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Towards Transient Advantages: the role of knowledge management on productivity

Emily Marie Taherian

A thesis submitted in partial fulfilment of the requirements of
Sheffield Hallam University
for the degree of Doctor of Business Administration

April 2024

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Abstract

This empirical study delves into the impact of knowledge management initiatives (Knowledge-Oriented Leadership, Knowledge Process Capabilities, and Knowledge Management Behavior) on knowledge-worker productivity, aiming to uncover valuable insights for organizations seeking competitive advantages in a rapidly evolving landscape. While the importance of knowledge management in organizational success is widely recognized, the specific relationship between these initiatives and knowledge-worker productivity remains a topic of exploration. This research is particularly urgent given the increasingly intricate nature of knowledge management and its indispensable role in organizational advantages.

Focusing on knowledge-workers within the financial services industry, this study investigates the interplay between knowledge management initiatives and knowledge-worker productivity, considering the moderating influence of affective commitment. By blending both inductive and deductive methodologies, a pragmatic philosophical stance was adopted, and the mixed-methods approach was employed in the endeavor to comprehensively identify, explore, and test effective knowledge management initiatives and their impact on knowledge-worker productivity.

Employing an exploratory sequential mixed-methods research design, data collection unfolded in two distinct phases. First, qualitative insights were gathered through ten semi-structured interviews with employees from the global Credit Specialties department of a multinational enterprise: quota sampling was deployed. Second, quantitative data was collected through an emailed questionnaire survey, yielding 294 valid responses providing a response rate of 32.81%. This multi-phased approach facilitated the testing of a robust framework encompassing knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, affective commitment, and knowledge-worker productivity.

The findings of this study, analyzed through SmartPLS 3, reveal significant connections among the studied variables. Notably, it underscores the pivotal role of the relationships between knowledge-oriented leadership and knowledge process capabilities, knowledge process capabilities on knowledge management behavior, knowledge management behavior on knowledge-worker productivity and knowledge-oriented leadership on knowledge-worker productivity directly. This research contributes novel insights into the nuanced dynamics of knowledge management within organizations, providing actionable recommendations for enhancing knowledge-worker productivity and competitiveness in the financial services sector. Further, this is one of the preliminary studies to empirically examine the association of knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior and affective commitment on knowledge-worker productivity under the knowledge-based dynamic capabilities lens carried out in the financial sector on a global scale using a mix methods approach. The findings revealed a positive link between knowledge-oriented leadership and knowledge process capabilities; knowledge process capabilities and knowledge management behavior; knowledge management behavior and knowledge-worker productivity; knowledge-oriented leadership and knowledge-worker productivity.

Keywords: Knowledge Management, International Management, Leadership, Multinational Enterprise, Financial Service Industry

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Table of Contents

Chapter One – Introduction	12
1.1 Background and Context	12
1.2 Role of the Researcher	14
1.3 Problem Statement	15
1.4 Statement of Purpose, Research Objectives, and Research Question	16
1.5 Significance of the Study	18
1.6 Methodology Overview	21
1.7 Thesis Structure	21
Chapter Two – Research Field and Literature Review	24
2.1 Introduction	24
2.2 Transient Advantage	28
2.3 Knowledge-Based Dynamic Capabilities View	38
2.4 Knowledge-Oriented Leadership	44
2.5 Knowledge Process Capabilities	50
2.6 Knowledge Management Behavior	56
2.7 Knowledge-Worker Productivity	60
2.8 Affective Commitment	65
2.9 Chapter Summary	69
Chapter Three – Research Framework and Hypotheses Development	71
3.1 Introduction	71
3.2 Hypotheses Development	74
3.3 Chapter Summary	79
Chapter Four – Methodology	81
4.1 Introduction	81
4.2 Research Paradigm and Philosophy	81
4.2.1 Ontology.....	84
4.2.2 Epistemology	85
4.2.3 Major Philosophies.....	86
4.2.4 Choice of Philosophy – Pragmatism	89
4.3 Research Strategy – Mixed Methods	91
4.4 Research Design – Exploratory Sequential Design	94
4.5 Phase One – Qualitative	102
4.5.1 Research Methods – Semi-Structured Interviews	102
4.5.2 Sampling and Selection of Participants.....	103
4.5.3 Interview Guide Development	104
4.5.4 Interview Procedures.....	106
4.5.5 Data Coding and Analysis.....	108
4.5.6 Trustworthiness, Rigor, and Reflexivity	115
4.5.7 Qualitative Section Summary.....	117
4.6 Phase Two – Quantitative	118

4.6.1 Research Method – Questionnaire	118
4.6.2 Questionnaire Development	119
4.6.3 Sampling Method	135
4.6.4 Methodology for Data Analysis	138
4.6.5 Validity and Reliability	138
4.7 Ethical Considerations	141
4.8 Chapter Summary	142
<i>Chapter Five – Research Analysis and Findings</i>	<i>144</i>
5.1 Qualitative Analysis and Findings	144
5.1.1 Introduction	144
5.1.2 Respondent Profiles	144
5.1.3 Qualitative Findings	145
5.1.4 Qualitative Analysis and Findings Section Summary	159
5.2 Quantitative Analysis and Findings	160
5.2.1 Introduction	160
5.2.2 Data Collection and Sample	160
5.2.3 Demographic Profile	161
5.2.4 Data Preparation and Screening	164
5.2.5 Statistical Techniques - PLS-SEM	170
5.2.6 Descriptive Statistics	190
5.2.7 Hypothesis Testing and Path Analysis	195
5.2.7.1 Measurement Model.....	195
5.2.7.2 Structural Model.....	200
5.2.8 Quantitative Section Summary.....	208
5.3 Chapter Conclusion.....	208
<i>Chapter Six – Discussion.....</i>	<i>210</i>
6.1 Introduction	210
6.2 Qualitative Discussion	210
6.2.1 Qualitative Themes	210
6.2.2 Qualitative Section Summary and Support for Mixed Methods Approach.....	220
6.3 Quantitative Discussion.....	221
6.3.1 Discussion across Hypotheses.....	221
6.3.2 Quantitative Discussion Section Summary	227
6.4 Chapter Summary	228
<i>Chapter Seven – Research Implications and Conclusion</i>	<i>231</i>
7.1 Synopsis of the Research.....	231
7.2 Conclusions across Research Objectives	234
7.2.1 Research Objective One	234
7.2.2 Research Objective Two	237
7.2.3 Research Objective Three	239
7.3 Contribution to Theory.....	240
7.4 Recommendations for Practice.....	245
7.5 Transferability of Results	246
7.6 Limitations of the Study.....	247
7.7 Further Research.....	249
7.8 Conclusion of Thesis.....	250

References253
Appendices.....285
 Appendix 1: Interview Guide285
 Appendix 2: Semi-Structured Interview Questions for Upper Management287
 Appendix 3: Semi-Structured Interview Questions for Client Facing Employees290
 Appendix 4: Transcribed Interview Responses292
 Appendix 5: Survey376

List of Figures:

Figure 1: Risk Industry Commerce Chain	26
Figure 2: The Narrowing of Research Scope.....	27
Figure 3: How to compete: the wave of transient advantage	34
Figure 4: Research Framework.....	72
Figure 5: Adapted Exploratory Design	96
Figure 6: Pragmatic methodological framework in comparison to traditional approaches	97
Figure 7: The abductive research process	98
Figure 8: Research Design – Exploratory Sequential Mixed-Methods.....	101
Figure 9: Nine-step questionnaire development process	119
Figure 10: Primary Emerging Themes from the Interview Data	146
Figure 11: Algorithm of PLS-SEM Path Model	188
Figure 12: SEM model with t-values	201
Figure 13: SEM model with path coefficient values.....	203
Figure 14: Conceptual Model Aligned with Foundation Premise	237

List of Tables:

Table 1: Summary of Transient Advantage Literature and Applications	30
Table 2: Summary of Knowledge-Based Dynamic Capabilities Literature and Applications.....	42
Table 3: Summary of Knowledge-Oriented Leadership Literature and Applications	47
Table 4: Conceptualization of Processes in Knowledge Management Literature	52
Table 5: Summary of Knowledge Process Capabilities Literature and Applications	54
Table 6: Summary of Knowledge Management Behavior Literature and Applications.....	59
Table 7: Summary of Knowledge-Worker Productivity Literature and Applications	64
Table 8: Summary of Affective Commitment Literature and Applications.....	68
Table 9: Four Versions of Paradigms	83
Table 10: Elements of Worldviews.....	84
Table 11: Typology of mixed-method designs	95
Table 12: Table of informants.....	108
Table 13: Phases of thematic analysis.....	109
Table 14: Example from Coding Phase	110
Table 15: Measurements for Knowledge-Oriented Leadership.....	123
Table 16: Measurements for Knowledge Process Capabilities.....	125
Table 17: Measurements for Knowledge Management Behavior.....	127
Table 18: Measurements for Knowledge-Worker Productivity.....	128
Table 19: Measurements for Affective Commitment	129
Table 20: Measurements for Control Variables	130
Table 21: Summary of Respondent Profiles	145
Table 22: Demographic Profile (n=294).....	164
Table 23: Normality Results	169
Table 24: Recommendations on When to Use PLS-SEM Versus CB-SEM.....	171
Table 25: Descriptive Statistics for Model Characteristics.....	177
Table 26: Construct Abbreviations	178
Table 27: Descriptive Statistics for Outer Model Evaluation – Indicator Reliability	179
Table 28: Descriptive Statistics for Outer Model Evaluation – Internal Consistency Reliability	180
Table 29: Descriptive Statistics for Outer Model Evaluation – Convergent Validity	180
Table 30: Descriptive Statistics for Outer Model Evaluation – Evaluation of Outer Models.....	180
Table 31: Descriptive Statistics for Outer Model Evaluation – Multicollinearity	181
Table 32: Evaluation of Outer Models and Level of Acceptance	183
Table 33: Descriptive Statistics for Inner Model Evaluation – Coefficient of Determination.....	184
Table 34: Descriptive Statistics for Inner Model Evaluation – Cross-Validated Redundancy	184
Table 35: Descriptive Statistics for Inner Model Evaluation – Path Coefficients	185
Table 36: Descriptive Statistics for Inner Model Evaluation – Effect Size	185

Table 37: Evaluation of Inner Models and Level of Acceptance.....	186
Table 38: Summary of the Hypotheses Development.....	189
Table 39: Descriptive Statistics – Constructs and their indicators.....	191
Table 40: Assessment of factor loadings, CR, and AVE	196
Table 41: Fornell-Larcker Criterion.....	197
Table 42: Heterotrait-Monotrait Criteria (HTMT).....	198
Table 43: Assessment of Multicollinearity	199
Table 44: Structural Model Estimates.....	204
Table 45: Effect Size Test.....	206

Chapter One – Introduction

1.1 Background and Context

The aim of this research was to investigate how organizational leadership encourages strategic knowledge management initiatives and the impact of these initiatives on individual employees' productivity to achieve transient advantages in dynamic environments. The focus was on developing a comprehensive model that enables multinational enterprises within the financial services sector to proactively manage knowledge at both the firm and individual levels. This model aims to support knowledge-worker productivity, allowing organizations to effectively navigate and capitalize on volatile and rapidly changing market conditions to achieve transient advantages.

Viewing firm resources as a potential source to attain a competitive advantage has been the foundation of strategic literature for more than three decades (Porter 1980; Jensen et al., 2016). However, with shifting economies as well as unrelenting market dynamism, strategy needs to evolve to fit current demands. In an age of digital revolution, fading barriers of entry and globalization, a sustainable competitive advantage is increasingly difficult to conserve. It is with this realization that the shift from single long-term strategy to a portfolio of multiple transient advantages can materialize (McGrath, 2013a). Accessory to the transient advantages strategy is the adoption of viewing knowledge as a firm's key resource (Grant, 1996). "In an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge" (Nonaka, 1991, p. 96). As such, this study explored knowledge management strategy (Grant, 1996) as the foundation in exploiting multiple transient advantages (McGrath, 2013a) at once while considering dynamic markets (Pitelis & Wang, 2019; Kaur, 2022).

In viewing knowledge as the key resource of a firm to be utilized for the exploitation of transient advantages (Grant, 1996), exploring the individual feels natural as knowledge is possessed within the minds of knowledge-workers (Nonaka, 1991; Drucker, 1999). As Drucker (1999) states, the central challenge is no longer understanding how to make manual workers more productive, but how to make knowledge-workers more productive. Therefore, the knowledge management strategy proposed in this study, seeks to understand how to influence knowledge-workers to become more productive through a framework of knowledge management initiatives (both firm and individual level) encouraged by leadership despite dynamic environments (Pitelis & Wang, 2019; Drucker, 1999). Understanding how to garner knowledge-worker productivity can support the exploration and exploitation of knowledge throughout the firm (Drucker, 1999; Ramírez et al., 2004; Lafuente et al., 2019; Sahibzada et al., 2022a). Increased exploration and exploitation of knowledge increases firm resources for further opportunities to attain multiple transient advantages.

Finding itself as an actor within the knowledge economy, the financial services industry affords itself as an ideal context to examine knowledge management strategy (Drucker, 1999). The financial services occupation group has been considered to require high competency in cognitive abilities (Kwon, 2014). Where high cognitive abilities are required and where intangible assets are exchanged for profit, strategic knowledge management can be considered a crucial practice. Especially in the face of volatile environments where advantageous are transient. Accordingly, this study sets out to examine knowledge management strategy within the context of the financial services industry to realize knowledge-worker productivity. This thesis focuses on specific knowledge management initiatives which together create a knowledge management framework that can be implemented by firms to increase knowledge-worker productivity to ultimately exploit transient advantages in dynamic environments. In this effort, it is useful to first consider the role of the researcher.

1.2 Role of the Researcher

Before and while in preparation of this thesis, the researcher worked in an expert position in the surety industry, which is a subdivision of the credit specialties sector. This allowed for close contact to the ongoing challenges colleagues and industry leaders were facing within the credit specialties industry. Although the researcher was working in the firm during the preparation of this thesis, she remained detached from procedures, results, and conclusions. Certain advantages over researchers who might have not had the same opportunities such as having access to research participants that share expertise and experience within this niche sector. This possibility might not have been attainable for external researchers. With this said, this study benefits from the openness of access to data.

The researcher is well aware of the potential disadvantages of the data, which present itself in the form of personal biases. Measures were taken to prevent perspectives and assumptions from affecting the quality of the research.

Preventative measures which were taken include, pilot interviews and questionnaires were collected, colleagues and supervisors reviewed interview and questionnaire questions before they were distributed, interviewees were able to review their interviews once transcribed and provide feedback, a journal was kept during the entire writing process to self-reflect and check for biases. More specifically, there were two scenarios, which saw successful bias mitigation. The first being from a colleague, who reviewed their interview and the researcher's comments on the interview. Further, during the guiding journal keeping process, it became known that the motivation for focusing on topics such as competitive advantage and productivity might have a connection to the researcher's upbringing in the United States. Together with reflection and having an underlying trust with colleagues and supervisors, the researcher feels informed and conscious of the biases, which might have surfaced throughout the research process.

1.3 Problem Statement

Prior research as well as professional observation indicate that the credit specialty divisions within multinational brokerage enterprises are facing market transitions, affecting their core servicing practices (Hutchin, 2005; Pitelis & Wang, 2019; Kaur, 2022). These market transitions arise from changing customer behavior (expectations) (Maas, 2010), an aging expert population (Hutchin, 2005), and the progressively changing industry IT infrastructure, mainly induced by the effects of digitalization (Röschmann, 2018). To adapt to such market transitions, multinational brokerage enterprises, where knowledge is the key asset (Grant, 1996), have the opportunity to refocus management strategy where knowledge management is at the forefront (Wang et al., 2009; Zhang-Zhang et al., 2022). As explained by Wang et al., (2009), existing research is limited in providing us with an understanding of how knowledge management shapes performance and suggests empirical insights are needed. Therefore, to increase further understanding, this study emphasizes knowledge from knowledge-workers as the infinite source for multinational brokerage enterprises to be able to continuously adapt to fluctuating market transitions through the increase of Knowledge-Worker Productivity (performance) (Grant 1996; McGrath 2013a; Zhang-Zhang 2022). In this view, this study investigates the management of knowledge held by knowledge-workers through a knowledge management model which has been identified, explored, and tested to bring empirical insights to this topic (Donate et al., 2015; Martin-Perez et al., 2015; Kamasak et al., 2017; Shamim et al., 2019; Sahibzada et al., 2022). Thus, the purpose of this study, the research questions, and objectives can be derived as follows.

1.4 Statement of Purpose, Research Objectives, and Research Question

The purpose of this empirical study was to explore how knowledge can be strategically managed to support knowledge-worker productivity in order to achieve transient advantages within the credit specialty brokerage industry, a niche expert sector within the financial services realm. This exploration focuses on a multinational enterprise context and aims to provide insights into how firms can navigate increasingly volatile and dynamic environments. By examining both firm-level and individual-level knowledge management initiatives, this study seeks to develop a management framework that supports productivity and competitiveness in dynamic settings. This framework was designed to be applicable in practice, contributing to the strategic management of knowledge within organizations.

To approach the scope of work systematically, the research has been guided by and structured to the following research objectives:

Research objective one: To identify key knowledge management initiatives - such as Knowledge-Oriented Leadership, Knowledge Process Capabilities, Knowledge Management Behavior, Affective Commitment, and Knowledge-Worker Productivity - that are critical for managing knowledge strategically within multinational enterprises in dynamic environments. These initiatives were derived through a comprehensive literature review of the Knowledge-Based Dynamic Capabilities (KBDC) view and transient advantage theory, as well as insights from pilot interviews with knowledge intensive firms.

While Knowledge Process Capabilities (firm-level) and Knowledge Management (individual-level) share common indicators – knowledge creation, transfer, integration, and application – both are necessary to connect the Knowledge-Based Dynamic Capabilities view with the concept of transient advantages. Knowledge Process Capabilities are embedded within the firm’s ability to sense opportunities, seize them, and transform resources to respond to dynamic

environments (McGrath, 2013; Rifat et al., 2017; Zhang-Zhang et al., 2022). Simultaneously, Knowledge Management Behavior at the individual level ensures that employees actively engage in these processes, enabling the firm to sustain transient advantages through their knowledge-driven actions (Shamim et al., 2019). Together, these capabilities align the organization's strategic efforts at both the macro (firm) and micro (individual) levels to maintain agility and competitiveness in volatile markets.

The objective is qualitative in nature, relying on literature review and pilot interviews to establish a theoretical foundation.

Research objective two: To explore how individual knowledge-worker productivity is influenced by these identified knowledge management initiatives (i.e., Knowledge-Oriented Leadership, Knowledge Process Capabilities, and Knowledge Management Behavior). This exploration considers how these initiatives interact during dynamic environments, capturing both the firm-level and individual-level contributions to productivity and transient advantages.

This objective is qualitative in nature, achieved through ten semi-structured interviews to gain deeper insights into the impacts of these initiatives.

Research objective three: To empirically test the relationships between the identified knowledge management initiatives (both firm-level and individual-level) and their influence on Knowledge-Worker Productivity. The goal was to develop a validated model that can be applied within multinational enterprises to maintain productivity and through this secure transient advantages in dynamic environments.

This objective is quantitative in nature, involving a survey to test the proposed relationships and validate the research model.

Therefore, the study has focused on the following research question:

How can multinational enterprises within the financial services sector, through knowledge management initiatives (i.e., Knowledge-Oriented Leadership, Knowledge Process Capabilities, Knowledge Management Behavior, and Affective Commitment) support Knowledge-Worker Productivity to achieve transient advantages throughout dynamic environments?

1.5 Significance of the Study

This study makes a substantial contribution to both theory and practice by providing a comprehensive knowledge management model that enables organizational leaders to achieve transient advantages through the productivity of knowledge-workers in continuously dynamic environments. By synthesizing theoretical insights from knowledge-based dynamic capabilities, knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, affective commitment and knowledge-worker productivity, this research offers a novel understanding of how organizations can strategically manage knowledge to remain competitive.

The findings emphasize that knowledge is an infinite and renewable resource that organizations can harness to adapt swiftly to changing market conditions. Through effective leadership and strategic management of knowledge, organizations can continuously sense and seize emerging opportunities, transforming them into transient advantages that contribute to sustained competitiveness (McGrath, 2013; Donate & Sánchez de Pablo, 2015; Zhang-Zhang et al., 2022). This insight underscores the central role of knowledge as a dynamic asset, positioning it as not only a critical factor in long-term organizational success, but also as the foundation for maintaining short-term competitive changes in fast-paced markets.

From a theoretical perspective, this study represents a significant advancement in the fields of knowledge management and strategic management. It is the first to empirically examine the interplay between knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, and knowledge-worker productivity under the lens of the Knowledge-Based Dynamic Capabilities (KBDC) view, specifically within the context of transient advantage. By integrating these constructs, the research bridges a gap in the literature and demonstrates how leaders, through knowledge management practices, can foster organizational agility and productivity in a dynamic business environment. The empirical validation of these relationships expands the understanding of how leadership styles, organizational processes, and knowledge practices influence productivity outcomes, especially in knowledge-intensive industries such as the financial services sector.

Moreover, this study's global scope contributes to the expansion of knowledge management theories beyond localized contexts. By testing hypotheses across diverse geographic regions, it offers insights into how knowledge-oriented leadership, knowledge process capabilities, and knowledge management behaviors function in different organizational and cultural settings. This extension enhances the applicability of the KBDC view, providing a more comprehensive understanding of its principles in various international and dynamic markets as well as its applicability to multinational enterprises.

Practically, the research offers actionable recommendations for organizations, particularly in the financial services sector, to enhance productivity and achieve transient advantages. Leaders are encouraged to cultivate a culture that prioritizes knowledge creation, transfer, integration, and application (Donate & Sánchez de Pablo, 2015; Rifat et al., 2017; Shamim et al., 2019). By fostering knowledge-oriented leadership and by promoting knowledge-sharing behaviors among employees, organizations can build stronger capabilities to manage and leverage knowledge effectively. The implementation of robust knowledge

management processes, continuous learning initiatives, and leadership practices aligned with knowledge-worker productivity are essential steps toward maintaining transient advantages in dynamic environments.

In addition, the findings show that managers who leverage knowledge as a strategic asset can better adapt their organizations to the challenges of the modern business landscape. By continually developing knowledge standards, aligning leadership with knowledge management practices, and supporting knowledge-workers in their productivity, organizations can sustain transient advantages. The research reinforces the idea that knowledge, when effectively managed and dynamically deployed, can be a powerful tool for organizational adaptation and success in an ever-changing market landscape (Nonaka & Takeuchi, 2021).

Ultimately, this study provides a significant theoretical contribution by explicitly linking the concept of transient advantage with the Knowledge-Based Dynamic Capabilities View, offering a detailed explanation of how organizations can generate, sustain, and relinquish temporary (transient) competitive advantages through knowledge-based capabilities. It also contributes to practice by offering a clear framework for how knowledge can be managed to enhance productivity and competitiveness, particularly in industries where the rapid pace of change requires continuous adaptation. This study is not bound to a specific geographical region, thus contributing to knowledge management literature and by providing valuable insights for the practice and management of multinational enterprises.

In conclusion, this research demonstrates that knowledge is not only an infinite, non-hierarchical resource, but also a key enabler of both short-term and long-term organizational success. By understanding and strategically managing knowledge, leaders and managers can position their organizations to thrive in the face of ongoing market disruptions and to continually reinvent their transient advantages in dynamic environments.

1.6 Methodology Overview

With the aim of achieving the research objectives of this thesis, a mixed-methods methodology was conducted. The study design involved both a qualitative and quantitative phase. Ten semi-structured interviews were carried out with both management (five semi-structured interviews) and client facing (five semi-structured interviews) employees from five geographical regions. The idea was to capture data from each of the multinational's defined geographic regions as well as from both management and non-management levels to capture a holistic perspective. A Qualtrics survey was also dispersed by management via email to employees within the global credit specialties department within a single multinational enterprise concluding in 294 valid responses. Again, all employees disregarding of level or geography could participate in the study. The aim was to gather an inclusive perspective to test the proposed knowledge management framework. The credit specialties department is a niche insurance sub-sector consisting of knowledge experts which allowed for the cross border and cross level data collection. The collection of both qualitative and quantitative data simultaneously allows for perspectives and advantages from both methods. For example, the mixed-methods approach has the potential to offset weaknesses inherent to one design approaches and to shorter data collection periods. With a brief methodology overview established, the next section will take the reader through an outline of the thesis structure.

1.7 Thesis Structure

This study is divided into seven chapters. In *chapter one*, following a brief introduction, my role as a researcher as well as an explanation of the research problem is demonstrated. Subsequently, an overview of the research question and research objectives are outlined before the significance of this study is discussed. Conclusively, the methodological overview provides a synopsis of how the research objectives were achieved.

Chapter two begins with an encompassing breakdown of the current environment in which the financial services industry finds itself as well as how the financial services industry can be broken down into subsectors. The breakdown shines a light on as to why the industry is a fit for knowledge management research. In this consideration, the following sections will review and synthesis the current state of research on key knowledge management initiatives and theories relevant to this study. In addition, research gaps for each theory and knowledge management initiative will be addressed within the specific sections. Without such a review, the research objectives cannot be fundamentally addressed. To bring the chapter to a close, overarching gaps will be identified and will substantiate the need for research on this topic.

Chapter three discusses the conceptual framework and hypotheses development. This chapter is straightforward in highlighting how each initiative fits into the other and why the framework was designed as it currently stands. A visual is provided to enhance the readers understanding. What is more, knowledge-based dynamic capabilities will be found orchestrating throughout this chapter.

Chapter four will begin by discussing the philosophical approach taken, being the pragmatist paradigm, in respect to this research project. Further, the research strategy will be presented where the researcher will explain the reasons and benefits for taking the mixed methods research avenue for this study. Consequentially, the chapter will then explore both qualitative and quantitative approaches utilized to acquire the necessary data to pursue the research objectives. The chapter will come to a close by considering the ethical research aspects and by evaluating the relevant validation issues.

Chapter five presents the analysis and findings of the research data. Following a brief introduction, the researcher will split the chapter into two sections to outline both qualitative and quantitative analyses and findings of the data. Tools for the data analysis such as NVIVO

and SmartPLS 3 will also be introduced within this chapter before concluding the chapter with a brief summary.

In *chapter six*, a discussion from both qualitative and quantitative analyses from chapter five will be presented. Keeping in consistency, chapter six will also be split into qualitative and quantitative subsections ending with a conclusion comprehensive of triangulation and how the research added to knowledge and practice.

Lastly, *chapter seven* presents the research conclusions and summarizes the position of the thesis and its key contributions. A discussion of the limitations as well as reflections for future research will conclude the chapter and thesis.

To build the basis for the conceptual framework, the following chapter will present the research field and the literature review.

Chapter Two – Research Field and Literature Review

2.1 Introduction

In the face of continuous market transitions and global volatility, the financial services industry should be pivoting to longer-term reinvention. The entire corporate life cycle moves increasingly faster, demanding a paradigm shift in corporate strategy (McGrath, 2013). The shift moves away from Porter's model of finding and then maintaining a competitive advantage, to McGrath's model of building a portfolio of multiple transient advantages that can be created swiftly and discarded just as promptly (Porter, 1979; McGrath, 2013). In taking a knowledge-based dynamic capabilities view, having a focus on knowledge-capital, and knowledge management initiatives can supplement such strategy transitions and reinvention.

In the next sections of this chapter, the literature review will take the reader through the key building blocks of the proposed knowledge management initiatives which are to support in securing organizational transient advantages. Prior to, this study will outline the research field of this study in the next paragraphs.

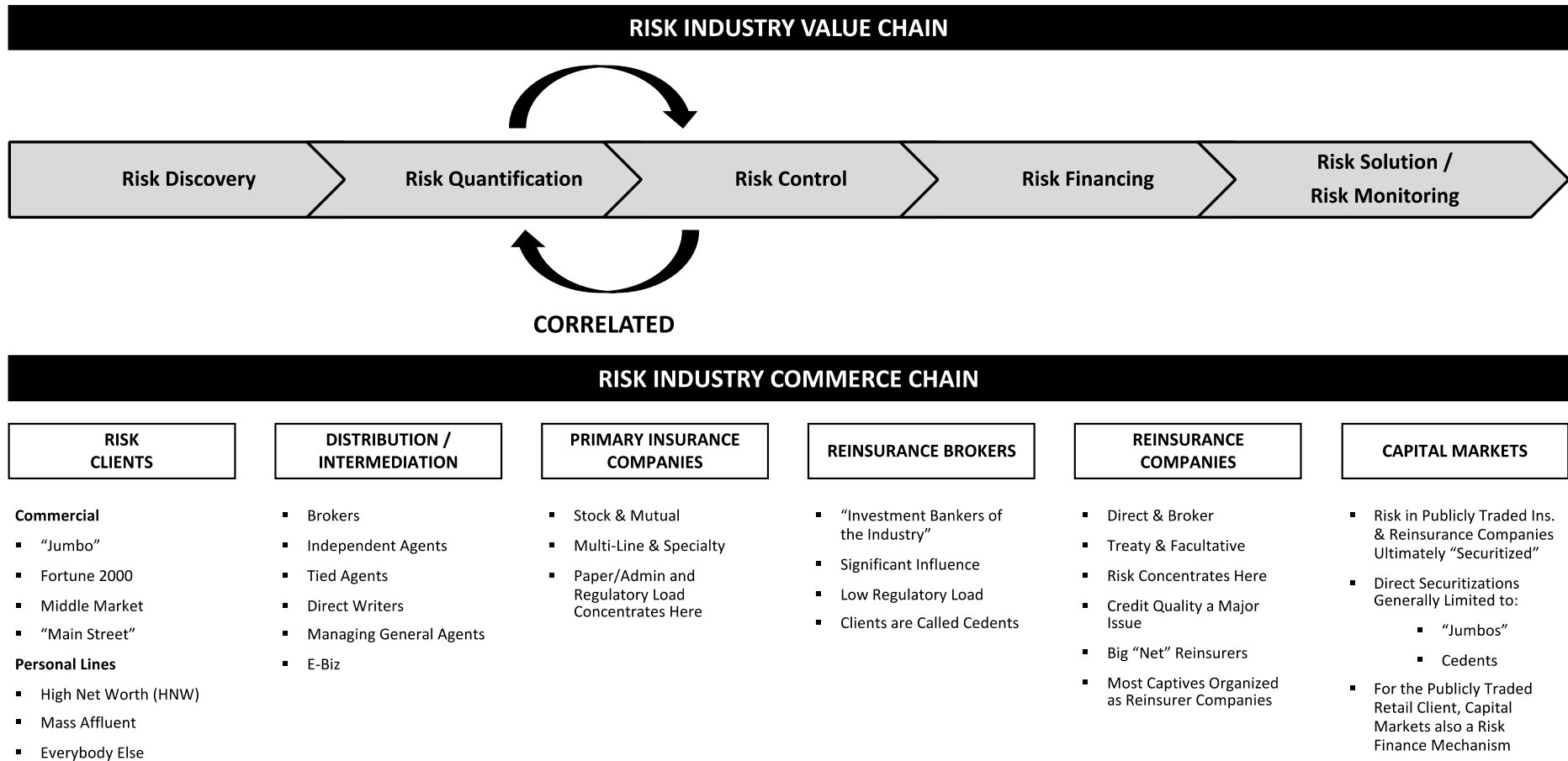
The financial services sector cannot be neatly defined, nor can the services be listed in its entirety. Rather than writing a voluminous treaty on what is categorized as a financial service and its outliers, this study will use the description provided by the International Monetary Fund (IMF). To begin, a service is defined as, "a task that someone performs for you" (Asmundson, 2011, p. 1). Further, "financial service is not the financial good itself, but something that is best described as the process of acquiring the financial good" (Asmundson, 2011, p. 1). Said differently, financial service is the transactional act, which is required to obtain said financial product.

Financial transactions cover a broad spectrum, therefore, for this research, financial transactions include real estate, consumer finance, banking, and insurance (Puustelli et al., 2008; Asmundson, 2011). While bound by their act of providing financial services, these four financial sectors are inherently different and governed by separate regulatory bodies. With this said, to test the proposed knowledge management strategy in question, this study reduces the scope to focus on the insurance sector within the financial services realm.

The insurance realm includes four key sub-groups, being intermediaries or brokers, primary insurance companies, reinsurance companies, and capital markets. In Figure 1, the four key sub-groups are outlined in Hutchin's *Risk Industry Commerce Chain*, beginning with the client, and moving through the risk dispersion phenomenon and ending with capital markets (2005, p. 335). Insurance intermediaries and reinsurance brokers are joined to create one of the four sub-groups because at the fundamental level both groups act as a link to bring about an agreement; the main difference being that insurance intermediaries are account focused whereas reinsurance brokers are primarily portfolio focused (Hutchin, 2005, p. 335).

The scope is further reduced to focus on insurance intermediary and brokerage multinational enterprises. Literature concerning intermediaries and brokers and their work within the general insurance sector has been extensively researched (Beh et al, p. 242; Cummins et al., 2006; Bullock et al., 2019). There have been only few attempts to systematically map the work of intermediaries and their work in line with knowledge management (Kilelu et al., 2011; Torres et al., 2022). While these studies provide valuable insights, there is still a lack of common understanding of how insurance intermediaries manage knowledge (Kilelu et al., 2011; Torres et al., 2022). In this keeping, this research will focus on the role of knowledge management within intermediary and brokerage multinational enterprises.

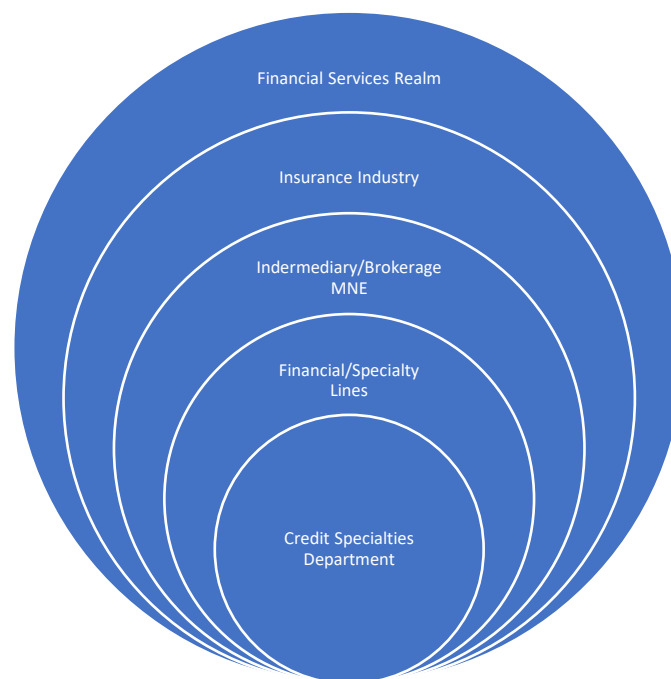
Figure 1: Risk Industry Commerce Chain



Source: Hutchin, James W., 2005, p. 35

In an effort to address the existing research lacuna, this study endeavors to refine its scope by concentrating on a distinct subunit within a multinational brokerage corporation (Sahibzada, 2022a, p. 726). The primary objective is to investigate the productivity of knowledge-workers operating within the confines of a private cross-border sector (Shujahat, 2019; Khaksar, 2020; Sahibzada, 2022a). The sub-department, Credit Specialties falls under the Financial or Specialty Lines department. The Credit Specialties sub-department consists of expert sub-groups including, Factoring, Political Risk, Structured Credit, Surety, and Trade Credit. Figure 2 visualizes the narrowing of the research scope for the reader.

Figure 2: The Narrowing of Research Scope



Source: Author (2024)

In summary, the research field of this study takes place within the Credit Specialties department of a single insurance brokerage multinational enterprise finding itself designated under the financial service industry umbrella.

Setting a specific context allows for the detailed exploration of knowledge management initiatives with the ambition to add to overall organizational strategy, which ultimately can support in the creation and understanding of transient advantages.

2.2 Transient Advantage

It is no secret that the environment businesses need to operate in today are, to say the least, dynamic. These dynamic contexts stem from technological advancements, such as artificial intelligence and digitalization, the strengthening of emerging markets (Zhang-Zhang et al., 2022), the departure of organizational expert knowledge as the Baby Boomer generation begins to retire (Cole et al., 2012), and changing customer expectations, especially in the global insurance brokerage industry (Hutchin, 2015). Further, “simultaneous multilevel crisis events such as the COVID-19 pandemic,” forced displacement arising from warfare and climate change (UNHCR 2021 Global Trends), and warfare itself, namely the Russian invasion of Ukraine, “corroborate the even more increasingly volatility, uncertainty, complexity, and ambiguity (VUCA) contexts” (Zhang-Zhang et al, 2022, p. 587). To keep pace with a continuously unstable environment, organizations within the insurance brokerage sector must adapt their strategies to grab hold of transient advantages.

For the past decades, business strategists have been focused on the idea of finding and then maintaining a competitive advantage. Pioneered by Michael Porter (1980), the five forces model is a fundamental strategy practiced by managers globally which worked rather well in times of stability (Leavy, 2014; Voyles, 2019; Salgado et al., 2022). In summary, with an industry-bound view, a competitive advantage could be achieved through limiting the threat of new entrants, product substitutes, bargaining power of suppliers or buyers (Porter, 1980). However, in a world where rapid change is becoming the norm and where boundaries are

becoming more fluid, “sustainable competitive advantage is now the exception, not the rule” (McGrath, 2013b, p. 2; Leavy, 2014).

To match the current less-industry bound and VUCA global context, this study suggests that global insurance brokerage firms should extend their focus from industry-bound and long-cycle competitive advantages to multiple transient advantages. With the importance of transient advantage strategy being determined within this context, this empirical research will introduce the topic in the following structure: existing literature overview, key underpinnings of the strategy, and defining the term, which will then organically lead into the next section on knowledge based dynamic capabilities view.

Scholarly discourse pertaining to the concept of transient advantage is notably limited to virtually non-existent within the domain of insurance brokerage firms (Salgado et al., 2022, p. 186). To provide a digestible understanding this study has created a table summarizing the available literature in chronological order. This overview allows for interpretation through a visual sense and summarizes the literature by source, subject, level, location, guiding theory/constructs/concepts, and methodology. Table 1 below is inspired by and adapted from Venkatesh et al. (2016), *Summary of UTAUT Applications* (p. 333).

Table 1: Summary of Transient Advantage Literature and Applications

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
McGrath (2013a)	Manager	Organizational	Global	Transient Advantage	Interviews with managers from publicly traded companies on any global exchange with a market capitalization of over \$1 BN as of the end of 2009 (4,793 firms), which increased revenue or net income by at least 5% every year for the preceding five years (2004-2009)
McGrath (2013b)	Manager	Organizational	Global	Transient Advantage	Interviews with managers from publicly traded companies on any global exchange with a market capitalization of over \$1 BN as of the end of 2009 (4,793 firms), which increased revenue or net income by at least 5% every year for the preceding five years (2004-2009)
McGrath (2013c)	Manager	Organizational	Global	Transient Advantage	Interviews with managers from publicly traded companies on any global exchange with a market capitalization of over \$1 BN as of the end of 2009 (4,793 firms), which increased revenue or net income by at least 5% every year for the preceding five years (2004-2009)
Leavy (2013)		Organizational	Global	Transient Advantage	Interview between Strategy & Leadership Journal and Rita Gunther McGrath regarding her book "The End of Competitive Advantage: How to Keep Your Strategy Moving as Fast as Your Business"
Bell (2013)	Manager	Organizational	Global	Transient Advantage	Interview between Strategic Direction Journal and Rita Gunther McGrath regarding her book "The End of Competitive Advantage: How to Keep Your Strategy Moving as Fast as Your Business"
Leavy (2014)	Manager	Organizational	Global	Transient Advantage; Corporate Strategy; Innovation; Leadership; Entrepreneurship	Interview between Strategy & Leadership Journal and Rita Gunther McGrath regarding her book "The End of Competitive Advantage: How to Keep Your Strategy Moving as Fast as Your Business"
Kaharuddin et al. (2017)	Manager	Small and medium sized enterprises	Bandung, Indonesia	Transient Advantage	Data collected via questionnaires and interviews. Questionnaire was adopted from McGrath (2013b). SPSS used to carry out Group Statistic Check, Levene's measurement between two industries, and Kruskal-Wallis test

Table 1: Summary of Transient Advantage Literature and Applications Continued

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Gupta et al. (2018)	Manager	Organizational	Not mentioned	Sustainable Competitive Advantage; Transient Advantage; Resource-Based View; Information Systems	Reviews the extant literature on the RBV of systems to propose new avenues for future research
Voyles (2019)	Manager	Organizational	Not mentioned	Transient Advantage	Roland Berger publication published an interview carried out with Rita McGrath regarding her book, "Seeing Around Corners: How to Spot Inflection Points in Business"
Munner (2019)	Manager & Employee	Organizational	Not mentioned	Transient Advantage	Testing the creation of a social intranet for information to travel faster to leadership within an organization
Donnelly et al. (2020)	Consumer	Individual	UK Consumer	Reduced Assortment Size; Perceived Quality; Quality Variation; Brand Portfolio; Brand Fit; Purchase Intention	Mono-method quantitative methodology using a survey research approach. PLS SEM method used to test data
Zhang et al., (2020)	Manager	Individual & Group	Global	Transient Advantage	Multicase approach used to analyze four cases. Data was collected by a query-based website crawler as well as group interviews
Cooke et al. (2021)	Manager	Individual	UK Real Estate Sector	Risk; Lease Accounting; Costs; Financial Analysis; Business Metrics; Motivational Drivers	Nine semi-structured interviews carried out. The program Lucidchart was used to map out a network of the situation, decision, attribute, and benefit variables
Salgado et al. (2022)	Manager	Individual	Brazil	Transient Advantage; Continuous Reconfiguration; Resource Allocation; Leadership & Mindset; Innovation Proficiency; Healthy Disengagement	Literature review carried out to build framework. Multiple case study then used to test framework. Data collected via semi-structured interviews

As of January 2023, literature on transient advantage consists of thirteen journal articles and one book as presented in Table 1. The articles listed in the above table are published in journals ranging between tier one and tier four journals and two being not ranked at all based on the *Scimago Journal & Country Rank* ranking system (2023). Consolidation of literature affords the possibility to understand the current state of knowledge of the topic at hand (Blaikie, 2010, p. 68), allowing for defining and outlining key underpinnings which lay the foundation of how the strategy of transient advantages can be created through the implementation and utilization of knowledge management initiatives.

