerged from the participants' interviews. It is pertinent that the participants should be knowledgeable about initiating and reinforcing knowledge sharing among employees to

prevent knowledge loss. I conducted methodological triangulation by comparing the interview data with evidence obtained from my review of organizational documents and determined that data alignment had occurred.

Transition and Summary

In Section 2, I restated the purpose statement of this study and described my role as the researcher. I presented the eligibility criteria for research participants. I discussed the research method and design, population, and sampling. In addition, I highlighted ethical research, discussed the data collection instruments and technique, data organization technique, and data analysis, and concluded with the study's reliability and validity.

In section 3, I present the research findings and discuss the application to professional practice and implications for social change. I also provide recommendations for action and future research, reflect on the doctoral study process, and present my study conclusions.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative multiple case study was to explore strategies business leaders in the Nigerian oil and gas public sector agencies use to initiate and reinforce knowledge sharing among employees to prevent knowledge loss. The data were collected from business leaders' interviews and reviews of organizational documents. The research participants included five business leaders from five Nigerian oil and gas public sector agencies who had successfully initiated and reinforced knowledge-sharing strategies. I obtained secondary data from the organizational documents including training materials, manuals, and protocols.

Based on the participant's responses to the interview questions, review of organizational documents, and thematic analysis, I identified four themes: (a) develop structured mentoring, (b) institute a knowledge-sharing culture, (c) establish open and effective communication, and (d) provide leadership support. The key takeaway from the findings was that business leaders should take deliberate steps to incorporate knowledge sharing into the organization's culture to create efficiency and improve organizational performance. I have included in Section 3 my presentation of the findings, applications to professional practice, implications for social change, recommendations for action and further research, my reflections, and the conclusions of the study.

Presentation of the Findings

The overarching research question for this qualitative multiple case study was: What strategies do Nigerian oil and gas public sector business leaders use to initiate and

reinforce knowledge sharing among employees to prevent knowledge loss? To answer this study's central research question, I conducted semistructured interviews with five business leaders who had successfully initiated and reinforced knowledge-sharing strategies among their employees. I also reviewed organizational documents, such as training materials, manuals, and protocols.

Theme 1: Develop Structured Mentoring

The first theme that emerged from the thematic analysis was develop structured mentoring, which involves experienced staff sharing institutional knowledge, technical information, and other work-related insights with less-experienced employees through regular interactions, role modeling, and guidance. Mentoring engagements ease knowledge sharing, provide opportunities for career development, and increase overall productivity (Busby et al., 2023). All the participants agreed to have mentoring programs as a means of cultivating strong relationships among employees that enable experience and knowledge sharing.

All five participants commented on the implementation of varying mentoring initiatives to drive knowledge sharing among employees. For instance, P02 and P05 have a professional developmental approach to mentoring, as it starts from the point of onboarding newly recruited employees. According to P02,

> It starts right from the very first-day staff is recruited. We start onboarding, in most cases, by assigning newly employed staff to experienced members of staff for mentoring. And through this mentoring process, such staff members can gain useful knowledge from their seniors. They follow through this process of working

> under experienced hands. And this continues even almost throughout the period of about 9 to 10 years. Before they are allowed to stand on their own, so with this kind of process in place, obviously, you see that they have access to knowledge.

Similarly, P05 shared the same perspective, as structured mentoring is part of the onboarding process to integrate new hires. P05 stated that,

> And we started a mentorship program, which is also a form of knowledge sharing. Such a form of sharing knowledge where newly recruited employees has been assigned mentors to guide them in the activities of the board. And to ensure that they fit into the operations of the board.

P01, P03, and P04 have also structured mentoring as part of their staff developmental programs. For instance, P01 stated,

> Mentoring is also another way we share knowledge. Getting the team members moderate engagement sessions or drive the engagements aids in building communication skills and presentation skills. Normally, we moderate these engagements because of the years of experience we have. After a while, I started allowing some team members moderate the engagements. They would make mistakes, which is fine as nobody is perfect or knows it all. They learn from their mistakes, but we see that it has built their confidence.

P03 noted they have a coaching and mentoring program as part of their knowledge sharing initiatives where a crop of management staff engages the young staff in train-the-trainer exercises. And according to P04,

> The other method of knowledge sharing we do is on the job, where you are expected to mentor and teach people who work with you. Transfer knowledge to them through your day-to-day interactions and how you guide and show them what to do.

Peer mentoring is another approach P05 mentioned. The initiative branded as the buddy system, is a platform whereby a new hire is assigned to an experienced peer for mentoring, knowledge and experience sharing, and social support. Thus, the new hire is getting help settling into the new organization and gaining access to valuable experience and expertise. P05 stated,

> Another form of knowledge sharing session which we started not too long ago, is the buddy system, where you assign employees to people of the same level so they can guide them, especially the newly recruited staff. They can ensure that they feel comfortable, and they get to know what the department is doing.

The participants highlighted the effectiveness of the mentoring program by stating the value additions; however, some measures were put in place to ensure effectiveness. For instance, P02 mentioned that they have routine reports to check on mentees' progress. P02 stated, "the lecturers who mentor the younger ones also report their progress occasionally, especially when they are new."