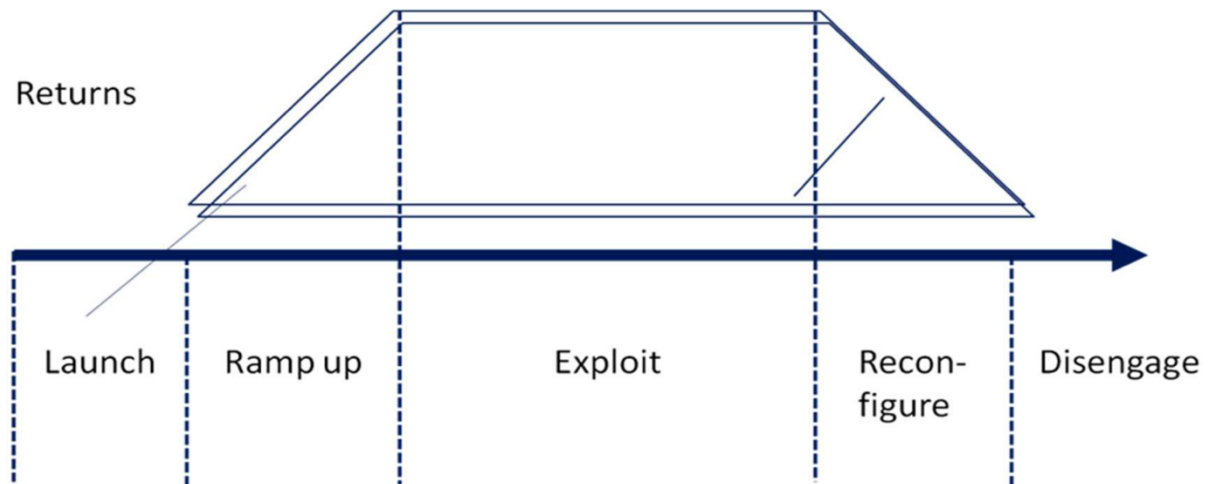
To better understand the relationship between transient advantage and knowledge management initiatives, this study will first lay out the foundations of the transient advantage strategy before defining the term. To match the VUCA global context businesses find themselves in today, McGrath (2013a) proposed a transient competitive advantage strategy following its predecessors Porter's (1980) competitive advantage and Barney's (1991) sustainable competitive advantage. The key differences separating transient advantage from its predecessor strategies are that (i) the context is no longer defined by industries, but by arenas, and (ii) the goal is no longer to establish structures and systems to maximize value from an advantage, but to maintain fluidity and flexibility to create a portfolio of advantages (Porter, 1980; Barney, 1991; McGrath, 2013a). Previous competitive advantage strategies operated within the notion of a mainly stable business context (McGrath, 2013a; Leavy, 2014; Zhang et al., 2020). Said differently, opening the field of competition from industries to arenas and by keeping strategy flexible, businesses can gain advantages over competitors in the current hypercompetitive knowledge-based economy (D'Aveni, 1995, McGrath, 2013a).

Expanding the field of competition from industries to arenas gives businesses access to focus on mobilizing capabilities that extend past the industry level (McGrath, 2013a). Arenas can be defined by, "particular connections between customers and solutions, not by the

conventional description of offerings that are near substitutes for one another” (McGrath, 2013a, p. 9). Orchestrating capabilities relevant at the arena level allows for connection between market segment, offer, and geographic location, which can ultimately mitigate peripheral threats (McGrath, 2013a). Along with accepting a new level of analysis, flexibility remains a key factor in creating transient advantages.

Under the notion of flexibility, businesses should continually seek the next innovative and customer focused opportunity instead of expending resources to maintain a current advantage which could be non-existent in 12 months’ time (McGrath 2013a). According to the transient advantage strategy perspective, competitive advantages move through a lifecycle consisting of five central phases, which are: launch, ramp up, exploitation, reconfiguration, and disengagement and replacement (McGrath 2013a, McGrath 2013b, Leavy, 2014). These phases are visually outlined in Figure 3.

Figure 3: How to compete: the wave of transient advantage



Source: McGrath, 2013a

The launch period is when an opportunity has been identified and firm resources are assigned (McGrath, 2013a). If the opportunity gains support, this now becomes an advantage to capitalize on where systems and processes are ramped up. Following the ramp up phase, the business rides the exploitation wave (McGrath, 2013a). In this phase, developing a strong strategic position is the focus to exploit the competitive advantage (McGrath, 2013a). Subsequently, the critical phase of reconfiguration takes place. Reconfiguration is “central to succeeding in transient-advantage situations, because it is through reconfiguration that assets, people, and capabilities make the transition from one advantage to another” (McGrath, 2013a, p. 14). Finally, while some resources have already been reallocated during the reconfiguration phase, the disengage phase suggests that the firm smoothly eliminates the remaining assets and capabilities that are no longer aligned with firm’s future goals (McGrath, 2013a). In summary, *transient advantage* can be characterized as a business strategy that focuses on continually building a portfolio of new temporary advantages (McGrath, 2013a; McGrath, 2013b).

McGrath (2013a) made a significant contribution to the field of competition by suggesting the traditional approaches to strategy must be rethought and adapted to the demands

of an increasingly dynamic environment. However, while her theoretical insights were and are valuable, a practical and operational framework for implementing these ideas is lacking. To address this gap, Salgado et al., (2022) developed the Transient Competitive Advantage Model (TCAM), which offers a practical tool for analyzing business scenarios within the context of transient competitive advantage. From the authors listed in Table 1, Salgado et al., (2022) was the first to conceptualize and operationalize the transient advantage framework.

McGrath's (2013a) concept of transient advantage can be understood through several interrelated elements that emphasize adaptability, agility, and continuous renewal. Salgado et al., (2022), conceptualized and operationalized transient advantage to include five central elements being continuous reconfiguration, resource allocation, leadership and mindset, innovation proficiency, and healthy disengagement.

Central to this framework is the notion of continuous reconfiguration, which refers to a company's ability to constantly reorganize and embrace dynamism. In this context, change is viewed as an inherent and ongoing feature of business, rather than as an exceptional event. Companies that successfully adopt this mindset promote change as a natural part of their culture, allowing them to move seamlessly from one wave of competitive advantage to the next. This stands in contrast to the traditional perspective of sustainable competitive advantage, which regards change as infrequent and focuses on extracting maximum value from each advantage for as long as possible (Forrest et al., 2020; Salgado et al., 2022)

Another key element is resource allocation, which plays a pivotal role in enabling companies to respond effectively to the short-lived nature of transient advantages. The ability to reallocate resources in a flexible, efficient, and timely manner is critical for companies facing frequent shifts in competitive dynamics. This flexibility allows organizations to quickly pivot towards new opportunities as they arise, ensuring that they remain competitive in an environment characterized by constant disruption (Salgado et al., 2022).

Leadership and mindset also emerge as essential components within this framework, with particular emphasis on the role of focused and adaptive leadership. Leaders must guide organizations through the inevitable transitions from one advantage to another, facilitating an environment that encourages the inclusion of diverse opinions, maintains open feedback channels, and supports rapid decision-making. Moreover, leadership must remain attuned to external signals of change and interpret contextual information that may indicate the likelihood of potential missteps. This proactive approach enables leaders to steer their organizations away from emerging risks and towards new opportunities (McGrath, 2013a; Salgado et al., 2022).

Innovation proficiency is equally critical to the transient advantage framework, as innovation must be integrated into the company's routines and treated as a core, continuous process (Salgado et al., 2022). Rather than approaching innovation as a sporadic or ad-hoc event, companies must manage it with discipline and professionalism, ensuring that innovation becomes a key driver of ongoing competitive success. This approach helps organizations remain agile and responsive to market shifts.

Finally, healthy disengagement is a vital aspect of navigating transient advantages. Companies must recognize when an existing advantage is in decline and disengage from it in a timely manner (McGrath, 2013a; Salgado et al., 2022). Viewing disengagement as a natural part of the business cycle allows firms to redeploy valuable resources to emerging opportunities before the existing advantage is fully exhausted. In this way, organizations can maintain a proactive approach to managing the decline of advantages, ensuring they remain competitive in a rapidly changing landscape (McGrath, 2013a; Zhang-Zhang et al, 2022).

The concept of transient advantage is particularly important to the intermediary sector due to the sector's inherent reliance on agility and adaptability in rapidly changing markets. Intermediaries, such as brokers, agents, and distributors, operate in environments where value

is derived from connecting various parties, and these connections are increasingly influenced by technological disruption, shifting consumer preferences, and evolving business models. The transient advantage framework emphasizes the need for continuous innovation, flexible resource allocation, and strategic agility, all of which are critical for intermediaries seeking to maintain relevance. As competitive advantages in the intermediary sector tend to be short-lived due to low entry barriers and high competition, firms must be capable of quickly identifying and exploiting emerging opportunities while disengaging from obsolete advantages. In this context the ability to pivot and reconfigure business models in response to external shifts becomes essential for sustaining a competitive edge, making transient advantage a vital strategic consideration for the intermediary sector.

In conclusion, the concept of transient advantage is essential for intermediaries, who operate in fast-moving environments where competitive advantages are short-lived due to technological disruption and low entry barriers. The ability to quickly adapt, innovate, and reconfigure resources is critical for maintaining relevance in this sector. Moreover, the underpinning principles of the knowledge-based dynamic capabilities view provide a robust framework for achieving transient advantages. By effectively managing knowledge as a dynamic asset, organizations can continuously learn, innovate, and respond to market shifts. The integration of knowledge management with dynamic capabilities enables firms to remain agile and strategically flexible, ensuring they can navigate the constant cycle of advantage creation and decline. Ultimately, the transient advantage framework, supported by the knowledge-based dynamic capabilities view, offers a pathway for intermediaries to sustain competitiveness in an ever-evolving market landscape.

2.3 Knowledge-Based Dynamic Capabilities View

To support the achievement of the research's objectives, this study considers the theoretical underpinnings of Knowledge-Based Dynamic Capabilities View (Zheng et al., 2011). This decision is aligned with contemporary knowledge management and strategy research (Wang et al., 2009; Denford, 2013; Khaksar et al., 2020; Zia, 2020; Kaur, 2022; Zhang-Zhang et al., 2022). In this section this research will outline the foundations and the current understanding of knowledge-based dynamic capabilities view (KBDC) and how this theory ties into knowledge management strategy as whole. In the coming sections the study will thread the theory of knowledge-based dynamic capabilities view through each of the individual knowledge management initiatives pertaining to this study.

Emerging in the literature at similar times, knowledge management and dynamic capabilities have and are still steering the conversation surrounding organizations building competitive advantages, especially in dynamic environments (Wang & Ahmed, 2007; Kaur, 2022). "The genesis of these pivotal concepts lies in the knowledge-based view (Grant, 1996) and the dynamic capability view (Teece et al., 1997)" (Kaur, 2022, p. 1367). Knowledge-based theory focuses itself on knowledge management process capabilities which facilitate the creation, retention, combination, and use of knowledge being the leading source towards competitive advantage (Grant, 1996; Zheng et al., 2011; Kaur, 2022). While dynamic capability view suggests that for a competitive advantage, it is vital for resources to reconfigure into new capabilities (Teece et al., 1997; Zheng et al., 2011; Pitelis & Wang, 2019; Kaur 2022). For a wholistic examination of knowledge-based dynamic capabilities view, this study will first guide the reader through the foundations of the theory, beginning with knowledge-based view before proceeding to dynamic capabilities view and eventually bringing the two together.

In terms of theory, knowledge has afforded mutuality for several streams of management research including organizational learning (Grant et al., 2022). This commonality

originating from knowledge-based view, which posits “the firm as a knowledge processing institution with knowledge as its preeminent strategic resource” (Grant et al., 2022). In simple terms, knowledge is an essential resource which the firm is responsible for managing to create a strategic advantage.

Knowledge is created and held by individuals (Nonaka et al., 1995). Knowledge held by individuals can be embedded within the firm through established processes (Grant, 1996). Knowledge is largely categorized into two different forms which are explicit knowledge and tacit knowledge (Nonaka et al., 1995). Explicit knowledge tends to be more straightforward in its handling as it can be formalized into modes such as data (Nonaka et al., 1995; Faccin et al., 2019; Bhardwaj et al., 2022). Whereas tacit knowledge can be described as being complex as it is determined by the interaction between agents which is difficult to formalize (Nonaka et al., 1995; Faccin et al., 2019; Bhardwaj et al., 2022). When managed, the interplay between tacit and explicit knowledge promotes and advances overall firm knowledge (Nonaka et al., 1995; Faccin et al., 2019). In the knowledge-based view context, knowledge management is focused on generating solutions to transform tacit knowledge into explicit knowledge as well as improving the competence of the firm to make critical knowledge resources available and accessible throughout the entity (Faccin et al., 2019; Lei et al., 2021; Kaur, 2022). The focus is more so on knowledge and on ways to create, transfer and combine said knowledge throughout the firm (Khaskar, 2020).

Unlike the knowledge-based view, the dynamic capabilities view is focused on solutions which generate the renewal of resources by ultimately modifying operational routines to source a competitive advantage (Teece; 1997; Faccin et al., 2019; Pitelis & Wang, 2019; Senaratne et al., 2021). In this view, the organization can adapt resources and capabilities to accommodate dynamic environment conditions (Khaskar, 2020; Senaratne et al., 2021). In the effort to explore firm behavior in volatile environments, Teece et al., (1997), introduced the

dynamic capabilities view framework. Since first introducing the theory in 1997, the definition has evolved. For the sake of this research, this study will utilize the definition outlined by Zheng et al. (2011) which refines “dynamic capabilities as the capabilities that enable business enterprises to create, deploy, and protect the intangible asset that support superior and long business performance.” This definition was chosen as it allows for the employment of the knowledge-based dynamic capabilities view because knowledge can be considered as an intangible asset (Zheng et al., 2011).

The knowledge-based dynamic capabilities view is the combination of both knowledge-based view and dynamic capabilities view to create one joined guided approach. Both theories have evolved from the resource-based view, having the commonality of its end goal to generate firm competitive advantages (Khaksar et al., 2020; Horng et al., 2022; Kaur, 2022; Shamim et al., 2022). In this consideration, *knowledge-based dynamic capabilities* can be interpreted as the “ability to acquire, generate and combine internal and external knowledge resources to sense, explore, and address environment dynamics” (Zheng et al., 2011). In this sense, dynamic capabilities view extends the knowledge-based view in scope to include integration and combination of knowledge from external sources as well as allows knowledge management to modify current routines (Zheng et al., 2011; Khaksar et al., 2020). These theories highlight the importance of knowledge and dynamic process capabilities as an essential component for the continuity of the firm and as a factor that can differentiate in organizational performance (Faccin et al., 2019).

Knowledge-based dynamic capability view is a fairly new approach, originating first in 2011 through the study carried out by Zheng et al., (2011). In regard to the existing research carried out on knowledge-based dynamic capability, Khaksar et al., (2020, p. 3) mentions that the approach “has yet to draw full attention from the area of strategic management, but it appears to be at a development stage, receiving signals from recent studies that have considered

it a solution to promote knowledge management as a dynamic capability.” Acknowledging this, the study has carried out an extensive search to consolidate and synthesize all existing literature on knowledge-based dynamic capability as of January 2023 which can be seen in Table 2. The studies found in Table 2 are all from journals ranked as tier one based on the *Scimago Journal & Country Rank* ranking system (2023).

Table 2: Summary of Knowledge-Based Dynamic Capabilities Literature and Applications

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Zheng et al. (2011)	Employees	Individual	China	Knowledge-Based Dynamic Capabilities; Innovation Performance; Network Embeddedness; Nonredundancy	Survey method with 218 valid questionnaires gathered from Chinese manufacturing firms and tested using SEM with AMOS 7.0
Denford (2013)	Manager and Employees	Multilevel	Global	Knowledge-Based Dynamic Capabilities	Conducts a theoretically grounded typology development exercise based on an extensive literature review
Cheng et al. (2016)	Managers	Business Unit	Taiwan	Knowledge Acquisition Capabilities; Knowledge Sharing Capabilities; Radical Innovation	Survey method with 213 valid questionnaires and tested using moderated regression analysis
Faccin et al. (2019)	Individuals involved in the project	Project Level	France	Knowledge-Based Dynamic Capabilities	Single case study, where 65 semi-structured interviews were conducted and secondary data from a joint R&D project was utilized which was analyzed using the Gioia method
Khaksar et al. (2020)	All organizational employees	Individual	Australia	Knowledge-Based Dynamic Capabilities; Knowledge-Worker Productivity; Organizational Culture Traits	Survey method with 303 valid questionnaires and test using SEM method
Shamim et al. (2020)	Managers and their employees	Individual	China	Big Data Management Capability; Big Data Value Creation; Exploratory Activities; Exploitative Activities	Survey method with 308 valid questionnaires and tested using PLS SEM method
Zia (2020)	Employees	Individual	Pakistan	Knowledge-Oriented Leadership; Knowledge Management Behavior; Innovation Performance; Goal Orientation	Survey method with 215 valid questionnaires tested using PLS method via SmartPLS 3.0

Table 2: Summary of Knowledge-Based Dynamic Capabilities Literature and Applications Continued

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Chien et al. (2021)	Store Managers	Restaurant Level	Taiwan	Entrepreneurial Orientation; Learning Mechanism; Knowledge-Based Dynamic Capabilities; Store Performance	Survey method with 132 valid questionnaires tested using PLS SEM method
Janelová et al. (2021)	Managers		Slovakia	Entrepreneurial Orientation; Innovative Work Behavior; Knowledge-Based Dynamic Capabilities; Innovative Performance	Survey method with 175 valid questionnaires tested using PLS SEM method
Bhardwaj et al. (2022)	Managers	Firm	India	Micro-Foundations of Knowledge-Based Dynamic Capabilities	Multiple-case study conducting semi-structured interviews and analyzed using NVIVO 12
Kaur (2022)	Managers and Employees	Multilevel	Global	Knowledge Management; Dynamic Capabilities; Knowledge-Based View; Dynamic Capabilities View; Knowledge-Based Dynamic Capabilities View	Clarivate Analytics Web of Science Core Collection database was used to extract 225 manuscripts and a scientometric analysis and text mining was conducted and integrated with a systematic review of results to facilitate an unstructured ontological discovery in the field of KBDCs
Horng et al. (2022)	Managers	Firm	Taiwan	Big Data Strategy; Big Data Knowledge Management; Big Data Analytics Capabilities; Sustainability Marketing; Competitive Advantage; Company Performance; Social Media Customer Collaboration; Proactive Social Media Market Orientation	Combined quantitative and qualitative methods. 257 valid questionnaires were obtained and tested using SEM method via AMOS 24.0 software. 19 semi-structured interviews carried out to verify the results of the statistical analysis
Zhang-Zhang et al. (2022)	All organizational employees	Individual	Not applicable	Dynamic Environments; Resource-Based View; Knowledge-Based View; Dynamic Capabilities View; Strategic People Management; People Centric View; Leadership; Culture; Learning; Networking	Literature review

Therefore, this study takes a novel approach to explore knowledge management initiatives founded on the knowledge-based dynamic capabilities view-based premise where if knowledge is managed strategically this can generate higher knowledge-worker productivity, to ultimately gain transient advantages. The focus is on how multinational enterprises renew their resource-based advantages dynamically. Accordingly, the theory of knowledge-based dynamic capabilities view will be grounded within the next sections.

2.4 Knowledge-Oriented Leadership

From the knowledge-based dynamic capabilities view, knowledge from both internal and external sources and how it is managed is viewed as the most important resource and ability for supporting an organization's long-term existence, or in other words, an organization's transient advantages. Therefore, processes and practices that firms employ to strategically manage their knowledge becomes decisive. Multiple transient advantage waves can appear simultaneously and can even be in different phases while playing out, thus the job of how these waves are managed becomes an increasingly important part of leaderships' role (McGrath, 2013a). Leaders' perceptions of the firm and the environmental dynamics surrounding it can change the strategic direction of the firm to meet the needs of creating the next advantage (McGrath, 2013; Zhang-Zhang et al., 2022). It is the roll of the leader to facilitate a learning culture within the organization to influence and maintain the ability to reconfigure business abilities (McGrath, 2013; Donate, et al., 2015; Shariq et al., 2019; Zhang-Zhang et al., 2022; Le et al., 2022; Liu et al., 2022). In this regard, it can be considered that leadership behavior plays an important role on knowledge management initiatives on an organizational and individual level (Donate et al., 2011; Donate et al., 2015; Naqshbandi et al., 2018; Sahibzsada et al., 2021).

Consequentially, this study focuses on leadership as a fundamental element for the advancement of knowledge management initiatives. In this consideration and in keeping with guidance of the knowledge-based dynamic capabilities theory, this study suggests that a distinctive type of leadership behavior is needed to support the strategic guidance of knowledge management initiatives. In the knowledge economy, organizational leaders must lead through a knowledge lens that will stimulate and operationalize the process of knowledge creation, transfer/sharing, integration/storage, and application within their firms (Nonaka & Takeuchi, 1995; Donate et al., 2015; Sahmim et al., 2019; Shariq et al., 2019; Le et al., 2022). In this sense, knowledge lens refers to knowledge-oriented leadership.

Originating from Donate and Sanchez de Pablo (2015), the key principals for a *knowledge-oriented leader*, “are to act as a role model, encouraging learning by challenging workers and stimulating them intellectually, institutionalizing learning through the provision of incentives and training, foster a pro learning culture that tolerates mistakes and encourages cross-functional and cross-discipline engagement, and developing knowledge transfer, storage, and application mechanisms” (p. 363). To this end, knowledge-oriented leadership is an amalgamation of two leadership styles being transformational and transactional leadership (Donate et al., 2015).

Idealized influence is at the heart of transformational leadership under the knowledge lens (Bass, 1985; Donate et al., 2015; Shamim et al., 2019). This meaning that leaders are to serve as a role model in ways that knowledge is managed i.e., assert the perceived importance of knowledge management. Adding to this, managers should also provide individualized motivation and intellectual stimulation to their followers (Donate et al., 2015; Shamim et al., 2019). Through these leadership behaviors, managers can influence followers to engage in knowledge exploration processes (Ribiere et al., 2003; Donate et al., 2015).

Differently, transactional leadership under the knowledge lens can be described as task oriented. Task orientation is driven by the need to achieve organizational and individual objectives (Shamim et al., 2019). The transactional approach is based on a rewards and penalization system (Franco et al., 2015; Shamim et al., 2019). In this regard, leaders have the capability to intensify the exploitation of existing knowledge (Donate et al., 2015).

By adopting a combination of the two leadership styles, managers can adapt their behavior to diverse circumstances and individuals (Donate et al., 2015; Shariq et al., 2019). Adaptability can support leadership in exploiting tacit and explicit knowledge (Shamim et al., 2019).

In this consideration, this research has outlined the known literature in concerning knowledge-oriented leadership in Table 3. The literature found in Table 3 are all published in academic journals ranked as tier one based on the *Scimago Journal & Country Rank* ranking system (2023). From the researcher's knowledge, studies carried out on knowledge-oriented leadership have not yet studied the concept on a global basis. All studies except for one were carried out in a single country, the exception being carried out in two countries. Further, prior research has not tied knowledge-oriented leadership to achieving transient advantages through the strategic deployment of knowledge management initiatives. Through this study, the aim is to close these gaps to ultimately contribute to the development of knowledge-oriented leadership.

Table 3: Summary of Knowledge-Oriented Leadership Literature and Applications

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Donate et al. (2011)	Managers	Organizational Level	Spain	Knowledge-Based View; Knowledge Exploration Practices; Knowledge Exploitation Practices; Knowledge-Centered Culture; Knowledge-Oriented Leadership; Knowledge-Centered HR Practices; Innovation Results; R&D Spending	Survey; SEM-PLS
Donate et al. (2015)	Managers	Organizational Level	Spain	Knowledge-Based View; Knowledge-Oriented Leadership; Knowledge Management Practices; Innovation Performance	Survey; SEM-PLS
Naqshbandi et al. (2018)	Managers	Organizational Level (Multinational Enterprise)	France	Knowledge-Based View; Knowledge-Oriented Leadership; Knowledge Management Capability; Inbound Open Innovation; Outbound Innovation	Survey; SEM & AMOS 7.0
Matošková et al. (2018)	Employees & Managers	Organizational Level	Czech Republic	Knowledge-Sharing in the Organization; Knowledge-Oriented Leadership	Opinion-based questionnaires; SPSS
Shariq et al. (2019)	Employees	Individual Level	Pakistan	Social Cognitive Theory; Knowledge-Oriented Leadership; Emotional Intelligence; Knowledge Sharing; Employee Goal Orientation	Survey; PLS-SEM
Lin et al. (2019)	Employees	Team Level (Virtual Teams)	Taiwan	Social Cognitive Theory; Social Exchange Theory; Transactional Fulfilment; IT Training Fulfilment; Knowledge-Oriented Leadership; Collective IT Efficacy; Virtual Team Performance	Survey; SEM
Shamim et al. (2019)	Employees	Individual level	UK	Knowledge-Based View; Knowledge-Oriented Leadership; Creative Self Efficacy; Affective Commitment; Work Engagement; Knowledge Management Behavior	Survey; PLS-SEM
Rehman et al. (2020)	Professors	Organizational Level (Universities)	Pakistan	Knowledge-based view; Knowledge-Oriented Leadership; Knowledge Management Process; Innovation; Organizational Performance	Survey; Cross-Sectional Study; PLS-SEM
Zia (2020)	Employees	Team Level (Project Teams)	Pakistan	Knowledge-Based Dynamic Capabilities; Social Capital Theory; Knowledge-Oriented Leadership; Employee Goal Orientations; Knowledge Management Behavior; Project-Based Innovation Performance	Survey; SmartPLS - SEM
Latif et al. (2021)	Employees	Project Teams	Pakistan	Knowledge-Based View; Knowledge Management Enablers; Knowledge Management Processes; Project Success	Survey; PLS-SEM; Configuration paths were assessed using fuzzy-set qualitative comparative analysis

Table 3: Summary of Knowledge-Oriented Leadership Literature and Applications Continued

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Sahibzada et al. (2021a)	Faculty and management staff	Individual Level	China and Pakistan	Knowledge-Oriented Leadership; KM Processes; Creative Organizational Learning; Organizational Performance	Survey method with 784 valid questionnaires and tested using Smart-PLS 3.2.9
Men et al. (2021)	Manager and Employees	Team Level	China	Knowledge-Oriented Leadership; Team Learning; Task Interdependence; Task Complexity; Team Creativity	Survey method with 89 valid team questionnaires (employees & supervisors)
Sahibzada et al. (2021b)	Academics & management staff	Individual Level	Pakistan	Knowledge-Oriented Leadership; Knowledge-Worker Satisfaction; Knowledge-Worker Productivity; Organizational Performance	Survey method with 248 valid questionnaires tested with Smart PLS 3.2.9
Ballesteros-Rodriguez et al. (2022)	Scientist	Team Level (Project Teams at Universities)	Spain	Knowledge Sharing; Researchers' Motivation; Knowledge-Oriented Leadership; Scientific Area	Survey method with 678 valid questionnaires tested using hierarchical regression analysis
Mariam et al. (2022)	Project employees	Individual Level	Pakistan	Knowledge-Oriented Leadership; Team Cohesion; Project Success	Survey method with 121 valid questionnaires tested with SmartPLS software
Jiang et al. (2022)	Engineers and technicians, teachers, and government officials	Individual Level	China	Knowledge-Oriented Leadership; Leader-Member Exchange; Knowledge Integration; Technology Standards Innovation	Survey method with 341 valid questionnaires tested with the bootstrapping method
Donate et al. (2022)	Hotel employees	Individual Level	Spain	Task Management Conflict; Knowledge-Oriented Leadership; Deceptive Knowledge Hiding; Innovation Capabilities	Survey method with 118 valid questionnaires tested with SEM methodology
Banmairuoy et al. (2022)	Employees	Individual Level	Thailand	Knowledge-Oriented Leadership; Human Resource Development; Innovative Working Behavior; Organizational Innovation; Sustainable Competitive Advantage	Survey method with 431 valid questionnaires tested with SEM methodology
Rehman et al. (2022)	Owner, CEO, director, general manager, or manager	Organizational Level	Malaysia	Knowledge-Oriented Leadership; Electronic Resource Management; Decentralized Organization Structure; Organization Innovation; Readiness for Industry 4.0	Survey method with 218 valid questionnaires tested with SmartPLS 3 software

Table 3: Summary of Knowledge-Oriented Leadership Literature and Applications Continued

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Rehman et al. (2022)	Owner, CEO, director, general manager, or manager	Organizational Level	Malaysia	Knowledge-Oriented Leadership; Electronic Resource Management; Decentralized Organization Structure; Organization Innovation; Readiness for Industry 4.0	Survey method with 218 valid questionnaires tested with SmartPLS 3 software
Le et al. (2022)	Presidents, vice-presidents, directors, vice-directors/managers, and heads of key departments	Organizational Level	Vietnam	Knowledge-Oriented Leadership; Knowledge Sharing Behaviors; Market Turbulence; Innovation Capability	Survey method with 335 valid questionnaires tested using SEM method
Liu et al. (2022)	Executives, senior managers, and specialists	Individual Level	China	Knowledge-Oriented Leadership; Knowledge Management; Knowledge Management Behaviors	Qualitative method carries out semi-structured interviews analyzed using NVIVO
Chaithanapat et al. (2022)	Owners or managers	Individual Level	Thailand	Knowledge-Oriented Leadership; Customer Knowledge Management; Competitive Intensity; Innovation Quality; Firm Performance	Survey method with 283 valid questionnaires tested using PLS-SEM method
Mansoor et al. (2022)	Faculty members	Individual Level	Pakistan	Knowledge-Oriented Leadership; Organizational Innovation; Psychological Empowerment; Sustainable Service Quality	Survey method with 306 valid questionnaires tested using SEM method
Ghosh et al. (2022)	Mid-level employees	Individual Level	India	Knowledge Leadership; Risk Mitigation Efforts; Project Performance; Project Quality Practices	Survey method with 198 valid questionnaires tested using PLS-SEM method

“As a strategic people component in management, leaders need to scan, monitor, and proffer internal and external changes and development (e. g., technology, business model) to sense and seize capabilities, judge direction, and dynamically manage the process” (Zhang-Zhang et al., 2022, p. 591). By acting as a role model, managers lay the foundation of how knowledge is to be handled within and throughout the business (Donate et al., 2011). Said differently, knowledge leaders facilitate knowledge processes (Mabey et al., 2012). It is inferred that knowledge-oriented leadership establishes process capabilities within the firm which influence knowledge management behavior and overall productivity which ultimately support in harnessing transient advantages. Accordingly, the researcher will outline the knowledge process capabilities concept in the next section.

2.5 Knowledge Process Capabilities

In a world of transient advantages, leaders can establish and advance effectiveness by implementing and maintaining a long-term knowledge process capabilities strategy (Alghail et al., 2022). Further, previous research has indicated that constructive behaviors from leaders (e.g., role model), strengthen knowledge process capabilities (Sinshaw et al., 2021). As Paisittanand et al., (2007), explains, “managers are crucial in developing organizational capabilities, facilitating adaptability, synthesizing information, and championing strategic alternatives” (p. 91). Knowledge-oriented leaders through their behaviors, such as role modeling (transformational) and incentivization (transactional), can facilitate how knowledge is processed to support the firm’s strategy (Piasittanand et al., 2007; Sinshaw et al., 2021; Alghail et al., 2022). According to strategic management literature, knowledge process capabilities is to be considered as a dynamic capability of a firm (Bamel et al., 2018). This meaning that knowledge is increased through the implementation of knowledge process capabilities, which ultimately supports firms in identifying opportunities and threats (Grant,

1996; Bamel et al., 2018). Moreover, it has been suggested that knowledge process capabilities promote responsiveness to market circumstances through the promotion of resourcefulness (Bamel et al., 2018). In summary, through the knowledge-based dynamic capabilities view, knowledge process capabilities utilize and structure a firm's most important resource (knowledge) to support overall firm dynamic strategy. Tying into the transient advantage strategy, suggesting that firms need to deploy resources strategically to meet market conditions. In this sense, *knowledge process capabilities* can be defined as, "the abilities of a firm to create valuable and strategic knowledge through a series of coordinated knowledge processes" (Kamasak et al., 2017, p.357).

The literature supports the conceptualization of knowledge process capabilities, however there are various views regarding the founding factors which make up the concept (Paoloni et al., 2020; Asiaei et al., 2021). In Table 4, the reader will find an overview of the studies which have considered the key underpinnings of knowledge process capabilities. In the effort to support a unified conceptualization, the researcher follows the consensus among scholars where knowledge processes include the following factors, creation, integration, transfer, and application (Wu et al., 2014; Kamasak et al., 2017; Asiaei et al., 2021). This is also in line with the factors utilized in following concept of this study's framework.

Table 4: Conceptualization of Processes in Knowledge Management Literature

Gold et al., (2001)	Conversion, acquisition, protection, and application
Alavi et al., (2001)	Creation, storage, transfer, and application
Grover et al., (2001) & Oshri et al., (2008)	Generation, codification, transfer, and realization
Tanriverdi, (2005)	Creation, storage, distribution, and application; creation, integration, transfer, and leverage
Wu et al., (2014)	Creation, integration, transfer, and application

Source: Asiaei et al., 2021

In keeping with the unified conceptualization of knowledge process capabilities, the researcher has defined the four factors in line with previous studies. *Knowledge creation* involves a firm’s knowledge-workers obtaining knowledge from internal and external sources which is then developed (Wu et al., 2017; Asiaei et al., 2021; Alghail et al., 2022). Further, *knowledge integration* is the structuring and organization of knowledge to maximize knowledge synergy (Gold et al., 2001; Wu et al., 2014; Shamim et al., 2019). It is important for created knowledge to be structured and organized as to not lose this newly gained knowledge or to duplicate already existing knowledge (Alavi et al., 2001; Shamim et al., 2019). Integrated knowledge can also support the efforts of *knowledge transfer*, which is the act of distributing knowledge throughout various organizational levels through both informal and formal channels (Alavi et al., 2001; Wu et al., 2014). This component supports the organization and its employees to better understand what they already know (Alavi et al., 2001). Knowledge-based theory implies that to source competitive advantages it relies on the application of knowledge and not on the knowledge itself (Grant, 1996). In this consideration, *knowledge application* can be referred to as the use of valuable knowledge for locating the

source of competitive advantage (Wu et al., 2014). Together, these four factors make up the key elements of knowledge process capabilities.

Previous literature has laid out the conceptual foundation for knowledge process capabilities (Gold et al., 2001; Alavi et al., 2001; Grover et al., 2001; Oshri et al., 2008; Tanriverdi, 2005; Wu et al., 2014). To further enhance these foundations, this study will explore the relationship of knowledge-oriented leadership on knowledge process capabilities which has not yet been carried out in prior research. In addition, knowledge process capabilities will be studied within a framework where the relationship between knowledge-oriented leadership and knowledge process capabilities on knowledge management behavior will be analyzed. This research will also supplement the transient advantage and knowledge-based dynamic capabilities literature as knowledge process capabilities has not been reviewed in this regard yet. Considering the research gaps as well as to keep consistent with previous sections, in Table 5, the researcher has outlined the available literature from journals which are ranked as tier one according to the *Scimago Journal & Country Rank* ranking system (2023) as of January 2023.

Table 5: Summary of Knowledge Process Capabilities Literature and Applications

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Gold et al. (2001)	Senior manager - vice president or above	Individual	USA	Knowledge Infrastructure Capabilities; Knowledge Process Capabilities; Organizational Effectiveness; Social Capital Theory	Survey method with 323 valid questionnaires confirmed with SEM
Alavi et al. (2001)	Managers and employees	Multilevel	Global	Knowledge-Based Theory; Knowledge Management Systems	Systematic literature review
Grover et al. (2001)	Managers and employees	Multilevel	Global	Knowledge Management; Information Technology; Knowledge Market; Knowledge Process	Systematic literature review
Tanriverdi (2005)	CIO or higher levels (i.e., vice president, senior vice president, or executive vice president of information services)	Organization	USA	Product knowledge management capability; Customer knowledge management capability; Managerial knowledge management capability; Industry profitability	Survey method with 250 valid questionnaires tested with SEM method
Paisittanand et al. (2007)	Middle Managers	Individual	Not provided	Knowledge Capabilities Theory; Knowledge Process Capabilities; Knowledge Infrastructure Capabilities; Strategy Implementation Effectiveness	Survey method with 162 valid questionnaires tested using SEM method
Laframboise et al. (2007)	IT Managers	Individual	Canada	Knowledge Management Capabilities; Knowledge Infrastructure Capabilities; Knowledge Transfer Success	Survey method with 127 valid questionnaires tested using PLS method
Sandhawalia et al. (2011)	Cross-section consisting of executive vice president, members of the process engineering group, consultants, project managers, and software developers	Individual	Global	Knowledge Management Infrastructure Capabilities; Knowledge Management Process Capabilities; Knowledge Sharing	Case study using structured interviews and a questionnaire
Lee et al. (2012)	Chief knowledge officer or chief information officer	Organization	Korea	Knowledge Management Infrastructure; Knowledge Process Capabilities; Creative Organizational Learning; Organizational Performance	Survey method with 120 valid questionnaires tested using SEM-PLS method
Wu et al. (2014)	Senior managers - CEO and CFO	Firm	Taiwan	Knowledge-Based View; Knowledge Resources; Basic Information; Business Process Capabilities; Organizational Performance; Organizational Learning	Survey method tested using PLS method
Masa'deh (2017)	Academics	Organization	Jordan	Knowledge Management Process; Knowledge Management Performance; Job Performance	Survey method with 207 valid questionnaires tested via SEM method

Table 5: Summary of Knowledge Process Capabilities Literature and Applications

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Kamasak et al. (2017)	Senior level executives	Individual	Turkey	Dynamic Capabilities View; Knowledge Process Capabilities; Environment Dynamism; Strategic Flexibility; Innovation Performance	Survey method with 236 valid questionnaires and tested using moderate multiple regression methods
Bamel et al. (2018)	Owners or key managers	Organization	India	Resource-Based View; Dynamic Capability View; Strategic Flexibility; Knowledge Management Process Capability; Firm Social Resources; IT Resources of Firm	Data collected from 87 participants from 23 family-owned firms using a 37-item questionnaire and tested using multiple hierarchical regressions and bootstrapping
Nguyen et al. (2019)	Senior manager		HoChiMinh City & Hanoi, Vietnam	Resource-Based View; Technical Knowledge Management Infrastructure; Social Knowledge Management Infrastructure; Competitive Advantage Provided by Knowledge Management	Survey method with 251 valid questionnaires tested using PLS-SEM method confirmed by bias-corrected bootstrap procedure and fsQCA was carried out
Dooley et al. (2019)	Researchers and academicians	Organization	Ireland	Knowledge Process Capabilities; Inter-Organizational Networks; Knowledge Exchange and Discovery	Qualitative longitudinal single case study carrying out semi-structure interviews
Asiaei et al. (2021)	CFOs	Organization	Iran	Resource Orchestration Theory; Knowledge-Based View; Knowledge Assets; Knowledge Process Capabilities; Performance Measurement Systems; Corporate Performance	Survey method with data set from 92 firms tested using PLS-SEM
Sinshaw et al. (2021)	Followers - assistant and branch managers	Organization	Ethiopia	Knowledge Process Capabilities; Ethical Leadership; Administrative innovation	Survey method with 266 valid questionnaires tested with SEM method
Latif et al. (2021)	Employees	Project Teams	Pakistan	Knowledge-Based View; Knowledge Management Enablers; Knowledge Management Processes; Project Success	Survey; PLS-SEM; Configuration paths were assessed using fuzzy-set qualitative comparative analysis
Alghail et al. (2022)	Employees	Group	Yemen	Project Knowledge Acquisition; Project Knowledge Conversion; Project Knowledge Application; Project Knowledge Protection; Project Management Maturity	Survey method with 352 valid questionnaires tested using PLS-SEM
Basheer et al. (2022)	Employees	Individual	Punjab, Pakistan	Employees' Entrepreneurial Orientation; Knowledge Process Capabilities; Management Support; Resource and Time Availability; Rewards; Work Discretion; Propensity to Take Risk; Locus of Control	Survey method with 291 valid questionnaires tested using PLS-SEM method

Knowledge process capabilities which are influenced and supported by knowledge-oriented leaders can potentially affect the knowledge management behaviors of employees and how they manage knowledge. Processes set the stage for employees to create, integrate, transfer, and apply their knowledge to increase productivity which can ultimately transpire into gained transient advantages. In that respect, this research will provide an unabridged overview of the concept of knowledge management behavior in the next section.

2.6 Knowledge Management Behavior

Leading by example, through processes and routines, knowledge-oriented leaders can provide conditions that allow for employees to contribute to their own and to organizational knowledge (Sahibzada et al., 2022a). Organizational knowledge can be defined as reliable information that holds potential value for an organization, consequently empowering a firm to take effective action (Wang et al., 2009). Said differently, leaders also have the capability to create an environment where knowledge-workers might not thrive in turning knowledge into value. Therefore, it is important to better understand the key factors which influence employees' knowledge management behaviors. This study investigates the relationship of enhanced knowledge process capabilities through knowledge-oriented leadership on knowledge management behaviors.

Through the knowledge-based dynamic capabilities view, it is through the promotion of knowledge management behavior, that knowledge-workers will be encouraged to convert their tacit knowledge into explicit organizational knowledge, which can then be applied to gain transient advantages (Grant, 1996; Zia, 2020). In this sense, *knowledge management behavior* can be defined as the creation, integration, transfer, and application of knowledge at an individual level (Shamim et al., 2019; Zia, 2020). Similar to knowledge process capabilities, the concept of knowledge management behaviors is comprised of four factors being knowledge

creation, knowledge integration, knowledge transfer, and knowledge application (Wu et al., 2014; Shamim et al., 2019; Zia, 2020; Asiaei et al., 2021). The difference here is that the four factors are reviewed in the context of the behaviors of the individual knowledge-workers and not in the context of processes and routines promoted by leadership. By focusing on the individual knowledge-workers, this can support in the understanding of employee motivations to exploit knowledge.

Previous literature suggests that knowledge management behavior can bring about problem-solving skills (Zia, 2020), performance (Vrontis et al., 2017), team performance, and financial performance (Giampaoli et al., 2017). These outcomes are significant for an organization and its ability to leverage advantages for overall continued success. While notable advancements have been made to the conceptualization of knowledge management process, prior studies have primarily focused on the direct relationship between knowledge-oriented leadership on knowledge management behaviors. This study aims to investigate the relationship between enhanced process capabilities supported by knowledge-oriented leadership on knowledge management behaviors. Further, because knowledge is inherently owned by an individual and cannot be purchased or coerced out of an individual, it is important to understand which leadership behaviors and environments best supports knowledge management behaviors. Especially in the effort to use the direct relationships between the concepts (knowledge-oriented leadership, knowledge process capabilities, and knowledge management behavior) to increase knowledge-worker productivity. Prior studies have not explored the direct relationship of knowledge management behavior on the outcome of knowledge-worker productivity (Lafuente et al., 2019; Shujahat et al., 2019; Khaksa et al., 2020; Sahibzada et al., 2022). In distinguishing the various gaps in knowledge management literature, this study has compiled a visual of all prior studies carried out in relation to knowledge management behavior, which can be observed in Table 6. All literature listed in

Table 6 are from journals which are ranked as tier one according to the *Scimago Journal & Country Rank* ranking system (2023) as of January 2023.

Table 6: Summary of Knowledge Management Behavior Literature and Applications

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Darroch (2003)	most senior person w/i the organization	Organization	New Zealand	Knowledge Acquisition; Knowledge Dissemination; Responsiveness to Knowledge	Content analysis and survey method used with 407 valid questionnaires, tested via SPSS
Crawford (2005)	Students	Individual		Knowledge Management Inventory; Multifactor Leadership	Survey method used
Magnier-Watanabe et al., (2009)	All employees	Individual	Japan	Socialization; Externalization; Combination; Internalization	Survey method used
Vrontis et al. (2017)	CTOs	Organization		External Knowledge Sourcing; Organizational Ambidexterity; Firm Performance	Survey method and tested via SEM techniques.
Giampaoli et al. (2017)	Managerial level	Organization	Italy	KM Infrastructure; Creative Problem Solving; Problem Solving Speed; Organizational Performance; Financial Performance	Survey method with 112 valid questionnaires and tested using PLS method
Rhee et al. (2017)	Managers and their teams	Team	South Korea	Goal Orientation; Knowledge Management Behavior; Social Status; Individual Outcome	Survey method used with 214 valid questionnaires from 37 teams and exploratory factor analysis carried out
Shamim et al. (2019)	Front line employees	Individual	United Kingdom	Knowledge-Based View; Path Goal Theory; Knowledge-Oriented Leadership; Knowledge Management Behavior; Affective Commitment; Employee Work Engagement; Creative Self-Efficacy	Survey method used with 330 valid questionnaires and PLS is employed using SmartPLS 3.0
Rossi et al. (2020)	Organization	Organization	Global	Knowledge management Behaviors; Institutional Venture Capitalists; Corporate Venture Capitalists	Focused literature review and a descriptive, inferential, and discriminant analyses on the 15 most active IVCs and CVCs in the world in 2019 are presented
Zia et al. (2020)	Employees	Team Level (Project Teams)	Pakistan	Knowledge-Based Dynamic Capabilities; Social Capital Theory; Knowledge-Oriented Leadership; Employee Goal Orientations; Knowledge Management Behavior; Project-Based Innovation Performance	Survey; SmartPLS - SEM
Kim (2021)	Leader-member dyads	Individual	South Korea	Psychological Well-Being; Job Performance; Knowledge-Sharing Behavior; Knowledge-Hiding Behavior; Knowledge-Manipulating Behavior; Leader-Member Exchange	Survey method with 333 valid questionnaires and tested using hierarchical regression analysis and bootstrapping methods
Good et al. (2022)	All employees	Individual	Canada	Participation in Organizational Social Activities; Intrinsic Motivation for Social Activities; Positive Affect; Knowledge Management Behaviors	Survey method with 165 valid questionnaires tested using SPSS AMOS
Liu et al. (2022)	Executives, senior managers, and specialists	Individual	China	Knowledge-Oriented Leadership; Knowledge Management Behaviors; Knowledge Management	Semi-structured interviews analyzed using NVIVO

“Knowledge and its management involve effort on many fronts to be successful” (Grover et al., 2001, p. 19). If constructed and carried out in an intelligent way, knowledge can be utilized to support knowledge-workers’ in their perceived efforts to increase productivity. The practice of knowledge management behaviors through the lens of knowledge-based productivity suggests that knowledge will be sourced from internal and external avenues to be integrated, transferred, and eventually applied as seen fit. In this sense, it can be deduced that if the components of what make up knowledge management behavior are practiced this can support knowledge-workers in their job tasks (Khaksar et al., 2020). In addition, it might not be enough to only explore the effects of behavior on knowledge-worker productivity, but also the attitudes which support perceived productivity. Behavior can be described as the way a knowledge-worker acts, while attitude can be determined as how a knowledge-worker thinks (Shamim et al., 2019). In this regard, to encompass both human behavior and attitude into the proposed knowledge management construct, the attitude of affective commitment will be analyzed as moderating the relationship between knowledge management behavior and knowledge-worker productivity.

2.7 Knowledge-Worker Productivity

Previous literature has suggested that in the current knowledge-based economy, the financial services industry significantly depends on knowledge-workers with strong cognitive abilities, communication skills, and capabilities to manage knowledge (Kwon, 2014). Therefore, this research takes a contemporary approach to explore knowledge management initiatives founded on the knowledge-based dynamic capabilities view premise, that people are knowledge-workers (Nonaka, 1991; Zhang et al., 2013). More specifically, where if knowledge is managed strategically this can generate increased knowledge-worker productivity, to ultimately gain transient advantages (McGrath, 2013; Zhang-Zhang, 2022). As Nonaka (1991)

posits, new knowledge invariably comes from the individual. Accordingly, to gain transient advantages, the relationships between knowledge management initiatives must be explored to better understand how to achieve knowledge-worker productivity.

Knowledge-worker productivity can be defined as, “knowledge-worker proficiency to augment the knowledge, build intellectual outcomes through the precise usage of knowledge” (Sahibzada et al., 2022a, p. 716). Manual worker productivity, where ratio of the output to the input is measured, cannot be used to measure a knowledge-worker productivity (Drucker, 1991; Ramírez et al., 2004; Shujahat et al., 2019; Sahibzada et al., 2022a). Unlike manual workers, knowledge-workers carry out knowledge-work, which is mostly intangible, making outputs difficult to measure (Drucker, 1991; Bosch-Sijtsema et al., 2009). As a result of its complexity, knowledge-work is challenging to appraise (Ramírez et al., 2004). Consequently, previous literature has sought to establish dimensions of knowledge-worker productivity.

The conceptualization of knowledge-worker productivity can be structured into three key components being timeliness, work/knowledge efficiency, and job autonomy (Sahibzada et al., 2022a; Sahibzada et al., 2022b). *Timeliness* can be determined as a worker’s effectiveness in achieving task deadlines (Ramírez et al., 2004; Sahibzada et al., 2022a; Sahibzada et al., 2022b). The task component within the definition should be highlighted. Timeliness does not refer to hours spent working to reach the intended deadline, timeliness refers to delivering knowledge-work by the established cut-off date. Therefore, reaching the same outcome could take one person two hours where it could take another person ten hours, but if the deadline is met, this is considered timely. The component timeliness together with the component work/knowledge efficiency determines the quantity and quality of outputs (Ramírez et al., 2004; Sahibzada et al., 2022a; Sahibzada et al., 2022b).

Under this notion, *work/knowledge efficiency* can be understood as a knowledge-worker carrying out tasks to the expected standard (Ramírez et al., 2004; Sahibzada et al.,

2022a; Sahibzada et al., 2022b). There is a sense of high-quality output in all aspects, regardless of the task and irrespective if it is important to the job or not.

Autonomy makes up the last factor of knowledge-worker productivity which accounts for independence of the knowledge-worker and how the worker determines to go about tasks to achieve timeliness and to deliver outputs (Ramírez et al., 2004; Sahibzada et al., 2022a; Sahibzada et al., 2022b). Autonomy can be influenced by knowledge management behavior or customer expectations and satisfaction (Ramírez et al., 2004; Sahibzada et al., 2022a). Autonomy is a crucial aspect in achieving transient advantages because, as McGrath (2013) states, business is ever faster moving, therefore knowledge-workers need to be able to independently decide on how to achieve tasks to not lose time and quality through the back-and-forth discourse with upper management.

Leaders play a crucial role for the overall well-being of their knowledge-workers. As a result, their behaviors can directly influence either positive or negative knowledge behaviors from employees. For example, abusive leadership behavior can lower employee satisfaction and commitment levels as well as overall performance (Ahmed et al., 2021). Knowledge-oriented leaders who role model positive knowledge management behaviors can directly and indirectly influence knowledge-workers' knowledge management behaviors through processes and routines (Donate et al., 2015; Sahibzada et al., 2020a). Similar to the effects of positive leadership behaviors, abusive management behaviors can also have a direct effect on knowledge-workers. Through the combination of both transformation and transactional leadership, managers and supervisors can directly influence their knowledge-workers and their productivity (Donate et al., 2015). For example, through motivation, open communication and sharing innovative ideas, transformational leadership can inspire knowledge-workers to achieve goals in a timely manner, work towards upholding expected standards as well as carry out tasks in new and creative ways (Donate et al., 2015; Sahibzada et al., 2020a). In addition,

through the transactional leadership style, rewards and constructive feedback are provided to directly influence worker productivity (Donate et al., 2015; Sahibzada et al., 2020a).

Previous literature has conceptualized knowledge-worker productivity through providing a taxonomy and by studying direct and indirect relationships (Khaksar et al., 2020; Shujahat et al., 2019; Sahibzada et al., 2020a; Sahibzada et al., 2020b). However, prior studies have yet to explore the indirect and direct effects of knowledge-oriented leadership on knowledge-worker productivity (Ahmed et al., 2021; Lafuente et al., 2019; Khaksar et al., 2020; Shujahat et al., 2019; Sahibzada et al., 2020a; Sahibzada et al., 2020b). Further, only one study within the financial services sector has been carried out to study knowledge-worker productivity (Shujahat et al., 2019). Ahmed et al. (2021), explored the effects of abusive supervision and its indirect impacts on knowledge-worker productivity where employees were working in the banking sector in Pakistan. This study aims to explore the insurance side of the financial servicing sector on a global basis. Lastly, this research is the first to explore both behavior and attitude in the case of knowledge-worker productivity; where behavior is measured through knowledge management behavior and its direct relationship to knowledge-worker productivity, and where attitude is measured through affective commitment and its moderating effects on the relationship between knowledge management behaviors and knowledge-worker productivity. In character with the preceding sections, in Table 7 the reader will find an overview of literature exploring the concept knowledge-worker productivity from journals listed as tier one according to the *Scimago Journal & Country Rank* ranking system (2023) as of January 2023.

Table 7: Summary of Knowledge-Worker Productivity Literature and Applications

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Nonaka (1991)	Employees & Managers	Individual	Japan	Knowledge-Worker	Survey method
Drucker (1999)	Employees	Individual	USA	Knowledge-Worker	Observational study
Ramírez et al. (2004)	Employees	Individual	USA	Knowledge-Worker; Productivity	Systematic literature review
Bosch-Sijtsema et al. (2009)	Manager & Employees	Team	Global	Knowledge Work Productivity; Team Tasks; Team Structure and Processes; Workspaces; Organizational Context	Systematic literature review
Karr-Wisniewski et al. (2010)	Knowledge-Workers	Individual	USA	System Feature Overload; Information Overload; Communication Overload; Knowledge-Worker Productivity	Survey method with 111 valid questionnaires
Palvalin et al. (2013)	Employees	Individual + Organization	Sweden	Information and Communication Technology; Knowledge Work Productivity	Literature review and a case study method using both survey and interview methods. 128 valid questionnaire responses
Lafuente et al. (2019)	Academicians	Individual	Spain	Human Resource Architecture; Contract Policy; Research Productivity	Empirical analysis using the bi-annual reports provided by the Spanish Association of University Rectors, annual reports available from the Network of Spanish Technology Transfer Offices, and number of articles published in scholarly journals included in the SCOPUS databases
Shujahat et al. (2019)	Software engineers, analysts, designers, electrical engineers, marketing, finance, HR, & IT managers	Individual	Pakistan	Knowledge-worker productivity; Innovation; Knowledge Creation; Knowledge Sharing; Knowledge Utilization	Survey method with 369 valid questionnaires tested using SmartPLS 26
Khaksar et al. (2020)	All organizational employees	Individual	Australia	Knowledge-Based Dynamic Capabilities; Knowledge-Worker Productivity; Organizational Culture Traits	Survey method with 303 valid questionnaires and test using SEM method
Ahmed et al. (2021)	Employees	Individual	Pakistan	Abusive Supervision; Knowledge Management Process; Knowledge-Worker Productivity	Survey method with 204 valid questionnaires tested through PROCESS Macro in IBM SPSS v. 26
Sahibzada et al. (2022a)	Academicians	Organization	China	Knowledge-Based View; Knowledge-Oriented Leadership; Knowledge Management Processes; Organizational Performance	Survey method with 536 valid questionnaires tested via PLS-SEM method
Sahibzada et al. (2022b)	Academicians	Individual	Pakistan	Trust; Knowledge-Oriented Leadership; Environment Uncertainty; Knowledge Management Processes; Knowledge-Worker Productivity	Survey method with 248 valid questionnaires tested via SmartPLS and fsQCA 3.0

This study aims to understand how to support knowledge-worker productivity through knowledge management initiatives. As suggested, this research takes the view that employees of a firm within the financial services industry are knowledge-workers (Nonaka, 1991; Zhang et al., 2013). Being human, employees within the workplace can show and experience different attitudes and behaviors which guide their output (Shamim et al., 2019). Therefore, this study explores not only knowledge-management behaviors, but also the attitude of affective commitment, which will be explored in the following section.

2.8 Affective Commitment

Attitudes consider the emotions a person might have towards something, this can be seen either be in a positive or negative light (Shamim et al., 2019). Said differently, attitude is the way a person might feel, while behavior is the way a person might act; behavior follows attitude (Shamim et al., 2019). Accordingly, it is important to examine both human characteristics of attitudes and behaviors when considering the relationship between knowledge management behaviors and knowledge-worker productivity. This study has focused on one aspect of organizational commitment, being affective commitment, which from previous studies has been found to be an antecedent of several organizational and behavioral outcomes (Allen et al., 1990; Meyer et al., 1991; Martin-Perez et al., 2015; Shamim et al., 2019; Kim, S., 2021).

Organizational commitment consists of three factors being affective, continuance, and normative commitment (Allen et al., 1990; Meyer et al., 1991; Allen et al., 1996). The multiple studies carried out by Meyer and Allen (1990, 1991, 1996, 1997) explore the rationale as to why employees remain at an organization and through this have proposed three characteristics of commitment. Continuance commitment suggests that the employee weighs the cost of leaving with the cost of staying at an organization (Allen et al., 1990; Meyer et al., 1991).

Normative commitment explains an employee's feelings of obligation to stay at the firm (Allen et al., 1990; Meyer et al., 1991). *Affective commitment* explains an emotional bond an employee might have to their organization (Allen et al., 1990; Meyer et al., 1991). Prior literature has suggested that affective commitment positively affects behavioral outcomes such as job performance, while continuance and normative commitment seem to not play such a significant role on employee behavior (Kim, S., 2021). Accordingly, this study examines affective commitment as a significant element on the relationship between knowledge management behaviors and knowledge-worker productivity.

An employee with affective commitment has an emotional tie to the organization through involvement and membership (Allen et al., 1990). An individual who is committed to their organization and who has an emotional connection, such as trust, with their colleagues and supervisors are more likely to engage in knowledge sharing (Jarvenpaa et al., 2001; Martin-Perez et al., 2015). Knowledge-workers with affective commitment are also more likely to consider organizational goals as their own (Shamim et al., 2019). As previously discussed, through knowledge-oriented leadership guided processes and routines, knowledge-workers will have a foundation to engage in knowledge management behaviors, which can support in their own productivity to reach individual and firm goals. However, attitudes can either positively or negatively impact the success of knowledge initiatives and the engagement of knowledge management behaviors (Kim, S., 2021). An individual with affective commitment is more inclined to exhibit positive emotions towards knowledge management behaviors because their basic psychological needs, such as membership, are fulfilled (Mahdi et al., 2014; Shamim, 2019).

Knowledge can be interpreted as being a competitive resource held within the minds of employees (Grant, 1996, Drucker, 1999; Shamim et al., 2019; Kim, S., 2021). Due to this unique situation, it is fundamental to understand which attitudes and behaviors best support

knowledge-workers to engage in knowledge management initiatives. Certain attitudes have the potential to better support knowledge-workers in their efforts to engage in knowledge-management behaviors, such as affective commitment (Martin-Perez et al., 2015; Kim, S., 2021). Therefore, this study has chosen to explore affective commitment on the relationship between knowledge management behaviors and knowledge-worker productivity, which has not been examined by previous literature yet. To the researcher's knowledge, from reviewing literature within the knowledge management arena, there has only been one study carried out where affective commitment was tested as a moderator of a relationship. For generalizability, this study will pursue in examining affective commitment as moderating the relationship between knowledge management behaviors and knowledge-worker productivity. Moreover, prior studies within the knowledge management literature exploring the concept of affective commitment have been carried out in a single region or country, and no studies were found to be carried out within the financial services sector. In this regard, the researcher has provided a visual overview of literature consisting of primarily articles from journals ranked as tier one according to the *Scimago Journal & Country Rank* ranking system (2023) as of January 2023 and one book (Meyer et al., 1997).

Table 8: Summary of Affective Commitment Literature and Applications

Source	Subject	Level	Location	Guiding Theory / Constructs / Concepts	Methodology
Meyer et al. (1988)	University graduates	Individual	Canada	Organizational Commitment; Work Experiences	Longitudinal survey method, having 73 valid organizational commitment questionnaires.
Allen et al. (1990)	University graduates	Individual	Canada	Organizational Commitment; Work Experiences; Behavior and Turnover Intention	Canonical correlation analysis from previous two studies: Meyer et al., 1987 and Meyer et al., 1988
Meyer et al. (1991)	University graduates	Individual	Canada	Organizational Commitment; Work Experiences; Behavior and Turnover Intention; Affective Commitment; Continuance Commitment; Normative Commitment	Reconceptualization and synthesis of existing research
Allen et al. (1996)	Managers & Employees	Individual	Global	Organizational Commitment; Affective Commitment; Continuance Commitment; Normative Commitment	Literature review/taxonomy of existing literature
Meyer et al. (1997)	University graduates	Individual and organization	Canada	Organizational Commitment; Affective Commitment; Continuance Commitment; Normative Commitment	Quantitative empirical research undertaken to establish general principles
Meyer et al. (2001)	Managers & Employees	Individual	Global	Organizational Commitment; Commitment Theory	Literature review/taxonomy of existing literature
Jarvenpaa et al. (2001)	Academic and general staff	Organization	Australia and Canada	Information Sharing Theory; Social Exchange Theory; Self Ownership; Propensity to Share; Organizational Culture; Information Culture; Task Interdependence; Demographics; Organizational Ownership	Survey method with 1935 valid questionnaires
Meyer et al. (2002)	Managers & Employees	Individual	Global	Organizational Commitment; Commitment Theory; Affective Commitment; Normative Commitment; Continuance Commitment	Meta-analyses
Mahdi et al. (2014)	Supervisors and employees	Individual	Malaysia	Leadership Behavior; Supportive Leadership; Directive Leadership; Affective Commitment; Continuance Commitment; Normative Commitment; Organizational Commitment	Survey method with 200 valid questionnaires tested via SPSS
Martin-Perez et al. (2015)	Employees	Individual	Spain	Extrinsic Rewards; Intrinsic Rewards; Affective Commitment; Knowledge Transfer	Survey method with 227 valid questionnaires and tested via PLS
Shamim et al. (2019)	Front line employees	Individual	United Kingdom	Knowledge-Based View; Path Goal Theory; Knowledge-Oriented Leadership; Knowledge Management Behavior; Affective Commitment; Employee Work Engagement; Creative Self-Efficacy	Survey method used with 330 valid questionnaires and PLS is employed using SmartPLS 3.0
Kim (2021)	Supervisor-employee dyads	Organization	South Korea	Social Learning Theory; Social Exchange Theory; Affective Commitment; Supervisor Knowledge Sharing; Employee Knowledge Sharing; Learning Goal Orientation	Survey method with 192 valid employee-supervisor dyads questionnaires

In the broader sense, through the knowledge-based dynamic capabilities view, affective commitment, can support in achieving continued firm advantages (Allen et al., 1990; Teece et al., 1997). Knowledge-based dynamic capabilities view, considers knowledge as the key resource of the firm, which is to be utilized to overcome dynamic environments and to gain competitive advantages (Grant, 1996; Teece et al., 1997; Zhang-Zhang et al., 2022). Knowledge-workers with affective commitment are more likely to engage in knowledge management behaviors, which can ultimately be used to achieve firm advantages through the implementation of knowledge management initiatives (Nonaka; 1994; Martin-Perez et al., 2015; Shamim et al., 2019; Kim, S., 2021). Consequently, affective commitment is a key element in the proposed knowledge management framework this study examines.

2.9 Chapter Summary

Chapter two assessed and synthesized the relevant literature to address the research problem in question. Concepts, a guiding theory, and the underlying motivation were presented in the previous sections to illustrate an overall construct which can be explored and tested within the financial services industry, specifically the multinational insurance brokerage industry. A construct consisting of knowledge management initiatives being, knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, affective commitment and knowledge-worker productivity guided by knowledge-based dynamic capabilities view, were chosen to create a framework which can be explored and tested and potentially utilized by organizations to address market dynamics stemming from changing customer behavior, an aging expert population, and from the effects of digitalization to achieve transient advantages.

The concepts selected to compose the knowledge management framework with the aim to address the research problem were adopted because previous literature has identified them

as being established antecedents of knowledge management (Shamim et al., 2019; Zia, 2020; Sahibzada et al., 2022a; Asiaei et al., 2021; Zhang-Zhang et al., 2022). While being antecedents of knowledge management, previous literature has not examined the relationships of these concepts together as a framework to be utilized to increase knowledge-worker productivity to ultimately achieve transient advantages in dynamic environments. The framework design was guided by professional practice as well as by prior literature.

Further, prior research which have explored the concepts proposed in this study were usually carried out in a single region or country where the sample included industries such as agriculture, banking, communication, construction, hospitality, IT, manufacturing, pharmaceutical, public institutions, real estate, and universities. This study proposes to test the relationships of the concepts within a framework, on a global scale, within the insurance industry to close these gaps and to support generalizability. Consistent with adding to literature, this study aims to also contribute and to shape new understandings of how knowledge management initiatives affect the financial services arena.

In this consideration, chapter two addresses the research problem through the foundations of previous literature which takes the form of a knowledge management framework. With now having established a foundation, chapter three will introduce the reader to the proposed framework and hypotheses development.

Chapter Three – Research Framework and Hypotheses Development

3.1 Introduction

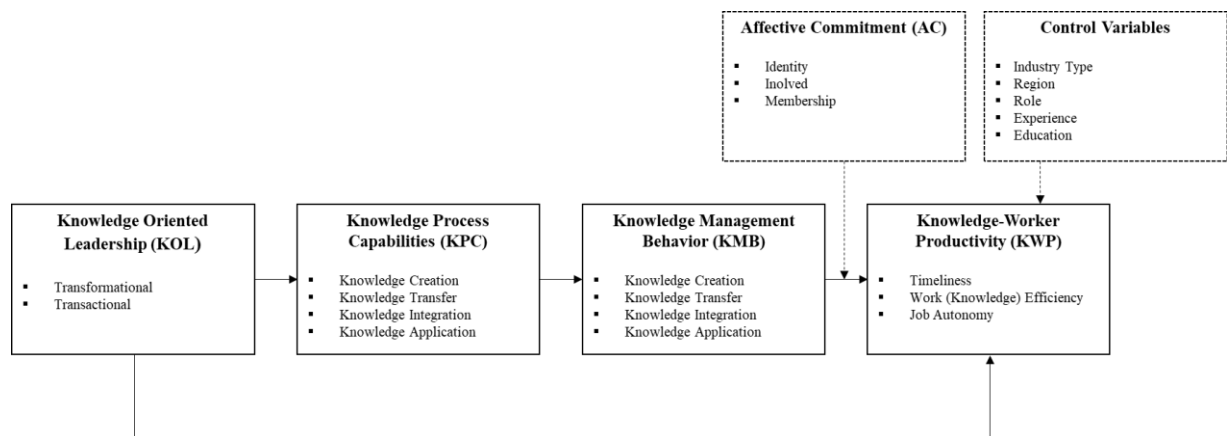
To be deemed successful, the management of knowledge and knowledge itself demands effort on several fronts (Grover et al., 2001). Further, it is suggested that the knowledge management research agenda “should be closely tied to practical issues” (Grover et al., 2001, p. 19). In this view and through the evaluation of prior research, this study has thoughtfully designed a knowledge management framework based on professional experience, supported by knowledge management and strategy literature. The framework was inspired by existing market threats confronting the financial services industry and the industry’s urgent need for reinvention. Summarily, the proposed framework is tied to practical issues grounded in prior literature.

In keeping with the theme of practicality, knowledge management can be interpreted as the ability to convert intangible assets into value, creating an advantage whenever needed (Wang et al., 2009). This notion aligns with the concept of transient advantage, wherein the capacity to leverage knowledge fluidly and adaptively becomes critical to navigating temporary competitive advantages. Through the knowledge-based dynamic capabilities lens, this ability to swiftly reconfigure knowledge assets plays a vital role in capitalizing on short-lived opportunities. Adapted from the resource-based view, which then evolved into the knowledge-based view and subsequently merged with dynamic capabilities view, the knowledge-based dynamic capabilities view posits that knowledge is a firm’s essential asset for addressing dynamic environments to gain competitive advantages (Grant, 1996; Grant, 1997; Teece et al., 1997; Zheng et al., 2011). In this context, the proposed framework responds

to the dynamic and transient nature of the financial services industry, where non-tangible assets (knowledge) form the foundation of both individual and firm success (Hutchin, 2005; Kwon, 2014).

This study explores knowledge as an essential resource not only for continuous adaptation to evolving threats, but also for exploiting transient advantages in parallel. In transient advantage settings, the agility with which organizations acquire, apply, and redeploy knowledge determines their ability to capitalize on fleeting market opportunities while preparing for the next. The knowledge-based dynamic capabilities view, which has not yet been fully explored in this setting (see Table 2), acts as the composer, orchestrating and motivating each knowledge management initiative within the framework. Figure 4 provides a visual of this knowledge management orchestra, strategically designed to carry out the symphony of transient advantages despite dynamic environments. This framework positions knowledge as the key driver of sustained competitiveness, ensuring that firms can consistently reconfigure their capabilities in pursuit of transient advantages.

Figure 4: Research Framework



Source: Author (2024)

It is viewed that leaders can act as the stimulant for the engagement of knowledge management processes (Donate et al., 2015; Sahibzada et al., 2022a). Further, Sahibzada et al., (2022a) writes, “researchers have called for empirical investigation of knowledge-oriented leadership as a facilitator of knowledge management processes since there is significantly limited research on the impact of leadership on knowledge-related practices” (p. 714). Therefore, the design of the framework starts with the initiative of leadership and studies the relationship between knowledge-oriented leadership on knowledge process capabilities. Authors such as Paisittanand et al., (2007) suggest that little attention has been paid to knowledge capabilities, therefore this study chooses to review the specific type of knowledge management process being knowledge management capabilities.

Considering that knowledge resides within an individual’s mind (Drucker, 1999), the framework extends beyond leadership and processes to include human interaction with knowledge. Since the effectiveness of knowledge management largely depends on individual behavior and attitudes toward knowledge sharing and utilization, it is crucial to consider both human behavior and human attitudes in the analysis. Understanding how individuals perceive, react to, and engage with knowledge is key to fostering successful knowledge management initiatives. Therefore, affective commitment – the emotional attachment and identification employees’ feel toward their organization – was adopted as the attitude component for this research. Affective commitment plays a critical role in shaping knowledge-related behaviors, as individuals who are emotionally invested in their organization are more likely to engage in knowledge-sharing activities and other productive knowledge management behaviors (Kim, 2021)

The framework builds on the relationship between knowledge-oriented leadership and knowledge process capabilities to explore how these capabilities influence knowledge management behavior. Knowledge-oriented leaders, who lead by example through processes

and routines, have the potential to shape employee behavior in regards to knowledge management (Donate et al., 2015; Shamim et al., 2019; Zia, 2020). Previous literature has examined the direct influence of knowledge-oriented leadership on knowledge-management behavior (see Tables 3 and 5). This study advances the field by investigating the relationship between knowledge process capabilities and knowledge management behavior under the premise that knowledge-oriented leaders set the groundwork handling knowledge through structured processes and routines, which in turn influences individuals' knowledge management behavior (Latif et al., 2021).

By forging a sense of knowledge diffusion through leadership and processes, organizations can facilitate the creation, sharing, storing, and application of knowledge at an individual level (Shamim et al., 2019). In addition, where affective commitment is high, employees are more willing to engage in knowledge management behaviors such as knowledge sharing (Kim, S., 2021). Therefore, this study explores the relationship between knowledge management behavior and knowledge-worker productivity where the relationship is moderated by affective commitment. To the researcher's knowledge, the constellation of these relationships has yet to be fully explored in knowledge management literature.

The intent is to create a framework where each concept is an antecedent of knowledge management to propose a wholistic approach which can be utilized in professional practice to address dynamic environments and to attain transient advantages. In this consideration, the next section will outline the hypotheses of this study.

3.2 Hypotheses Development

The notion of knowledge being considered as a strategic asset of a firm has been widely acknowledged throughout literature (Grant, 1996; Horng et al., 2022; Zheng et al., 2011). Despite this realization, organizations striving for transient advantages in dynamic

environments usually focus their efforts on identifying individual knowledge assets rather than on the implementation of a holistic knowledge management strategy to support the creation, integration, transfer, and application of knowledge (Kogut et al., 1992; Wang et al., 2009; Shamim, et al. 2019; Argote et al., 2000). Through these modes of knowledge exploration and exploitation, firm and behavioral outcomes can be achieved (Alavi et al., 2001; Zack et al., 2009; Donate et al., 2015). Therefore, a more complete framework is necessary to fully enhance knowledge-worker productivity for firm advantages.

Literature suggests that employee knowledge should be managed so as to convert employee tacit knowledge into organizational knowledge (Shamim et al., 2019). This knowledge exploring and exploiting practice is vital for the growth and competitiveness of the organization (Argote et al., 2000; Zack et al., 2009; Donate et al., 2015; Martin-Perez et al., 2015; Sahibzada et al., 2021a). However, because organizations do not own their employees and their employees' intellectual assets, organizations need to introduce initiatives which support employee knowledge behaviors (Connelly et al., 2012). Such strategies can include providing an environment suitable for knowledge management behavior or by implementing motivating factors such as knowledge-oriented leadership characteristics (Donate et al., 2015; Shamim et al., 2019).

According to previous studies it is necessary for organizations to identify procedures in which the organization handles and values its knowledge sharing capabilities (Masa'deh et al., 2017). "The goal of the knowledge management processes is to make an organization aware of its knowledge at the individual and collective level and utilize that knowledge to shape itself and make its business processes efficient and effective" (Latif et al., 2021, p. 152). Leadership is the catalyst for knowledge process capabilities and routines (Sahibzada et al., 2022a). Said differently, it can become challenging to achieve the comprehensive benefits from knowledge management without the support and efforts from leaders (Civi, 2000; Latif et al., 2021). In

principle, it has been argued that leadership should support the knowledge management activities of creation, integration, transfer, and application (Donate et al., 2015; Latif et al., 2021). As discussed, organizations cannot force employees to engage in knowledge processes and behaviors (Connelly et al., 2012). However, an organization can motivate such activities through knowledge experts who hold managerial positions (Latif et al., 2021). Knowledge-oriented leaders play a decisive role in knowledge process capabilities through their knowledge management role model function, which lays the foundations of the how and why employees can and should participate in knowledge processes and routines (Abualoush et al., 2018; Naqshbandi et al., 2018; Shamim et al., 2019; Latif et al., 2021). Hence, based on prior literature, it is proposed that:

Hypothesis 1: *Knowledge-oriented leadership will have a positive impact on knowledge process capabilities.*

One of the main challenges facing knowledge-workers is the support from management to categorize information (Durst et al., 2012). Considering the assumption that knowledge-oriented leadership impacts knowledge process capabilities, it can be posited that this relationship could positively influence individual employees' knowledge management behavior. Procuring defined knowledge processes and routines which are supported by knowledge experts in managerial positions can support individual employees to practice knowledge management behaviors. Previous studies have shown that the way an organization approaches knowledge management has significant implications on the outcomes of an individual employee's knowledge exploration and exploitation (Donate et al., 2015; Masa'deh, 2017). Knowledge sharing is one of the four main applications of knowledge process capabilities (Wu et al., 2014; Kamasak et al., 2016; Asiaei et al., 2021) and of knowledge

management behavior (Shamim et al., 2019; Zia, 2020;). Like knowledge process capabilities, knowledge management behavior can be characterized as the creation, integration, transfer, and application of knowledge (Shamim et al., 2019; Zia, 2020). By creating an organizational atmosphere for information and knowledge diffusion through knowledge processes and routines which are supported by knowledge-oriented leaders, this can then facilitate the creation, integration, transfer, and application of knowledge behavior among knowledge-workers (Shamim et al., 2019). Accordingly, it is rational to hypothesize that knowledge processes capabilities supported by knowledge-oriented leadership has the potential to positively affect employee knowledge management behaviors. Hence, the proposed hypothesis is as follows:

Hypothesis 2: *Knowledge process capabilities will have a positive impact on knowledge management behavior.*

Leading by example, through processes and routines, knowledge-oriented leaders can provide conditions that allow for employees to contribute to their own and to organizational knowledge (Donate et al., 2015; Sahibzada et al., 2022a). By way of the knowledge-based dynamic capabilities view, it is through the promotion of knowledge management behavior, that knowledge-workers will be encouraged to convert their tacit knowledge into explicit organizational knowledge (Grant, 1996; Zia, 2020). By focusing on the individual knowledge-worker, this can support in the understanding of employee motivations to exploit knowledge. Therefore, this research takes a contemporary approach to explore knowledge management initiatives founded on the knowledge-based dynamic capabilities view premise, that people are knowledge-workers (Nonaka, 1991; Zhang et al., 2013). More specifically, where if

environments are pruned and where knowledge is managed strategically this can generate increased knowledge-worker productivity. Hence, the proposed hypothesis is as follows:

Hypothesis 3a: *Knowledge management behavior will have a positive impact on knowledge-worker productivity.*

In taking the view that knowledge-workers are people, it is then important to consider not just human behaviors, but also human attitudes. To encompass both human characteristics, this study explores the attitude of affective commitment. An employee with affective commitment has an emotional tie to the organization through involvement and membership (Allen et al., 1990). An individual who is committed to their organization and who has an emotional connection, such as trust, with their colleagues and supervisors are more likely to engage in knowledge sharing (Jarvenpaa et al., 2001; Martin-Perez et al., 2015). Knowledge-workers with affective commitment are also more likely to consider organizational goals as their own (Shamim et al., 2019). As posited, through knowledge-oriented leadership guided processes and routines, knowledge-workers will have a foundation to engage in knowledge management behaviors, which can support in their own productivity to reach individual and firm goals (Sahibzada et al., 2022a; Sahibzada et al., 2022b; Shamim et al., 2019). However, attitudes can either positively or negatively impact the success of knowledge initiatives and the engagement of knowledge management behaviors (Kim, 2021). An individual with affective commitment is more inclined to exhibit positive emotions towards knowledge management behaviors because their basic psychological needs, such as membership, are fulfilled (Mahdi et al., 2014; Shamim, 2019). Hence, the proposed hypothesis is as follows:

Hypothesis 3b: *When affective commitment is present, the relationship between knowledge management behavior and knowledge-worker productivity will be stronger.*

Leaders play a crucial role for the overall well-being of their knowledge-workers. As a result, their behaviors can indirectly and directly influence either positive or negative behaviors from employees (Donate et al., 2015; Shamim et al, 2019; Zia, 2020; Sahibzada et al., 2020a; Ahmed et al., 2021). For example, abusive leadership behavior can lower employee satisfaction and commitment levels as well as overall performance (Ahmed et al., 2021). Similar to the effects of abusive management behaviors, positive leadership behaviors can also have a direct effect on knowledge-workers. Through the combination of both transformation and transactional leadership, managers and supervisors can directly influence knowledge-workers and their productivity (Donate et al., 2015). For example, through motivation, open communication, and the sharing of innovative ideas, transformational leadership can inspire knowledge-workers to achieve goals in a timely manner, work towards upholding expected standards as well as carrying out tasks in new and creative ways (Donate et al., 2015; Sahibzada et al., 2020a). In addition, through the transactional leadership style, rewards and constructive feedback are provided to directly influence worker productivity (Donate et al., 2015; Sahibzada et al., 2020a). Hence, the proposed hypothesis is as follows:

Hypothesis 4: *Knowledge-oriented leadership will have a positive impact on knowledge-worker productivity.*

3.3 Chapter Summary

To summarize, this chapter has explained and shown (Figure 4) the study's research framework, as well as provided an understanding of the core guiding theory, and lastly laid out

the relationships to be tested. There are five propositions to be tested where the researcher believes that each relationship will have a positive result based on prior research. However, the results may not be as expected because the constructs, which make up the study's proposed conceptual framework have not yet been tested in this makeup, nor have these constructs been tested on a global basis within the insurance brokerage industry in the pursuit of capturing transient advantages. The propositions will be tested, and the methodology in doing so will be explained in Chapter Four.

Chapter Four – Methodology

4.1 Introduction

Chapter four discusses the research paradigm and presents the methodology exercised to collect and analyze the data for exploring the research questions. Further, this chapter will assess the research design and qualitative and quantitative methods. This chapter will describe and explain the strategies used in the sampling design, the data collection procedures, as well as the construction for the data analysis.

4.2 Research Paradigm and Philosophy

The research paradigm and philosophy are essential elements as they set the course of the whole research project. For this study, a paradigm is defined as “the consensual set of beliefs and practices that guide a field” (Morgan, 2007, p. 49). Research philosophy “informs us of the nature of the phenomenon examined (ontology) and methods for understanding it (epistemology)” (Van de Ven, 2007, p. 36). According to Van de Ven, (2007) and Easterby-Smith et al., (2018) the rational of understanding and communicating one’s philosophical underpinnings is important for two reasons. The first being that this allows the researcher to formulate the design of the research by choosing appropriate techniques for collecting and analyzing data as well as limitations. The second reason being that through this understanding, it offers the researcher the opportunity to adapt existing knowledge to introduce new ideas related to the research design. Essentially, through the establishment of a sound research philosophy to underpin methodological choice, research strategy, data collection techniques and analysis procedures affords for a credible research project.

Accordingly, it is fundamental to consider both the ontological and epistemological discourse (Saunders et al., 2015) because philosophical underpinnings are always involved in our methodological choices (Gill et al., 2010) whether we realize this or not. Understanding an ontological and epistemological approach is the gateway to understanding how we believe the research question can be investigated. Failure to connect philosophical matters such as theory and data, can negatively affect the quality and validity of the research (Easterby-Smith et al., 2018). Therefore, it is also important for the researcher to understand their own philosophical underpinnings by reflexively engaging to become aware of how one's own thinking can influence or motivate research objectives and processes (Gill et al., 2010; Saunders et al., 2015). Taking into consideration the way we think the world is (ontology) and what we think can be known about it (epistemology), it is first through the combination of these various assumptions that allows for the exploration of the broader shared philosophical map.

Through the publishing of his work, Kuhn (1962) introduces the concept of paradigm where its popularity quickly took hold (Morgan, 2007). Kuhn's definition of paradigm can be understood as "a regulative framework of metaphysical assumptions shared by members of a given community" (Kuhn, 1970, p. 175). While leading the way forward, it must be mentioned that his work did and still does cause controversy due to the breadth of his use for the concept (Johnson et al., 2000; Morgan, 2007; Blaikie, 2010). Authors such as Morgan (2007) have continued Kuhn's work to highlight the different ways the concept of paradigm is used in research, which can be viewed in Table 9 (p. 51).