Correlation to the Literature

Theme 1 relates to the findings of Busby et al. (2023) in that mentoring leads to knowledge sharing as mentors freely share their experience, know-how, and wisdom with mentees. Mentoring, a relationship between an experienced mentor and a less

experienced mentee, is recommended as a strategy to improve the satisfaction and retention of employees (Busby et al., 2023). Mentoring is used to acclimate mentees into a new organization and provide guidance and opportunities for career development through functions such as sponsorship, role modeling, counseling, and friendship (Busby et al., 2023). Onifade et al. (2023) confirmed that employees shared and applied their knowledge through mentoring, brainstorming, and open discussion to harness the wealth, wisdom, expertise, and experiences embedded in the heads of employees. The effectiveness of mentoring as a knowledge-sharing strategy, as expressed by this study's participants, supports the findings of Moreo et al. (2023) and Busby et al. (2023) on the benefits of mentoring. Employees gain valuable practical knowledge from mentors' experiences through sharing their career-long experiences, providing salient lessons and advice, thus lending insights into pitfalls to avoid and best practices to implement in daily practice (Moreo et al., 2023). The practical experiences and advice shared by experienced managers create an opportunity for knowledge sharing and reverse mentoring for employees, which can result in leadership development (Moreo et al., 2023). Collaborative knowledge sharing between the mentor and mentee fosters better support, resilience, increased motivation, and overall job satisfaction (Voss et al., 2022). The mentor's knowledge also is expressed through constructive feedback about the protégé's performance. The benefits of successful mentoring impact the individual, the team, and the organization (Voss et al., 2022). The qualities of effective mentoring include regular communication, frequent collaboration, reciprocity, well-defined goals, feedback, and interpersonal compatibility (Busby et al., 2023). Besides information and knowledge, the

sharing in peer mentoring was seen to contribute also to the feeling of social and emotional support for the employees (Nokkala et al., 2022). The first theme on delivering structured mentoring aligned with the findings of recent literature on knowledge-sharing strategies among employees.

Correlation to the Conceptual Framework

Theme 1 relates to the SCT, as some of the outcomes of mentoring engagement tie to some of the concepts of SCT, including self-efficacy, outcome expectation, and observational learning. A vital aspect of SCT is model-based learning (observational learning); thus, the assumption is that employees can learn through observation and imitation of others (Kim et al., 2023). The development of the structured mentoring approach is consistent with this construct since mentoring involves guidance and role modeling (Busby et al., 2023). More so, the mentoring engagements between experienced employees (mentors) and less-experienced employees (mentees) to share experience and knowledge can elicit self-efficacy through regular interactions (Astrove & Kraimer, 2022; Deng et al., 2022). Yoon et al. (2023) opined that self-efficacy is strengthened, and personal experiences of success form expectations of positive outcomes for career goals and exposure to and mentoring by successful role models.

Theme 2: Institute a Knowledge-Sharing Culture

The second theme that emerged from the thematic analysis was institute a knowledge-sharing culture to build employee competence through knowledge-sharing sessions. Building employees' competence through knowledge-sharing sessions is essential to ensure that relevant information is available to deliver job tasks effectively.

This study's participants considered knowledge sharing as the process of exchanging and accessing relevant and valuable information between people, teams, and organizations to make good decisions or carry out tasks with less or without supervision. All the participants attested to implementing knowledge-sharing strategies to bridge the knowledge gap and ensure employees are equipped with the requisite knowledge and experience for task execution. The knowledge-sharing sessions involve knowledgeable and experienced employees sharing knowledge with others, thus providing that critical knowledge is more than just domiciled with particular employees. The participants shared the various initiatives they adopted for sharing knowledge and experiences. P01 stated that,

> While we established the experiences are not adequate, we had to look for a way to bridge the gap, as time was of the essence in hitting the ground and setting the ball rolling. So, we instituted a one-hour weekly program, every Thursday, whereby staff share knowledge. The knowledge sharing is on HSE [Health, Safety, and Environment] work processes and procedures, what individuals or team tasks are, how it is done, and relevant information on HSE operations in the oil and gas industry.

The strategy deployed in A05 is no different although branded as lunch and learn. P05 stated,

> Knowledge sharing became a new thing in my organization some two years ago when we decided to adopt a concept called lunch and learn which is out of the normal training that staff is normally sent to, and since then we have continued

> with it. For the lunch and learn exercise, you can get people from various areas to share what they know with employees, especially when we are trying to onboard new employees.

In A02, P02 commented on the two initiatives they use to build employee competence through knowledge-sharing sessions. The two initiatives are a staff developmental program and knowledge-sharing series. P02 noted,

> Another method we normally use is we have staff development for our employees. So, what happens at these staff developments, especially at our in-house staff development, is that we give the opportunity for older staff to share knowledge with younger staff across various areas, even as far as administrative; we do this from time to time.

P02 further stated, "this very year, we already have about three training programs for this sort of knowledge-sharing activity." The second strategy P02 mentioned was the knowledge-sharing series, "we also have another program which the Director of Research and Development anchors, which is very specific to your research topic, it is called the knowledge-sharing series (KSS)." P02 highlighted that the KSS, which is research-based, is conducted regularly among the teaching departments, and it involves different research groups inviting a cross-section of the institute to a seminar done within the institute where they present their research, findings, and recommendations to other employees for the purpose of sharing their gained knowledge with other colleagues. The initiatives deployed in A03 included engaging internal consultants and subject matter experts in the industry to share knowledge with staff on specific areas to bridge knowledge gaps

identified and to ensure such task-related knowledge is retained in the organization. P03 described the process,

> We engage our internal consultants to deliver papers so that staff or those concerned will be able to know that this is the knowledge that is important and that will also help them in their career, and that in case there is a break, maybe one person leaves the organization, that knowledge will reside in those people, and they will carry on.

P03 further stated,

> We also have what we call lecture series. Those are more technical issues that relate to oil and gas. So, we have these lectures delivered to all staff members every quarter, looking at some very critical areas that we know that members need that knowledge to help them in their careers and at the same time to do their job.

The organization engaged subject matter experts to share industry knowledge with employees to build competence, P03 noted that employees gain useful knowledge from such sessions, "the knowledge gained will reside in them [employees]. They will use it throughout their career." Regarding instituting knowledge sharing culture among employees, P04 highlighted the strategies A04 have deployed in this space, the teach-back sessions and formal training by subject matter experts. P04 described the teach-back session as follows,

> We also have the teach-back session whereby a staff is nominated to attend formal instructor-led classroom training. After participating in the training, the staff is expected to return and share knowledge gained from the training with

> others by setting up a training session for either people in your department or a group of people. And then you teach back what you have learned so that way knowledge is being transferred from you that went for the training on to other people. So instead of training one person, we end up training 20–40 people, depending on the number that has been put together for the teach-back session.

P02, P03, and P05 also engaged in teach back exercises in their organizations after employees had undergone formal instructor-led classroom training. Apart from the teach-back session, P04 commented on the formal training by subject matter experts whereby sessions are organized for experienced employees from different functional areas/teams within a department to share experiences and technical know-how with other departmental members handling other functions to increase team collaboration, coordination, and productivity. A05 had similar exercise adapted to incorporate knowledge sharing. P05 explained,

> And another means we use in sharing knowledge is through our interdepartmental meetings, where we call on someone to come and take the employees on what they do. Especially since we have units, and each unit is dedicated to its core functions. So, the other units might not know what the sister unit is doing, so to ensure that everybody is at par or have a uniform understanding of what may be, for example, HR is doing, we could call on someone from L&D [Learning and Development] to explain their processes to people in ER [Employee Relations] or resourcing.

To ensure that these knowledge-sharing strategies were well entrenched in the organizational culture, all the participating organizations had measures in place to reinforce the strategy. Some measures adapted to sustain the initiatives included fixing regular periods for the various exercises, making employee participation mandatory, providing incentives, and appraising performance. Setting regular periods ensures that employees follow and adapt the structures in their schedules. P01 stated, "we instituted a one-hour weekly program, every Thursday, whereby staff shares knowledge". P01 further noted, "we made it mandatory. So, every Thursday, everyone must attend. If you're not attending, there must be a cogent reason for which you must seek prior permission." Similarly, P03 and P04 shared the same point. P03 stated that "we have these lectures delivered to all members of staff on a quarterly basis," and P04 added, "on the appointed day, we do it across the organization, same time every twice a month." Besides having the programs from time to time, P02 noted that they have a two-way appraisal process in place to assess the performance of the strategies. According to P03, "we sometimes design and send some formats for supervisors to give us feedback, to ascertain if the information that has been passed has been effectively utilized and what the result is." Besides the measures described to build a culture and competence around the strategies, P05 emphasized the use of incentives to encourage staff,

> We now implemented some form of carrots [reward] and support approach where you put a sweetener to something. For example, if you are able to attend the lunch and learn session, you are going to get some gifts. The first few persons that

> attend or that come for the session, you get gifts. You know, when you start attaching some level of gifts to it, you overcome [absenteeism].

According to all the participants, the result is that there has been improvement, as they all commented on the effectiveness of the strategies. P05 noted, "we have experienced remarkable change and growth ever since we started implementing various knowledge-sharing strategies. We have experienced growth even in leadership, some form of confidence, and employee engagement."

Correlation to the Literature

An organizational culture that supports employee knowledge sharing has been found to influence knowledge sharing (Erena et al., 2023; Wen & Wang, 2022; Yeboah, 2023). Erena et al. (2023) found that organizational culture, among other factors, strongly relates to knowledge management dimensions, such as knowledge sharing. Erena et al. noted that good leadership and management support create a conducive environment for knowledge management practices, such as employee interaction, which increases the culture of sharing, learning, and creating new ideas. Erena et al. further suggested that the success of the knowledge management process highly depends on an organization's culture, which entails a sense of security, a lack of fear, openness, trust, and transparency. Moreover, Erena et al. inferred that a good organizational culture that supports knowledge sharing is essential as a culture of knowledge sharing among employees or between firms in the same industry highly encourages innovative activities. Yaqub and Al-Sabban (2023) advocated for organizations to establish effective knowledge-sharing environments by encouraging individuals to share knowledge using the most advanced

contemporary means, such as social media platforms. Creating a climate conducive to knowledge sharing and appropriating sufficient resources and customizing incentives could assist management reap greater benefits from their knowledge-sharing promotion efforts (Yaqub & Al-Sabban, 2023). Jasimuddin and Saci (2022) advocated for the need to gain top management support to create a culture in which employees spontaneously shared knowledge within the organization to do the job, and that management should make employees understand that there is more value in sharing knowledge than in hoarding it. Wen and Wang (2022) added that a rigidly bureaucratic organizational culture can be a key barrier to promoting knowledge sharing. Theme 2 on instituting a knowledge-sharing culture aligned with the findings of recent literature on knowledge-sharing strategies among employees.