Table 9: Four Versions of Paradigms

	Paradigms as Worldviews	Paradigms as Epistemological Stances	Paradigms as Shared Beliefs in a Research Field	Paradigms as Model Examples
Defining Characteristics	All-encompassing perspectives on the world	Ontology, epistemology, and methodology from philosophy of knowledge	Shared beliefs about the nature of questions and answers in a research field	Relies on specific exemplars of best or typical solutions to problems
Place in Kuhn's Work	Implicit	Directly discussed but not favored	Directly discussed and favored	Directly discussed and favored
Place in Social Sciences	Common as nontechnical usage	Currently dominant version	Relatively uncommon	Largely absent
Advantages	Recognizes role of personal experience and culture in science	Relies on well-known elements from philosophy of knowledge	Can be studied by examining the work of actual researchers	Very explicit, concrete
Disadvantages	Too broad, little direct relevance to research	Broad approach to knowing, less direct connection to research	Usually describes smaller research groups, not whole disciplines	Very narrow, limited applications
Place in Combining Methods	Little explicit use	Major impact	Minor impact	Little explicit use

Source: Morgan, 2007, p. 51

This study views the concept of paradigms through the worldview perspective from a community of scholars' perspective (Morgan, 2007; Denscombe, 2008; Creswell et al., 2018). Following the understanding that researchers share a consensus in specialty areas about which questions are most purposeful and which approaches are most suitable in answering these questions. According to Morgan, the worldview perspective from a community of scholars' perspective was the version of paradigm that Kuhn (1970) advocated when discussing shared beliefs in a research field (Morgan, 2007; Creswell et al., 2018). The most common paradigms in business research through the worldview lens can be determined as displayed in Table 10, which was adapted from Creswell et al., 2018, p. 38).

Table 10: Elements of Worldviews

Philosophical Question	Postpositivism	Interpretivism	Pragmatism
Ontology	Singular reality	Multiple realities	Singular and multiple realities
Epistemology	Distance and impartiality	Closeness and subjectivity	Practicality
Axiology	Unbiased	Biased	Multiple stances
Methodology	Deductive	Inductive	Combining
Rhetoric	Formal style	Informal style	Formal or informal

Source: Creswell et al., 2018, p. 38

Worldviews through a community lens has been chosen as the guiding paradigm for this research, in that this study will follow the shared beliefs from knowledge management and organizational management literature as well as from the practical influences of the business setting. It is important to consider the business setting along with the academic community, as the problem this study sets out to understand finds itself existing in the practical business setting. With the paradigm determined, the next sections will outline in more detail the ontology and epistemology followed throughout this study.

4.2.1 Ontology

Ontology is concerned with the nature of social reality (Blaike, 2010; Mcauley et al., 2014). For the purpose of this research ontology can be viewed as asking the question of whether or not the phenomenon, which in this case is knowledge management initiatives, exists independently of our knowing it. Based on this question of reality, previous literature has categorized ontological assumptions into two primary assumptions being realist and idealist (Blaike, 2010; Pratt; 2016). While further research has extended ontology assumptions, sometimes also interchanging one term for another, to include subjectivist (Mcauley et al.,

2014), relativist (Moon et al., 2014), and nominalist (Easterby-Smith, 2018). This research will focus on the realist and idealist assumptions outlined by Blaike (2010).

The ontological realist assumption suggests that phenomena and reality exist independently and independently of human minds (Blaike, 2010; Mcauley et al., 2014). The ontological idealist assumption explains that phenomena and reality is a creation or projection of the human mind (Blaike, 2010; Mcauley et al., 2014).

Having an overview of ontological assumptions outlined, the next section will touch on epistemological understandings.

4.2.2 Epistemology

This study takes Blaike's (2010) definition of epistemology stating that, "epistemological assumptions are concerned with what kinds of knowledge are possible – how we can know these things – and with criteria for deciding when knowledge is both adequate and legitimate" (p. 92). In other words, epistemology is the study of how we know when a form of assertion about social reality is justified. Similar to the previous sections, it is also essential to establish epistemological commitments as this will influence the process in which the research will develop and what is understood as warranted knowledge.

To best establish such commitments, the epistemological positions of objectivists and subjectivist should be understood. The objectivist view argues that social reality can be neutrally observed (Mcauley et al., 2014; Saunders et al., 2015). This suggests that objectivism tends to embrace the ontological assumption of realism. The objectivist epistemological approach builds empirical evidence from reality into methodologies to justify the adequacy of theories (Mcauley et al., 2014). This approach also seeks to limit bias in research and in analysis.

The subjectivist view argues that social reality is created from what we perceive or is the consequence of our understanding of the world (Mcauley et al., 2014; Saunders et al., 2015).

This suggests that subjectivism tends to embrace the ontological assumption of idealism. The subjectivist is interested in understanding the causes that can account for different social realities and actors (Saunders et al., 2015). This approach seeks to best understand the implications of reflexivity (Mcauley et al., 2014).

It is through the combinations of ontological assumptions with the participating epistemological assumptions, we can study the three different philosophies which impact business and management research being positivism, interpretivism, and pragmatism (Gill et al., 2010; Saunders et al., 2015; Creswell et al., 2018) which will be discussed in the following section.

4.2.3 Major Philosophies

In this section, three major philosophies are discussed being positivism, interpretivism, and pragmatism. To be clear there are multiple major philosophies, while not exhaustive these include (in alphabetical order) constructivism, critical realism, critical theory, feminism, hermeneutics, phenomenology, postmodernism, and post-positivism. This study explores positivism, interpretivism, and pragmatism in closer detail, ultimately adopting the pragmatist view. Prior literature has come to a consensus that these three philosophies support the research of business, management, and knowledge management studies (Hellström et al., 2001; Fendt et al., 2008; Blaike, 2010; Gill et al., 2010; Marr, 2011; Mcauley et al., 2014; Saunders et al., 2015; Creswell et al., 2018; Rechberg, 2018; Turyahikayo, 2021). Further, the underlying assumption of positivism, interpretivism, and pragmatism have the ability to fit to this study, which will be explained in the next paragraphs.

To best understand the different philosophies for knowledge management we look to the ontological and epistemological make up. Ontology allows for the identification of the research subject, or what is considered to exist and in what form. For example, tacit knowledge

exists in individuals (Rechberg, 2018). Epistemology allows us to determine the research object such as the relationship between knowledge and activity or structure. For example, corporate spaces and IT systems can be considered objects (Rechberg, 2018).

Having this in mind, *positivism* in knowledge management can best be explained as knowledge being an asset and the function to advance individuals, organizations, and society towards enlightenment or competitive strategy (Rechberg, 2018). The positivist philosophy takes the knowledge-based view of a firm meaning that knowledge is an asset which should be utilized for the output of some form of a gain, e.g., competitiveness, productivity, and /or performance (Marr, 2011; Rechberg, 2018; Turyahikayo, 2021). A critique of the positivist approach is through the confrontation that tacit knowledge is held within the individual consciousness (Nonaka, 1994) and that knowledge management finds itself intertwined in a complex social world of human experiences, values, and practices (Rechberg, 2018; Turyahikayo, 2021). Said differently, human beings and knowledge cannot be separated, therefore humans cannot simply be observers of knowledge (Turyahikayo, 2021). It is questioned that knowledge may only exist through these complex social undertakings (Rechberg, 2018). Therefore, it is important to also view the interpretivist assumptions of knowledge management.

Unlike positivism, which is derived from realism, the interpretivist view stems from idealism. *Interpretivism* view on knowledge management suggests that knowledge management exists through self-interpretations and is socially constructed (Williams, 2008; Easterby-Smith et al., 2018; Rechberg, 2018; Turyahikayo, 2021). Therefore, it is also possible that multiple social realities can exist (Rechberg, 2018). For example, the interpretivist believes that the concept of knowledge management came to be through the interpretation of knowledge-workers and that through their knowledge work will lead to firm success (Drucker, 1999; Rechberg, 2018). Humans are a crucial aspect of the interpretivist view because

knowledge is derived from the individual and knowledge can only then be managed through the engagement of individuals with their environment and processes (Nonaka, 1994; Marr, 2011; Rechberg, 2018; Turyahikayo, 2021). Unlike positivism, the interpretivist does not see knowledge necessarily as an asset, but rather as a source that is put into question if it can be managed (Rechberg, 2018). One critique of the interpretivist view is in the judgment of quality of an individuals' knowledge understanding (Turyahikayo, 2021). "It would appear that epistemology and methodological track put into consideration the meaning attached to reality by the subject" (Turyahikayo, 2021, p. 213). Meanings are derived from social actors' interpretations; however, individuals' interpretation of knowledge are not necessarily free from error (Blaike, 2010; Turyahikayo, 2021).

As this research seeks to explore knowledge management where knowledge is considered as an asset of the firm and where it is interpreted that knowledge-workers through their knowledge work can increase firm success, it is best to explore this study outside the bounds of the positivist and interpretivist philosophies. "Knowledge management is intellectually eclectic and has become more elaborate and unrestricted by disciplinary boundaries and diverging assumptions" (Hellström et al., 2001, p. 150). Further, researchers have called for a more practical view on management research (Ghoshal, 2005; Fendt et al., 2008; Marr, 2011). More specifically, Marr (2011) states that it is ironic that organizational theorists' fashion the objectivist approach, which ultimately separates the managers' domain from the work, when in practice "managers pragmatically adopt views of their own knowledge and its relationship to the activities for which they are responsible" (Marr, 2011, p. 188). In this light, this study adopts the philosophy of pragmatism, which will be presented in the section.

It must be noted that the researcher is not pursuing the philosophy of pragmatism because it is deemed as the 'better' philosophy. All philosophies are considered equally

important and bring with them their own essential understanding on the topic of knowledge management. However, a philosophy must be established and pursued in order to develop a credible research project as the philosophical choice underpins methodological choice, research strategy, data collection techniques, and analysis procedures. In this light, pragmatism is the way forward for this research.

4.2.4 Choice of Philosophy – Pragmatism

The aim of this study seeks to explore a social phenomenon concerning knowledge management initiatives and its impact on individual knowledge-worker productivity. In this sense, there is a need to capture data which can provide a most holistic understanding. Accordingly, pragmatism has been embraced to guide this study. It is in this approach that the influence of philosophical assumptions is given less focus, ultimately loosening restrictions on how research is to be carried out. Pragmatism considers a world that ‘will do’ (Johnson et al., 2000). This meaning that it thrives for functionality and credibility to solve real world situational problems (Rechberg, 2018).

While pragmatism abandons the idea of objective certitude, the pursuit of truth is still very much a focus. Truth must not be substantiated by an empirical claim, but can warrant assertability if it works to support people to better cope with the world or to create better organizations (Johnson et al., 2000; Fendt et al., 2008; Saunders et al., 2016; Rechberg, 2018; Turyahikayo, 2021).

Pragmatism provides an alternative to positivism and interpretivism philosophies in that it aims to explore a question rather than to find causal links. With the focus on the problem instead of on the methods, this requires researchers to use multiple approaches to study the problem (Johnson et al., 2000; Fendt et al., 2008; Rechberg, 2018). The emphasis is on the link between action and truth, not bounding the researcher to any paradigm (Fendt et al., 2008).

Having the research problem at the center and with no commitments to a particular philosophy, this allows for a selection of various methods which will best serve to answer the question at hand (Creswell et al., 2018; Rechberg, 2018).

Being a philosophy committed to practice, the pragmatist sees their own action as a process of arriving at the truth (Fendt et al., 2008). The pragmatic paradigm embraces methods and findings that are appropriate, and which find harmony with the value system held by the researcher as long as this leads to useful results (Johnson et al., 2000; Fendt et al., 2008; Creswell et al., 2018). Through the predisposition of practitioner-based research, the pragmatic paradigm affords social and knowledge management research permission to adopt the mixed quantitative and qualitative approach (Morgan, 2007; Tashakkori et al., 2007).

This study mirrors the existence and significance of physical and social realities in pragmatism (Johnson, 2000) through the collection of objective facts (surveys) and individual thoughts and interpretations (interviews). The ontological assumption is that “social reality is populated by teleological systems that are capable of pursuing different ends in the same environment and maintain and end across a range of contextual conditions (Fendt et al., 2008, p 479). Thus, the complex nature of exploring knowledge management initiatives (processes, behaviors, and attitudes) needs to be understood through the individual knowledge-workers’ physical and social realities.

Unlike positivism and interpretivism where priori knowledge is imposed on the practices in social science (Morgan, 2007), pragmatism focuses on the characteristics and approaches to exploration. Through the lens of pragmatism, “science is a social activity where people intervene and manipulate an intransitive reality which they confront and change on the basis of socially constructed transitive theory through practice” (Johnson et al., 2000, p. 163). It is understood that truth is constantly refined and advanced, thus, to produce useful

contributions, objectivity should be viewed as a design of the inquiring systems (Fendt et al., 2008).

4.3 Research Strategy – Mixed Methods

Creswell (2007) states, the design of any research study begins with the selection of a topic and a research methodology. There are three approaches or methods to conducting knowledge management research where knowledge-based view of a firm has been taken, which includes qualitative, quantitative, and mixed methods (Nemani, 2009).

It must be mentioned that champions of the quantitative and qualitative research paradigms have engaged in passionate debates defending their paradigm of choice (Johnson et al., 2004). Further, through the advocacy of the *incompatibility thesis* (Howe, 1998) both sides suggest that their research paradigms, including the corresponding methods, cannot and should not be mixed. However, in most recent literature the mixed-methods approach has gained support and academic founding (Brewer et al., 1989; Greene et al., 1989; Reichardt et al., 1994; Newman et al., 1998; Tashakkori et al., 1998, 2010; Johnson et al., 2004a; Johnson et al., 2004b; Morgan, 2007; Saunders et al., 2015; Schoonenboom et al., 2017; Creswell et al., 2018; Easterby-Smith, 2018). The goal of mixed methods research is not to replace either paradigm or to downplay the importance of either approach. The aim is to use the strengths from both and minimize the weaknesses of both in single research studies (Johnson et al., 2004a). Further, it can be said that both quantitative and qualitative researchers apply an empirical observation to dissect research problems and questions. To best understand this and both sides, it is beneficial to understand both quantitative and qualitative paradigms within the social sciences.

Quantitative research maintains that social science inquiry should be objective and contends that the observer is separate from the entities that are subject to observation (Johnson

et al., 2004a). The research outcomes can be carried out reliably and determined validly. With intended neutrality at the forefront, quantitative paradigms tend to be guided by ontological realism, objectivist epistemological views, and is determined to seek answers to reality (Johnson et al., 2004a; McCauley et al., 2014; Saunders et al., 2015). The quantitative approach in knowledge management is more so concerned with the development of processes (Hou, 2012). Hence, the quantitative method is focused on utilizing numerical data pulled from survey and historical numerical data for verification purposes (Saunders et al., 2015).

Conversely, qualitative research sets out to understand the elemental explanations for social behavior (Blaikie, 2010). It is argued that multiple-constructed realities can exist, and that the knower and known cannot be separated (Johnson et al., 2004a). With intended empathic qualities at the forefront, qualitative paradigms tend to be guided by ontological idealism, subjectivist epistemological views, and it purports that research is value-bound (Johnson et al., 2004a; Mcauley et al., 2014; Saunders et al., 2015). The qualitative approach in knowledge management is more so concerned with the perception and perspectives of the people involved in the process (Hou, 2012). Hence the qualitative method is focused on utilizing tools such as interview to generate non-numerical descriptive data (Saunders et al., 2015).

A third method, combining the use of both quantitative and qualitative approaches is the mixed methods approach (Creswell et al., 2018). As mentioned, this approach has gained significant attention in the last few decades. While seemingly straightforward, it has been suggested that the mixed methods approach should be differentiated and is defined as research comprising of at least one method from both qualitative and quantitative approaches (Johnson et al., 2004a; Creswell et al., 2018).

By taking the knowledge-based dynamic capabilities view of the firm, it is assumed that knowledge is within the domain of human action. In order to best capture a holistic view,

this study explores both the process itself and the knowledge behaviors through a mixed-methods approach. The mixed-method approach is believed to grant a deeper understanding of an inquiry by adding words to numbers and contrariwise (Creswell et al., 2018). Communicated earlier, the mixed methods approach contributes to strengthening the weaknesses of each research method (Johnson et al., 2004a). The mixed-methods approach goes beyond this by allowing the researcher to also gain a new and/or deeper understanding of the inquiry through the intentional joint venture of both methods. Creswell et al., (2018) suggests that through the collaboration of both methods, new knowledge becomes attainable which might not have been through traditional methods alone.

A benefit of the mix methods design is that it affords the researcher the ability to address an array of research questions regarding a topic. Said differently, each method has its strengths in addressing certain questions as the research question illuminates the method (Blaikie, 2010; Schoonenboom et al., 2017). The mixed-methods design also allows for flexibility on how the research questions will be addressed. For example, if the study will be a qualitatively driven, a quantitatively driven, or an equal-status mixed methods study (Schoonenboom et al., 2017). The researcher also has the flexibility of timing. This having two aspects, the first being simultaneity, referring to if the components are to be implemented concurrently, sequentially, or a combination of both in a multiphase design (Schoonenboom et al., 2017; Creswell et al., 2018). The second aspect being dependence, referring to whether one component is dependent on the results of an earlier component (Schoonenboom et al., 2017; Creswell et al., 2018).

This study will use a mixed methods design to better understand both knowledge process and social behavior entangled within the central problem. Due to the complex human nature of knowledge and where process is also a key element, it would be insufficient to examine this study through a single method. It is through the combination of both qualitative and quantitative methods with a pragmatist view that this study can aspire to generate a deeper

meaning or build new knowledge which might not have been possible through one method alone (Creswell et al., 2018).

4.4 Research Design – Exploratory Sequential Design

The research design provides a road map for the collection and for the analysis of data (Myer, 2013). It provides the statement and justification for the technical decisions embraced in the planning and carrying out of the research project (Blaikie, 2010). The type of information that is needed depends on the research design, which is influenced by how to best answer the research question (Blaike, 2010; Myer, 2013).

As previously communicated, because this study takes a knowledge-based dynamic capabilities view of the firm, it is assumed that knowledge is to be held within the domain of human action. Therefore, knowledge is a necessary social construction (Grant, 1996). In this sense, to capture both the realities of the knowledge processes itself and the social knowledge behaviors and attitudes within the knowledge process, this study takes a pragmatic stance by using a mix methods approach.

In the design of mixed methods studies, three features need to be considered which are priority, implementation, and integration (Schoonenboom et al., 2017; Creswell et al., 2018). Priority refers to if the study will be qualitatively driven, quantitatively driven, or equal-status mixed methods study (Schoonenboom et al., 2017; Creswell et al., 2018). Implementation refers to if the components are to be implemented concurrently, sequentially, or a combination of both in a multiphase design and if one component is dependent on the results of an earlier component (Schoonenboom et al., 2017; Creswell et al., 2018). Integration refers to the point in which the qualitative and quantitative components are pulled together and fused (Schoonenboom et al., 2017; Creswell et al., 2018).

Elaborating on Hammersley’s (1996) types of mixed methods research, Creswell et al., (2018) classify three major types of mixed methods studies which are convergent (triangulation), explanatory sequential, and exploratory sequential. The three classifications can be found summarized in Table 11.

Table 11: Typology of mixed-method designs

Design	Key Features
Convergent (Triangulation)	Quantitative and qualitative data of equal weight within the same time frame
Explanatory Sequential	A quantitative phase where the results need elaboration or explanation through a follow up qualitative phase
Exploratory Sequential	An initial qualitative phase which is followed up with a quantitative phase

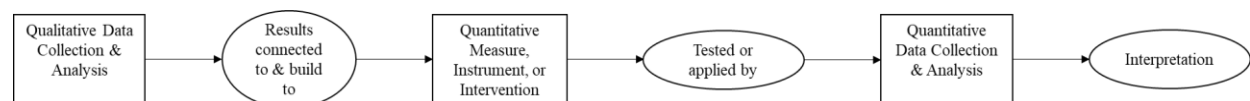
Source: Creswell et al., 2018, p. 59

The convergent design is when quantitative and qualitative data carry equal weight and are performed within the same time frame (Blaikie, 2010). The basic idea is to compare the quantitative and qualitative data results in an effort to attain a more complete understanding of the problem (Creswell et al., 2018). Further, the essence of convergent design is to support in validating one set of findings with the other (Creswell et al., 2018).

The explanatory sequential design is the most straightforward of the designs and occurs in two distinct phases (Blaikie, 2010; Creswell et al., 2018). Typically, this mixed-methods approach begins with the collection and analysis of quantitative data. Following the quantitative phase, the collection and analysis of qualitative data is carried out to explain and/or expand on the first phase (Blaikie, 2010; Creswell et al., 2018). The qualitative phase is designed so that it takes in consideration the results from the quantitative phase (Creswell et al., 2018).

Similar to the explanatory design, the exploratory design also uses sequential timing (Blaikie, 2010; Creswell et al., 2018). However, unlike the explanatory design, the first phase of the exploratory design begins with the collection and analysis of qualitative data (Blaikie, 2010; Creswell et al., 2018). It is from the results of this first phase that the researcher conducts a design or development phase to build the quantitative measure (Creswell et al., 2018). In the final stage, the researcher tests the developed quantitative measure (Creswell et al., 2018). The results from the quantitative phase can be interpreted in two ways, the first being that the quantitative results build on the initial qualitative results or the second being that the quantitative results provide a holistic understanding because they are grounded in the qualitative feedback (Creswell et al., 2018). Figure 5 provides a visual of the exploratory sequence.

Figure 5: Adapted Exploratory Design



Source: Creswell et al., 2018, p. 66

The exploratory sequential mixed methods design comes with advantages. The separate phases allow for straightforward description, implementation, and reporting. Further, it is also easily applied to multiphase research studies and single study findings (Creswell et al., 2018).

In mixed method research, the integration or mixing of both quantitative and qualitative data is essential (Creswell et al., 2018). The mixing of data can happen at different points within a study, but must occur at some point (Creswell et al., 2018). This study follows the mixed methods typology of exploratory sequential design where one study strand is embedded into the other. In the qualitative phase, semi-structure interviews were gathered and utilized to build the appropriate knowledge management framework. Once the knowledge management

framework was developed, the framework was tested in the quantitative phase utilizing the survey method.

The method employed in this study to link theory and data is abduction, a fundamental component of the pragmatic approach model as depicted in Figure 6 (Morgan, 2007).

Figure 6: Pragmatic methodological framework in comparison to traditional approaches

**A Pragmatic Alternative to the Key Issues in
Social Science Research Methodology**

	Qualitative Approach	Quantitative Approach	Pragmatic Approach
Connection of theory and data	Induction	Deduction	Abduction
Relationship to research process	Subjectivity	Objectivity	Intersubjectivity
Inference from data	Context	Generality	Transferability

Source: Morgan, 2007, p. 71

Abduction, also known as abductive reasoning, is a fundamental concept in the realm of logic and reasoning. It is often described as a form of "explanatory reasoning," wherein individuals construct concise and coherent explanations to make sense of observed phenomena (Magnani and Bertolotti 2017; Douven 2021). However, the scope and interpretation of abduction have not been without controversy, leading to ongoing debates and variations in its definition within academic circles (Magnani and Bertolotti 2017; Douven 2021).

Gabbay and Woods (2005) have significantly contributed to this discourse by challenging the conventional understanding of abduction. They argue that abduction does not necessarily entail the creation of explanatory narratives and can, in fact, serve non-explanatory purposes. This provocative stance highlights the complexities surrounding the concept of abduction, as scholars grapple with its multiple dimensions and potential applications (Gabbay and Woods, 2005).

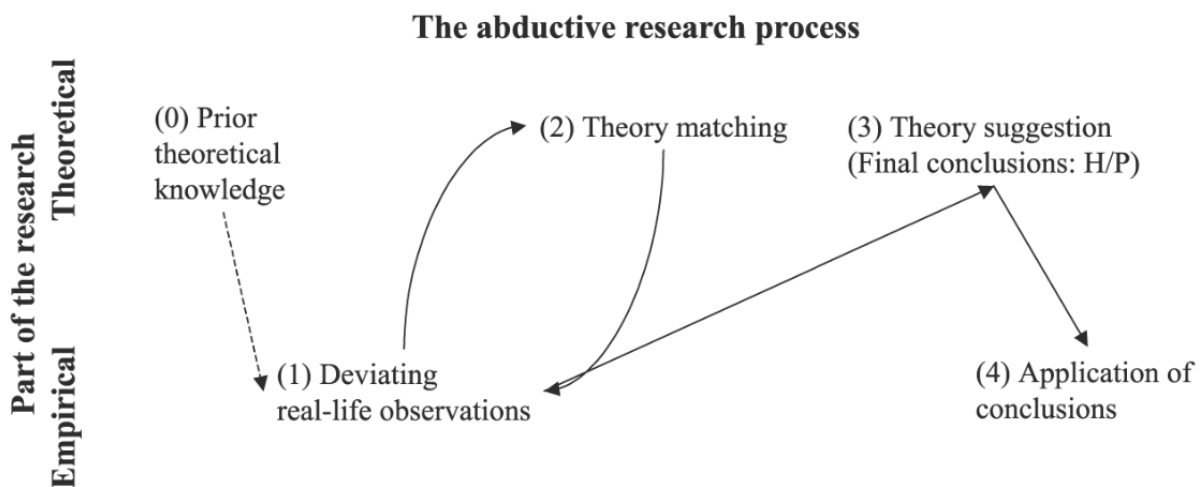
This lack of consensus has given rise to various interpretations of abduction, each advocated by prominent philosophers. Among these philosophers, Gabbay and Woods,

Harman, Mirza et al., Magnani and Bertolotti, and Schurz have all contributed to the growing body of literature on abduction (Park 2015).

For the purposes of this thesis, the focus narrows down to Charles Sanders Peirce's conception of abduction. Notably, Peirce, who is not only recognized as the originator of the term "abduction" (Douven 2021), but is also revered as the "father of pragmatism" (Mirza et al. 2014), has provided a significant framework for understanding abduction. Peirce's abduction revolves around the generation of hypotheses to provide insight into observed phenomena (Magnani and Bertolotti, 2017).

Peirce's contribution extends to his argument regarding the relationship between abduction, deduction, and induction and eventually redefined these forms as "different stages in inquiry" (Park 2015, p. 228). Kovács and Spens, (2005, p. 139) illustrate this in Figure 7, which shows that abductive reasoning begins with a deviating observation and concludes in deductive hypotheses or proposition while induction reasoning facilitates to elucidate these conclusions empirically.

Figure 7: The abductive research process



Source: Kovács and Spens, 2005, p. 139

Guided by this nuanced understanding of abduction, this study has developed an approach that encompasses Peirce's identified "different stages in inquiry" (Park 2015, p. 228). This approach, informed by Peirce's insights and complemented by Kovács and Spens (2005) and Mirza et al. (2014), underpins the methodology employed in this study, serving as a critical foundation for research in the field.

Abduction: In the initial phase of my research, the researcher embarked on the process of abduction, which involves drawing from existing knowledge in both professional and academic spheres to establish the foundation for the study's hypotheses. Working through prior knowledge retroductively while revisiting the literature, a conceptual model was constructed as detailed in Chapter 3 aimed at elucidating the underlying and meaningful patterns of knowledge management on knowledge-worker productivity. Subsequently, these initial propositions were subjected to qualitative analyses as outlined in Chapter 4, marking the transition to the second stage of the research, the inductive phase.

Induction: Induction, a mode of reasoning, which was pursued in shaping the findings of this study, can be described as a more robust form of inference compared to hypotheses (Park 2015, p 224). By conducting such explanatory research, this allowed the researcher to better understand the underlying problem in depth, ultimately permitting for the creation of hypotheses. As outlined by Mirza et al., (2014), induction empirically explains the consequences of abduction, allowing then for inference of future developments and effective planning.

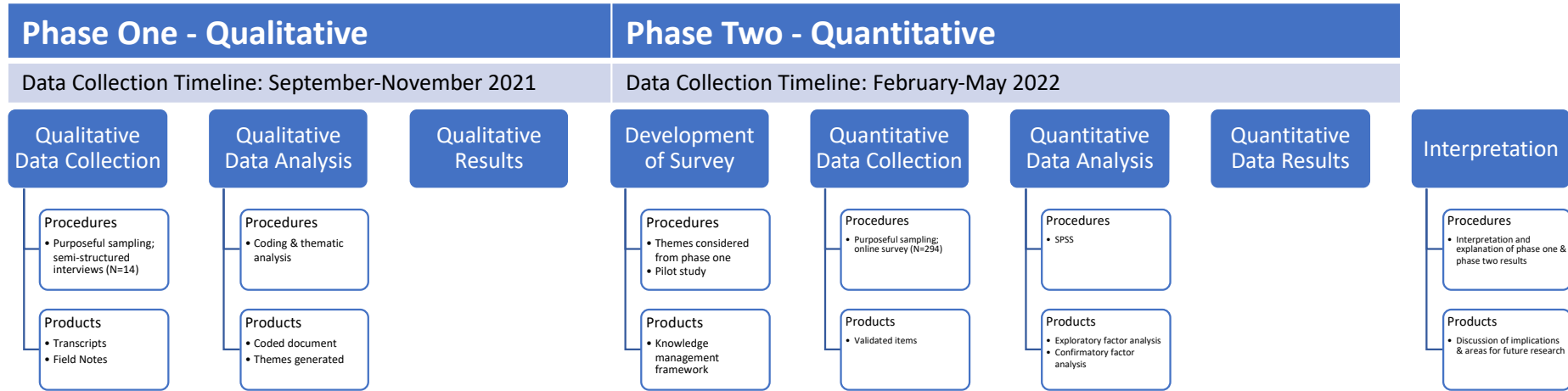
This study did not rely solely on the certain conclusions drawn from the inductive process applied to the qualitative data. The insights and data drawn from the inductive phase

supported in the formation of the hypotheses outlined in Chapter 3, which were then tested in the deductive phase of the research.

Deduction: Deduction played a crucial role in the examination phase of this study, where each hypothesis was rigorously tested based on its respective premise. The Partial Least Squares Structural Equation Modeling (PLS-SEM) technique was employed to analyze the path model, which was originally derived from the research framework introduced in Chapter 3. The primary purpose of deduction with the three stages of inquiry is to offer a coherent and logical rationale for the conclusions derived during the abduction phase (Mirza et al., 2014). By complementing deduction with induction, the conclusions reached in this study address the objectives outlined in Chapter 1.

In this keeping, the two distinct phases, phase one being qualitative and phase two being quantitative (illustrated in Figure 8), and the data collection methods in each phase will be disclosed in further detail in the next sections of this chapter.

Figure 8: Research Design – Exploratory Sequential Mixed-Methods



Source: Author (2024)

4.5 Phase One – Qualitative

The content of section 4.5 explains the phase one of the exploratory sequential mixed methods research, being the qualitative approach. In this section, details regarding the sampling and participant selection, interview procedure, pilot testing, reliability and finally, the data coding and analysis process will be provided.

4.5.1 Research Methods – Semi-Structured Interviews

Whether unstructured or semi-structured, interviewing has become the most common method utilized within the social sciences and within business and management research to collect qualitative data (Blaikie, 2010; Myers, 2013). The difference between semi-structured and unstructured interviews is that with semi-structured interviews there is utilization of pre-formulated questions (Myers, 2013). Unstructured interviews give free rein to the interviewee to speak about the topics they feel important and there is usually no set time limit (Myers, 2013).

The primary qualitative research method chosen for this study is the utilization of semi-structured interviews. The advantage of the semi-structured method is that there is consistency across interviews (Myers, 2013). However, a disadvantage to semi-structured interviews could be that the researcher misses important side information by sticking too close to the pre-determined questions. Having this in mind, the researcher made sure to practice listening skills and to pause as often as possible and to allow time for the interviewee to speak to anything else that might have been on their minds. The researcher also pursued questions outside of the set pre-determined questions which came up during the course of the interview. The researcher also benefited from the fact that all interviewees were working within the same department as the researcher so that a basic level of trust was pre-established. With a basic level of trust, interviewees were less cautious and more open to sharing their insights.

4.5.2 Sampling and Selection of Participants

Qualitative methods are intended to attain a depth of understanding of the topic at hand. In this vein, it is essential for later analysis to define the selection of data and the data sources (Miles et al., 1994; Blaikie, 2010). In the effort to obtain a deeper understanding of the research question, the choice to utilize a sample of a population was made for this study. This allowed the researcher to define and narrow down the sample which ultimately allowed for a focused interview process.

The population consisted of around 45,000 individuals working for a large multinational enterprise, having operations in 130 countries. This number of individuals employed by the multinational enterprise cannot be precisely defined, as employees decide to join or leave the organization on a consistent basis. The population was narrowed down to a specific sub-division to only include individuals working within the Credit Specialties sub-division. To achieve a global view from multiple hierarchy levels within the sub-sector, the researcher focused on specific regions and employee levels.

From the approximate 3,000 people within the credit specialties subsector, the range of language, experience, responsibility, and level of education is vast. Therefore, the literature was consulted to construct a fitting sampling methodology to guide in the selection of interview participants from the existing population. Based on the literature and on the research questions of this study, quota and convenient sampling was utilized.

The Credit Specialties department at Marsh is active globally. To include the global aspect in the sampling, stratified sampling was used. Two participants from each Marsh defined geographical region were chosen for interview. The cluster sampling includes Asia Pacific, Europe, Latin America, MEA, and North America. Due to the diverse levels in education, responsibility, and experience, a combination of purposive and snowball sampling was utilized.

In a large global organization, it is difficult to have a network which allows you to have access to the necessary population of the study. The researcher utilized snowball sampling to retain access to specific employees. Purposive sampling was utilized in combination of snowball sampling to differentiate between client facing colleagues and managers. Client facing colleagues can be defined as junior employees who have a maximum of five years of experience. Managers can be defined as colleagues who have over five years of experience and hold positions which carry additional responsibility. One client facing colleague and one manager colleague were chosen per each Marsh pre-defined region. Purposive sampling supported the differentiation between client facing and manager colleagues and snowball sampling supported access to the larger network within the organization.

The aim was to obtain two interviews from each region consisting of participants from varying hierarchical levels (Moutinho et al., 2011, p.38). While the sampling structure sought out was ambitious, it was also understood that this effort could have been insufficient to achieve saturation. Therefore, a list of additional interviewees from each region was collected prior to the interviewing process to make sure that enough respondents would be available to reach a point a saturation. The number of interviews that lead to saturation depends on the interviews themselves and the skillset of the interviewer rather than on the number of participants (Mason, 2010). Further, academic literature states that saturation on a conceptual level is useful, however, this provides little guidance on the number of participants one should interview. The range can be anywhere from five to twenty-five interviewees (McCracken, 1988; Creswell, 2012; Morse, 2015).

4.5.3 Interview Guide Development

The qualitative research interview is not based on a formal set of questions which are to be read out word-for-word, but rather an interview guide is created of topics which should

be addressed during the interviews (Cassell et al., 2014). The topics can and should be sourced from research literature, the interviewer's own personal knowledge and from informal preliminary work (Cassell et al., 2014). Preliminary work can include discussions with people who have experience in the business area or experts in the specific research field (Cassell et al., 2014). Further, an interview guide is not set in stone, the guide can be adapted and developed over the course of the interview period, for example by dropping or adding questions (Cassell et al., 2014)

The interview guide for this study can be found in the appendices labeled as Appendix 1. The design of the interview is semi-structured in nature and was constructed based on the literature to meet the aims of the research. The interview guide started with a 'warm-up' section where the participants had the opportunity to introduce themselves and speak to their working experience. Following the 'warm-up', the researcher introduced the questions which pertained to the literature. These questions were open-ended, allowing for the interviewee to answer freely. The open-ended questions pertaining to the literature were arranged according to the following themes: 1) knowledge-oriented leadership 2) knowledge process capabilities 3) knowledge management behavior 4) affective commitment 5) knowledge-worker productivity. In this sense, the interview covered the key knowledge management topics when considering the study's research questions. It must also be noted that this study utilized two different research guides, one for client facing employees and one for management level employees. The questions were essentially the same, the only difference was that the questions were asked from a different point of view. For example, if we look at the first questions which was created based off the knowledge-oriented leadership literature, the framing of the question is based around the position of the person within the organization. For ease, the questions have been listed here within. The goal was to make the interview guide as specific and relatable to each position as possible, in turn allowing for ease in answering the questions.

Managerial Position:

4. *In your personal view, what are some ideal qualities a leader/manager in your organization should have?*
 - a. *Is there an example of a time when you felt that you exemplified leadership qualities?*
 - b. *Is there an example of a time when you felt that someone else exemplified leadership qualities?*

Client Facing Position:

4. *In your personal view, what are some ideal qualities a leader/manager in your organization should have?*
 - a. *Is there an example of a time when you felt that someone exemplified strong leadership?*

4.5.4 Interview Procedures

The interview data collection phase included a pilot study which consisted of eight participants. These were exploratory semi-structured interviews where participants consisted of colleagues and market leaders within the surety and consulting industry. The exploratory interviews were carried out in September of 2020, exactly one year before the interview process took place for this study. The exploratory interviews allowed the researcher to mainly assess the feasibility of the study as well as establish a foundation in the literature.

With the feasibility tested and by having a foundation within the literature, the interview procedure for this study could be established and carried out. As previously discussed, an interview guide was created to conduct semi-structured interviews. Because the interview

period was conducted during the Covid-19 pandemic, all interviews were conducted online via Zoom. The interview period was between September and November 2021. During this time ten interviews were carried out. A summary overview of the informants can be found in Table 12 below. Before each interview, each participant was well informed about the aims and objectives of this study. Each participant understood that their information was to be kept strictly confidential and that at any point during or after the interview they could request to break off the interview or to have their interview deleted entirely and removed from the research process. Before the start of the interview each participant consented to the interview as well as to having the interview recorded. Anonymity in all interviews was guaranteed which should also aid in open discussion (Saunders et al., 2015).

The interview discussions ranged between thirty to sixty minutes in dialogue depending on the participant. The interview discussions were guided by the interview guide listed in Appendix 1, but were open to further discussions outside of the researcher's guide. Because the interviews took place via Zoom application, the participants were free to choose where they would take the interview, which was usually at their homes or in the office setting. As mentioned, the interviews were recorded and immediately transcribed following the interview utilizing a transcription service. While carry out the interview, detailed notes were taken by the researcher to ensure the accuracy of the data recorded.

While an interview guide was created, the interviews were adapted to each participant and their responses. Questions from the interview guide were asked, but sometimes not in any specific order or topics outside of the guide were discussed. Participants were encouraged to take their time, ask questions, have questions repeated, and to speak openly. Probes were created to support in creating an open dialogue around key themes utilizing the researchers own working experience. For example, if a participant elaborated on types of company processes, the researcher understood the context of such firm processes and could ask for more

details surrounding such scenarios. Follow the collection and transcription of data, the coding and analysis process could take place.

Table 12: Table of informants

Participant	Gender	Geography	Job Role	Years of Experience
Participant 1	Female	Europe	Client Advisor Credit Specialties	2 years
Participant 2	Male	Europe	Head of Credit Specialties Germany	25 years
Participant 3	Male	Latin America	Digital Product Owner, International Surety Practice	6 years
Participant 4	Male	Asia Pacific	Client Advisor Credit Specialties	2 years
Participant 5	Male	North America	Senior Client Advisor Credit Specialties	4 years
Participant 6	Male	Latin America	New Business Development Leader Brazil Surety	15 years
Participant 7	Male	North America	Global Surety Leader	33 years
Participant 8	Male	Asia Pacific	Head of Surety Asia	17 years
Participant 9	Female	Africa Middle East	Head of Surety and Political Risk Africa	25 years
Participant 10	Male	Africa Middle East	Senior Client Advisor Credit Specialties	8 years

Source: Author (2024)

4.5.5 Data Coding and Analysis

Thematic analysis is employed as the primary method of analysis for the qualitative data of this study. Best described by Braun et al., (2006, p. 79), “thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data”. The patterns are organic with minimal organization, but are rich in detail (Braun et al., 2006). Patterns or themes capture the essence of the data in relation to the research question. Braun et al., (2006) establish a guide through six phases that form thematic analysis which the researcher employs to identify themes. The six phases are illustrated in Table 13.

Table 13: Phases of thematic analysis

Step 1	Data familiarization	Transcribe data, read and re-read data and note initial ideas
Step 2	Initial coding	Code features of the data in a systematic fashion and collect data relevant to each code
Step 3	Theme exploration	Collate codes into potential themes and collect data relevant to each theme
Step 4	Theme review	Generate a thematic ‘map’ of the analysis
Step 5	Defining themes	Refine and define themes and the overall story
Step 6	Report production	Select extract examples and relate back to the research questions and literature to produce scholarly report

Source: Braun et al., 2006, p. 87

4.5.5.1 Data Familiarization

The data familiarization phase began with having all interviews transcribed utilizing the Rev transcription service, a third-party source. Once transcription was complete, the researcher read through the transcripts and compared them to the original interview notes to ensure accuracy. This was followed by repeated readings of the transcripts to become intimately familiar with the data.

During this phase, the researcher actively sought meaning and patterns within the data (Braun et al., 2006), identifying topics such as trust in knowledge systems, collaboration and productivity, emotional engagement, the role of leadership, and organizational knowledge processes. These patterns were then translated into a list of initial ideas that reflected core themes connected to the research questions, particularly those centered around knowledge-oriented leadership, affective commitment, knowledge-worker productivity, and the quest for transient advantages in dynamic environments.

4.5.5.2 Initial Coding

After familiarization, the researcher uploaded each transcript into NVIVO software for systematic coding. At this stage, initial codes were generated that captured meaningful segments of the data, as suggest by Braun et al., (2006). This coding process was conducted with a focus on key theoretical constructs from the research model – such as affective commitment’s influence on knowledge management behavior, knowledge-oriented leadership’s impact on knowledge-worker productivity, and how knowledge-worker productivity contributes to transient advantages. For example, codes like “emotional engagement in work,” “leadership influence,” and “knowledge-sharing behaviors” emerged from participants’ discussions, providing early insight into how affective commitment and leadership shape productivity and knowledge management behavior.

The codes were then organized and categorized to support the creation of first-order themes (Miles et al., 1994; Braun et al., 2006). These initial codes represent the building blocks for deeper exploration, as shown in Table 14.

Table 14: Example from Coding Phase

Data Extract	Coded For
“Our industry is resilient because of the human beings, because of the professionals and the specialists that we have”	<ol style="list-style-type: none">1. Importance of people and their knowledge2. Expert knowledge3. Industry resilience for transient advantages due to human impact
“I know that when people leave or when people will retire or just leave the firm, a lot of that institutional knowledge goes with it”	<ol style="list-style-type: none">1. Knowledge behavior2. Knowledge transfer from human to firm3. Lack of knowledge processes

Source: Author (2024)

4.5.5.3 Theme Exploration

With the initial codes in place, the researcher moved on to identifying first-order themes by grouping similar codes and examining how they related to the core concepts in the research model. Codes related to leadership behaviors and employee commitment, for instance, were collated into broader themes such as “knowledge-oriented leadership” and “affective commitment’s role in knowledge sharing.” This phase required analyzing how these themes tied back to theoretical constructs like the influence of affective commitment on knowledge management behavior and leadership’s impact on knowledge-worker productivity.

At this stage, mind maps were utilized within NVIVO to visualize the relationships between codes and themes, which helped in identifying larger aggregated dimensions – such as “knowledge-worker productivity” and “transient advantages” – that integrate several first order themes. For example, first-order themes such as “employee emotional engagement,” “leadership role in decision-making,” and “knowledge dissemination practices” were grouped to form an aggregated dimension of “knowledge-worker productivity.”

4.5.5.4 Theme Review

In the theme review phase, the researcher evaluated candidate themes to ensure coherence and validity. At this stage, themes like “leadership engagement in knowledge practices” were examined in relation to both the coded data and the overall dataset. This process helped to refine the thematic map and ensure that each theme captured meaningful insights relevant to the key concepts of the research model.

During the theme review, some codes were found to overlap with others, which led to themes such as “affective commitment” being further refined to emphasize its role in influencing knowledge management behaviors like knowledge-sharing and collaboration. Similarly, themes related to leadership were refined to highlight how knowledge-oriented

leadership fosters productivity and ultimately the achievement of transient advantages in dynamic environments.

4.5.5.5 Defining Themes

In phase five, the researcher worked on further defining and refining of the themes to connect them more closely with the research questions and theoretical framework. Themes such as “knowledge-oriented leadership” were analyzed in terms of their role in facilitating productivity and driving transient advantages through the strategic management of knowledge resources. Likewise, themes related to “affective commitment” were explored as they related to fostering higher engagement in knowledge management behaviors, ultimately impacting knowledge-worker productivity.

The refinement process enabled the researcher to assign more specific names to each theme that encapsulated their role in the research model, ensuring that the connections between leadership, commitment, behavior, and productivity were explicitly clear.

4.5.5.6 Report Production

Finally, in the report production phase, the researcher integrated data extracts with the refined themes to construct a coherent narrative that links the theoretical concepts to the empirical findings as outlined in subsections 4.5.5.6.1, 4.5.5.6.2, 4.5.5.6.3. The themes that emerged – such as “affective commitment on behavior” “leadership on productivity” and “knowledge-worker productivity on transient advantages” were utilized to interpret how the relationships between these key concepts operate within the framework of the study.

By tying the coded data, first-order themes, and aggregated dimensions to the research model, this study provides a comprehensive analysis of how leadership, affective commitment,

and knowledge-worker productivity collectively contribute to the pursuit of transient advantages in dynamic environments.

Subsections 4.5.5.6.1, 4.5.5.6.2, 4.5.5.6.3 provide a condensed view of the links between theoretical concepts and empirical findings which will be discussed in more detail in Chapter 5.

4.5.5.6.1 Affective Commitment and Knowledge Management Behavior

Affective commitment refers to an employee's emotional attachment and identification with an organization (Allen et al., 1990). Through the perceived level of affective commitment employees have, this can impact knowledge management behavior (Martin-Perez et al., 2015). Through the discussions with the participants a few qualities emerged under the categories of Affective Commitment and Knowledge Management Behavior, which include, knowledge sharing and collaboration; employee engagement; and finally, retention of tacit knowledge.

4.5.5.6.2 Leadership and Productivity

According to Kwon (2014), in the current knowledge-based economy, the financial services industry significantly depends on knowledge-workers with strong cognitive abilities, communication skills, and capabilities to manage knowledge. Knowledge-oriented leaders through their behaviors, such as role modeling and incentivization, can directly and indirectly facilitate how knowledge is processed to support the firms' strategy (Piasittanand et al., 2007; Sinshaw et al., 2021; Alghail et al., 2022). Throughout the interview process examples of how knowledge-oriented leadership plays both a direct and indirect role on employee productivity was gathered. Interviewees specifically pointed to the qualities a leader should have, encompassing both transformational and transactional qualities.

4.5.5.6.3 Productivity and Transient Advantages

In industries where knowledge is an asset, the key is leveraging your people and their knowledge for continued advantages. More specifically, where if knowledge is managed strategically this can generate increased knowledge-worker productivity, to ultimately gain transient advantages (McGrath, 2013; Zhang-Zhang, 2022). Transient advantage allows for continual change and evolution rather than fixating and relying on one competitive advantage (McGrath, 2013). To match the VUCA global context businesses find themselves in today, McGrath (2013a) proposed a transient competitive advantage strategy following its predecessors Porter's (1980) competitive advantage and Barney's (1991) sustainable competitive advantage. The key differences separating transient advantage from its predecessor strategies are that (i) the context is no longer defined by industries, but by arenas, and (ii) the goal is no longer to establish structures and systems to maximize value from an advantage, but to maintain fluidity and flexibility to create a portfolio of advantages (Porter, 1980; Barney, 1991; McGrath, 2013a).

The coding findings presented in this section provide valuable insights into the constructs affective commitment, knowledge management behavior, knowledge-oriented leadership, and knowledge-worker productivity. These findings will be further explored and discussed in Chapter Five, where they will be contextualized within the existing literature. Through a comprehensive review of prior research, the interview findings will be examined in light of established theories, allowing for a deeper understanding of their implications and significance in the field of knowledge management.

4.5.6 Trustworthiness, Rigor, and Reflexivity

The qualitative study takes place in the real social world and can therefore have real consequences in peoples' lives. In this keeping, the researcher follows the guidance from prior literature to uphold trustworthiness and rigor and to maintain reflexivity. Understanding the importance of upholding scholarly standards, consideration must be given to trustworthiness. Lincoln et al., (1985), put forward four elements of trustworthiness, being 1) credibility, 2) transferability, 3) dependability, and 4) confirmability. Credibility can be explained as being the value of truth (Miles et al., 1994). It allows others to recognize and understand what is or has been interpreted from the study's participants and their experience (Lincoln et al., 1985). Transferability is the ability to transfer the conclusions to any larger import (Miles et al., 1994). It surrounds itself with the topic of generalizability. Dependability concerns itself with quality control. Quality control consists of whether the research is consistent and if observations are stable (Miles et al., 1994). Lastly, confirmability concerns itself with the question around biases (Miles et al., 1994). The researcher should be focused on confirming that findings are derived from the data.

Several strategies can be pursued to ensure trustworthiness within a study. According to Creswell (2012), qualitative researchers should utilize at a minimum two strategies to ensure trustworthiness. Accordingly, this study ensures trustworthiness through the strategies of triangulation and reflexivity as well as by providing an audit trail.

Triangulation is the utilization of two or more techniques to collect data, or by the combining of qualitative and quantitative research methods in one study (Myers, 2013). To ensure the credibility of the study, the researcher combines qualitative and quantitative research methods to triangulate data. By implementing both qualitative and quantitative methodological practices, the researcher aims to reduce inherent bias, to verify inferences, and to investigate the integrity of the responses collected (Miles et al., 1994). The exercise of the mix method

exploratory sequential design allows for thoughtful comparison of qualitative and quantitative data.

To further reduce researcher bias, reflexivity is adopted and practiced throughout the entire study. Reflexivity refers to the continuous process by which the understanding of reality depends on preexisting knowledge (Gill et al., 2010). In this regard, it is the acknowledgement that knower and knowledge generated cannot be fully independent from one another (Gill et al., 2010). Therefore, the practice of reflexivity is adopted by the researcher to recognize pre-existing knowledge and the (potential) influence said knowledge has or could have had on the study. Reflexivity entails a level of self-awareness to understand how one's own social background, experience, and assumptions affect the research process. Said differently, the principal action is to make the relationship between the researcher and the participants as well as the researcher's influence explicit (Gill et al., 2010). For example, the researcher collected all data from the firm where she is also employed. Therefore, the researcher brings her own organizational specific experiences and inherent biases which need to be continually reflected upon throughout the course of the entire study. The researcher was mindful of their own attitudes, behaviors, experience, and prior knowledge. As previously mentioned, the researcher cannot remove herself completely from the process, but can be aware and mindful as to not force a narrative on to the data and on to the findings.

Finally, the researcher maintained an audit trail shown through the reporting of the methodological and analytic decision making. This allows others to assess the significance of the research. Throughout this chapter specifically, this research has detailed and documented the purpose, the approach to participant selection, the method of data collection, the procedures of analysis, and the interpretation of those findings in the effort to leave an open book for audit. The individual steps are clearly communicated and show techniques utilized to determine the creditability and trustworthiness of data.

1) For example, at the design stage, mixing can be achieved through embedding in which one study strand is embedded into the other. There is also “connecting”, a strategy normally applied at the analysis phase where analysis of one data type triggers a need for the other. The analysis results of quantitative data triggering need for qualitative data to get a comprehensive picture of the phenomenon being investigated.

2) Davenport (2009) argues that adopting multiple perspectives leads to better decisions and robust conclusions, typically overcoming bias and weakness from single method approaches. It is also important to know when a particular decision approach does not apply. For example, analytics is not a good fit when you have to make a fast decision. Almost all quantitative models, even predictive ones, are based on past data, so if your experience or intuition tells you that the past is no longer a good guide to the present and future, you’ll want to employ other decision tools, or at least create some new data and analyses” (Mitchell, 2018, p. 271).

4.5.7 Qualitative Section Summary

The qualitative research phase of this study has provided valuable insights into the intricate dynamics and nuances surrounding the research question. Through semi-structured interviews and thematic analysis, the study was able to unearth and explore the phenomenon in question. However, further exploration using quantitative methods is warranted for several compelling reasons.

First, the qualitative phase has generated a wealth of qualitative data, which while enlightening, does not allow for generalizability to a larger population. By complementing the qualitative findings with quantitative research, it can provide empirical evidence that extends beyond the specific cases examined, offering a broader perspective on the phenomenon.

In addition, the integration of quantitative methods will enable the identification of patterns and correlations that may not be immediately evident from qualitative data alone. The relationships between variables can be quantified, causality can be assessed, and statistical rigor can be applied to the analysis, providing a more robust and objective assessment of the research question.

While qualitative exploration has shed light on the complexities of the research topic, embracing quantitative methods is the logical next step to complete the study. By doing so, generalizability, rigor, and comprehensiveness of the research can be enhanced, ultimately contributing to a more comprehensive understanding of the phenomenon at hand. Therefore, the next section will outline the quantitative research portion of this study.

4.6 Phase Two – Quantitative

The content of section 4.6 describes phase two of the exploratory sequential mixed-methods research, being the quantitative approach. In this section, the reader will find details about the questionnaire development, pre-testing, sampling, methodology for analysis, and validity and reality circumstances.

4.6.1 Research Method – Questionnaire

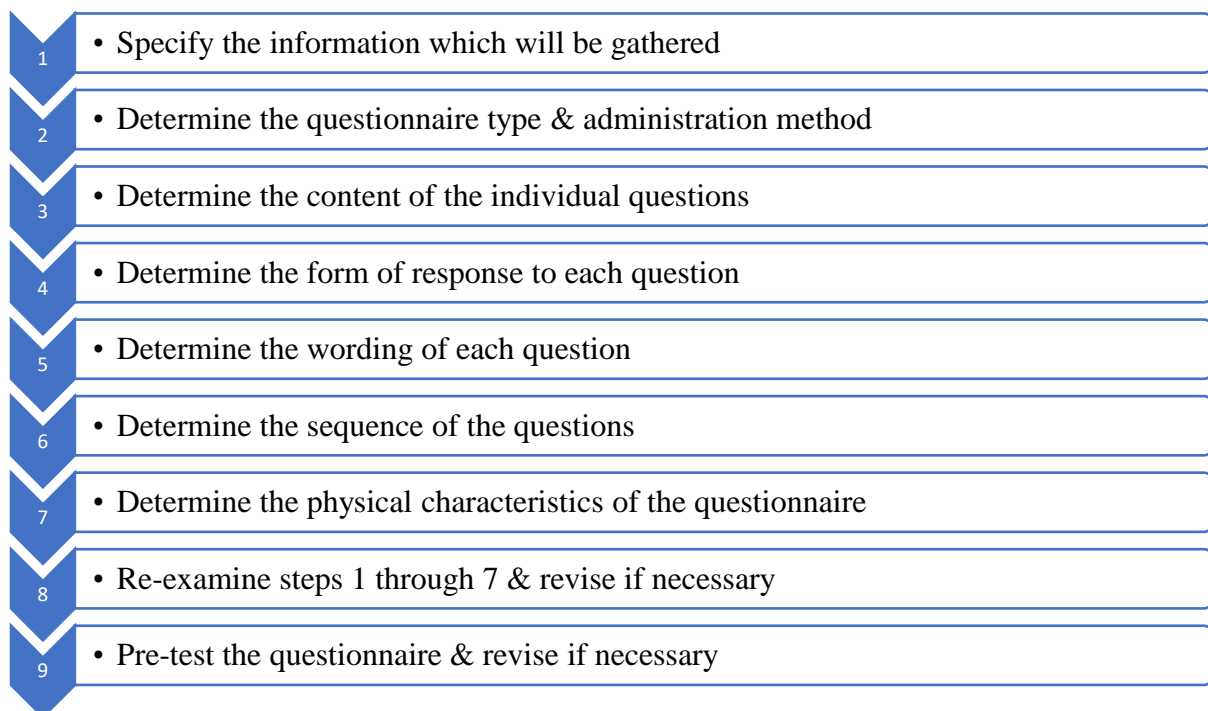
In line with the exploratory sequential mixed methods research design, this study utilizes a questionnaire to extend and quantify the findings from the qualitative phase one. According to Blaikie (2010), the most commonly utilized quantitative data-gathering method in the social sciences is undoubtedly the self-administered questionnaire. Further, Saunders et al., (2015) states that the questionnaire is the most widely utilized method within the survey strategy. The questionnaire provides an effective and efficient way of gathering primary data from a larger sample (Saunders et al., 2015). No two questionnaires are alike, as Oakshott

(2016, p. 34), states, “questionnaire design is more of an art than a science and there is no universal design”. As such, the next section will present the questionnaire development utilized in this study.

4.6.2 Questionnaire Development

In the questionnaire development process, the researcher looked to the procedures laid out by Iacobucci et al., (2022). The questionnaire development section of this chapter is organized by following the nine-step process recommended by Iacobucci et al., (2022) illustrated in Figure 9. One stage leads to the next, but in practices the construction of a questionnaire is complex and therefore the process as a whole, as well as the influences from the qualitative phase are kept in mind when developing the questionnaire for this study.

Figure 9: Nine-step questionnaire development process



Source: Iacobucci et al., 2022, p. 126

The development of the questionnaire is not taken lightly as the design can affect the response rate, and the reliability and validity of the data collected (Saunders et al., 2015). Accordingly, the researcher has outlined the considerations to increase response rates through careful design of individual questions, pilot testing, and execution of the questionnaire.

4.6.2.1 Step One – Specify the information which will be gathered

Step one focuses on the specific information which is intended to be gathered. For this study the key information sought was introduced in Chapter 3, in Figure 4 *Research Framework*. Thus, the key information includes the following constructs: knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, knowledge-worker productivity, and affective commitment. In addition, control questions were specified which included: department type, region, organizational position, working experience, and level of education. Having the information specified, it is then more straightforward to determine the questionnaire type and administration method.

4.6.2.2 Step Two – Determine the questionnaire type and administration method

Determining the questionnaire type and administration method is an essential part to developing a questionnaire. This study utilized a structured questionnaire that consisted of close-ended questions. There are some advantages to structured close-ended questionnaires. For example, because the respondent completes the questionnaire without assistance from the researcher, close-ended questions allow for simplification in answering (Blaikie, 2010). In addition, the close-ended question type allows for the control of the length of question and the order to assure uniformed responses (Saunders et al., 2015).

The method of administration was also taken into consideration. Luckily, the researcher was guided by the populations' preferred questionnaire type and administration method.

Therefore, an online questionnaire administered via email using Qualtrics software was utilized. This approach is also in keeping with the quantitative approach of removing the researcher from the respondents (Blaikie, 2010; Saunders et al., 2015; Easterby-Smith et al., 2018).

It should be mentioned that there are several ways to administer questionnaires which can take place via modes such as postal services or mail, web based, telephone, and face-to-face questionnaires (Saunders et al., 2015). As mentioned, this study utilizes an online approach by means of a combination of email and Qualtrics.

There are two main reasons for this strategy. The first being that the organization in which the questionnaire was administered has a standard practice of using the combination of email and Qualtrics to gather information from respondents. Therefore, to increase response rate, this study adopted the standard working practice of the firm. Secondly, questionnaires distributed via email utilizing the Qualtrics software have benefits such as order control, ingrained collection process, overview of incomplete answers. Order control refers to making sure the respondents answer the questions in order. The Qualtrics questionnaire can be designed so that the respondents will need to answer the questions in order. Said differently, the questionnaire can be designed in that the respondents cannot skip questions or answer questions out of order. Ingrained collection process refers to the data bank which is part of the Qualtrics software. The researcher can see exactly how many respondents received the questionnaire and how many people started the questionnaire at any given time. Overview of completed questions refers to the data bank where the researcher can select to export information only from fully completed questionnaires out of all the returned questionnaires. In summary, the Qualtrics software supported in minimizing human error from the researcher in this study.

A disadvantage of this approach can be that possible respondents could be neglected if they do not have access to the internet (Blaikie, 2010). The internet access disadvantage was not a possibility in this study because all respondents had a firm email address and had access

to the study during the timeframe the questionnaire was administered. The only respondents which could have had difficulty filling out the questionnaire were in South Africa where electric outages were taking place at the time the questionnaire was administered. However, due to the timeframe provided to fill out the questionnaire, there were points in time where the respondents had long periods of internet access in which the questionnaire could be accessed and filled out.

With the questionnaire type and administration method established, focus can be turned to determining the content of each individual question.

4.6.2.3 Step Three – Determine the content of the individual questions

Step three in the questionnaire development phase is centered around the individual questions to be included in the questionnaire. For this study, the researcher utilizes validated questionnaires from previous studies in relation to the corresponding concepts chosen to be explored. To select the individual questions, the researcher deliberately reviewed the literature and was guided by the outcomes of phase one.

The questions utilized in this study were developed to measure, knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, knowledge-worker productivity, and affective commitment. Two main considerations were taken when determining the questions. The first being the concern of validity. Since questions were drawn from previous studies, this supports content validity. Further it was important to operationalize multi-item constructs. Multiple items reduce measurement error and permit a more detailed description (Iacobucci, 2022).

The following sub-sections provide a detailed description of each construct operationalized in this study.

4.6.2.3.1 Knowledge-Oriented Leadership

The knowledge-oriented leadership measurement was adopted from Donate et al., (2015, p. 369). Donate et al., (2015) introduced this construct and questionnaire which has been tested by researchers such as Shamim et al., (2019) and Zia, (2020). A total of six items were measured on a seven-point Likert scale varying from 1 – Strongly disagree, 2- Disagree, 3 – Somewhat disagree, 4 – Neither agree nor disagree, 5 – Somewhat agree, 6 – Agree, 7 – Strongly agree.

Table 15: Measurements for Knowledge-Oriented Leadership

1. Leadership has been creating an environment for responsible employee behavior and teamwork.	1	2	3	4	5	6	7
2. Managers are used to assuming the role of knowledge leaders, which is mainly characterized by openness, tolerance of mistakes, and mediation for the achievement of the firm’s objectives.	1	2	3	4	5	6	7
3. Managers promote learning from experience, tolerating mistakes up to a certain point.	1	2	3	4	5	6	7
4. Managers behave as advisers, and controls (i.e., deadlines) are just an assessment of accomplishment of objectives.	1	2	3	4	5	6	7
5. Managers promote the acquisition of external knowledge.	1	2	3	4	5	6	7
6. Managers reward employees who share and apply their knowledge.	1	2	3	4	5	6	7

Source: Author (2024)

4.6.2.3.2 Knowledge Process Capabilities

The knowledge process capabilities measurement was adopted from Kamasak et al., (2017, p. 361). This measurement introduced by Kamasak et al., (2017) was adapted from previous knowledge process capabilities scholars, including studies from Alavi et al., (2001); Gold et al., (2001); Tanriverdi, (2005); and Wu et al., (2014), which have all been referenced in the literature review portion of the study in Chapter 2. A total of twelve items were measured on a seven-point Likert scale varying from 1 – Strongly disagree, 2- Disagree, 3 – Somewhat disagree, 4 – Neither agree nor disagree, 5 – Somewhat agree, 6 – Agree, 7 – Strongly agree.

It must be mentioned that questions one, two, three, and four were adapted to include terminology which could be understood by the respondents of the specific firm where the questionnaire was carried out. The following subtle changes were made:

Item 1: Specific firm related technology was referenced within the question to make the question more specific to the organization.

Item 2: “Within credit specialties and with other industry practices such as renewable energy” was added to make the question more specific to the Credit Specialties practice within the organization.

Item 3: Specific technology to the organization was included and supply chain and logistics systems was removed as this is not necessarily applicable to the credit specialties insurance/finance industry.

Item 4: “across all organizational levels” was included to emphasize the potential impact of management knowledge behavior on employee knowledge behavior.

Table 16: Measurements for Knowledge Process Capabilities

1. Our firm has the capability to distribute relevant knowledge throughout the organization (via collaborative platforms like Knowledge Exchange, social software like MS Teams, blogs, and wikis in MarshForce etc.).	1	2	3	4	5	6	7
2. Our firm has the capability to share relevant knowledge among business units i.e., within credit specialties and with other industry practices such as renewable energy	1	2	3	4	5	6	7
3. Our firm has the capability to develop knowledge from internal and external knowledge sources (via IT systems, call centers, CRM tools [e.g., Salesforce], and ERP technology).	1	2	3	4	5	6	7
4. Our firm has the capability to transfer relevant knowledge to employees across all organizational levels.	1	2	3	4	5	6	7
5. Our firm has the capability to apply knowledge to develop new products/services.	1	2	3	4	5	6	7
6. Our firm has the capability to organize and manage knowledge.	1	2	3	4	5	6	7
7. Our firm has the capability to apply knowledge to solve new problems.	1	2	3	4	5	6	7
8. Our firm has the capability to apply knowledge to change competitive conditions.	1	2	3	4	5	6	7
9. Our firm has the capability to store acquired knowledge into organizational knowledge repository.	1	2	3	4	5	6	7
10. Our firm has the capability to integrate different sources and types of knowledge.	1	2	3	4	5	6	7
11. Our firm has the capability to codify acquired knowledge into accessible and applicable formats.	1	2	3	4	5	6	7
12. Our firm has the capability to interpret new knowledge based on prior knowledge.	1	2	3	4	5	6	7

Source: Author (2024)

4.6.2.3.3 Knowledge Management Behavior

The knowledge management behavior measurement in this study was adopted from Shamim et al., (2019, p. 2417). The knowledge management behavior measurement introduced by Shamim et al., (2019) included four items which were developed by the researcher themselves. Next to the four items developed by the researcher, items from Hansen (2002) and

Van et al., (2004) were adapted and incorporated to create the 12-item scale. A seven-point Likert scale varying from 1 – Strongly disagree, 2- Disagree, 3 – Somewhat disagree, 4 – Neither agree nor disagree, 5 – Somewhat agree, 6 – Agree, 7 – Strongly agree was utilized.

It must be mentioned that questions seven, eight, and nine were adapted to match the flow of the entire questionnaire. More specifically the ‘how’ questions were changed to fit to the rest of the ‘I’ questions in this measurement. The following subtle changes were made:

Item 7: The original question, “How often do you document knowledge that you create” was changed to “I often document knowledge that I create.”

Item 8: The original question, “How often do you document the knowledge shared within your team (i.e., reports, e-mails, flyers)?” was changed to “I often document the knowledge shared within my team (e.g., reports, e-mails, flyers)”

Item 9: The original question, “How often do you convert your knowledge into codified procedures?” was changed to “I often convert my knowledge into codified procedures.”

Table 17: Measurements for Knowledge Management Behavior

1. When I need certain knowledge, I ask my colleagues about it.	1	2	3	4	5	6	7
2. I like to be informed of what my colleagues know.	1	2	3	4	5	6	7
3. When one of my colleagues is good at something, I ask him/her to teach me how to do it.	1	2	3	4	5	6	7
4. When I have learned something new, I tell my colleagues about it.	1	2	3	4	5	6	7
5. I share information I have with my colleagues.	1	2	3	4	5	6	7
6. I regularly tell my colleagues what I am doing.	1	2	3	4	5	6	7
7. I often document knowledge that I create.	1	2	3	4	5	6	7
8. I often document the knowledge shared within my team (e.g., reports, e-mails, flyers)	1	2	3	4	5	6	7
9. I often convert my knowledge into codified procedures	1	2	3	4	5	6	7
10. I incorporate the suggestions acquired by clients and colleagues, into product, process, or service.	1	2	3	4	5	6	7
11. My knowledge helps me to serve clients in a better way.	1	2	3	4	5	6	7
12. My knowledge helps me in day-to-day problem-solving activities.	1	2	3	4	5	6	7

Source: Author (2024)

4.6.2.3.4 Knowledge-Worker Productivity

The knowledge management behavior measurement in this study was adopted from Sahibzada et al., (2022a). The seven-item knowledge-worker productivity measurement introduced by Sahibzada et al., (2002a) consists of two items of timeliness adapted from Lerner et al., (2001), three items of work (knowledge) efficiency adapted from Tangen (2005), and two items of job autonomy adapted from Morgeson et al., (2006). A seven-point Likert scale varying from 1 – Strongly disagree, 2- Disagree, 3 – Somewhat disagree, 4 – Neither agree nor disagree, 5 – Somewhat agree, 6 – Agree, 7 – Strongly agree was utilized.

The reader might notice that no page number is provided in reference to the measurement in the original work. The specific questions are not listed in the original work;

therefore, the researcher contacted the authors to request the questions utilized in the original study. They were so kind to share the information.

Table 18: Measurements for Knowledge-Worker Productivity

1. I achieve satisfactory results in relation to my goals.	1	2	3	4	5	6	7
2. I am usually able to carry out my work tasks efficiently (smoothly, without problems).	1	2	3	4	5	6	7
3. I am able to use the majority of my working time for conducting relevant tasks related to my goals.	1	2	3	4	5	6	7
4. My job mainly includes tasks in which I am able to exploit my knowledge and skills efficiently.	1	2	3	4	5	6	7
5. I am able to meet customers' expectations.	1	2	3	4	5	6	7
6. The quality of my work output is high.	1	2	3	4	5	6	7
7. The group(s) I work in work(s) efficiently as a whole.	1	2	3	4	5	6	7

Source: Author (2024)

4.6.2.3.5 Affective Commitment

The affective commitment measurement in this study was adopted from Martin-Perez et al., (2015, p. 1185). The four-item affective commitment measurement introduced by Martin-Perez et al., (2015) was adapted from Meyer et al., (1991 & 1997). A seven-point Likert scale varying from 1 – Strongly disagree, 2- Disagree, 3 – Somewhat disagree, 4 – Neither agree nor disagree, 5 – Somewhat agree, 6 – Agree, 7 – Strongly agree was utilized.

It must be mentioned that the researcher planned on using the entire original measurement from Allen et al., (1990) which consisted of seven items (p. 17). However, during the test pilot phase it was mentioned that the questions should be reduced. Therefore, as way of compromise, this measurement was reduced from the original seven item measurement to the four-item measurement introduced by Martin-Perez et al., (2015), which is built from the original Meyer et al., (1991 & 1997) and Allen et al., (1990 & 1996) affective commitment studies.

Table 19: Measurements for Affective Commitment

1. I would be happy to spend the rest of my career with this organization.	1	2	3	4	5	6	7
2. I feel as if this organization's problems are my own problems.	1	2	3	4	5	6	7
3. I am emotionally connected to this organization.	1	2	3	4	5	6	7
4. This organization has a great personal meaning to me.	1	2	3	4	5	6	7

Source: Author (2024)

4.6.2.3.6 Controls

In broader organizational studies, a core objective is to elucidate and clarify the connections between different factors (Bernerth et al., 2015). At the heart of this endeavor lies the capacity to pinpoint and distinguish elements that clarify and forecast the phenomena of interest, while concurrently managing other pertinent variables that might inadvertently influence the relationships under examination (Bernerth et al., 2015). The identification and control of such extraneous, non-central elements, not only exemplifies rigorous scientific methodology, but also ensures the applicability of empirical research, which, in turn, contributes to the betterment of individuals, organizations, and society at larger (Becker, 2005; Bernerth et al., 2015).

In this keeping, control variables were collected in the questionnaire of this study. The control variables were introduced as part A before the construct questions were introduced in part B. Questions regarding gender, specific roles, and experience in relation to the firm were asked as well as education level. The possible responses were taken from the firm. For example, the department possibilities are all department names which are defined by the firm. Further, the geographies are specific to how the firm defines its global footprint. The possible titles are also taken from how the firm defines specific roles.

Table 20: Measurements for Control Variables

A1. Select the cell that best describes your gender:

Female	1
Male	2

A2. Select the cell that best describes the department in which you work in:

Factoring	1
Lenders Solutions Group	2
Political Risk	3
Surety	4
Trade Credit	5
Other	6

A3. Select the cell that best describes the region you work in

Africa	1
Asia / Pacific	2
Europe	3
Latin America	4
Middle East	5
North America	6

A4. State your current position within your organization:

Chief Executive Officer (CEO)	1
Managing Director	2
Senior Vice President	3
Vice President	4
Assistant Vice President	5
Analyst	6
Trainee/Working Student/Intern	7
Other	8

A5. Select the cell that best describes how long you have been with your organization:

Less than 5 years	1
5 but less than 10 years	2
10 but less than 15 years	3
15 but less than 20 years	4
More than 20 years	5

A6. Select the cell that best describes the level of education:

No formal education	1
Secondary (high school)	2
Bachelor's degree (B.A., B.Sc., BAS, etc.)	3
Master's degree (MA, MBA, MSc, etc.)	4
Doctorate (PhD, MD)	5
Professional / Vocational Qualifications	6
Other	7

Source: Author (2024)

4.6.2.4 Step Four - Determine the form of response to each question

With the specific content formalized for each individual question, step four centers itself around the response to each of the questions. This typically involves closed-ended and open-ended styles. It can be noted that these question styles differ mainly in the type of responses provided. Open-ended questions allow for the respondent to express thinking in a more complete way (Saunders et al., 2015). Conversely, closed-ended questions limit the respondent to the responses provided by the researcher (Saunders et al., 2015).

For this study the researcher chose to implement a self-administered online closed-ended questionnaire for two reasons. The first being that the researcher was informed by practitioners within the firm that an open-ended questionnaire would not produce as many results when compared to a close-ended questionnaire. The advantages of a close-ended questionnaire also include more efficient completion times and an increase in result

comparability (Saunders et al., 2015). In this case the advantages outweighed the disadvantages which include potential misunderstandings the respondents might have had when completing the questionnaire. Therefore, a closed-ended style using a seven-point Likert-scale, where one answer was possible was chosen for this study.

4.6.2.5 Step Five – Determine the wording of each question

With response style confirmed, attention can be provided to determining the wording for each question. The question wording must be taken into careful consideration as this can affect the validity of the responses (Saunders et al., 2015). When determining the wording for each question the following questions were taken into consideration:

- *Does the data collect at the right level (individual)?*
- *Are technical and/or leading questions avoided?*
- *Are the questions adapted to the context?*

As shown in section 4.6.2.3, some of the questions were adapted to include firm specific technologies or terminologies to fit the questions to the context. In addition, some questions were adapted to fit the overall flow of the questionnaire with the goal to provide consistency and avoid possible confusion. In this consideration, it is important to discuss the sequence of the questions.

4.6.2.6 Step Six – Determine the sequence of the questions

The sequence of the questions should be logical to the respondent and consider of possible bias caused by the ordering (Saunders et al., 2015). This researcher implemented the control questions first as way of ‘warm-up’ for the participants. This was confirmed by practitioners of the firm as a suitable way to start the questionnaire as this is how firm wide questionnaires usually begin. For example, the firm wide questionnaires typically ask questions

such as “which division do you work for?” or “in which region are you located in”. These questions are like the control questions asked in this study. Following the ‘warm-up’ phase, which was considered part A of the questionnaire, Part B, consisting of questions pertaining to the constructs were listed. When determining the sequence of the questions, the following questions were taken into consideration:

- *Are questions and topics that are more complex placed towards the middle of the questionnaire?*
- *Are personal and sensitive questions towards the end of the questionnaire?*
- *Are filter questions necessary? If yes, are they clear and fit logically into the overall questionnaire?*
- *Are questions grouped in obvious sections that make sense to the respondent?*

Because screening was not necessary and because no sensitive/personal questions were asked, filter questions were not included. Therefore, the researcher did not need to be aware of filter questions logically fitting within the overall questionnaire. Further, questions were grouped into obvious sections, this being parts A and B and then sub-sections in part B relating to each construct.

4.6.2.7 Step Seven – Determine the physical characteristics of the questionnaire

Similar to the sequence, physical characteristics of the questionnaire were also taken into consideration. The physical characteristics related to the ease of following and responding to the questionnaire (Saunders et al., 2015).

Because the questionnaire was constructed in the Qualtrics software, characteristics of the questionnaire could be adapted quite easily. For example, to make the questionnaire seem not so long, the respondent would view the questions from one sub section at a time. This was done as to not overwhelm the respondent with viewing all 47 items at once. Further, each

question was numbered for ease of participation and following the order. Lastly, because of the Qualtrics software, the design of the questionnaire was compatible with multiple electronic devices such as PCs, tablets, and mobile smartphones.

In addition, a cover letter was included within the Qualtrics questionnaire. Once the Qualtrics link in the email was clicked, the participant was directed to the cover letter which provided guidance and informed the participants of the objectives of the research which can be found in the appendix of this study.

Lastly, the questionnaire was closed out by thanking the participant for their time and efforts. All respondents which completed the questionnaire could opt into the chance to win a prize. The winner was picked at random using an online drawing tool. The prize consisted of a traditional Bavarian Weisswurst Package from Dallmayr, which was shipped to a participant located in Romania.

4.6.2.8 Step Eight – Re-examine steps one through seven and revise if necessary

Similar to all research and practitioner work it never hurts to double check one's work. As such, step eight can be considered the 'double check' step. This step involves re-examining and revising questions, content, administration, and sequence (Iacobucci et al., 2022). The researcher can confirm the a 'double check' was carried out before moving to the step nine, the final step.

4.6.2.9 Step Nine – Pre-test the questionnaire and revise if necessary

The objective of a pilot test is to fine-tune the questionnaire so that it can be best understood by the participants to ensure ease in responding (Saunders et al., 2015). While not limited to, a pilot test phase allows the researcher to best understand which questions might cause difficulty or are not understood, how long the questionnaire takes the participants to

answer on average, and if the sequence is acceptable. Participants taking part in the pilot test should include respondents who are similar to those who will actually complete the questionnaire (Saunders et al., 2015). In addition, it is advised that the minimum number for a pilot test should be ten participants (Fink, 2013; Saunders et al., 2015).

Fortunately for the researcher, experts, friends, practitioners, and supervisors were more than willing to support in the pilot test phase. In the first phase, supervisors reviewed the questionnaire and provided feedback on question wording and advised to seek additional expert assessment. In the second phase, the firm's marketing and Qualtrics experts were approached for feedback. In this phase, feedback regarding the design was provided. It was in this phase where it was suggested to group the questions for each construct on separate pages as to not overwhelm the participants by showing all items at once. It was further suggested to limit the number of questions. Both adaptations were carried out by the researcher, for additional detail, please refer to the subsections of 4.6.2. In the final phase of the test pilot, the questionnaire was sent to friends working at multinational enterprises such as Accenture, Knorr-Bremse, and PwC, as well as to colleagues working in departments outside of the Credit Specialties department. This allowed for professional feedback from outside and from inside of the firm. It was in this phase where it was also suggested to adapt examples to include technology which the firm utilizes. It took both the Qualtrics experts and professionals about 15 minutes to complete the questionnaire. Overall, the pilot test revealed that the questionnaire successfully captured the responses from participants.

4.6.3 Sampling Method

Sampling can be explained as the selection of elements from a population, and which may be used to make assertions about that population (Blaikie, 2010). Sampling highly depends on the nature of the research, the availability of information, access to financial funds, and time

restrictions (Blaikie, 2010). Sampling methods have been divided into two categories being probability sampling versus non-probability sampling (Blaikie, 2010).

Probability sampling gives every population element a known and a non-zero probability of being selected (Blaikie, 2010; Saunders et al., 2015). There are four common probability sampling methods which include: simple random, systematic, stratified, and cluster sampling (Blaikie, 2010).

Unlike probability sampling, non-probability sampling does not give every population element a chance of selection (Blaikie, 2010; Saunders et al., 2015). There are also four common methods to non-probability sampling which are: accidental/convenience, quota, judgmental/purposive, and snowball.

Like most aspects of research, there are advantages and disadvantages to both sampling methods. Utilizing probability sampling tends to support in generalizing the population from which the sample was selected (Blaikie, 2010; Saunders et al., 2015). The explanation for this being because of the random nature of the sampling (Blaikie, 2010; Saunders et al., 2015). However, there are situations in which probability sampling cannot be employed. For example, when a sampling frame is not available or when the researcher must use participants which are only available to them (Blaikie, 2010; Saunders et al., 2015).

From the researcher's literature review, most studies, which were qualitative studies, were carried out using quota or convenience sampling (see *context* column in tables in Chapter 2). Similarly, this study also utilizes non-probability quota sampling. Quota sampling can be described as quotas based on classification factors selected by the researcher (Blaike, 2010). Because the sample is not selected randomly and based on the researcher's judgement, this can impact the survey findings and efforts of generalizability.

The quota utilized in this study included all professionals working within the credit specialties department of a single multinational enterprise. Quota sampling was selected as the

most appropriate method as the credit specialties department of the single multinational enterprise opened itself up to the researcher for this study. Further, quota sampling was selected because the exact population size of credit specialties departments within insurance brokerage multinational enterprises globally could not be defined, this meaning that employees are leaving while newcomers are joining the organization.

Since defining the exact population size of credit specialty department within multinational enterprises globally was not possible for the researcher, parameters were defined. Sampling was taken from one large multinational corporate focusing on a specific department labeled as Credit Specialties. The region was defined by the organization itself being North America, Latin America, Europe, Africa and Middle East, and Asia Pacific..

Quota sampling allowed for the researcher to take into consideration participants on a global basis from all levels of firm hierarchy. As Gold et al., (2001, p. 197) states, “the use of key informants for knowledge management purposes can come from those in the organization that have access to, and use of, the organization’s knowledge. This can be virtually anyone in the organization”. For this particular study it is essential to understand the role of knowledge management initiatives on all levels of hierarchy within the firm on a global basis, as the framework created aims to support the creation of transient advantages through knowledge-worker productivity within multinational enterprises.

As Wang and Cheng (2020) suggest, a well-planned sampling design is important for a cross-sectional survey design. Despite aiming to employ probability sampling by drawing a random sample from the sampling frame, the study encountered challenges due to limited access to the population (globally scattered) and resources constraints for conducting random sampling (Creswell, 2015). Thus, a non-probability sampling (quota sampling) was adopted, where respondents were selected based on department and geographical region. Quota sampling, being relatively straightforward and cost-effective as participants are readily

accessible, aligns with exploratory studies (Greener & Martelli, 2015). It is important to note that the utilization of a quota sampling implies that the findings of the study are exploratory, limiting the extent to which they can be generalized.

4.6.4 Methodology for Data Analysis

This researcher utilized statistical techniques to examine the data collected; this includes exploratory factor analysis and confirmatory factor analysis. Descriptive analysis gives a complete overview of the respondents' demographic profiles and the constructs. Exploratory factor analysis with reliability analysis is utilized to ensure reliability analysis and validity when evaluating the constructs. To ensure content validity, the researcher adopted scales and items that were developed and tested by previous researchers. SmartPLS 3 statistical software is utilized to conduct data analysis.

4.6.5 Validity and Reliability

A fundamental part of quantitative analysis is the investigation of validity and reliability of the measurements utilized (Hair et al., 2010; Bryman, 2012). Hair et al., (2010) proposes four steps to validate measurement scales prior to modeling, which includes assessing the content validity, reliability, and construct validity of each scale.

4.6.5.1 Content Validity

Assessing content validity, also known as face validity, is the first step in the process. Content validity evaluates the accuracy in which the characteristics intended are captured by the measurement (Iacobucci et al., 2022). This step should extend past empirical matters and include theoretical and practical considerations (Hair et al., 2010). Subjective evaluation of the items and concepts can be carried out by the review of expert judges, pre-tests with various

sub-populations, and/or other means (Hair et al., 2010). For this study, feedback from experts and a pilot test were carried out to ensure content validity. The expert feedback and pilot test feedback identified questions which needed to be reworded, ultimately increasing the content quality of the final version of the questionnaire used for the data collection phase.

4.6.5.2 Reliability

Reliability can be understood as a measure consistently reflecting the construct that it is measuring (Field, 2018). Reliability is essential to determine whether the data collection and analysis techniques can be replicated by a different researcher (Saunders et al., 2015). There are four different approaches to reliability which are test-retest, internal consistency reliability, split half reliability, and inter-rater reliability. The most frequently utilized method for evaluating reliability is internal consistency reliability (Hayes, 2005). Therefore, this study implements the internal consistency reliability method to test for reliability. Simply put, internal consistency reliability refers to how well the questionnaire measures what is intended to be measured. The most common way to measure internal consistency is by utilizing the statistic of Cronbach's Alpha, thus this approach was utilized in the study (Hair et al., 2011). Interpreting for Cronbach's Alpha is hotly debated; however, it is typically suggested that a value of 0.70 to 0.80 is an acceptable value (Field, 2018). However, a value below 0.7, but which is still above 0.50 can be acceptable when dealing with psychological constructs.