Correlation to the Conceptual Framework

Theme 2, instituting a knowledge-sharing culture, also relates to the conceptual framework for this study, Bandura's (1986) SCT. According to SCT, environmental elements often influence individual behavior (Nguyen et al., 2022b). In this study's context, the organizational culture constitutes the environmental element. Information resources and interactive environments provided by organizations support the progress of knowledge-sharing activities (Cai & Shi, 2022). Similarly, the findings of Kim et al. (2023) corroborated the importance of a trusting and cooperative environment in promoting employee knowledge sharing with other team members. Knowledge-sharing behavior only happens when a knowledge-sharing opportunity exists, as knowledge-sharing opportunity plays a crucial role in creating a favorable environment for

knowledge-sharing behavior (Nguyen et al., 2022b). All the participants highlighted the way they had incorporated knowledge-sharing sessions and periodic meetings that provided platforms for knowledge-sharing opportunities. Nguyen et al. (2022b) recommended that organizations facilitate the knowledge-sharing process to motivate employees to improve performance and organizational competitive advantage. An enabling organizational culture supporting knowledge sharing can motivate employees to share beneficial knowledge among colleagues.

Theme 3: Establish Open and Effective Communication

The third theme that emerged from the thematic analysis was that establishing open and effective communication provided a veritable platform for knowledge sharing among employees. All five participants attested that the success of knowledge sharing hinges on establishing open and effective communication in the workplace since it entails the exchange of information among employees. P01 stated, "knowledge sharing can be formal or informal; it could also be a reverse kind of knowledge sharing which doesn't necessarily have to be from top to bottom, as it can be from bottom to top or across." Employees can build interpersonal relationships, boost collaboration, and be empowered when leaders provide an enabling environment for open communication. P01 affirmed, "the knowledge sharing was not just for information sharing but also for building relationships because we were all new and needed to get the team bonded. So, it created a forum whereby people interact, learn, and communicate." Giving feedback is part of effective communication because it brings about improvement, and participants affirmed

that as well. P01 stated, "individuals are given feedback on how they fared by providing constructive feedback and identifying their flaws, weaknesses and acknowledging their strengths. The team members can also, after the engagements, get clarification on the meeting." Similarly, P02 noted, "subsequently, when they [new hires] start communicating and carrying out their duties, we check them occasionally; for instance, to generate a memo, we have a line of communication which every staff is supposed to follow." Communicating expectations is another point P02 noted,

> So now, when we employ new staff members, the first thing we do is to introduce them to this employee handbook and what that really does is give them the basis of our expectations in terms of what we expect from them, how we do things.

All five organizations use periodic meetings as a platform to encourage open communication, provide a platform to communicate, share information, and also learn. The meetings could be formal or informal. All five participants shared similar views on this issue; for example, P02 noted, "another way of doing it is by giving your staff room at meetings to share their experiences talking about what works and what does not." Thus, through such platforms, other employees will learn from mistakes made by others, thereby reducing errors and trial times. Also, P05 stated, "we also hold town hall meetings where the leadership talks to employees on things regarding the operations of the organization to create this sort of awareness." Another form of meetings P05 mentioned is the expanded leadership meetings (ELT). P05 added, "we also have ELT meetings where we also discuss/share knowledge amongst the management staff to tell

them things about what the organization is doing so that they are abreast." Employees have an opportunity to interact with the management during these meetings. P03 pointed out, "there will be some interaction between them [management and staff], and the subordinates will learn." To bring about team cohesion and fluidity in communication, P01 advocated for occasional informal engagements to foster team bonding. Team bonding results in an excellent interpersonal relationship among team members, which may eliminate knowledge hoarding and minimize undesirable competitive tendencies. P01 noted, "where we had an informal engagement and people were free to express themselves and address issues, they had with each other." Consequently, employees can relate with one another, break communication barriers, and share information which can enhance organizational learning and innovation. In consonant, P05 commented on the value of establishing open and effective communication among employees, P05 noted, "even some forms of workplace conflicts that used to happen due to lack of understanding and ineffective communication; all those things were reduced."

P04 and P05 highlighted the importance of peer learning, which promotes peer interaction and open communication. P04 described the peer group learning program instituted in A04, where employees on the same level but different functional roles are formed into learning groups to meet at specified times every two weeks for the purpose of knowledge sharing. P04 emphasized that through such meetings, employees could relate freely and share information. P04 stated,

> We bring people from various functions within the group for them to learn from one another, and they all form a group scheduled officially through the training

> function, where they have a structured knowledge-sharing sessions. So by that you and your peers are equal, and can talk and interact freely, you can share jokes. And then you can teach each other. So that has worked for us.

Establishing open communication channels will provide employees access to relevant information that will assist them in carrying out their organizational functions.