4.6.5.4 Construct Validity

The final step laid out by Hair et al., (2010) is ensuring construct validity. Construct validity, also known as factorial validity, appertains to the rationality of items which comprise measures of social concepts (Moutinho et al., 2011). Said differently, construct validity investigates the items which are intended to measure a construct and if in fact they really

measure that specific construct (Hair et al., 2010). The more a construct is utilized by researchers with outcomes consistent with theory, it can be said that the construct is considered to be more valid (Moutinho et al., 2011). It is proposed that researchers establish both the two main types of construct validity for their constructs, being convergent and discriminant validity (Hair et al., 2010; Moutinho et al., 2011). It must be mentioned that nomological validity is also a widely accepted type of construct validity, Hair et al., (2010). However, this study will follow the guidance from Moutinho et al., (2011) and focus on establishing convergent and discriminant validity to carry out construct validity for this study.

Convergent validity can be explained as the extent to which two measures capture the same information (Carlson et al., 2012). Said differently, it is the degree to which a measure is correlated with other measures that it is theoretically predicted to correlate with. The researcher utilized confirmatory factor analysis which allows for the assessment of convergent validity in a variety of ways, including internal consistency, Cronbach's alpha, simple factor structure, and average variance extracted (Hair et la., 2010; Moutinho et al., 2011; Carlson et al., 2012). Simple factor structure is another test of internal consistency which seeks to show a valid scale in that indicator items for a given construct load unambiguously on their own factor (Moutinho et al., 2011). Correlation can be determined by a defined loading value of 0.50, however a loading value of 0.7 is ideal (Hair, et al., 2010). Alternatively, the AVE considers a construct to display convergent validity if it is at least 0.50 (Moutinho et al., 2011).

Next to convergent validity, discriminant validity was also carried out to ensure construct validity. *Discriminant validity* can be described as "the principle that the indicators for different constructs should not be so highly correlated as to lead on to conclude that they measure the same thing" (Moutinho et al., 2011, p. 328). Similarly, to convergent validity, discriminant validity can also be empirically tested utilizing various methods such as cross loadings, AVE, and Heterotrait-Monotrait Ratio (Moutinho et al., 2011). In this study, the

researcher applied the cross loadings and the AVE approach. According to cross loadings, an item should have higher loadings on its own parent construct when compared to other constructs in the study (Hair et al., 2010). A difference of loading less than 0.10 indicates that the item is cross loading onto other construct and could therefore potentially indicated lack of discriminant validity. Fornell and Larcker (1981) suggest that the square root of the AVE for a construct should be greater than its correlation with all other constructs.

4.7 Ethical Considerations

Ethical considerations are fundamental to any research design as ethical concerns pervade every aspect of life (Saunders et al., 2015). As business management and social science research inevitably involves human participants, ethical concerns must be considered. Respectively, this study involves human participation, therefore the necessary ethical procedures must be fulfilled. Therefore, the researcher sought approval from the Sheffield Hallam University's ethics committee.

The researcher was diligent in keeping with the ethical guidelines set forth by the university, ethic's literature, and by the firm where data was collected. Conscious steps were taken, for example, all participants were required to grant consent to take part in the interview and grant consent once more to having the interview recorded. Consent was also requested and required before participants could engage with the questionnaire. The researcher made the interviewees and questionnaire participants aware that participation is voluntary and that they could abandon the process at any time. Further, the researcher explained that at any time following participation the interviewees and respondents could request to have their data pulled from the research completely. All interviews and questionnaire participants were provided with an explanation as to why the data was being collected, what the research project was about,

that the collected data will be analyzed utilizing statistical software and finally that the analyzed findings may be published.

All collected data is kept strictly confidential, in that all participants remain completely anonymous and where data is securely stored and protected in accordance with the Data Protection Act. All individual's names and firm names were immediately coded before transcription and sharing with supervisors. Safeguards were put in place such as deleting all audio recordings once transcription was carried out. Further, interviews and questionnaire respondents were all provided with the researcher's contact details to allow for any follow-up questions related to the project.

The researcher does not take ethical considerations lightly and therefore also kept a journal during the entire process to practice reflexivity. It was essential for the researcher to be sensitive to the viewpoints of others and to make sure that the best interests of the interviewees and questionnaire participants were put first.

4.8 Chapter Summary

This chapter has presented the attributes of the research methodology considered to meet the research objectives and to answer the research questions and hypotheses. This study assumes the pragmatists view and applies the mixed methods exploratory sequential design. The study was conducted over two key phases with phase one being the qualitative phase and with phase two being the quantitative phase. Phase one consisted of ten semi-structured interviews, which was followed by the development of a survey instrument which resulted in an online questionnaire which was tested in phase two. The utilization of an online questionnaire granted the opportunity to examine the research questions and hypotheses. Further, this chapter demonstrated the questionnaire and its development as well as the data collection process. In closing, validity, reliability, and ethical considerations were illustrated

within Chapter 4. With the methodology portion of the study expounded, this lays the foundations for the research findings to be examined. Therefore, the qualitative and quantitative findings will be outlined and analyzed within the next chapter, Chapter 5.

Chapter Five – Research Analysis and Findings

5.1 Qualitative Analysis and Findings

5.1.1 Introduction

In this section, the qualitative results obtained from interviews conducted during the data collection phase are explored. This initial phase aims to delve into a wide range of knowledge experiences, attitudes, and behaviors, given the limited previous research. The goal is to uncover emerging themes and issues that may not be addressed in the current literature.

5.1.2 Respondent Profiles

The qualitative data consisted of interviews from ten respondents (two females and eight males) between their mid-twenties and early sixties. The participants were of varying ethnicities, geographical location, employment role, and responsibility levels. Respondents were selected from different geographical locations to support diversity and to provide a global view.

All participants discussed and shared their experiences and attitudes towards knowledge management in general and in relation to their firm. Table 21 provides a summary of the respondent profiles.

Table 21: Summary of Respondent Profiles

No.	Profile
1	KS is a female in her late-20s having German nationality and living in Germany. She has about 2 years of working experience. Her job title is Key Client Advisor Credit Specialties and is supporting the book of business in the Southwest region of Germany.
2	JK is a male in his early 50s having German nationality and living in Germany. He has about 25 years of working experience. His current job title is Head of Credit Specialties for Germany looking after the Credit Specialties team in Germany and the book of business.
3	FO is a male in his early 30s having Brazilian nationality and living in Brazil. He has about 6 years of working experience. His current title is Credit Specialties Digital Product Owner looking after the digital offerings for the group on a global level.
4	WG is a male in his late 20s having Australian nationality and living in the United Kingdom. He has about 2 years of working experience. His current title is surety underwriter at an insurance firm. He left the researcher's employer about 4 months following the interview.
5	DM is a male in his early 30s having U.S. nationality and living in the U.S. He has about 4 years of work experience. His current title is US Growth Leader - Surety & SDI for the U.S.
6	FS is a male in his mid-40s having Brazilian nationality and living in Brazil. He has about 15 years of work experience. His current role is Head of Operations at an insurance firm. He left the researcher's employer about 3 months following the interview.
7	VM is a male in his early 60s having U.S./Chinese nationality and living in the United States. He has about 33 years of working experience. His current title is Global Leader Surety.
8	KY is a male in his early 50s with Korean nationality living in Korea. He has about 17 years of working experience. His current title is Surety Leader Asia.
9	LH is a female in her early 50s having South African nationality and living in South Africa. She has about 25 years of working experience. Her current title is Surety & Political Risk Leader Africa.
10	GP is a male in his early 60s with Israeli nationality living in Israel. He has about 36 years of working experience total, but 8 years at the researcher's firm. His current title is Credit Specialties Leader Israel.

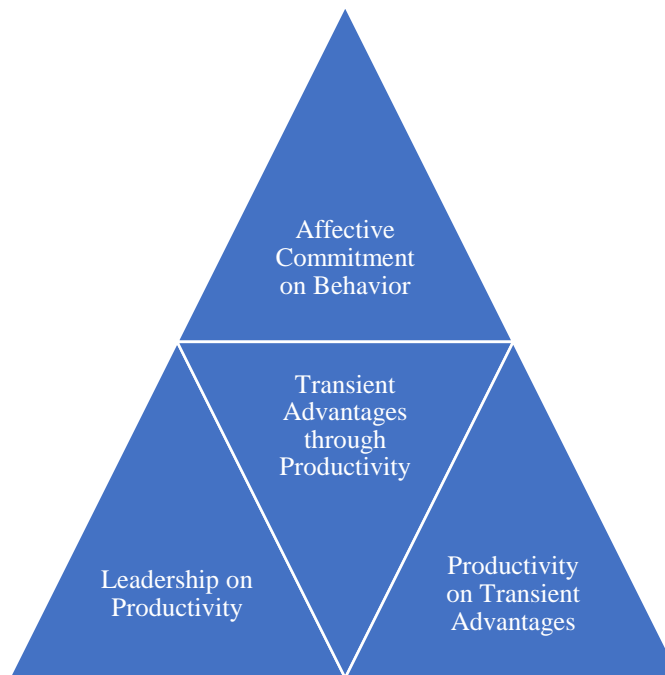
Source: Author (2024)

5.1.3 Qualitative Findings

Three primary themes emerged from the data being affective commitment on knowledge management behavior; leadership on productivity; and productivity on transient advantages, which is outlined in Figure 10. These three themes come together to create the

overarching message of the study being the creation of transient advantages through knowledge-worker productivity. This section elucidates participants' perspectives on their industry's or firm's approach to knowledge management for achieving transient advantages. Participants conveyed how specific knowledge management endeavors can affect their own or other's behaviors. As mentioned, statements were examined and gathered to delineate significant themes presented in Figure 10, which will guide the discussion through the support of prior literature.

Figure 10: Primary Emerging Themes from the Interview Data



Source: Author (2024)

5.1.3.1 Theme One: Affective Commitment on Knowledge Management Behavior

Affective commitment refers to an employee's emotional attachment and identification with an organization (Allen et al., 1990). Through the perceived level of affective commitment employees have, this can impact knowledge management behavior (Martin-Perez et al., 2015). Through the discussions with the participants a few sub-themes within this theme emerged,

which include, knowledge sharing and collaboration; employee engagement; and finally, retention of tacit knowledge.

High levels of affective commitment can often lead to a positive organizational culture where employees are more willing to share their knowledge and to collaborate with others (Jarvenpaa et al., 2001; Martin-Perez et al., 2015). Said differently, if levels of affective commitment are low this could lead to employees feeling less inclined to share their knowledge and less inclined to collaborate (Kim, S., 2021). For example, Participant Seven states,

“I think we have within our own organization; I think we've done a pretty good job of sharing information. People are not afraid to ask, right? They're not afraid to ask how things are done. And I think I've been successful in creating that kind of environment to where people ask each other or ask me, and we will be very happy to share.”

In the case of Participant Seven, when affective commitment is perceived by the employees this has the opportunity to influence knowledge management behavior in a way where employees are more willing to share knowledge and collaborate.

Where affective commitment is perceived to exist, employees might also feel engaged (Jarvenpaa et al., 2001; Martin-Perez et al., 2015). Engaged employees are more likely to actively participate in knowledge management initiatives, contributing their insights and expertise to the organization's knowledge base (Shamim et al., 2019). Or said differently by Participant Six,

“All things can be summarized as the feeling of belonging, because if you have an employee that does not have this sensation of belonging, they will not produce and will not be responsible as another one that has this sensation or this feeling.”

Further, Participant Nine suggests,

“If there are employees that are content or feel or have a sense of belonging, they are definitely more inclined to share and to participate.”

From the data collected it suggests that employees within the credit specialty industry who feel a sense of belonging are more likely to actively engage in knowledge management initiatives such as knowledge management behaviors.

Further, affective commitment can influence employees' willingness to share not only explicit knowledge, but also tacit knowledge (Nonaka et al., 1995; Grant, 1996). Tacit knowledge is the personal insights and experiences an employee might have (Nonaka et al., 1995; Faccin et al., 2019; Bhardwaj et al., 2022). This tacit knowledge is often crucial and can be retained within the organization when employees are committed and motivated to contribute (Faccin et al., 2019; Lei et al., 2021; Kaur, 2022). In the following statement, Participant Seven speaks about the importance of tacit knowledge and of examples of how this can be shared and retained within an organization,

“I think it has to be done by mentorship, apprenticeship programs, pairing people up. Less experience or junior members of the team with more senior people that happens already, but sometimes when we all get too busy and too siloed that it's not happening. And I know that

when people leave or when people will retire or just leave the firm, a lot of that institutional knowledge goes with it. And then because we've not done a good enough job to hand it down from one site generation to the next. And I see that happening."

According to participant seven, tacit knowledge is the personal insights and experiences an employee might have which can be retained within the organization if an employee perceives levels of affective commitment. Through the perceived level of affective commitment, the employee is more likely to retain tacit knowledge in way of sharing this knowledge with others.

5.1.3.2 Theme Two: Leadership on Productivity

According to Kwon, in the current knowledge-based economy, the financial services industry significantly depends on knowledge-workers with strong cognitive abilities, communication skills, and capabilities to manage knowledge (2014). Knowledge-oriented leaders through their behaviors, such as role modeling and incentivization, can directly and indirectly facilitate how knowledge is processed to support the firms' strategy (Piasittanand et al., 2007; Sinshaw et al., 2021; Alghail et al., 2022). Throughout the interview process examples of how knowledge-oriented leadership plays both a direct and indirect role on employee productivity was gathered. Interviewees specifically pointed to the qualities a leader should have, encompassing both transformational and transactional qualities.

The direct influence of leaders became prevalent throughout the discussions had with client facing individuals who report to managers. For example, Participant Three mentions:

“I really do believe that a manager can, a leader can impact the productivity of the team cause the productivity I believe it's very much linked to how well you feel doing your job and how a manager portrays that to you.”

A transformational leader, having empathy and acknowledging the employees' work can in turn affect the productivity of the knowledge-worker. In the direct sense, knowledge-oriented leaders have the capability to impact their employees' well-being, which in turn affects the knowledge-worker's productivity. Further, knowledge-oriented leaders directly impact their employees by the leader's day-to-day behaviors, which is highlighted in Participant One's statement:

“My direct manager is also kind of my mentor. So, I adopted a lot of his working styles and his behaviors. Yeah. So, I would probably say my direct manager is someone who always helps people, always try, that everyone is fine, and everyone knows everything. So, I guess I probably adopted a lot of his behavior styles.”

A knowledge-oriented leader can have a direct and indirect influence on a knowledge-worker's productivity in the sense that autonomy is provided or taken away from the employee (Ahmed et al., 2021). Autonomy accounts for independence of the knowledge-worker and how the worker determines to go about tasks to achieve timeliness and to deliver outputs (Ramírez et al., 2004; Sahibzada et al., 2022a; Sahibzada et al., 2022b). Throughout the interviews, it became clear that knowledge-workers seek autonomy and understand that autonomy can be taken away in the form of a consequence for poor delivery on works. For example, Participant Five suggests:

“It's more important to be in tune with how your employees are feeling and the product that they're putting out in a more loose and almost subjective basis rather than did you work this many hours, did you complete this many ... yada yada, whatever.”

Further, Participant One states the element of autonomy being taken away as way of consequence in the below statement:

“And obviously we all have business goals. So always we're always interested, in that and if I do not like reaching my goals or his goals or our goals, obviously then maybe the freedom of doing my work is little bit more tracked, let's say but I guess it's yeah, the model part of me because, they need to fulfill their new business numbers. They make sure that we do it and if it's not working, obviously then they're closer on tracking you, how you work and what are your ways to gain new clients and stuff. But as long as I bring my numbers, they might let me do how and when I want.”

Or to put it quite bluntly, Participant Six states:

“I don't like the micromanagement.”

The ability for a manager to provide their knowledge-worker with autonomy has an impact on the knowledge-worker's productivity (Sahibzada et al., 2022a; Sahibzada et al., 2022b). In addition, it became prevalent that knowledge-workers felt that it is important for their leader to understand the industry they are in, and that the leader has the knowledge needed to lead. Knowledgeable leaders influence knowledge-workers and their work outcomes. For example, Participant Four states:

“I think that goes back to having strong leaders, that if you, if we, or the colleagues believe or say, ‘I believed in what our leaders were doing, and I respected how they were and what direction they were going in.’ You feel more inclined to work hard and go out of my way to do better for the whole organization. I think being knowledgeable about the business would probably be one of the most crucial things.”

Further, Participant Five goes on to state that he prefers autonomy, but still would like to have a leader in the case he does not have an answer or needs additional support:

“I think, anecdotally within my own space, that my manager is great for that, for motivating my productivity. He allows me flexibility and he's very candid with our relationship and I don't feel like I need to be working by this time and ... It's like, "Just get your work done. Come to me with questions," and things like that. And for me, that is perfect.”

Lastly, in the words of Participant Three, who states that they believe the role of a leader is to share their own knowledge to the knowledge-workers and that the leader has the technical skills to support their knowledge-workers:

“I believe that first thing that a manager needs to have, is a way to transmit its knowledge to its employees, its colleagues, the ones that answer to him, to the manager. I think it's very important that the manager has the technical qualities to support the team with whatever they need. And I also, I believe that those would be the two main qualities. So being able to transmit the knowledge with the team and having the knowledge to be able to help the team with their

needs. But I also really think that empathy it's a very good quality for any manager. And I think those three are ones that come to my mind directly, when I think about it."

Leaders play a crucial role for the overall well-being of their knowledge-workers. As a result, their behaviors can directly influence either positive or negative knowledge behaviors from employees. For example, abusive leadership behavior can lower employee satisfaction and commitment levels as well as overall performance (Ahmed et al., 2021). Knowledge-oriented leaders who role model positive knowledge management behaviors can indirectly influence knowledge-workers' knowledge management behaviors through processes and routines (Donate et al., 2015; Sahibzada et al., 2020a). Through the combination of both transformation and transactional leadership, managers and supervisors can directly influence their knowledge-workers and their productivity (Donate et al., 2015).

5.1.3.3 Theme Three: Productivity on Transient Advantages

In industries where knowledge is the asset, the key is leveraging your people and their knowledge for continued advantages. More specifically, where if knowledge is managed strategically this can generate increased knowledge-worker productivity, to ultimately gain transient advantages (McGrath, 2013; Zhang-Zhang, 2022). Transient advantages allow for continual change and evolution rather than fixating and relying on one competitive advantage (McGrath, 2013). To match the VUCA global context businesses find themselves in today, McGrath (2013a) proposed a transient competitive advantage strategy following its predecessors Porter's (1980) competitive advantage and Barney's (1991) sustainable competitive advantage. The key differences separating transient advantage from its predecessor strategies are that (i) the context is no longer defined by industries, but by arenas, and (ii) the goal is no longer to establish structures and systems to maximize value from an advantage, but

to maintain fluidity and flexibility to create a portfolio of advantages (Porter, 1980; Barney, 1991; McGrath, 2013a).

Participants suggest that especially in dynamic environment, such as the COVID-19 pandemic, knowledge should be shared efficiently to support in the day-to-day tasks to increase the likelihood of continued competitive success. For example, Participant One suggests:

“If we take the whole last year and the whole Corona or COVID phase of the year, it was a time where we all needed to know how, for example, insurers react on the COVID crisis. So, I guess it was a time when news really needs to be shared quite quickly because it changes maybe every second day, because it's so new and stuff like this. It was not that easy, but I would say it was quite good managed actually.”

Similarly, but also expressing the role of leadership, Participant Nine states:

“I feel that if your manager is quite involved, that kind of rubs off into the team. Because you are managing that you wanted to go in a certain direction, so of course, it's going to rub off onto the team. So, for example, we've all seen what COVID, what happened last year. And it was quite a challenge. Some managers and some teams were battling with it because it was quite difficult. Suddenly, we were managing remotely. But then it was up to me now. And then we had a problem we couldn't spend money, because now we are working from home, but we got to look at expenses, et cetera. So, there's a lot of things that I was trying to do, to keep up that momentum, to keep up that interaction. So, I believe the manager is key. It's absolutely key to impact the team. I think sometimes you have to understand that you need to adapt. When you learn a skill, try it. And you can always say, ‘Listen, it didn't work,’ but doesn't mean it's a bad thing. If it didn't work, maybe the dynamics of that team, for those reasons. So, I think it

is important to open up as a leader as well and to reflect areas for development in the team, what you can do better.”

Participant Nine, gives emphasis on how organizational leadership or team leaders set the standard and tone of the team in such dynamic market situations like the COVID-19 pandemic. She suggests that by having an overview of the individuals within the team and their strengths and weaknesses in that period of time, you can better adapt to the situation at hand.

Similar to Participant Nine’s sentiments, but not tied a specific period of time or dynamic situation, Participant 8 suggests that leadership should have an overview of their people and an understanding of their knowledge base and skill sets:

“So, the organization must analyze and keep of such data and record where each individual employee has a very profound knowledge and skills and know-hows about any specific areas of practice. So, that should be very thoroughly managed. So as to leverage the best human resources into the right task to perform. The management they should be attentive to this issue, and they must have a sort of established program or data for which individual has which kind of scales to what level. They should be maintained. And actually, the employees go outside of the organization to search for actually information and intelligence for mostly for the market trend. Leadership is very, very important in setting the productivity of employees.”

By having such an overview, leadership can guide their employees and leverage their knowledge to gain transient advantages in an ever-dynamic market. Participant Seven suggests opportunities in that leadership can support knowledge transfer and the storage of individual tacit knowledge into organizational knowledge in the following statement:

“This is still very much a people driven business. And there’s a lot of information contained inside people and the relationships that they own. There’s a lot of institutional knowledge and experience contained in people, history that’s contained in people, and I think that makes those people valuable that they have an experience and a history, and we can do a much better job at distributing that history experience and knowledge. I think it has to be done by mentorship, apprenticeship programs, pairing people up. Less experience or junior members of the team with more senior people that happens already, but sometimes when we all get too busy and too siloed that it's not happening. And I know that when people leave or when people will retire or just leave the firm, a lot of that institutional knowledge goes with it. And then because we've not done a good enough job to hand it down from one site generation to the next. And I see that happening.”

Said different, if leadership does create opportunities for its employees to transfer tacit knowledge into organizational knowledge, this knowledge is lost and cannot be utilized to garner transient advantages. For example, Participant Five speaks about employees within his firm in that the individual employee is innovating everyday within their own job, however without the guidance from the leadership there is no path to creating a uniform organizational knowledge assets:

“They are innovating every day within their own jobs but there's no path to creating something that we can use uniformly across our book.”

Participant Five is an employee who is managed and who works directly with clients. He sees that people like himself within the firm are innovating, however, there is a lack of strategic alignment across the organization where this innovation can be better institutionalized

and accessed, ultimately improving on opportunities to gain transient advantages. To benefit from the knowledge within the firm in way of transferring the knowledge from individual productivity into transient advantages, participants were quite clear in the leadership played a major role in this transition. For example, Participant Two states:

“In the whole organization, because Marsh is big here in Germany, we have 805 people with all different... Okay, at the end of the day, we have one goal. It's the perfect service for the client or the prospect. But we have so many different solutions, so many different tasks. And I have the feeling that the more complexity you have, then it's not so easy to feel a belonging. And that's the reason that we from the management side, we put a lot into our... I don't know the right word in English, for our company 'leitfaden', for our vision or our mission. What are the key points we are staying for, so. And so, in order to become a leader, he or she should lead the team for the organization in a mutually trusting environment and suggesting the goals and vision of the organization, which it is heading to.”

Participant Three suggests:

“I really do believe that a manager can, a leader can impact the productivity of the team cause the productivity I believe it's very much linked to how well you feel doing your job and how a manager portrays that to you. It's very important. The showing every step of the way what you're doing and how that impacts the local results, the regional results, the global results, the information you're creating, what you're doing, how it impacts the whole chain inside the company and the business. I think that if a manager doesn't give their employees a clear view of the importance of what they're doing, that might affect productivity.”

Similarly, Participant Four states:

“At the top level you want to see your leaders have good morals and have a good direction. Clear direction, I would think. And in particular with my leaders... If I see them, they're trying their hardest to bring in new business and interact with clients. It inspires you to work hard and get involved as much as you can. So, for example, when we have our... When my team has our weekly catch up. When I hear what my manager is doing to try and help our team reach our budget. They're going out of their way to call a whole bunch of clients. It's quite inspiring.”

Equally, Participant Six submits:

“And we need to transfer this responsibility to our colleagues. And if you don't have this vision, this is our capitalism, Emily, this is our capitalism. So, the people need to work, and everyone needs to find the profit. But we need to do in a different way that the people doesn't feel this sensation directly. Not the pressure, but to be intentional to collaborate, to motivate the people, not say this straight directly to them. At the end, the job of the leader is to create the environment for the employees to work well, looking for more knowledge including collaboration within the team and outside of the team.”

And lastly, Participant Ten offers:

“I mean, I think it's the job of management to make comments or suggest how to handle information. If I remember in my history, when I joined Firm XYZ in 2009, everyone was printing every piece of mail and document and put them in big binders, which were then sent to the archives. I took the initiative to change all that, storing everything on the outlook and

the famous online files that we have today. That we filed that, you filed the whatever. It's developed enormously since then. I mean, the system today is nothing compared to what I started long time ago. But clearly yes, that's our job as managers to get in, shout when needed and recommend if we have some good ideas."

Essentially, the participants, whether analysts or leaders themselves, are advocating for the importance of leadership and its role in supporting individual productivity and transferring this productivity into organizational transient advantages, especially in a rapidly evolving and dynamic business landscape.

5.1.4 Qualitative Analysis and Findings Section Summary

The qualitative analysis and findings revealed that, knowledge management supported and guided by leadership has a profound impact on knowledge-worker productivity. Knowledge-worker productivity underscores its pivotal role in shaping the competitive landscape, particularly within large multinational enterprises striving for transient advantages. The participants have explained that through the effective utilization of knowledge resources, this can serve as a powerful catalyst for organizational success especially in dynamic environments. The interconnected relationship between knowledge management and transient advantages highlights the need for a strategic approach to information and expertise within the credit specialty industry. In essence, the quest for transient advantages demands a strategic alignment of knowledge management practices with organizational goals, coupled with adaptive leadership and a commitment to cultivating a dynamic and innovative knowledge-centric culture.

5.2 Quantitative Analysis and Findings

5.2.1 Introduction

This section is divided into three parts, the first part provides a summary of the participants' demographic profile and how data was prepped and screened including the mean, standard deviation, skewness, and kurtosis. The second part of this section focuses on PLS-SEM, on how this statistical technique was chosen and path model is explored. The third part of this section presents both descriptive and inferential statistics. In regard to inferential statistics, the analysis focused on both the measurement and structural model. Hypotheses were formulated and tested using a path diagram, employing a path weighting scheme for parameter estimation. The study centered around five main hypotheses, with affective commitment acting as a moderating construct.

5.2.2 Data Collection and Sample

The survey data was conducted over a 3.5-week span, being sent out on Wednesday, March 16, 2022, and concluded on Monday, April 11, 2022. A follow up reminder email was sent out on Tuesday, March 29, 2022. With this said, the official process of assembling the survey and pilot testing began in August of 2021, with first discussions with academic supervisors. Following, the approval process within Marsh McLennan Companies began on Tuesday, December 7, 2021. The survey was adjusted in both rounds of discussions to best fit the study and to the company standards. Once approved and tested, the survey was sent out to 896 employees who find themselves placed within the Credit Specialties department at Marsh McLennan Companies. At the time the department had 896 employees globally.

Qualtrics, a third-party research panel, collected 375 responses from 896 employees where 294 of those responses were valid. 81 responses were not fully completed; therefore,

these responses were manually removed from the Excel spreadsheet exported from Qualtrics. Utilizing the valid responses, the response rate is 32.81%, which is quite high for the Credit Specialties department. The researcher was informed that she should expect about a 10% to 12% response rate.

5.2.3 Demographic Profile

The demographic profile of respondents consists of six questions related to gender, department, geographical region, organizational position, time at the organization, and level of education. A complete description of the demographic profile is presented in Table 22.

The demographic data indicated that slightly more males (58.50%) responded to the survey than females (41.50%). This could however be due to the fact that the industry is very much male dominated, meaning there are more males than females in the pool having the opportunity to take the survey.

In regard to the sub-departments within the Credit Specialties department, the respondents of the Trade Credit (53.06%) team heavily out-weighed the other sub-departments with 156 respondents to the survey. The next sub-department in line is Surety with 78 respondents (26.53%). Similarly, to the gender discussion, the Trade Credit sub-department is the largest sub-department within the Credit Specialties department at Marsh McLennan Companies, providing a larger pool of respondents to take this survey. Coming in at second largest sub-department within the Credit Specialties department at Marsh McLennan Companies is the Surety sub-department. This means that the data gathered reflects the pool of available personnel within the company. The option of *Other* was provided for back-office members as well as leadership (e.g., Global Leader of Credit Specialties) which are not tied to a specific sub-segment.

The largest geographical region which participated in the survey is Europe with 133 respondents (45.24%). This does not reflect the company's demographics as North America employees the largest majority of the Credit Specialties department with Latin America coming in second and Europe in third place. According to the survey results, respondents from Europe had the highest response rate, with North America (24.49%) coming in second with 72 respondents and with Asia / Pacific (14.97) ranking third with 44 respondents. A reason as to why the European region collected such a high number of responses could be because the researcher is located in Europe and sent out the survey link during European working hours which is not the case for other time zones like North America, Latin America, and Asia Pacific. Further, the reminder email was sent out by another colleague who is also located in Europe during European working hours, again facing the same issue.

Organizational position showed that most respondents have a middle ranking position within the firm with the title of Vice President (44.90%). Almost half of the respondents have the position of Vice President. The next highest level of respondents came from participants with the title of Senior Vice President (21.09%). Following Senior Vice President's is Analyst (15.99%) with Managing Director's (10.20%) next. Assistant Vice President (05.78%) and Trainee/Working Student/Intern (02.04%) followed in the response ranking. Lastly, there was no engagement from participants with a C-Level (00.00%) title. This is representative of the departments hierarchical ranking. As one can see leadership positions consisting of Senior Vice Presidents and Managing Directors make up 31.29% of the firm's Credit Specialties department.

Time spent at the organization showed that most respondents within the Credit Specialties department have been with the firm less than 5 years (41.16%). Following this is respondents having spent 5, but less than 10 years at the firm (27.55%). It was surprising to observe that the third highest response for time spent at the firm is more than 20 years (11.90%).

Being able to hold on to employees for so long can prove beneficial to institutionalizing tacit knowledge (Nonaka et al., 1995; Grant, 1996; Faccin et al., 2019; Lei et al., 2021; Kaur, 2022).

In terms of level of education about half of respondents studied up to the bachelor's degree level (46.26%), while 39.12% achieved a postgraduate level of education. 14.85% made up no formal education, secondary education (high school), and professional/vocational qualifications, ranking as the lowest number of respondents for this category.

Table 22: Demographic Profile (n=294)

		<i>n</i>	%
Gender	Female	122	41.50%
	Male	172	58.50%
Organizational Sub-Department	Factoring	3	01.02%
	Lenders Solutions Group	14	04.76%
	Political Risk	27	09.18%
	Surety	78	26.53%
	Trade Credit	156	53.06%
	Other	16	05.44%
Geographical Region	Africa	10	03.40%
	Asia / Pacific	44	14.97%
	Europe	133	45.24%
	Latin America	25	08.50%
	Middle East	10	03.40%
	North America	72	24.49%
Organizational Position	Chief Executive Officer (CEO)	0	00.00%
	Managing Director	30	10.20%
	Senior Vice President	62	21.09%
	Vice President	132	44.90%
	Assistant Vice President	17	05.78%
	Analyst	47	15.99%
	Trainee/Working Student/Intern	6	02.04%
	Other	0	00.00%
Time at Organization	Less than 5 years	121	41.16%
	5 but less than 10 years	81	27.55%
	10 but less than 15 years	31	10.54%
	15 but less than 20 years	26	08.84%
	More than 20 years	35	11.90%
Level of Education	No formal education	1	00.34%
	Secondary (high school)	25	08.50%
	Bachelor's degree (B.A., B.Sc., BAS, etc.)	136	46.26%
	Master's degree (MA, MBA, MSc, etc.)	112	38.10%
	Doctorate (PhD, MD)	3	01.02%
	Professional / Vocational Qualifications	17	05.78%
	Other	0	00.00%

Source: Author (2024)

5.2.4 Data Preparation and Screening

A meticulous examination of data holds significant importance. While the preparation and screening of data may consume time, it is indispensable for ensuring the accuracy of subsequent data analysis (Hair et al., 2006; Kline, 2015). The collected data was carefully

assessed to identify any instances of missing data, outliers, and to evaluate its adherence to normality. Further insights are provided in Section 5.2.4.1, 5.2.4.2, and 5.2.4.3.

5.2.4.1 Missing Data

The presence of missing data is an inevitable aspect of multivariate analysis, “in fact, rarely does the researcher avoid some form of missing data problem” (Hair et al., 1998, p. 46). Understanding the process which brought about the missing data is essential in order to proceed with the relevant course of action (Hair et al., 1998). According to Newman, missing data can exist within the three data levels of analysis being item-, construct-, and person-level (2014). For example, it is quite common for respondents to skip questions, provide incomplete responses, or not conclude the survey altogether (Lewis-Beck et al., 2004; Newman, 2014).

Some missing data processes are known and are accommodated for (Hair et al., 1998). However, others, typically those stemming from the respondents, are rarely known (Hair et al., 1998; Newman, 2014). In the case of this research, missing data was found, as multiple surveys were not fully completed. Luckily, the researcher was able to identify patterns through the utilization of the Qualtrics tools. Qualtrics has the capability to show how long it took each participant to fill out the survey and how long the participant spent away from the survey if the user closed out of the survey and returned. When data was missing, typically the time spent on the survey well exceeded the average time spent on the survey, which typically ranged between 10 to 15 minutes. If a participant spent more than the average 10 to 15 minutes on the survey, the likelihood of them completing the survey went down. Perhaps because the participant was pulled into something else and forgot to complete the survey altogether. From the 375 responses collected, 81 responses were incomplete. Where 896 respondents had the opportunity to participate in the survey, 294 valid surveys were collected, providing a response

rate of 32.81%. This research defines response rate being the total number of completed surveys divided by the total number of participants who were surveyed (Morton et al., 2012).

There are detrimental impacts of missing data, for example, the potential of hidden biases impacting the results and also the practical impact on the sample size available for analysis (Hair et al., 1998). With this said, the researcher ended the survey gathering once the 294 valid surveys were collected. The decision was taken in agreement with the company's marketing team. The Credit Specialties department within the firm typically has a response rate of 10%-12%. Therefore, having achieved a response rate of 32.81% far exceeded the expectation and typical rate. Further, academic literature has suggested that high response rates do not necessarily guarantee validity, instead it is essential "to know more about the data-collection effort to gather evidence about its validity" (Holtom, et al., 2022, p. 1573). The researcher adapted the survey to fit to the firm's standards and utilized the technology (Qualtrics) which the respondents were familiar with. In addition, a reminder email was sent out to respondents and leadership encouraged respondents to participate in the survey. The survey process remained transparent to all parties involved throughout the entire process.

For this study, the complete case approach was taken (Hair et al., 1998). This means that the researcher included only those observations with complete data into the analysis. The researcher was afforded the ability to utilize the complete case method due to the higher-than-average response rate for this particular department for this particular survey.

5.2.4.2 Outliers

Outliers can be defined as, "an observation that is substantially different from the other observations (i.e., has an extreme value)" (Hair et al., 1998, p. 38). Despite the significance of outliers, there is no clear guidance as to how to appropriately deal with them (Aguinis et al., 2013). Some will see outliers as data problems which will need to be fixed (Hair et al., 1998;

Aguinis et al., 2013). However, on the other hand, outliers can also be viewed as unique phenomena that may lead to new understandings (Hitt et al., 1998). A review of each individual item was completed to check for respondents which might have answered the same Likert-scale number for all questions. This could have been done to move through the survey as fast as possible. Fortunately, this was not the case. Further the researcher checked for procedural error which might have caused outliers. This was also not the case.

While there were observations that deviated from the rest, the researcher retained all cases, as the detected outliers were part of the overall population (Hair et al., 1998). Often times respondents answered similarly to an individual question, while a minority of respondents answered differently. With this said, the minority of dissimilarly answered questions was kept as this is the respondents' lived experience and part of the sample population. As mentioned, Hitt et al., explains that outliers can be viewed as unique phenomenon which can support new understanding within a study (1998). Further, Hair et al., suggests that if the identified outliers "represent a segment of the population, they should be retained to ensure generalizability to the entire population" (1998, p.66). In this sense, all valid cases were retained for this study.

5.2.4.3 Normality

A key assumption in multivariate analysis is normality, referring to the "degree to which the distribution of the sample data corresponds to a normal distribution" (Hair et al., 1998, p. 38). According to Tabachnick and Fidell (2007, p. 79), understanding the normality of the variables in a study is not always necessary, however, it does support in better realizing if the variables are all normally distributed. It can be said that a solution can be viewed as downgraded if the variables are not normally dispersed, for example if some variables are positively skewed and others are negatively skewed (Tabachnick and Fidell, 2007).

Normality can be observed through the measurement of kurtosis and skewness (Hair et al., 1998; Tabachnick and Fidell, 2007). Skewness shows the symmetry of the variable distribution while kurtosis shows the peakedness of the distribution (Tabachnick and Fidell, 2007). From evaluating the skewness and kurtosis values in Table 23, it can be seen that most of the variables of skewness are between -1.5 and 0, suggesting that they are moderately to highly negatively skewed. In this sense, because the values lie between -2 and 2, it can be suggested that these variables are moderately, not normally, distributed with a negative skew (Tabachnick and Fidell, 2007; Icard et al., 2017). The kurtosis values ranged from -0.534 (KMB 9) to 6.213 (KMB 11) with most values being between the range of -2 and 2. The kurtosis distribution can be labeled as being platykurtic, having a flatter peakedness (Hair et al., 1998; Tabachnick and Fidell, 2007; Icard et al., 2017).

Table 23: Normality Results

Construct	Item	Mean	SD	Kurtosis	Skewness
Knowledge-Oriented Leadership	KOL 1	5.91	0.923	2.933	-1.381
	KOL 3	5.66	1.056	1.593	-1.235
	KOL 4	5.72	0.880	1.861	-1.073
	KOL 5	5.30	1.151	0.002	-0.658
	KOL 6	5.49	1.206	0.993	-1.027
	KOL 7	5.36	1.203	0.851	-0.986
Knowledge Process Capabilities	KPC 1	5.69	0.964	2.472	-1.101
	KPC 2	5.54	1.077	2.108	-1.197
	KPC 3	5.32	1.094	0.732	-0.864
	KPC 4	5.59	0.946	1.850	-1.056
	KPC 5	5.64	0.983	2.685	-1.162
	KPC 6	5.44	0.997	1.218	-0.997
	KPC 7	5.77	0.884	2.432	-1.111
	KPC 8	5.61	0.976	3.329	-1.301
	KPC 9	5.21	1.182	0.655	-0.862
	KPC 10	5.29	1.131	1.376	-0.962
	KPC 11	5.00	1.236	0.156	-0.646
	KPC 12	5.43	0.997	0.510	-0.651
Knowledge Management Behavior	KMB 1	6.07	0.947	3.332	-1.473
	KMB 2	6.03	0.849	1.621	-0.958
	KMB 3	6.01	0.922	1.701	-1.086
	KMB 4	5.83	1.017	0.727	-0.933
	KMB 5	6.14	0.841	1.684	-1.103
	KMB 6	5.40	1.158	-0.185	-0.600
	KMB 7	5.01	1.212	-0.441	-0.303
	KMB 8	5.23	1.154	0.106	-0.628
	KMB 9	4.15	1.415	-0.534	-0.145
	KMB 10	5.24	1.111	1.162	-0.774
	KMB 11	6.30	0.825	6.213	-1.784
	KMB 12	6.33	0.745	2.000	-1.217
Affective Commitment	AC 1	5.44	1.147	0.565	-0.776
	AC 2	4.93	1.366	0.142	-0.669
	AC 3	5.19	1.285	0.627	-0.776
	AC 4	5.29	1.184	0.033	-0.532
Knowledge-Worker Productivity	KWP 1	5.85	0.897	2.280	-1.241
	KWP 2	5.64	1.014	2.312	-1.33
	KWP 3	5.36	1.122	0.666	-0.833
	KWP 4	5.63	1.047	0.908	-0.972
	KWP 5	6.04	0.759	1.667	-0.912
	KWP 6	6.09	0.743	0.588	-0.699
	KWP 7	5.67	1.099	1.474	-1.064

Source: Author (2024)

5.2.5 Statistical Techniques - PLS-SEM

The aim of statistical technique is to assess the likelihood that the observed data pattern is a result of the hypothesized causes in the tested theory rather than an occurrence of chance (Lowry and Gaskin, 2014). Therefore, the choice of statistical technique should be made thoughtfully keeping in mind the type of data collected and the context of the theory. In this regard, Lowry and Gaskin (2014, p. 123) posit, “there is much about a theory that a researcher must understand before employing statistical tests – for example, its axiomatic foundations and the internal consistency of its logic”. In this keeping, the statistical technique should be aligned with the theory being tested to not diminish the relevance of the study and ultimately the progress of scientific research (Lowry and Gaskin, 2014). Accordingly, the researcher will use the next sections to outline the choice for using PLS-SEM for this study.

5.2.5.1 Choosing PLS-SEM

While the constructs in this study have been tested before, either via CB-SEM (AMOS software) or PLS-SEM (SmartPLS software), to avoid mindless duplication the researcher has studied the multiple statistical techniques, both 1G and 2G and their respective software applications.