Correlation to the Literature

Knowledge sharing is based on an open and effective organizational communication process. Avença et al. (2023) noted that maintaining effective communication with all employees is the most frequently mentioned soft skill in the knowledge-sharing literature. Communication and engagement are critical when developing and maintaining a resilient organization built on knowledge sharing, especially given the continuously changing nature of work settings and the rise of remote and hybrid work (Tiwari, 2022). Implementing organizational communication in (organizations) enhances the intensity of knowledge sharing among employees (BM et al., 2023). Besides supporting knowledge sharing, the organization's communication can also support human resource performance (BM et al., 2023). Managers must leverage the great potential of broad-based social interactions and communication by promoting effective knowledge sharing (Yaqub & Al-Sabban, 2023). Thus, business leaders and executives might consider investing in and promoting internal communication and collaboration to increase knowledge sharing (Hwang, 2022; Meickmann, 2023). The theme of establishing open and effective communication aligned with the findings of

recent studies on approaches to initiate and reinforce knowledge sharing among employees to prevent knowledge loss.

Correlation to the Conceptual Framework

This study draws upon the SCT (Bandura, 1986), which indicates that employees are influenced by the interplay of individual, social, organizational, and cultural factors. Social interaction refers to close social relationships among co-workers in the organization (Nguyen et al., 2022b). According to the SCT, personal communications with other individuals would affect each other's opinions, emotions, and behavior (Bandura, 1988). Establishing open and effective communication among employees could result in social interactions, which may promote knowledge sharing. The more employees interact and communicate with each other, the more likely they share knowledge (Nguyen et al., 2022b). Organizations must provide opportunities to share knowledge and experiences through meetings in physical or virtual spaces, including organizational social media channels where formal and informal interaction and communication occur.

Theme 4: Provide Leadership Support

The final theme that emerged from the thematic analysis was that the five participants provided effective leadership support to promote and reinforce knowledge-sharing strategies among employees. All five participants established that they provided leadership support in various forms for all the strategies that have been identified to put into practice. Considering that all five participating organizations are in the public sector

where seeking headship assent for most initiatives is paramount, all the participants concurred that getting management buy-in is critical. P01 noted,

> We had to sell the idea and make a business case for the need by identifying the current challenge and its impact. So we sold the idea, showed what the benefits and value additions are, and then we got the management buy-in which, was seamless because we were on the same page, and the benefits were there.

Also, P05 added, "when they [management] see the improvements, they buy into it." Getting management buy-ins may bring them to champion the course while putting measures around to reinforce the practice. Such measures may include recognition and reward, performance management, and other modalities to create efficiencies. For instance, P02 stated,

> I will say to encourage knowledge sharing; it could be once a week, once in two weeks, it depends, but once it's done regularly. It has the implication of becoming a habit in your staff and thus enhancing the potential for everybody.

Regarding recognition and reward, P05 noted that they ensure to give some form of incentives to those employees living the culture in a remarkable way to serve as encouragement for other employees.

The leadership must be willing to carry everybody along by making the process inclusive and expansive. P01 noted, "we found that it would also be good to get everyone involved, so we made the knowledge sharing not only technically inclined but non-technical on soft skills such as ergonomics, emotional intelligence, team building and many other things." Similarly, other participants attested that all employees and

management staff are involved in the knowledge and experience-sharing practices as the programs are organization-wide.

Leaders create enabling environment to influence and inspire others with their valuable knowledge, such that employees feel supported, empowered, and motivated to align with the process. Leaders also provide the tools and motivation to support the process. P02 commented,

> I would say that when staff are encouraged to share knowledge, you boost your staff engagement, when that happens it's very good. And then the best way to do it could include providing your staff with the opportunity of having multiple ways to share their knowledge such that each member of staff has management empowerment to select the method that they think is proper and fit for them, talking about personality and skill set.

Similarly, P01 opined experience sharing and providing opportunities to give and receive feedback increases employees' confidence. P01 explained,

> Allowing them [employees] to make presentations builds their confidence which makes them [employees] open to attempt new things even if they don't have all it takes. They ask questions, get clarifications and as such builds their presentation, public speaking, interpersonal skills, and relationships.

Besides the moral support, it is necessary for leaders to provide the necessary infrastructure and technology to facilitate effective knowledge sharing. P02 pointed out,

> For infrastructure and connectivity at our end here, we started deploying a kind of intranet that will be available to staff. We plan to work with major

> telecommunication services providers to see how they can improve their services around our facilities.

The leader must be able to model the behavior and willing to share functional and valuable knowledge with employees. P03 described, “whatever you know as a superior is passed down to your subordinates so that at any point in time, they can work independently or with less supervision.” P01 retorted, “it is also revealed that when you encourage people, even if their best is not good, but you nudge them ahead, you show that you believe in them and you’re willing to work with them, they easily pick up.” Participants are proactive in taking leadership actions to enhance employee commitment, build competence and foster good working relationships among employees. P01 stated, “while we established the experiences are not adequate, we had to look for a way to bridge the gap.” Because job knowledge is functional changes from season to season, there might be occasions where a change of strategy is required. P05 noted, “so when that issue is addressed, and you see a remarkable improvement, you know that strategy has worked. If it does not work, you change your strategy.” P05 further elaborated on the proactive measures leaders take to reinforce knowledge sharing,

> People started losing interest, so we needed to change the strategy, make it in short streams, and add sweeteners. And then we got back people to holding those meetings. The key thing is ensuring that you make it interesting, attractive, and appealing to your employees, and you ensure that you do not follow one particular method.

Leaders must be involved in driving and sustaining knowledge-sharing practices among employees to prevent knowledge loss.

Correlation to the Literature

Researchers have identified providing exemplary leadership and management support as essential for promoting knowledge sharing in organizations (Erena et al., 2023; Wen & Wang, 2022; Yeboah, 2023). Erena et al. (2023) opined that good leadership and management support create a conducive environment for knowledge management practices such as employee interaction, which increases the culture of sharing, learning, and creating new ideas. From the organization dimension, leadership support, organizational culture, organizational reward systems, and organizational structure have been found to influence knowledge sharing (Wen & Wang, 2022; Yeboah, 2023). Top management and leadership support are essential for knowledge sharing and have been found to be a motivator for knowledge sharing (Yeboah, 2023). Additionally, Erena et al. noted that leadership is a device that nurtures employee motivation, skills, and competence and fosters the successful generation and implementation of knowledge. Wen and Wang (2022) maintained that leadership support has the strongest positive effect on knowledge sharing, among other factors. Avença et al. (2023) concluded that effective leadership has a more significant impact on team members' knowledge sharing by positively influencing team members. Thus, empowering leadership significantly affects employees' knowledge behaviors (Yeboah, 2023). The theme of providing leadership support aligned with the findings of recent research on knowledge-sharing approaches.

Correlation to the Conceptual Framework

The SCT posits that individual behavior is cognitively chosen based on personal, behavioral, and environmental factors (Kim et al., 2023). In this study's context, environmental input includes the social models by the leadership, instructions, feedback, standards, and rewards set by the organizations. Each of the environmental input influences employee behavior. Kim et al. (2023) maintained that leaders might promote employee knowledge-sharing behavior by modeling and explicitly demonstrating the knowledge sharing relevant to team goals. Leaders could also coach team members on effective knowledge-sharing behaviors and skills. Besides social modeling, employees need to be motivated to share knowledge, as motivation is necessary for any behavioral expression and is the decision made before behavior emergence (Jin & Suntrayuth, 2022; Nguyen et al., 2022a). To motivate employees to share knowledge, the design of the organizational knowledge sharing incentive mechanism should be targeted to meet the needs of employees, so that employees' knowledge sharing behavior is activated by stimulating their knowledge sharing motivation to facilitate their creativity effectively (Jin & Suntrayuth, 2022). Leaders may promote individuals' knowledge sharing by increasing their self-perceptions of their abilities to engage through positive feedback, coaching and reinforcing knowledge-sharing behavior, thereby boosting their self-efficacy (Kim et al., 2023). Employees with strong self-efficacy have stronger motivation to engage in more active knowledge-sharing activities (Jin & Suntrayuth, 2022; Nguyen et al., 2022a; Thomas & Gupta, 2022). Having the right leadership support can influence

employee knowledge sharing. Business leaders are enjoined to provide enabling environment and conditions for knowledge sharing to thrive.

Applications to Professional Practice

Business leaders in the public sector oil and gas agencies may apply the findings of this study to establish strategies to initiate and reinforce knowledge sharing among employees to prevent knowledge loss. Business leaders who had successfully initiated and reinforced knowledge sharing among employees offered proven strategies for professional practice to initiate and reinforce knowledge sharing among employees effectively. Based on the findings of my study, business leaders in the public sector oil and gas agencies could initiate and reinforce knowledge sharing among employees and prevent knowledge loss by implementing four strategies, including (a) develop structured mentoring, (b) institute a knowledge-sharing culture (c) establish open and effective communication, and (d) provide leadership support. The first strategy, deliver structured mentoring engagements, is important as it involves assigning a new hire to learn under experienced employees' tutelage to achieve knowledge and experience sharing seamlessly through regular interactions. The second strategy, institute a knowledge-sharing culture, is of critical importance as a way of reinforcing the knowledge-sharing practice among employees. The third strategy, establish open and effective communication, ensures that there is fluidity in communication as instructions and expectations are effectively communicated, including organizational goals and updates on future plans and projects of the agencies. The fourth strategy, provide effective leadership support, ensures that measures including motivation, recognition and reward, role

modeling, and other highlighted strategies are enforced to promote employee knowledge sharing and positive organizational outcomes.

Business leaders in public sector oil and gas agencies could prevent knowledge loss by implementing these strategies to initiate and reinforce knowledge sharing among employees. The proactive management of organizational knowledge-sharing initiatives can be a source of competitive advantage for organizations (Ali et al., 2019). Consequently, the findings of this study may add to the body of knowledge on strategies business leaders in public sector oil and gas agencies can implement to initiate and reinforce knowledge sharing among employees to prevent knowledge loss.

Implications for Social Change

The findings of this study may significantly contribute to social change by providing business leaders and human resource professionals with insightful information to effectively implement people management practices that will allow an enabling environment for knowledge sharing among employees. This plan may translate into increased intellectual capital among employees, boost efficiency and overall productivity, and prevent knowledge loss. This study can further contribute to positive social change by providing business leaders strategies that may reduce the learning curve cost attributed to employee replacement, resulting in cost savings for the organization; organizations can channel such cost savings toward social development courses.