1G statistical analysis techniques are methods such as correlations and regressions such as ANOVA, which are suited for simple modeling schemes (Lowry and Gaskin, 2014). Alternatively, 2G statistical analysis techniques are methods for “modeling causal networks of effects simultaneously” (Lowry and Gaskin, 2014, p. 124). An example of a 2G technique includes the SEM method. It is not suggested that 1G techniques are no longer necessary in the presence of 2G techniques (Lowry and Gaskin, 2014), however, when compared, it can be said that 2G techniques such as SEM can be deemed to be more advanced (Karimimalayer & Anuar 2012). 1G techniques provide the opportunity to test a single theoretical position whereas 2G

techniques can test a collection of theoretical positions (Lowry and Gaskin, 2014). Because this study observes multiple propositions, a 2G statistical technique was chosen to best understand the phenomenon at hand.

The 2G statistical technique, more specifically, SEM, was deemed appropriate for this study because SEM can jointly assess the measurements and the theory, it allows for a holistic testing of multistage models, it avoids fixed-scale construction, and finally allows for finer testing of moderators (Lowry and Gaskin, 2014). It is at this point to consider which method of SEM is best fit for this study as there are two forms, being PLS-SEM or CB-SEM (Lowry and Gaskin, 2014; Richter et al., 2016; Hair et al., 2018). While both approaches are utilized to analyze structural path models, they are distinct in a number of ways. Table 24 created by Lowry and Gaskin (2014, p. 133) provides an overview, comparing the differences between PLS-SEM and CB-SEM and when to utilize the respective statistical technique.

Table 24: Recommendations on When to Use PLS-SEM Versus CB-SEM

Model Requirement	PLS-SEM	CB-SEM
Includes interaction effects	Preferable, as it is designed for easy interactions	Difficult with small models, nearly impossible with large ones
Includes formative factors	Easier	Difficult
Includes multigroup moderators	Can use, but difficult	Preferable
Testing alternative models	Can use	Preferable, as it provides model fit statistics for comparison
Includes more than 40-50 variables	Preferable	Sometimes unreliable if it does converge; sometimes will not converge
Nonnormal distributions	Preferable (although it will still affect results, just to a lesser extent)	Should not be used; results in unreliable findings
Non-homogeneity of variance	Preferable (although it will still affect results, just to a lesser extent)	Should not be used; results in unreliable findings
Small sample size	It will run (although it will still affect results negatively)	Unreliable if it does converge; often will not converge

Source: Lowry and Gaskin, 2014, p. 133

There are several drivers pursuing PLS-SEM instead of CB-SEM for this study. This study is focused on exploratory work rather than confirmatory work; therefore PLS-SEM is considered to be a better fit (Lowry and Gaskin, 2014; Richter et al., 2016; Hair et al., 2018). As Cepeda-Carrion et al. (2019, p. 76), suggests, “PLS-SEM path models are fruit of productive dialogue between the path model (theory) and data (reality)”. Theory is considered in that CB-SEM is focused on testing between theory and confirmatory/explanatory modeling while PLS-SEM is focused primarily on prediction (Lowry and Gaskin, 2014; Richter et al., 2016; Hair et al., 2018). Further, this study deals with knowledge management as an overarching theme dealing with latent measures which are not directly observed. Because variables are composite, PLS-SEM is seen to be the appropriate choice to carry out analysis for this study (Hair et al., 2018; Cepeda-Carrion et al., 2019). Last, but not least, prior studies and their methodologies as well as the researcher’s own access to the respective statistical software was also taken into consideration. Additional details regarding the suitability of PLS-SEM for this study are elaborated upon in the following section, *Section 5.2.5.2*.

5.2.5.2 PLS-SEM Suitability

To test and to determine suitability of PLS-SEM for this study, the researcher adopted and adapted the key six identifiers outlined by Hair et al., (2012b, p. 419) being: 1) reasons for using PLS-SEM, 2) data characteristics, 3) model characteristics, 4) outer model evaluation, 5) inner model evaluation, and 6) reporting. The six identifiers supported in guiding the researcher through the discussion of PLS-SEM suitability while simultaneously presenting the hypothesis testing approach for this study. For this study identifiers four and five were conjoined to make one sub-group, labeled as model evaluation. In the next five subsections, considerations for utilizing PLS-SEM are outlined.

5.2.5.2.1 Reasons for Utilizing PLS-SEM

As previously described, there are multiple reasons as to why PLS-SEM is suitable for this study. In line with the purpose of PLS-SEM, this study is set out to explore endogenous constructs for exploratory research and for the development of theory (Wold, 1985). The PLS-SEM approach provides flexibility of theory and practice by allowing for the ability to pursue the explanation of the phenomenon at hand at a conceptual level while providing the ability to initiate predictions at a measurable level (Shmueli, 2010; Richter, et al., 2016). As this study seeks to add value to both theory and practice, PLS-SEM provides the flexibility to pursue both, as the technique allows for an open dialogue between the investigator and the computer (Richter et al., 2016). As Richter et al., (2016, p. 590) explains, PLS-SEM allows for “tentative model improvements such as the introduction of a new latent variable, an indicator, and an inner model relation, or the omission of such an element are easily and quickly tested for predictive relevance”. Moreover, Richter et al., and Hair et al, (2012a; 2016) both suggest that complex models motivate the use of PLS-SEM. This is in line with the study’s motivation for exploratory research for theory development (Hair et al., 2018).

5.2.5.2.2 Data Characteristics

This subsection will address three key data characteristics being sample size, robustness, and variable type.

Multiple researchers have pointed to the notion of PLS-SEM having an advantage over CB-SEM in that it works well with smaller sample sizes (Hair et al., 2012a; Hair et al., 2012b; Richter et al., 2016; Hair et al., 2019; Cepeda-Carrion et al., 2019). With this said, based on the studies carried out by Ridgon (2016, p. 600), he suggests that it is, “the nature of the population that justifies the small sample size, and not the small sample size that justifies the choice of PLS path modeling”. In line with this notion, Hair et al., (2019, p. 5) also states that

PLS-SEM is not meant to turn a non-representative sample into a legitimate sample in turn to achieve valid model estimations. The justifiability of PLS-SEM being able to handle a smaller sample size might have stemmed from Barclay et al., (1995) ‘ten times rule’ (Hair et al., 2012a). As Hair et al. (2012b, p. 420) explains that one should use a “minimum sample size of ten times the maximum number of paths aiming at any construct in the outer model and inner model”. In the case of this study, the researcher follows the advice of Ridgon (2016) by justifying the sample size to the nature of the population. As mentioned previously in section 5.2.2. *Data Collection and Sample*, the researcher at a response rate of 32.81% which is calculated by utilizing only returned valid responses (invalid responses were not included in this calculation). The total population consisted of 896 employees, where 375 responses were returned, and of those 294 responses were deemed to be valid.

Sample size along with distribution can contribute to robustness (Hair et al., 2012b). Data distribution should also be considered when assessing robustness (Hair et al., 2012b). While it is suggested that PLS-SEM can support non-normal data it is advised that data distribution should be considered (Hair et al., 2012b). The researcher evaluated skewness and kurtosis values which can be viewed in Table 23 in *section 5.2.4.3 Normality*. According to Wold (1982), PLS-SEM has the propensity to underestimate inner model relationships. Hence, the advice to understand the study’s data distribution to avoid or to be aware of such underestimations, which can be caused by highly skewed data (Hair et al., 2012b). Highly skewed data has the ability to inflate bootstrap standard errors (Chernick, 2008). This then has the possibility to reduce statistical power (Hair et al., 2012b).

When considering variable type, Hair et al., (2012a, p. 421 & 2012b, p. 326) suggests that PLS-SEM has the capability to process nominal, ordinal, interval, and ratio scaled variables. It is advised to proceed with caution when analyzing categorical data with PLS-SEM (Hair et al., 2012a). To this point, Jakobowicz and Derquenne (2007, p. 3668) advise that,

“when working with continuous data or grades from 1 to 10, PLS does not face any problems, but when working with nominal or binary data it is not possible to suppose there is any underlying continuous distribution”. In the case of this research, ordinal continuous data which is suitable for PLS algorithms is utilized (Jakobowicz & Derquenne, 2007; Hair et al., 2012a; Hair et al., 2012b).

In summary the researcher took into consideration the various data characteristics, specifically sample size, robustness, and variable type when considering the utilization of PLS-SEM.

5.2.5.2.3 Model Characteristics

To test and to determine suitability of PLS-SEM for this study, model characteristics were also considered. Model characteristics include number of latent variables, number of inner model path relations, model type, mode of outer models, number of indications per reflective constructs, number of indicators per formative construct, and total number of indications in models. This guide was adopted from Hair et al., (2012a, p. 421-423) and Hair et al., (2012b, p. 326-327). Through the prescribed guide, the researcher can provide an overview of the descriptive statistics for model characteristics in this study while comparing this to previous studies which used the PLS-SEM statistical technique to carry out analysis. Along with a written description of each element, the researcher also provides the reader with a table which offers an overview in one complete view. The table was also adapted from Hair et al., (2012a, p. 422) and Hair et al., (2012b, p. 327).

Beginning with metric latent variables, it was shown that on average studies reviewed by Hair et al., (2012a & 2012b) had an average of 7.94 latent variables, whereas in the review carried out by Shah and Goldstein (2006), an average of 4.70 latent variables were reported. In this study, five latent variables were elected. This can seem relatively low when compared to

the average found the studies carried about by Hair et al., (2012a & 2012b). With this said, the five latent variables use a high number of indicators which can be deemed higher or in line with the average study reviewed by Hair et al., (2012a & 2012b). The average being 9.4 before 2000 and 11.6 thereafter. The number of latent variables were chosen due to a mix of influence from prior research, guidance gained from the interviews, and finally from the organizational marketing team supporting to employ the survey.

Further, there are three types of models identified by Hair et al., (2012a, p. 421) being focused, unfocused, and balanced. This research identifies the balanced model being between the focused and unfocused model types (Hair et al., 2012). This meaning that this research is neither defined by having a small number of endogenous latent variables which are described by a large number of exogenous latent variables (focused model) nor by having several endogenous latent variables and mediating effects, with a smaller amount of exogenous latent variables (unfocused model) (Hair et al., 2012a, p. 421). Focused and balance models fit best to PLS-SEM (Hair et al., 2012a).

Regarding the outer models, PLS path models are typically either purely reflective latent variables or a combination of reflective and formative latent variables, it is seldom that only formative latent variables are utilized (Hair et al., 2012a; Hair et al., 2012b). In this study, the method of utilizing purely reflective latent variables is pursued.

As previously stated, Table 25 represents an overview of the descriptive statistics for model characteristics which are selected for this study while comparing this to previous studies which utilized the PLS-SEM statistical technique to carry out analysis. The rows labeled as *current research* reflect the statistics in this research.

Table 25: Descriptive Statistics for Model Characteristics

Descriptive Statistics for Model Characteristics		
Criterion	Research	Results
Number of Latent Variables	Current Research	5
	Mean	7.94
	Median	7.00
	Range	(2; 29)
Number of Inner Model Path Relations	Current Research	29
	Mean	10.56
	Median	8.00
	Range	(1; 38))
Model Type	Current Research	Balanced
	Focused	109
	Unfocused	85
	Balanced	(1; 38)
Mode of Outer Models	Current Research	Only Reflective
	Only Reflective	131
	Only Formative	20
	Reflective and Formative	123
	Not Specified	37
Number of Indicators per Reflective Constructs	Current Research	(3; 12)
	Mean	3.99
	Median	3.50
	Range	(1; 27)
Number of Indicators per Formative Construct	Current Research	Not Applicable
	Mean	4.62
	Median	4.00
	Range	(1; 20)
Total Number of Indicators in Models	Current Research	29
	Mean	29.55
	Median	24.00
	Range	(4; 131)

Source: adapted from Hair et al., (2012a p. 422) & Hair et al., (2012b, p. 327)

5.2.5.2.4 Model Evaluation

Outer Model Evaluation

Outer model evaluation supports the assessment of reliability and validity (Hair et al., 2012a). Determined in the prior section, the constructs in this study are measured by their reflective indicators. According to Diamantopoulos et al., (2008) it is essential to discern if reflective or formative indicators are utilized to measure the constructs as a different set of criteria must be applied. For example, Hair et al., (2012b, p. 328) suggests that reflective measures are “evaluated through criteria of internal consistency, such as Cronbach’s alpha and composite reliability”. To assess the reflective outer models in this study, determinates such as indicator reliability, internal consistency reliability, convergent validity, discriminant validity, and multicollinearity are measured (Hensler et al., 2009; Hair et al., 2011; Hair et al. 2012a). More specifically, empirical tests such as squared standardized outer loadings (indicator reliability), composite reliability and Cronbach’s Alpha (internal consistency), AVE (convergent validity), AVE Square Root (Fornell-Larcker criterion) and Heterotrait-Monotrait Ratio (discriminant validity), and VIF (multicollinearity) were carried out. Tables, 27, 28, 29, 30, and 31 provide an overview of the determinates, the specific empirical tests and findings of this research when assessing the outer models. Before outlining the outer model evaluation, a table is provided to best understand the constructs and their abbreviations which is shown in Table 26.

Table 26: Construct Abbreviations

Abbreviation	Construct Name
KOL	Knowledge-Oriented Leadership
KPC	Knowledge Process Capability
KMB	Knowledge Management Behavior
AC	Affective Commitment
KWP	Knowledge-Worker Productivity

Source: Author (2024)

Table 27: Descriptive Statistics for Outer Model Evaluation – Indicator Reliability

Evaluation of Outer Models					
Determinate	Empirical Test			Current Research	
Indicator Reliability	Squared Loadings	Standardized	Outer	AC 1	0,799
				AC 2	0,745
				AC 3	0,856
				AC 4	0,863
				KMB 4	0,896
				KMB 5	0,836
				KMB 6	0,737
				KOL 1	0,788
				KOL 3	0,827
				KOL 4	0,741
				KOL 6	0,739
				KOL 7	0,756
				KPC 1	0,726
				KPC 10	0,8
				KPC 11	0,757
				KPC 12	0,775
				KPC 2	0,7
				KPC 3	0,7
				KPC 4	0,825
				KPC 5	0,749
				KPC 6	0,828
				KPC 7	0,75
				KPC 8	0,723
				KPC 9	0,76
				KWP 2	0,749
				KWP 3	0,803
				KWP 4	0,738
				KWP 5	0,764
KWP 6	0,747				

Source: Author (2024) & adapted from Hair et al., (2012a) & Hair et al., (2012b)

Table 28: Descriptive Statistics for Outer Model Evaluation – Internal Consistency Reliability

Evaluation of Outer Models				
Determinate	Empirical Test	Current Research		
Internal Consistency Reliability	Composite Reliability	AC	0,889	
		KOL	0,88	
		KPC	0,942	
		KWP	0,873	
		KMB	0,865	
	Cronbach's Alpha	AC	0,837	
		KOL	0,829	
		KPC	0,933	
		KWP	0,818	
		KMB	0,763	

Source: Author (2024) & adapted from Hair et al., (2012a) & Hair et al., (2012b)

Table 29: Descriptive Statistics for Outer Model Evaluation – Convergent Validity

Evaluation of Outer Models				
Determinate	Empirical Test	Current Research		
Convergent Validity	AVE	AC	0,668	
		KOL	0,594	
		KPC	0,576	
		KWP	0,579	
		KMB	0,682	

Source: Author (2024) & adapted from Hair et al., (2012a) & Hair et al., (2012b)

Table 30: Descriptive Statistics for Outer Model Evaluation – Evaluation of Outer Models

Evaluation of Outer Models							
Determinate	Empirical Test	Current Research					
Discriminant Validity	Fornell-Larcker Criterion	AC	0,817				
		KOL	0,771				
		KPC	0,759				
		KWP	0,761				
		KMB	0,826				
	Cross-Loadings (HTMT)		AC	KOL	KPC	KWP	KMB
		AC					
		KOL	0,417				
		KPC	0,366	0,495			
		KWP	0,41	0,448	0,518		
KMB	0,395	0,475	0,304	0,552			

Source: Author (2024) & adapted from Hair et al., (2012a) & Hair et al., (2012b)

Table 31: Descriptive Statistics for Outer Model Evaluation – Multicollinearity

Evaluation of Outer Models				
Determinate	Empirical Test	Current Research		
Multicollinearity	Variance Inflation Factor (VIF)	AC 1	1,515	
		AC 2	1,76	
		AC 3	2,741	
		AC 4	2,292	
		KMB 4	2,08	
		KMB 5	1,82	
		KMB 6	1,345	
		KOL 1	1,762	
		KOL 3	2,076	
		KOL 4	1,778	
		KOL 6	1,689	
		KOL 7	1,825	
		KPC 1	2,173	
		KPC 10	2,839	
		KPC 11	3,004	
		KPC 12	2,39	
		KPC 2	2,195	
		KPC 3	2,007	
		KPC 4	2,791	
		KPC 5	2,362	
		KPC 6	3,156	
		KPC 7	2,575	
		KPC 8	2,139	
		KPC 9	2,743	
KWP 2	1,75			
KWP 3	2,128			
KWP 4	1,636			
KWP 5	1,763			
KWP 6	1,692			

Source: Author (2024) & adapted from Hair et al., (2012a) & Hair et al., (2012b)

The main function of the outer model evaluation is to ensure reliability and validity. To confirm reliability and validity a baseline of acceptable indices per empirical test is utilized. To assess the squared standardized outer loadings the rule of thumb outlined by Hair et al., (2017, p. 113) being that they “should be 0.708 or higher” was implemented for this study. Further, for composite reliability Netemeyer et. al., (2003) suggests that a minimum threshold

of .80 should be met, especially for a narrowly defined construct with five to eight items. In regard to Cronbach's Alpha, the advice from Salkind (2015) is applied, where a score of more than 0.7 is satisfactory. AVE and the square root of AVE was determined by following the guidance of Fornell & Larcker. "The AVE should not be lower than 0.5 to demonstrate an acceptable level of convergent validity" (Fornell & Larcker, 1981, p. 46). The square root of the AVE for each reflective construct should be higher than other correlations to indicate discriminant validity (Fornell & Larcker, 1981; Taylor & Geldenhuys, 2019). In addition, HTMT value is assessed where if the value is below 0.90, discriminant validity is suggested to be established (Frank & Sarstedt, 2019). Last, VIF was determined by adhering to the acceptance level outlined by Johnston et al., (2018) where a value of 2.5 or below indicates considerable collinearity. It is recognized that authors such as James et al., (2017) suggest that a VIF value of 5 or higher are deemed problematic. Table 32 summarizes the evaluations of the outer models and the level of acceptance utilized in this study.

Table 32: Evaluation of Outer Models and Level of Acceptance

Evaluation of Outer Models & Level of Acceptance			
Determinate	Empirical Test	Level of Acceptance	Source
Indicator Reliability	Squared Standardized Outer Loadings	≥ 0.7	Hair et al., (2017)
Internal Consistency Reliability	Composite Reliability	≥ 0.8	Netemeyer et. al, (2003)
	Cronbach's Alpha	≥ 0.7	Salkind, (2015)
Convergent Validity	AVE	≥ 0.5	Fornell & Larcker, (1981)
Discriminant Validity	AVE Square Root (Fornell-Larcker Criterion)	≥ 0.7	Fornell & Larcker, (1981)
	Cross-Loadings (HTMT)	$\leq .9$	Franke & Sarstedt (2019)
Multicollinearity	VIF	≤ 2.5	Johnston et al., (2017)

Source: Author (2024)

Inner Model Evaluation

Once outer model evaluation determines reliability and validity, inner model evaluation can then also be considered (Hair et al., 2012a). When utilizing PLS-SEM the focus of the evaluation is on variance-based, non-parametric criteria to assess the quality of the inner model (Henseler et al., 2009; Hair et al., 2012a). PLS does not standardize goodness-of-fit, instead quality is assessed based on the ability to predict the endogenous constructs (Hair et al., 2012a; Taylor & Geldenhuys, 2019). To test the quality of the inner model, four empirical tests are

carried out in this study being coefficient of determination (R-squared), cross-validated redundancy (Q-squared), path coefficients, and the effect size (F-squared). Bootstrapping is utilized to verify the explanatory capacity of the model, which employs resampling techniques to determine the meaningfulness of PLS coefficients. Tables 33, 34, 35, and 36 provides an overview of the determinates, the specific empirical tests and findings of this research when assessing inner models.

Table 33: Descriptive Statistics for Inner Model Evaluation – Coefficient of Determination

Evaluation of Inner Models					
Determinate	Empirical Test	Current Research			
Coefficient of Determination	R-squared		R Square	R Square Adjusted	
		KPC	0,201	0,199	
		KWP	0,29	0,277	
		KMB	0,07	0,067	

Source: Author (2024) & adapted from Hair et al., (2012a) & Hair et al., (2012b)

Table 34: Descriptive Statistics for Inner Model Evaluation – Cross-Validated Redundancy

Evaluation of Inner Models					
Determinate	Empirical Test	Current Research			
Cross-Validated Redundancy	Q-squared		SSO	SSE	Q ² (=1-SSE/SSO)
		AC	1176	1176	
		KOL	1470	1470	
		KPC	3528	3144,759	0,109
		KWP	1470	1271,763	0,135
		KM B	882	804,171	0,088

Source: Author (2024) & adapted from Hair et al., (2012a) & Hair et al., (2012b)

Table 35: Descriptive Statistics for Inner Model Evaluation – Path Coefficients

Evaluation of Inner Models				
Determinate	Empirical Test	Current Research		
Path Coefficients	Weighted Factors	AC --> KMB	0,275	
		KOL--> KPC	0,449	
		KOL--> KWP	0,245	
		KPC --> KMB	0,173	
		KMB --> KWP	0,346	

Source: Author (2024) & adapted from Hair et al., (2012a) & Hair et al., (2012b)

Table 36: Descriptive Statistics for Inner Model Evaluation – Effect Size

Evaluation of Inner Models								
Determinate	Empirical Test	Current Research						
Effect Size	F-squared		AC	AC *	Control Vari.	KPC	KWP	KMB
		KPC						0,075
		AC					0,042	
		AC *					0,017	
		KMB						
		Control Vari.					0	
		KOL				0,252	0,035	
		KWP						
KMB						0,085		

Source: Author (2024) & adapted from Hair et al., (2012a) & Hair et al., (2012b)

To evaluate the quality of the inner model, acceptance thresholds have been identified for each of the four empirical tests. As this study examines human behavior, which cannot be accurately predicted when compared with studies in the ‘pure science’ field, the acceptance level for R-squared can be deemed as acceptable if it is between 0.10 and 0.50 (Ozili, 2022). With this said, for this study, the guidelines set forth by Cohen (1988), where the recommended

R-squared values for endogenous latent variables is based on 0.26 being substantial, 0.13. being moderate, and 0.02 being weak is considered. The acceptable value of F-squared is determined by Cohen’s (1988) work where if effect is ≥ 0.02 it is considered small, if effect size is ≥ 0.15 it is considered medium and if effect size is ≥ 0.35 then it is large. In terms of path coefficients, the rule of thumb established by Hair et al., (2021, p. 118) is utilized, suggesting that “path coefficients are usually between -1 and +1, with coefficients closer to -1 representing strong negative relationships and those closer to +1 indicating strong positive relationships. Last, focusing on the advice from Henseler et al., (2009), Q-squared values above zero are considered acceptable and to show predictive relevance. Table 37 summarizes the evaluations of the inner models and the level of acceptance utilized in this study.

Table 37: Evaluation of Inner Models and Level of Acceptance

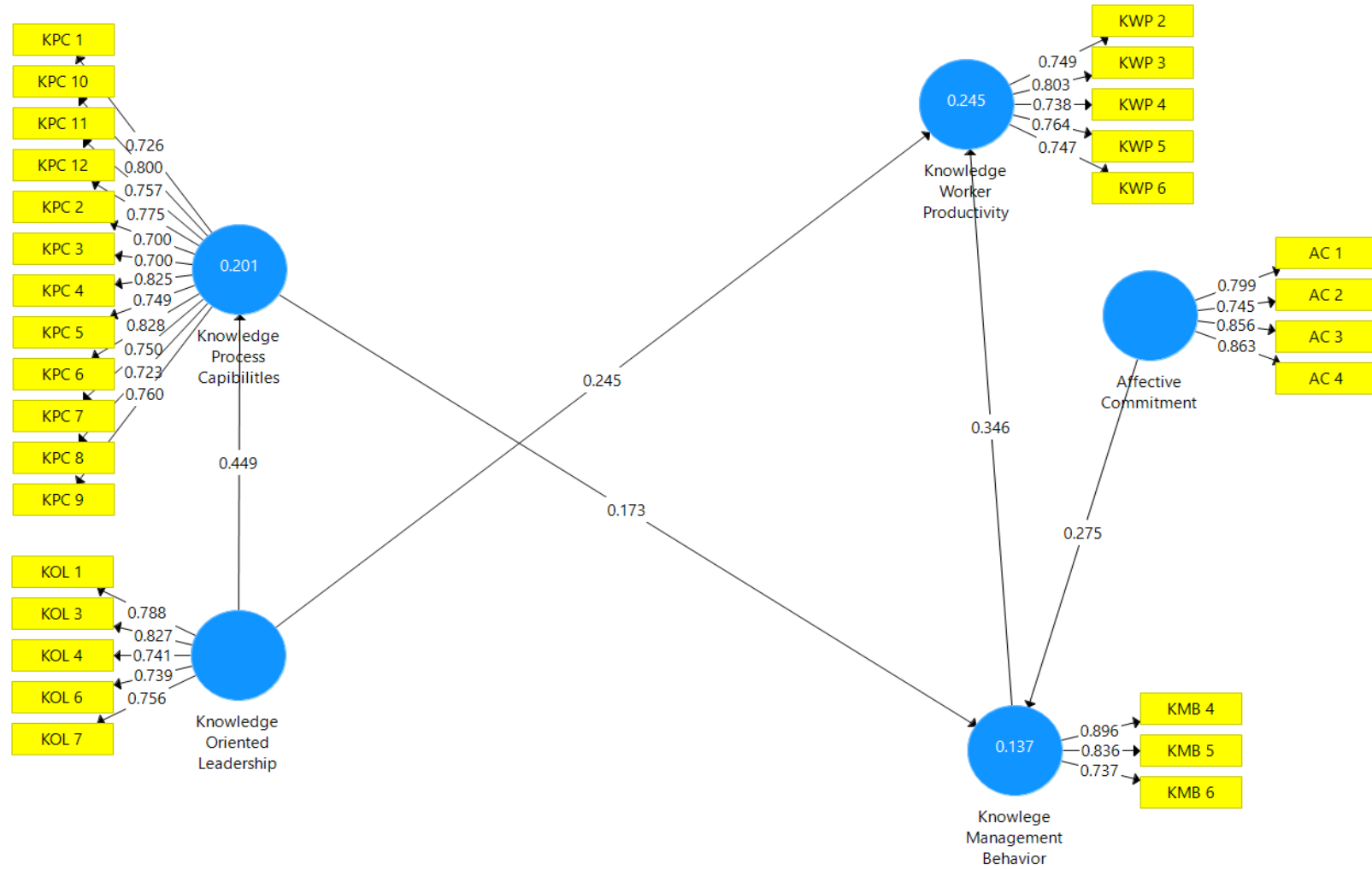
Evaluation of Inner Models			
Determinate	Empirical Test	Level of Acceptance	Source
Coefficient of Determination	R-squared	0.26, 0.13, and 0.02 (substantial, moderate, and weak)	Cohen, 1988
Cross-Validated Redundancy	Q-squared	>0	Cohen, 1988; Hair et al., 2014 & 2019
Path Coefficients	Weighted factors	-1 to +1	Hair et al., 2021
Effect Size	F-squared	0.02, 0.15, and 0.35 (small, medium, and large)	Henseler et al., 2009

Source: Author (2024)

5.2.5.2.5 Reporting

The original hypotheses outlined in Chapter 3 have been retained; therefore, no changes were made to the path model structure which you will find represented in Figure 11 where latent variables are blue and observed variables are yellow. Changes were required when evaluating the construct *Knowledge Management Behavior (KMB)*. As Hair et al., (2018, p. 10) suggests, “if the confidence interval of an indicator weight includes zero, this indicates that the weight is not statistically significant, and the indicator should be considered for removal from the measurement model”. The construct KMB originally consisted of twelve indicators which were included within the survey. Based on the analysis in SmartPLS 3, nine indicators were deleted, leaving three indicators to be utilized to measure KMB. The deletion of indicators was not done lightly, the individual indicators’ absolute contribution to the construct was considered. Of course, coding was revisited to make sure that coding errors were not contributing to the insignificance of those indicators. Further, deletion was carried out in a methodological way, by deleting the indicators sequentially (lowest loading first) and re-estimating the model each time. From all constructs, indicators from KMB were deleted (Cenfetelli & Bassellier, 2009).

Figure 11: Algorithm of PLS-SEM Path Model



Source: SmartPLS 3 (2024)

As previously suggested, the five proposed hypotheses constructed in Chapter 3 have been retained following the analysis of data collected. Based on perceived causal relationships among latent variables, hypotheses were formulated as depicted in Figure 11. Hypotheses in this study are non-directional. Nondirectional hypotheses are utilized due to the nature of this study having an exploratory sequential mixed method approach, where hypotheses causality cannot be asserted, but only predicted (Bozionelos, 2003).

In Figure 11, it can be observed that all latent variables are linked together causing a causal effect path relationship. Knowledge-Worker Productivity is an effect of Knowledge-Oriented Leadership and Knowledge Management Behavior. Knowledge Process Capabilities is causally determined by Knowledge-Oriented Leadership. Knowledge Management Behavior is causally determined by Knowledge Process Capabilities. The latent variable Affective Commitment is a moderating variable moderating the relationship between Knowledge Management Behavior and Knowledge-Worker Productivity.

Table 38: Summary of the Hypotheses Development

NO.	Hypotheses	Results
H1	<i>Knowledge-oriented leadership has a positive impact on knowledge process capabilities.</i>	+
H2	<i>Knowledge process capabilities has a positive impact on knowledge management behavior.</i>	+
H3a	Knowledge management behavior has a positive impact on knowledge-worker productivity.	+
H3b	<i>When affective commitment is present, the relationship between knowledge management behavior and knowledge-worker productivity is not proven to be stronger</i>	-
H4	Knowledge-oriented leadership has a positive impact on knowledge-worker productivity.	+

Source: Author (2024)

Hypothesis testing in this study was conducted by utilizing p-values and confidence intervals. These outcomes were generated through the software tool SmartPLS 3. Through the employment of P-values, causal relationships among latent variables in the path model were assessed for statistical significance or to determine if they occurred by chance. In this study, a significance threshold of .05 was set, indicating that coefficients were deemed significant if the P-value fell below this predetermined level, as suggested by Henseler et al., (2016). Conversely, P-values exceeding 05. Indicated an insignificant relationship. A smaller P-value suggested a higher likelihood that the results were not due to chance alone. In this keeping, to best comprehend the strength and direction of the causal effects on relationships, confidence intervals were evaluated, aligning with recommended statistical testing practices (Henseler et al., 2016). For this study, a 95% confidence interval is employed, with significance determined by intervals which should not cross zero, known as the line of no effect (Henseler et al., 2016). Narrow confidence intervals indicated relatively reliable estimates, while wider intervals may suggest high variability with the same sample (Clarke, 2012).

5.2.6 Descriptive Statistics

As noted, multiple indicators were employed to gauge the different constructs under the study. Descriptive statistics, including mean values and standard deviations, for each construct and their corresponding indicators, were computed and displayed in Table 39.

Table 39: Descriptive Statistics – Constructs and their indicators

Construct	Indicators	Indicator Mean	Std. Dev.	Composite Mean	Composite Std. Dev.
Control Variables	Gender	1.585	0.493	3.235	1.002
	Department	4.422	0.972		
	Region	3.67	1.504		
	Position	4.024	1.225		
	Time at Org	2.228	1.375		
	Education	3.483	0.899		

Construct	Indicators	Indicator Mean	Std. Dev.	Composite Mean	Composite Std. Dev.
Knowledge-Oriented Leadership	KOL 1	5.908	0.923	5.571	0.212
	KOL 3	5.66	1.056		
	KOL 4	5.718	0.88		
	KOL 5	5.299	1.151		
	KOL 6	5.486	1.206		
	KOL 7	5.357	1.203		

Construct	Indicators	Indicator Mean	Std. Dev.	Composite Mean	Composite Std. Dev.
Knowledge Process Capabilities	KPC 1	5.687	0.964	5.460	0.215
	KPC 2	5.537	1.077		
	KPC 3	5.32	1.094		
	KPC 4	5.588	0.946		
	KPC 5	5.636	0.983		
	KPC 6	5.442	0.997		
	KPC 7	5.772	0.884		
	KPC 8	5.612	0.976		
	KPC 9	5.211	1.182		
	KPC 10	5.286	1.131		
	KPC 11	4.997	1.236		
	KPC 12	5.429	0.997		

Construct	Indicators	Indicator Mean	Std. Dev.	Composite Mean	Composite Std. Dev.
Knowledge Management Behavior	KMB 1	6.071	0.947	5.644	0.625
	KMB 2	6.027	0.849		
	KMB 3	6.007	0.922		
	KMB 4	5.827	1.017		
	KMB 5	6.143	0.841		
	KMB 6	5.395	1.158		
	KMB 7	5.014	1.212		
	KMB 8	5.228	1.154		
	KMB 9	4.146	1.415		
	KMB 10	5.235	1.111		
	KMB 11	6.303	0.825		
	KMB 12	6.33	0.745		

Construct	Indicators	Indicator Mean	Std. Dev.	Composite Mean	Composite Std. Dev.
Affective Commitment	AC 1	5.442	1.147	5.211	0.188
	AC 2	4.925	1.366		
	AC 3	5.19	1.285		
	AC 4	5.286	1.184		

Construct	Indicators	Indicator Mean	Std. Dev.	Composite Mean	Composite Std. Dev.
Knowledge-Worker Productivity	KWP 1	5.854	0.897	5.755	0.238
	KWP 2	5.636	1.014		
	KWP 3	5.361	1.122		
	KWP 4	5.633	1.047		
	KWP 5	6.041	0.759		
	KWP 6	6.092	0.743		
	KWP 7	5.67	1.099		

Source: Author (2024)

5.2.6.1 Descriptive Statistics – Independent Constructs

As indicated in Chapter 3, the study has three independent constructs which include, Knowledge-Oriented Leadership (KOL), Knowledge Process Capabilities (KPC), and Knowledge Management Behavior (KMB). The KOL construct was measured using six indicators. The composite mean score for KOL as indicated in Table 38 is 5.571 ± 0.212 , indicating that leadership with a knowledge focus is relevant to employees within a multinational organization. Among the indicators for KOL, KOL indicator one, which asks the question if leadership has been creating an environment for responsible employee behavior and teamwork, has the highest mean score (5.908 ± 0.923). Meaning that respondents feel that leadership and their actions supports in creating an environment where employees can act responsibly and can collaborate.

Knowledge Process Capabilities (KPC) as a construct was measured using twelve indicators. On a scale of seven, KPC has a composite mean score of $5.460 \pm 0,215$. Among the twelve indicators, indicator KPC seven, which asks the question if the firm has the capability to apply knowledge to solve new problems, has the highest mean score (5.772 ± 0.884). Indicating that respondents strongly feel that their organization has the ability to apply knowledge as a problem-solving tool. Closely following KPC seven, KPC one, which asks the question, if the firm has the capability to distribute relevant knowledge throughout the organization (via collaborative platforms like Knowledge Exchange, social software like MS Teams, blogs, and wikis in MarshForce etc.), has a composite score of 5.687 ± 0.964 . This suggests that respondents feel strongly that their organization has and provides the ability for cross organizational knowledge exchange.

Knowledge Management Behavior (KMB) as a construct is measured using twelve indicators. On a scale of seven, KMB has a composite mean score of 5.644 ± 0.625 . Among the twelve indicators, indicator KMB twelve and KMB eleven had the highest mean score.

KMB twelve, which ask the question if knowledge helps the respondent in their day-to-day problem-solving activities, has a score of 6.33 ± 0.745 . This suggesting that respondents feel strongly that knowledge is needed in their day-to-day work to solve problems. KMB eleven, having a similarly high score of 6.303 ± 0.825 . KMB eleven asks the question if knowledge supports the respondent to serve their clients in a better way, which from the feedback strongly suggests that respondents do feel that knowledge is needed to support in servicing their clients in a better way.

5.2.6.2 Descriptive Statistics – Moderating Construct

This study has one moderating construct being Affective Commitment (AC). Affective commitment is measured using four indicators. On a 7-point scale, AC has a composite mean score of 5.211 ± 0.188 . Among the four indicators, indicator one has the highest mean score of 5.442 ± 1.147 . The question asked in this case is if the respondent would be happy to spend the rest of their career with the current organization. This suggests that many employees did feel that they would be happy to spend the rest of their career at their current organization.

5.2.6.3 Descriptive Statistics – Dependent Construct

This study has one dependent construct being Knowledge-Worker Productivity (KWP). Knowledge-Worker Productivity is measured using seven indicators. On a 7-point scale, KWP has a composite mean score of 5.755 ± 0.238 . Among the seven indicators, indicator six has the highest mean score of 6.092 ± 0.743 . The question asked in this case is if the respondent believes that the quality of their own work output is high. This suggests that several employees do feel that the quality of their work output is high. This is important to understand because if the quality of employee work output is high this can ultimately support organizational transient advantages (McGrath, 2013b).

5.2.7 Hypothesis Testing and Path Analysis

This section aims to ascertain the impacts and statistical significance of the path coefficients by examining the five hypothesized paths outlined in the study. It seeks to determine the empirical support for the proposed relationships and the degree to which the indicators are linked to each construct within the model. The analysis employs a two-stage approach, consisting of the measurement model and the structural model.

5.2.7.1 Measurement Model

The initial stage in assessing PLS-SEM involves scrutinizing the measurement model, as advocated by Hair et al., (2019). Hence, in this investigation, the PLS-SEM procedure commenced with an evaluation of the measurement model to verify that the indicators are measurable constructs. The measurement model is appraised based on three key criteria: reliability, convergent validity, and discriminant validity, as suggested by Hair et al., (2019). The reliability of indicators and internal consistency with the measurement model is gauged utilizing factor loadings and Composite Reliability (CR), following the recommendations of Hair et al., (2019) and Hanafiah (2020). Convergent validity is determined through the Average Variance extracted (AVE), while discriminant validity is assessed utilizing the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) criteria. Table 40 presents the outcomes regarding factor loadings, CR, and AVE.

In this study, the loadings for all of the items as shown in Table 40 range from 0.7 to 0.896, surpassing the threshold value of 0.4 for exploratory studies (Hair et al., 2019). Further, each construct has a composite reliability (CR) value ranging from 0.865 to 0.942 exceeding the recommended threshold of 0.6 for exploratory studies (Hair et al., 2019; Hanafiah, 2020). In addition, the AVE of all constructs achieved the required threshold of 0.5. (Hair et al., 2014) ranging from 0.576 to 0.682.

Table 40: Assessment of factor loadings, CR, and AVE

Constructs	Indicators	Loadings	CR	AVE
Affective Commitment	AC 1	0,799	0,889	0,668
	AC 2	0,745		
	AC 3	0,856		
	AC 4	0,863		
Knowledge Management Behavior	KMB 4	0,896	0,865	0,682
	KMB 5	0,836		
	KMB 6	0,737		
Knowledge-Oriented Leadership	KOL 1	0,788	0,88	0,594
	KOL 3	0,827		
	KOL 4	0,741		
	KOL 6	0,739		
	KOL 7	0,756		
Knowledge Process Capabilities	KPC 1	0,726	0,942	0,576
	KPC 10	0,8		
	KPC 11	0,757		
	KPC 12	0,775		
	KPC 2	0,7		
	KPC 3	0,7		
	KPC 4	0,825		
	KPC 5	0,749		
	KPC 6	0,828		
	KPC 7	0,75		
	KPC 8	0,723		
	KPC 9	0,76		
Knowledge-Worker Productivity	KWP 2	0,749	0,873	0,579
	KWP 3	0,803		
	KWP 4	0,738		
	KWP 5	0,764		
	KWP 6	0,747		

Source: Author (2024)

The final step of validity testing is to determine discriminant validity using the Fornell-Larcker criterion and the Heterotrait-Monotrait criteria (HTMT) as shown in Table 41 and Table 42. In Table 41, the values which are bolded along the diagonal line denote the correlation coefficients between the constructs. This table illustrates that the loading of each construct onto its designated construct surpasses its cross-loadings on all other constructs, indicating strong discriminant validity within the model.

Table 41: Fornell-Larcker Criterion

	AC	KOL	KPC	KWP	KMB
Affective Commitment	0,817				
Knowledge-Oriented Leadership	0,357	0,771			
Knowledge Process Capabilities	0,335	0,449	0,759		
Knowledge-Worker Productivity	0,353	0,378	0,456	0,761	
Knowledge Management Behavior	0,333	0,384	0,265	0,44	0,826

Source: Author (2024)

Table 41 demonstrates that across all constructs, the loading of each construct onto its designated factor exceeds its cross-loadings on all other constructs, affirming robust discriminant validity within the model. In addition, to supplement the Fornell-Larcker criterion for assessing construct validity, the Heterotrait-Monotrait (HTMT) criterion suggested by Henseler et al., (2015) is employed. The HTMT represents the average item correlation across constructs relative to the mean correlations of items measuring the same construct (Ronkko & Cho, 2020). According to Henseler et al., (2015), high HTMT values indicate potential discriminant validity issues, with 0.90 being the threshold for structural models featuring highly similar constructs. Nonetheless, for constructs with greater conceptual disparity, a threshold of 0.90 is recommended (Franke & Sarstedt, 2019).