Business leaders in the public sector oil and gas agencies implementing these knowledge-sharing strategies may reduce the inefficiencies that lead to employee frustration, thus boosting employee engagement within the organization. Boosting

employee engagement could result in improved organizational productivity, leading to profitability. Such profitability can be extended to support and sponsor social projects for the benefit of the host community, thereby helping people have a better way of life.

Recommendations for Action

Implementing strategies to initiate and reinforce knowledge sharing among employees benefits various organizational units, including individuals, team leads, human resource professionals, other business leaders, and the organizations. The lack of a proper approach to promoting knowledge sharing among employees could result in knowledge loss, which impacts productivity and efficiency and reduces the competitive advantage tendency, as unshared knowledge costs money. Given that knowledge is valuable in achieving organizational outcomes, business leaders could find the findings of this study applicable in maximizing their knowledge assets for optimal operational excellence. They could consider adopting the actionable strategies utilized by the participants to initiate and reinforce knowledge among employees to prevent knowledge loss in their respective organizations. Based on the findings of this study, I present the following recommendations for action that business leaders could implement to initiate and reinforce knowledge sharing among employees:

1. The need for organizations to develop structured mentoring engagements in which employees are assigned to experience employees for mentorship. Such engagements are a platform that eases experience and knowledge sharing; due to the regular interactions, institutional knowledge is shared between the mentors and mentees. This strategy is also effective as human

resource professionals can incorporate it into the onboarding processes for new hires to access shared task-related knowledge so as to bring new hires up to speed. This strategy may be purposeful if it is goal-focused, knowledge-needs-matched, and progress-checked periodically so improvements can be made.

2. Establish a knowledge-sharing culture by creating an enabling environment where employee knowledge sharing can thrive. Setting goals to ensure that knowledge sharing culture can develop by making knowledge sharing and knowledge-sharing attitude a second nature. A knowledge-sharing culture exists if everyone contributes to its development and actively participates.
3. Establishing open and effective communication ensures that meaningful connection exists and propels the intensity of knowledge sharing among employees. Such connection brings innovation and collaboration through knowledge sharing. Organizations will need to invest in appropriate communication channels through which employees can interact and share knowledge.
4. The right culture and a supportive leadership team are key factors driving an effective and more positive work environment. The need for leadership support in which organizational leaders commit a portion of their time to knowledge sharing reinforces the importance of the practice. It will send a strong message about the importance of the practice to employees.

Management's attitude and behavior influence organizational attitude. Leadership teams must have a clear view of knowledge sharing and demonstrate exemplary conduct. Leaders could design measures to motivate employees, such as using incentive schemes to recognize and reward the desired behavior.

5. The need to document and organize shared knowledge and information will ensure that the highlighted strategies effectively improve internal capacity and retention of institutional knowledge, thus preventing knowledge loss. Organizations could invest in knowledge repositories that will be updated regularly with knowledge-based information from training reports employees attended, minutes of meetings and reviews, videos that document intending retirees' expertise and other relevant information. Employees can easily access information and build upon such knowledge to create innovative solutions to business problems that might arise.

I will disseminate the findings of this study to relevant stakeholders through presentations at lateral learning to colleagues, professional forums, and seminars. I will send the summary of the results to the five business leaders that participated in the doctoral research and will also publish this study in Walden University's ProQuest dissertation database to make it available for interested future scholars.

Recommendations for Further Research

This qualitative multiple case study aimed to explore the strategies some business leaders in Nigeria's public sector oil and gas agencies used to initiate and reinforce

knowledge sharing among employees to prevent knowledge loss. I interviewed five business leaders from five public sector oil and gas agencies in the Federal Capital Territory and South-South geopolitical zone, who had successfully initiated and reinforced knowledge sharing among employees. This small sample size of five could pose a study limitation, as more themes could have emerged if the sample size was increased. I recommend that further researchers interview more business leaders to gain more robust knowledge and insights. Also, to address the limitation whereby I selected participants from a specific sector, the public sector oil and gas agencies, future researchers could consider extending the study to other industries. Lastly, I recommend that future researchers adopt a quantitative methodology to sample employees' perspectives on the relationship between the themes and knowledge sharing.

Reflections

Completing the Walden University's DBA Doctoral Program was more beneficial than I had hoped. I had wanted a flexible doctoral program that would afford me time to attend to other commitments while still studying, and it did that perfectly. However, given the numerous roles one plays daily, it necessitates intentional effort. I improved in terms of broadened knowledge in several aspects. With the various resources provided by Walden, which address academic demands and cater to the personal and professional growth of scholars, I have benefited immensely. Another aspect that this program helped me to do is to learn more about time management that students adapt during the program, which has really impacted my personal and professional activities. I particularly like the progressive approach in which the curriculum is structured, as it is designed in a way that

will prepare one to become an independent scholar. More so is the fact that Walden is strongly inclined towards positive social change. I had been contributing to many social causes, but with the Walden commitment to positive social change, my efforts are now more focused.

My motivations for pursuing the DBA program include: future-proofing oneself for upcoming roles, boosting earning potential, gaining additional opportunities, developing strategic leadership abilities, obtaining a globally recognized degree, and being competent to make an immediate impact at the workplace. I have gained the knowledge and insights to aspire at higher levels. During the program, I have met colleagues that have inspired and challenged me indirectly, which has made me strong and determined to put in the effort. The tasks could be daunting, but among the lessons learned is that a little effort put in daily makes a difference at the end of the day and hinge on you towards the finish line. I look forward to supporting others aspiring students to accomplish this feat.

Conclusion

Knowledge loss has a significant financial and nonfinancial impact on individuals, teams, and organizations. The loss of experienced employees with critical institutional knowledge negatively impacts efficiency and overall productivity, and replacing lost knowledge comes at a high cost. Therefore, business leaders must understand the actionable strategies to promote employee knowledge-sharing behavior such that knowledge and experience sharing becomes second nature in organizations. Participants in this study developed structured mentoring to foster purposeful knowledge

sharing, instituted a knowledge-sharing culture to reinforce the practice, established open and effective communication, and provided supportive leadership. Consequently, I strongly recommend the findings of this study for the consideration of business leaders interested in initiating and reinforcing knowledge sharing among employees.

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Appendix A: Interview Protocol

Interview Protocol

Specific Business Problem

The specific business problem is that some business leaders in the Nigerian oil and gas public sector agencies lack strategies to initiate and reinforce knowledge sharing among employees to prevent knowledge loss.

Research Question

What strategies do Nigerian oil and gas public sector business leaders use to initiate and reinforce knowledge sharing among employees to prevent knowledge loss?

Primary Research Goal

The primary research goal is to explore strategies that business leaders in the Nigerian oil and gas public sector agencies use to initiate and reinforce knowledge sharing among employees to prevent knowledge loss.

Participant Criteria

The participant must hold a managerial position with decision-making authority in a public sector oil and gas agency. In addition, the participant should be working in the Nigeria Federal Capital Territory or the South-south geopolitical zone. Finally, the participants should have successfully used strategies to initiate and reinforce knowledge sharing among their employees to prevent knowledge loss.

What you will do	**What you will say—script**

Introduce the interview and set the stage over a coffee.	A brief introduction as a doctoral student at Walden University and ascertain interview is for data collection. I want to thank you for agreeing to participate in the interview process for my study. Our interview today will last approximately one hour, during which I will require you to share your knowledge and experiences on the research subject (Castillo-Montoya, 2016). As briefly explained while seeking your consent, my research aims to understand how leaders in the public sector oil and gas agency initiate knowledge sharing among employees. The study also explores how employee knowledge-sharing strategies are reinforced to address knowledge loss and foster business continuity. Finally, this research aims to document the strategy to benefit other business leaders who might want to apply the techniques to improve employee performance and further research.
Initial Probe Questions	Kindly tell me about your background

• Observe for nonverbal cues • Paraphrase as needed • Take notes during the interview • Follow-up with probing questions to get more in-depth data	Interview Questions 1. What is your definition of knowledge sharing? 2. What strategies did you use to initiate and reinforce knowledge sharing among your employees? 3. What strategies have you found to be most effective? 4. What, in your opinion, constitutes effective knowledge sharing practices? 5. How do you assess the effectiveness of the strategies? 6. What challenges have you experienced in the implementation of these strategies? 7. How have you been able to address the challenges effectively? 8. What methods have you used when practicing knowledge sharing that was unsuccessful and did not yield the desired result? 9. What additional information would you like to share on initiating and reinforcing knowledge sharing among employees to prevent knowledge loss?

Wrap up the interview by thanking the participant	Thank you so much for taking the time to meet with me and share your experience. It was a pleasure to learn more about your employee knowledge-sharing approach. The information given during the interview will add to data collection and the success of the research.
Schedule follow-up member checking interview	I would like to seek your permission to place a phone call or visit for further clarification while transcribing the interview. Also, I will send a copy of the transcript to check with you for confirmation/interpretation of the interview discussion.

Appendix B: Invitation for Doctoral Study Participation

Email Title: Invitation for Doctoral Study Participation

Dear [Name]:

My name is Morufat Oshineye, and I am a doctoral candidate in Walden University's Doctor of Business Administration (DBA) program. One of the requirements to complete the program is to conduct a doctoral study. I am researching leadership strategies to initiate and reinforce knowledge sharing among employees. I have received approval from the University's Institutional Review Board (IRB) to conduct this study with approval number 03-20-23-1053865. The study's findings may help prevent knowledge loss in organizations, thereby translating to increased intellectual capital, which can boost organizational performance.

I am requesting your voluntary participation in this research study. If you wish to participate in the study, I will need your consent by signing a consent form. After getting your permission, I will contact you for a semistructured interview, either in person or virtually, to ask some questions about how you have successfully initiated and reinforced knowledge-sharing strategies in your organization. I also require organizational documents to back up your comments. As research ethics requires, I assure you that your identity and organization will be confidential. You may withdraw from the study anytime by calling, writing, or texting. I appreciate your anticipated consent and participation.

Best regards,

Morufat Oshineye

Appendix C: Document Information Template

Document Review Date: _____ Company Code: _____

Document Title: [List document name as stated on company document]

Significant Information:

- Describe the document
- Summarize the information provided by highlighting significant points
- Analyze the document using the Yin's (2018) thematic analysis model for data analysis

Note: Use a template per company document