Table 42: Heterotrait-Monotrait Criteria (HTMT)

	AC	KOL	KPC	KWP	KMB
Affective Commitment					
Knowledge-Oriented Leadership	0,417				
Knowledge Process Capabilities	0,366	0,495			
Knowledge-Worker Productivity	0,41	0,448	0,518		
Knowledge Management Behavior	0,395	0,475	0,304	0,552	

Source: Author (2024)

Table 42 illustrates the HTMT values across all variables ranging from 0.304 to 0.518, indicating the establishment of discriminant validity among the constructs. Further, apart from evaluating the validity and reliability of the measurement model, Hair et al., (2017) emphasized the importance of examining collinearity before assessing structural relationships. Table 43 presents collinearity statistics, including Variance Inflation Factor (VIF), to test multicollinearity among the independent variables.

Table 43: Assessment of Multicollinearity

Construct	Indicator	VIF
Affective Commitment	AC 1	1,515
	AC 2	1,76
	AC 3	2,741
	AC 4	2,292
Knowledge Management Behavior	KMB 4	2,08
	KMB 5	1,82
	KMB 6	1,345
Knowledge-Oriented Leadership	KOL 1	1,762
	KOL 3	2,076
	KOL 4	1,778
	KOL 6	1,689
	KOL 7	1,825
Knowledge Process Capabilities	KPC 1	2,173
	KPC 10	2,839
	KPC 11	3,004
	KPC 12	2,39
	KPC 2	2,195
	KPC 3	2,007
	KPC 4	2,791
	KPC 5	2,362
	KPC 6	3,156
	KPC 7	2,575
	KPC 8	2,139
	KPC 9	2,743
Knowledge-Worker Productivity	KWP 2	1,75
	KWP 3	2,128
	KWP 4	1,636
	KWP 5	1,763
	KWP 6	1,692

Source: Author (2024)

Table 43 provides insights into the VIF values which according to Hair et al., (2011), it is recommended that VIF values are below values of 5. However, as indicated in Chapter 5, this study follows Johnston et al., (2017) recommendation that VIF values should be less than 2.5. The VIF values range between 1.345 to 3.004. Most indicators suggest that collinearity is not detected within the data, however, seven out of twenty-nine indicators fall below the threshold indicating collinearity. Six of which were found in the Knowledge Process

Capabilities construct alone. This will be taken into consideration when discussing Knowledge Process Capabilities as this can affect the interpretability of the model.

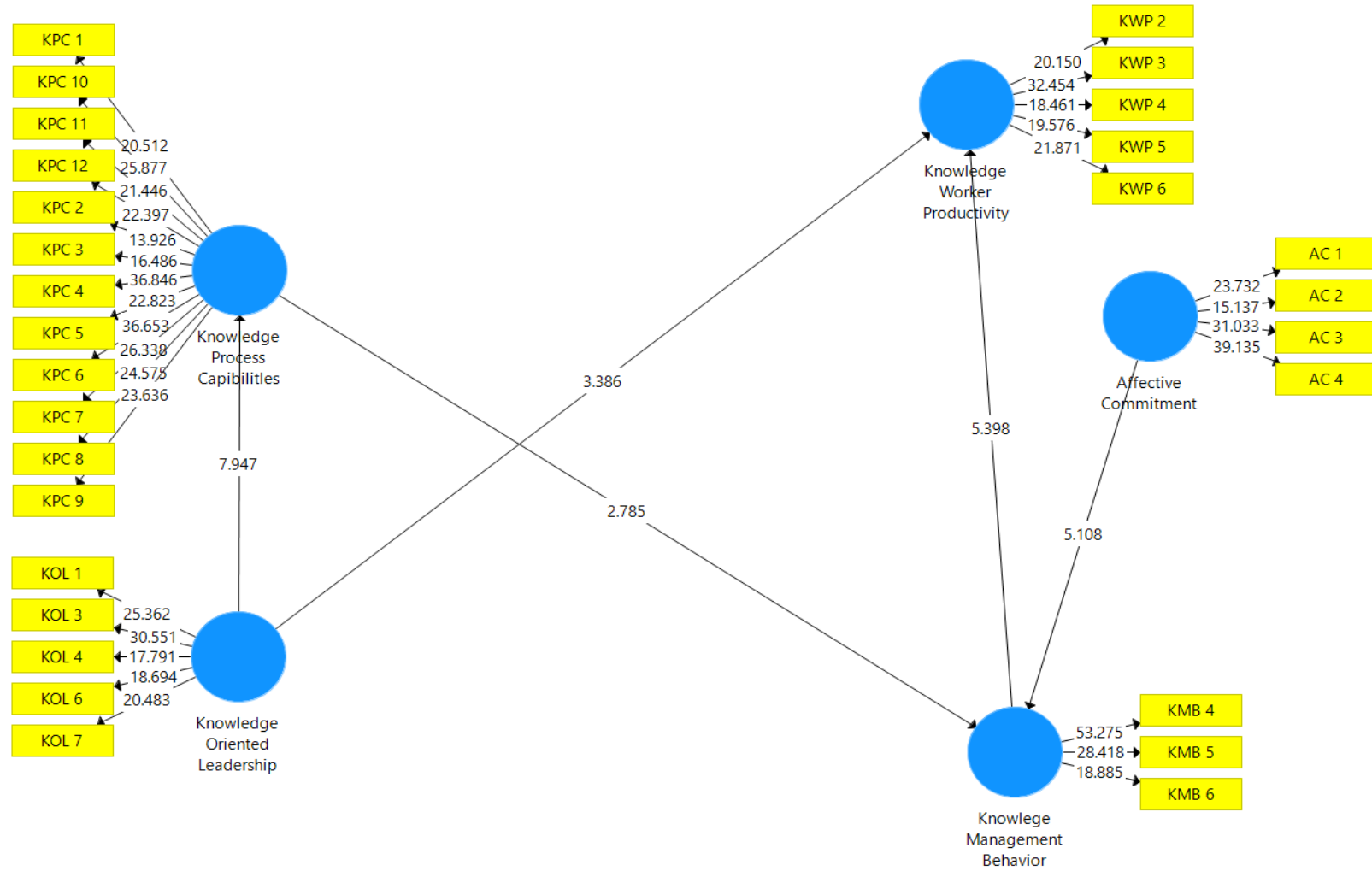
In essence, Section 5.2.7.1 affirmed the adequacy of the measurement model for the study according to the assessment criteria. Subsequently, after validating the measurement model, an evaluation of the structural model is necessary. Consequently, Section 5.2.7.2 is dedicated to the PLS-SEM findings in order to evaluate the structural model.

5.2.7.2 Structural Model

As suggested by Hair et al., (2017), once the measurement model fulfills all necessary criteria, evaluation of the structural model can proceed. After evaluating the measurement model, SEM is analyzed following the approach outlined by Hair et al., (2017). The standard criteria for assigning the structural model concerning the proposed hypotheses encompasses statistical significance, t-values, path coefficients, and the coefficient of determination (R²). In addition, the model's predictive power, predictive relevance, and effect size are also determined.

The hypotheses in this research underwent examination through a two-tailed t-test. Hence, according to Benitez et al., (2019), a path coefficient is deemed significant if its associated t-value surpasses 1.96. The t-test serves as a valuable tool for assessing significant relationships among constructs within the model (Benitez et al., 2019). Consequently, the bootstrapping algorithm was employed to compute t-values for each path coefficient and to determine the significance level for each hypothesized relationship as illustrated in Figure 12.

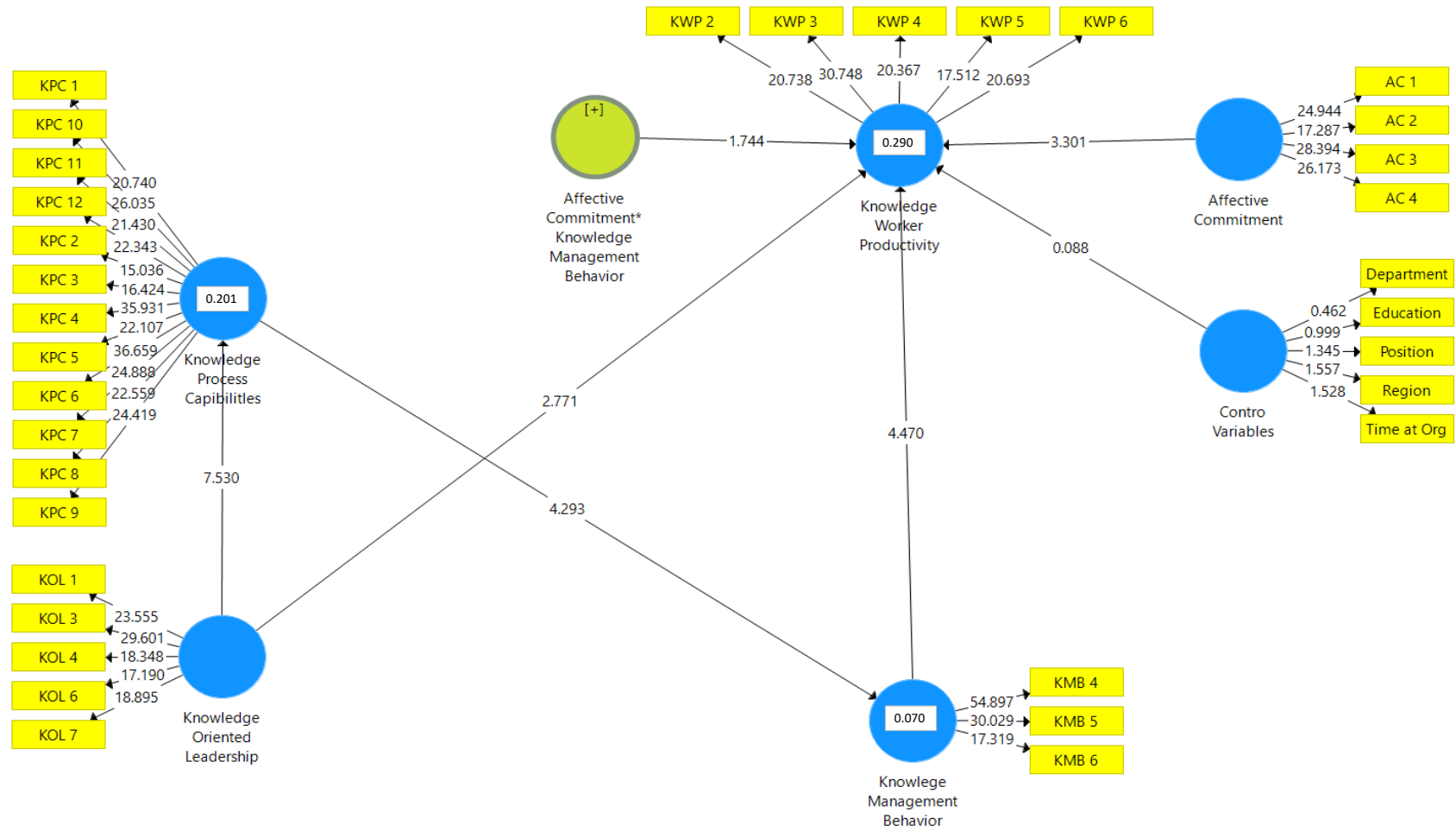
Figure 12: SEM model with t-values



Source: SmartPLS 3 (2024)

Path coefficients signify the degree to which antecedent constructs influence the independent variable. Essentially, these coefficients aid in gauging the impact of each hypothesized path on the overall suitability of the structural model (Hair et al., 2011; Hair et al., 2019). The generation of path coefficients among latent variables is facilitated through the application of the PLS algorithm, revealing the strength of relationships, as depicted in Figure 13.

Figure 13: SEM model with path coefficient values



Source: SmartPLS 3 (2024)

Assessment of Hypotheses

Table 44 provides an overview of each of the hypothesized relationships, detailing the corresponding t-values, path coefficients, and their statistical significance.

Table 44: Structural Model Estimates

Hypothesis	Path	Coefficients (β)	T-Values	P-Values	Results
H1	Knowledge-Oriented Leadership -> Knowledge Process Capabilities	0,449	7,53	0	Supported
H2	Knowledge Process Capabilities -> Knowledge Management Behavior	0,265	4,293	0	Supported
H3a	Knowledge Management Behavior -> Knowledge-Worker Productivity	0,279	4,47	0	Supported
H3b	Affective Commitment*Knowledge Management Behavior -> Knowledge-Worker Productivity	-0,106	1,744	0,082	Not Supported
H4	Knowledge-Oriented Leadership -> Knowledge-Worker Productivity	0,177	2,771	0,006	Supported

Source: Author (2024)

In Table 44, for each hypothesis significance was tested by calculating the P-Values. In this study, a path coefficient is significant when the P-Value is < 0.05 . There is a significant relationship between the two constructs Knowledge-Oriented Leadership and Knowledge Process Capabilities ($\beta=0.449$, $p < 0.05$), therefore Hypothesis 1 is supported at a 5% significant level. The relationship between Knowledge-Oriented Leadership and Knowledge Process Capabilities also showed a strong influence, based on the path coefficient being 0,449. Further, as evidence by the PLS output presents in Table 44, Knowledge Process Capabilities exhibited a positive impact on Knowledge Management Behavior ($\beta=0.265$, $p < 0.05$). Consequently, a

significant association between the two constructs is established, thereby confirming the support for Hypothesis 2 at a 5% significance level. Table 44 also reveals that Knowledge Management Behavior exerts a positive influence on Knowledge-Worker Productivity ($\beta=0.279$, $p < 0.05$), indicating a significant relationship between Knowledge Management Behavior and Knowledge-Worker Productivity. Hence, Hypothesis 3a can be affirmed at a 5% significance level. In addition, in Table 44 the connection between Knowledge-Oriented Leadership and Knowledge-Worker Productivity demonstrates a positive impact ($\beta=0.177$, $p < 0.05$), indicating a significant association between the two constructs. Accordingly, Hypothesis 4 is upheld at a 5% significance level.

Mohammed and Navid-Raza (2016) have contended that the inclusion of moderating variables is essential in business research analysis to ensure the realism and accuracy of research findings. Consequently, a bootstrap test of moderation was conducted to examine the effect of Affective Commitment on the relationship between Knowledge Management Behavior and Knowledge-Worker Productivity as detailed in Table 44. The relationship between Knowledge Management Behavior and Knowledge-Worker Productivity was not significantly moderated by Affective Commitment ($\beta=-0.106$, $p > 0.05$). Consequently, Affective Commitment demonstrated an insignificant moderating effect on the relationship between the two constructs, resulting in the lack of support for Hypothesis 3b.

It is noteworthy to state that control variables (Gender, Department, Geographical Region, Current Position, Time at Organization, Level of Education,) were incorporated into the analyzed relationships, as suggested by Becker et al., (2016). However, it was found that these control variables did not exhibit significant correlations with Knowledge-Worker Productivity ($\beta= 0.007$, $p > 0.05$).

Predictive and Explanatory Power: R^2

In addition to evaluating the measurement model, the explanatory power of the structural model is also assessed. The coefficient of determination serves as a gauge of the model's predictive precision, indicating the extent to which the exogenous variables collectively elucidate the variance in the endogenous variable. In this study, the three independent variables collectively accounted for approximately 29% of the variation in Knowledge-Worker Productivity, as depicted in Figure 13. Thus, the estimated R^2 of 0.29 ($p > 0.05$) suggests that Knowledge-Oriented Leadership, Knowledge Process Capabilities, and Knowledge Management Behavior jointly explain 29% variance in the dependent variable Knowledge-Worker Productivity. Further, the R^2 for Knowledge Process Capabilities is found to be 0.07, representing 7% and Knowledge Management Behavior is found to be 0.201, representing 20.1%, as shown in Figure 13.

According to Cohen (1988), R^2 values in the social and behavioral sciences are interpreted as follows: $R^2 = 2\%$ denotes a small effect, $R^2 = 13\%$ signifies a medium effect, and $R^2 = 26\%$ indicates a large effect. Typically, relevant R^2 values exceed 20%, which is pertinent to structural model assessment (Raithel et al., 2012). Consequently, this study demonstrates a large and medium predictive accuracy, with the model explaining a portion of the variance in Knowledge-Worker Productivity.

Effect Size (f^2)

Table 45: Effect Size Test

Antecedent Constructs	Henseler's (f^2)	Total Effect	Overall Effect
Knowledge-Oriented Leadership	0.144	Medium	0.087
Knowledge Process Capabilities	0.075	Small	
Affective Commitment	0.042	Small	
Knowledge Management Behavior	0.085	Small	

Source: Author 2024

The overall impact on Knowledge-Worker Productivity is relatively small (0.087) across all four independent variables, as detailed in Table 45. This implies a modest and statistically significant contribution from the variables whose hypotheses are confirmed. The overall effect size (f^2) suggests that all constructs in the model have either a medium or small effects. Knowledge-Oriented Leadership has the most significant (medium) effect size in the model, with a f^2 value of 0.144.

Predictive Relevance of the Model (Q^2)

Following Hair et al., (2019) recommendation, to evaluate the quality of the path model, predictive relevance (Q^2) statistic is employed. Q^2 is computed using blindfolding techniques, a standard procedure in SEM analysis. According to Hair et al., (2014), Q^2 values must exceed zero for each endogenous latent construct in the model. This study's findings revealed that the path model's accuracy is satisfactory, with an overall Q^2 value of 0.111, surpassing the minimum threshold of zero. This underscores the predictive significance of the constructs on Knowledge-Worker Productivity.

In summary, this study has formulated five hypotheses as outlined above. The findings revealed that H1, H2, H3a, and H4 are supported. Conversely, H3b is not supported and thus rejected. Consequently, four out of the five hypotheses garnered support based on the conducted tests. More specifically, the four which are supported are upheld at a 5% significance level. Knowledge-Oriented Leadership, Knowledge Process Capabilities, and Knowledge Management Behavior demonstrated a positive association with Knowledge-Worker Productivity. Where Affective Commitment is present in the relationship between Knowledge Management Behavior and Knowledge-Worker Productivity, there is no significance found.

5.2.8 Quantitative Section Summary

In summary, the research investigated five hypotheses related to the impact of knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, and affective commitment on knowledge-worker productivity. The findings provided strong support for hypotheses one and four, indicating that knowledge-oriented leadership positively influences both knowledge process capabilities and knowledge-worker productivity. In addition, hypothesis two and three (a) were supported suggesting that enhanced knowledge process capabilities positively impact knowledge management behavior, and that increased knowledge management behavior supports knowledge-worker productivity. However, hypothesis three (b) was not supported, indicating that affective commitment did not strengthen the relationship between knowledge management behavior and knowledge-worker productivity. This finding aligns with previous research indicating that moderators, such as affective commitment, are typically not supported in empirical studies. Overall, the study underscores the critical role of leadership and organizational capabilities in driving productivity gains within knowledge-intensive organizations, emphasizing the importance of investing in knowledge-oriented leadership and fostering a culture conducive to knowledge creation, sharing, integration, and utilization.

5.3 Chapter Conclusion

This chapter has described the analysis and findings of this research, to establish a more complete understanding of the phenomenon of the study. In conclusion, the findings of this study provide valuable insights into the research questions under investigation, shedding light on both the breadth and depth of the phenomenon studied which will be further discussed in the next chapter. The exploratory sequential mixed method approach employed in this research facilitated a comprehensive understanding of the topic, allowing for the triangulation of data

from multiple sources and perspectives. Through the qualitative exploration followed by quantitative validation, a nuanced understanding of the complexities involved has emerged. The qualitative phase unearthed rich narratives and contextualized experiences, to support and guide the structure of the quantitative work. More specifically, the qualitative results supported the structure of the research framework as well as the survey. The quantitative phase corroborated and added statistical rigor to these findings. The integration of both methods enabled a more robust analysis, enhancing the credibility and trustworthiness of the results which will be discussed in Chapter 6.

Chapter Six – Discussion

6.1 Introduction

This chapter illuminates the connections between the research analysis and findings presented in Chapter 5, the literature review in Chapter 2 as well as the hypothesis development in Chapter 3. In this chapter, the results and how they directly address the research questions of this study will be outlined and discussed.

6.2 Qualitative Discussion

The qualitative data is drawn from semi-structured questions and each question was attempted in full by all of the eligible participants. The thematic analysis approach is utilized in the analysis of the qualitative data, as outlined in Chapter 4. In summary, the thematic analysis approach consists of six steps being, 1) data familiarization, 2) initial coding 3) theme exploration 4) theme review 5) defining themes 6) report production. The six steps are explained in great length in Chapter 4. In Chapter 5, the statements from each of the participants are presented and discussed within the literature.

6.2.1 Qualitative Themes

This section discusses the three themes that emerged from the qualitative data: affective commitment on knowledge management behavior, leadership on knowledge-worker productivity, and knowledge-worker productivity on transient advantages. These themes reveal the intricate dynamics between organizational commitment, leadership practices, and the creation of transient competitive advantages in knowledge-intensive industries. Affective commitment is explored as a driver of knowledge management behaviors, while leadership's direct and indirect influence on knowledge-worker productivity is examined. Finally, the

section highlights how increased knowledge-worker productivity contributes to transient advantages, positioning organizations to remain competitive in rapidly changing environments.

6.2.1.1 Affective Commitment on Behavior

The first theme that emerged from the qualitative findings is the role of affective commitment in shaping knowledge management behavior. Affective commitment refers to an employee's emotional attachment and sense of belonging to the organization (Allen & Meyer, 1990). The qualitative data revealed a strong connection between affective commitment and knowledge management behavior, which suggests that employees who feel emotionally invested in their organization are more likely to engage in behaviors such as knowledge sharing, collaboration, and the retention of tacit knowledge. While the quantitative phase of this study did not support affective commitment as a moderator of knowledge management behavior, the qualitative data indicates that affective commitment may have a direct influence on these behaviors, underscoring its importance in the context of knowledge management.

Affective commitment is seen to foster a positive organizational culture, where employees are more inclined to share their knowledge and collaborate with others (Jarvenpaa et al., 2001; Martin-Perez et al., 2015). Participants frequently discussed the role of affective commitment in promoting an environment of open communication and knowledge sharing, as exemplified by Participant Seven's remarks about creating an environment where employees feel comfortable asking for and sharing knowledge. The finding aligns with previous research suggesting that high levels of affective commitment can result in a more cooperative and collaborative organizational culture (Jarvenpaa et al., 2001; Martin-Perez et al., 2015).

One of the critical sub-themes emerging from the interviews is the role of affective commitment in employee engagement with knowledge management behavior. Engaged employees are more likely to participate actively in knowledge-sharing activities, contributing

their expertise to the organization's knowledge base (Shamim et al., 2019). The connection between affective commitment and engagement was underscored by participants who emphasized the importance of creating a sense of belonging to encourage participation in knowledge management activities. As Participant Six highlighted, employees who feel that they belong to the organization are more likely to be responsible and productive, a sentiment echoed by Participant Nine, who noted that employees with a sense of belonging are more inclined to share knowledge.

This theme is further supported by prior literature, which indicated that affective commitment can positively influence employees' knowledge-sharing behaviors (Kim, 2021). The findings from this study extend this understanding by suggesting that affective commitment may be an essential factor in retaining tacit knowledge within organizations. Tacit knowledge, which refers to the personal insights and experiences that are not easily codified (Nonaka & Takeuchi, 1995; Faccin et al., 2019), is particularly vulnerable to being lost when employees leave an organization. Participant's emphasized the role of affective commitment in ensuring the transfer of tacit knowledge, often through mentorship and apprenticeship programs. As Participant Seven noted, organizations that do not invest in these programs risk losing critical institutional knowledge when employees retire or move on.

The discussion around tacit knowledge retention illustrates a broader challenge within knowledge management: ensuring the transfer of critical, experience-based knowledge across generations of employees. This challenge is particularly acute in industries such as financial services, where specialized knowledge is key to maintaining competitive advantages. The qualitative findings suggest that affective commitment can play a pivotal role in addressing this challenge by encouraging employees to share their tacit knowledge with colleagues, thereby retaining it within the organization. This aligns with existing research that underscores

the importance of commitment and motivation in retaining and sharing tacit knowledge (Lei et al., 2021; Kaur, 2022).

While the quantitative phase did not support affective commitment as a moderator between knowledge management behavior and organizational outcomes, the qualitative findings highlight its direct impact on knowledge-sharing behaviors and tacit knowledge retention. This discrepancy between the quantitative and qualitative findings may be due to the complex, context-dependent nature of affective commitment's role in knowledge management. The qualitative data provides a richer, more nuanced understanding of how employees' emotions tied to their organization can influence their willingness to share knowledge, collaborate, and contribute to the organization's knowledge base.

In conclusion, the qualitative findings emphasize the critical role that affective commitment plays in shaping knowledge management behaviors. Employees who feel emotionally attached to their organizations are more likely to engage in knowledge-sharing and collaboration, while also being more willing to contribute their tacit knowledge. The retention of tacit knowledge is particularly important for industries where specialized expertise and experience are key to maintaining competitive advantages. This direct influence of affective commitment on knowledge management behavior underscores its importance as a factor in organizational knowledge retention and the development of transient advantages. Future research could explore this relationship in more depth to better understand how organizations can foster affective commitment to enhance their knowledge management practices for transient advantages in dynamic environments.

6.2.1.2 Leadership on Productivity

The second theme that emerged from the qualitative findings is the role of leadership in influencing the productivity of knowledge-workers. The results suggest that knowledge-

oriented leadership plays both a direct and indirect role in shaping employee productivity, particularly within the financial services industry, where knowledge-workers' cognitive abilities, communication skills and knowledge management capabilities are critical (Kwon, 2014). Throughout the interviews, participants highlighted the importance of leaders possessing both transformation and transactional qualities, which enables them to foster an environment conducive to productivity while guiding employees through processes that align with the organization's strategy (Piasittanand et al., 2007; Sinshaw et al., 2021; Alghail et al., 2022).

Participants expressed that leaders can directly influence the productivity of their teams through their day-to-day interactions, including providing support, guidance, and feedback. For instance, Participant Three emphasized that leaders have a significant impact on productivity by shaping how employees feel about their work, suggesting that empathetic and supportive leadership positively affects knowledge-workers' performance. This perspective aligns with transformational leadership theory, which posits that leaders who demonstrate empathy and acknowledge the contributions of employees can enhance worker motivation and productivity (Bass & Avolio, 1994). The emotional well-being of knowledge-workers, as emphasized by Participant Three, is thus intrinsically tied to their productivity, a finding that echoes the literature on the relationship between employee well-being and performance (Zhou et al., 2015).

Another critical aspect of leadership's influence on productivity is role modeling and mentorship, as illustrated by Participant One's experience. The participant described adopting their manager's working styles and behaviors, which in turn influenced their own productivity. This observation supports the notion that leaders can shape the productivity of their subordinates through knowledge-oriented behaviors and role modeling (Sahibzada et al., 2022a). By demonstrating positive knowledge management practices, leaders create a cultural blueprint that employees can emulate, indirectly enhancing their productivity. Leaders who

actively mentor and support their teams enable knowledge-workers to better navigate challenges and become more efficient in their roles, a finding that aligns with research on leadership as a catalyst for organizational learning and knowledge-sharing (Donate et al., 2015).

The interviews also revealed that autonomy plays a pivotal role in influencing the productivity of knowledge-workers, and leadership is central to granting or restricting this autonomy. Autonomy, defined as the freedom to make decisions about how to execute tasks, is crucial for knowledge-workers to effectively manage their time and output (Ramirez et al., 2004). Participants expressed a preference for leaders who provide them with autonomy, as illustrated by Participant Five's statement that productivity is better evaluated on the basis of output rather than rigid time-based metrics. However, participants also acknowledged that autonomy could be limited if performance goals were not met, as described by Participant One. This dynamic reflects transactional leadership, where leaders monitor performance and adjust autonomy levels based on outcomes (Bass, 1985). While some level of autonomy is essential for creativity and innovation, leaders may need to intervene when productivity declines to ensure organizational goals are met (Sahibzada et al., 2022b).

The negative effects of micromanagement were also highlighted by several participants, including Participant Six, who expressed disdain for leaders who exert excessive control. This finding reinforces the literature that excessive oversight can undermine employee motivation and productivity, particularly among knowledge-workers who thrive on independence and the ability to self-manage (Ramirez et al., 2004). Leaders who micromanage can stifle creativity and diminish employees' sense of ownership over their work, which can ultimately reduce productivity.

In addition to autonomy, participants emphasized the importance of leader competence and industry knowledge. As noted by Participant Four, a knowledgeable leader who understands the intricacies of the business can inspire greater effort and commitment from

employees. This sentiment underscores the significance of technical expertise in leadership roles, particularly in knowledge-intensive industries like financial services, where employees must feel confident in their leaders' abilities to guide the organization in the right direction. Leaders who possess industry-specific knowledge are more likely to gain the trust and respect of their teams, which in turn enhances employee productivity. This aligns with the concept of knowledge-oriented leadership, where leaders' own understanding of the business directly impacts their ability to guide knowledge-workers effectively (Ahmed et al., 2021).

The interviews also revealed that leadership behaviors influence knowledge sharing behaviors, which are closely tied to productivity. Leaders who demonstrate supportive behaviors and encourage open communication foster an environment where knowledge-workers feel comfortable sharing their insights and expertise. For example, Participant Three emphasized the importance of leaders possessing the ability to transmit their knowledge to their subordinates and offer technical support when needed. This observation highlights the critical role that leaders play in facilitating knowledge transfer, which is essential for maintaining productivity, especially when knowledge-workers encounter complex challenges or require assistance.

Moreover, the combination of transformational and transactional leadership was found to be particularly effective in influencing productivity. Transformational leaders inspire and motivate employees by fostering a positive work environment and recognizing their contributions, while transactional leaders focus on goal attainment and performance monitoring (Donate et al., 2015). Several participants noted that their leaders effectively balanced these two approaches, allowing them the flexibility to work autonomously while also providing support and guidance when necessary. For instance, Participant Five appreciated the autonomy granted by their leader, combined with the availability of support when needed, which created an optimal environment for productivity.

In conclusion, the qualitative findings emphasize the critical role that leadership plays in shaping the productivity of knowledge-workers. Knowledge-oriented leaders directly influence productivity through their daily interactions, mentoring behaviors, and the autonomy they grant employees. Leaders who balance transformational and transactional qualities, providing both support and performance oversight, are more likely to foster a productive environment. Furthermore, the findings highlight the importance of leaders possessing industry knowledge and technical expertise, as this enhances their credibility and ability to guide knowledge-workers effectively. The role of leadership in fostering a positive organizational culture where knowledge sharing, and collaboration are encouraged further contributes to enhancing productivity. These insights suggest that organizations should prioritize leadership development programs that cultivate both transformational and transactional skills to optimize knowledge-worker productivity.

6.2.1.3 Productivity on Transient Advantages

The third theme emphasizes the role of leadership in leveraging knowledge-workers' productivity to gain transient advantages in a dynamic and competitive environment. Unlike traditional strategies that focused on building a single, long-term competitive advantage (Porter, 1980; Barney, 1991), the transient advantage model encourages constant evolution and adaptation (McGrath, 2013). In this model, leadership plays a crucial role in ensuring that knowledge is strategically managed, shared, and leveraged to support the firm's agility and capacity for ongoing innovation and success.

Participants underscored the importance of knowledge sharing in the face of rapidly changing environments, such as the COVID-19 pandemic, which forced firms to adapt quickly. For example, Participant One highlighted the necessity of rapidly disseminating information to navigate the evolving pandemic landscape, demonstrating how effective knowledge

management enables firms to respond more nimbly to market changes. Similarly, Participant Nine emphasized the role of leaders in setting the tone and standard for teams during dynamic periods like the pandemic, noting that leadership involvement is essential for keeping teams aligned and productive.

Leadership adaptability was another key point raised by Participant Nine, who suggested that in times of crisis, leaders must be flexible and willing to experiment with new approaches. This sentiment aligns with the concept of transient advantage, where success is tied to an organization's ability to pivot and adjust strategies as needed (McGrath, 2013a). In this view, leaders must be open to innovation and capable of adjusting their leadership styles to match the demands of the moment, fostering resilience and sustained productivity among their teams.

Participant Eight extended this idea by emphasizing the importance of leadership having a clear understanding of their employees' knowledge bases and skill sets. By maintaining a comprehensive overview of each employee's expertise, leadership can allocate resources strategically, ensuring that the right individuals are tasked with the appropriate responsibilities. This strategic alignment is key to maximizing productivity and creating conditions where transient advantages can be pursued.

A critical challenge identified by participants was the retention and transfer of tacit knowledge – the expertise and insights that reside within individuals but are not always captured within organizational systems. Participant Seven described how much of the firm's valuable knowledge is held by employees and is at risk of being lost when individuals leave the company. To address this issue, leadership must create systems that enable knowledge transfer, such as mentorship programs or structured opportunities for more experienced employees to share their insights with junior colleagues. By institutionalizing these processes,

organizations can ensure that individual productivity is translated into broader organizational knowledge that can be leveraged for future competitive advantages (Zhang-Zhang, 2022).

Participant Five emphasized this point by noting that while many employees innovate within their own roles, without strategic alignment from leadership, these innovations are not formalized into practices that can benefit the organization as a whole. This highlights the crucial role of leadership in not only recognizing individual innovations but also in creating pathways to integrate and scale these innovations across the organization. Leadership, therefore, acts as a bridge between individual creativity and organizational capability, enabling firms to generate transient advantages by continuously adapting and evolving in response to market conditions.

Several participants stressed that clear leadership direction is necessary for employees to understand how their work contributes to the organization's broader goals. For example, Participant Three noted that leaders must provide employees with a clear view of how their efforts impact local, regional, and global outcomes. This clear communication helps align individual productivity with organizational objectives, ensuring that employees' contributions are not only meaningful but also strategically valuable. Participant Four reinforced this idea, suggesting that leaders inspire employees when they demonstrate strong moral values and a clear sense of direction, which motivates teams to work harder and align their efforts with the organization's goals.

The role of leadership in creating the right organizational environment was also a recurrent theme. Participant Six argued that leaders should foster an atmosphere where collaboration and knowledge sharing are encouraged, without creating a sense of pressure. The focus should be on creating a collaborative and motivating environment, where employees feel supported in their pursuit of knowledge and innovation, rather than feeling micromanaged or

overly burdened by expectations. This leadership approach aligns with the transient advantage model, which prioritizes agility, collaboration, and knowledge flow over rigid structures.

Finally Participant Ten highlighted the managerial responsibility to guide employees on how to manage and organize information effectively. Leaders who introduce systems for handling and storing knowledge efficiently can dramatically enhance the productivity of their teams, creating a uniform approach to knowledge management that benefits the entire organization. This practice not only supports individual productivity but also contributes to the firm's ability to respond rapidly to change, a key component of maintaining transient advantages in a VUCA (Volatile, Uncertain, Complex, and Ambiguous) business environment.

6.2.1.4 Qualitative Themes Summary

The insights gathered from the interviews underscore the importance of leadership in translating individual productivity into organizational transient advantages. Leaders who are actively involved in knowledge management, who understand the strengths and weaknesses of their teams, and who foster an environment conducive to collaboration and innovation are well-positioned to help their organizations maintain a portfolio of competitive advantages. By facilitating knowledge transfer, aligning individual innovations with organizational goals, and adapting to the evolving market landscape, leaders can ensure that their firms remain agile and capable of sustaining success over time. The role of leadership is not only to manage current productivity but to ensure that this productivity is harnessed strategically to support ongoing innovation and competitive differentiation in a rapidly changing world.

6.2.2 Qualitative Section Summary and Support for Mixed Methods Approach

The mixed methods approach was sought out to support in recognizing and explaining the business problems and questions at hand (Molina-Azorin, 2016). It was important to the

researcher to first carry out the qualitative approach to better understand the connection between the different constructs as well as to better grasp the possible connection between knowledge management and transient advantage. Further, to achieve generalizability, the combination and integration of qualitative and quantitative methods in the same study was utilized (Creswell and Plano Clark, 2007; Molina-Azorin, 2016). As explained by Creswell and Plano Clark, the impetus is sustained in the reasoning that exploring research problems through both qualitative and quantitative avenues can provide a better understanding than if to explore the phenomena with one or the other approach individually (2007). It is in this motivation, which the researcher seeks generalizability through the combination of qualitative and quantitative methods. The discussion in this section will support in contextualizing the quantitative results, which will be introduced and discussed in the following section.

6.3 Quantitative Discussion

In this section, the quantitative findings from Chapter 5 of the study are discussed. In the quantitative phase of the study, several hypotheses were tested to examine the relationship between knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, and knowledge-worker productivity. In addition, the role of affective commitment as a moderating factor was explored to assess whether its presence strengthens the relationship between knowledge management behavior and productivity. The results of these hypotheses provide valuable insights into the mechanisms that drive knowledge-worker productivity in dynamic environments.

6.3.1 Discussion across Hypotheses

Hypothesis 1

H1: Knowledge-oriented leadership will positively impact knowledge process capabilities.

As expected, knowledge-oriented leadership was significantly and positively related to knowledge process capabilities. Therefore, H1 is supported. The positive influence of knowledge-oriented leadership on knowledge process capabilities implies that knowledge-oriented leadership creates an environment where knowledge processes are prioritized, supported, and integrated into the organization's strategic objectives, leading to enhanced capabilities for knowledge creation, sharing, storage, and utilization. Through analysis of participant responses, it became evident that an organization which is led by knowledge-oriented leaders exhibits significantly enhanced knowledge process capabilities. This aligns with existing literature suggesting that leadership plays an essential role in shaping organizational knowledge dynamics (Smith & Tushman, 2005). Knowledge stands as a pivotal strategic asset, holding significant potential to bolster competitive advantage (Grant, 1996). Firms must cultivate knowledge-based dynamic capabilities, such as knowledge process capabilities encompassing creation, sharing, storage, and utilization, to optimize employee productivity (Khaksar et al., 2020). This study, in line with prior literature, shows that knowledge-oriented leaders are found to prioritize knowledge-related activities, foster a culture of learning and innovation, and allocate resources towards initiatives aimed at improving knowledge processes (Nonaka & Takeuchi, 1995; Donate & Pablo, 2015). Further, by analyzing the relationship between knowledge-oriented leadership and knowledge process capabilities this study supports to close the gap of understanding the direct relationship between leadership and organizational level processes (Donate & Pablo, 2015). Overall, the findings provide empirical support for the positive impact of knowledge-oriented leadership on

knowledge process capabilities, underscoring the importance of leadership in facilitating effective knowledge management practices within organizations.

Hypothesis 2

H2: Knowledge process capabilities will positively impact knowledge management behavior.

The findings of this study offer robust evidence in support of hypothesis two, which proposed that knowledge process capabilities positively impact knowledge management behavior. Similarly, to hypothesis one, analysis of participant responses revealed a clear association between enhanced knowledge process capabilities and the adoption of effective knowledge management behaviors within the organization. This finding aligns with existing literature, emphasizing the importance of organizational process capabilities in driving greater propensity for individual knowledge creation, sharing, storage, and utilization, ultimately fostering a culture conducive to knowledge management (Jennex & Olfman, 2005). Moreover, this study confirms that an organization with strong knowledge process capabilities is better equipped to implement and sustain knowledge management initiatives, such as knowledge management behaviors (Zack, 1999). This finding underscores the critical role of knowledge process capabilities in shaping knowledge management behavior within organizations, highlighting the need for organizations to invest in developing and enhancing their capabilities to effectively manage knowledge assets (Gold et al., 2001). This study builds upon previous research by pioneering an investigation into the correlation between knowledge process capabilities and knowledge management behavior, particularly within the financial sector. Previous studies have predominantly focused on analyzing the link between knowledge-oriented leadership and knowledge management behavior (Shamim et al., 2017; Zia, 2020; Le

& Le, 2022; Liu et al., 2022). The favorable association observed between knowledge process capabilities and knowledge management behavior underscores the significance of implementing standardized operational protocols for knowledge management across firms, thereby enhancing the efficacy of knowledge creation, sharing, storage, and utilization among knowledge-workers. Overall, the empirical support provided by the study lends credibility to the notion that knowledge process capabilities play a pivotal role in driving knowledge management behavior, contributing to organizational success in the knowledge-driven economy where environments can be dynamic.

Hypothesis 3a

H3a: Knowledge management behavior will positively impact knowledge-worker productivity.

The empirical findings of this study support hypothesis three a. Through the comprehensive analysis of participant responses, a clear association emerged between effective knowledge management behavior and enhanced productivity among knowledge-workers within the organization. This finding resonates with existing literature highlighting the significance of knowledge management practices in fostering productivity gains (Holsapple & Joshi, 2000). An organization where the employees exhibit proactive knowledge management behaviors, such as knowledge creation, sharing, storage, and utilization, can be found to experience higher levels of productivity among their workforce (Alavi & Lediner, 2001). Similar to Davenport & Prusak's, (1998) findings, this study shows that effective knowledge management behavior supports individual job autonomy, timeliness, work (knowledge) efficiency ultimately improving productivity outcomes. Moreover, this is also in line with Choi & Lee's (2003) research which implies that an organization that prioritizes knowledge

management behaviors creates an environment conducive to innovation and creativity (work knowledge efficiency), further enhancing productivity levels among knowledge-workers. This research contributes to existing literature by pioneering an empirical analysis into the connection between knowledge management behavior and knowledge-worker productivity, representing one of the initial endeavors in this area of research. Further, this study supports in bridging the gap in knowledge management to provide a link between individual knowledge-worker behaviors to performance (Wang et al., 2009). The results emphasize the significance of knowledge management behavior in fostering productivity within multinational organizations. This highlights the importance of allocating resources to knowledge management initiatives as a strategy to enhance performance in today's knowledge-driven economy, especially where the organization is not selling a tangible product, but rather knowledge (Drucker, 1999).

Hypothesis 3b

H3b: When affective commitment is present, the relationship between knowledge management behavior and knowledge-worker productivity will be stronger.

The findings of this study do not support hypothesis three b, which posited that when affective commitment is present, the relationship between knowledge management behavior and knowledge-worker productivity will be stronger. Despite expectations that affective commitment would enhance the relationship between knowledge management behavior and productivity among knowledge-workers, the empirical analysis did not yield significant support for this hypothesis. This result aligns with previous research suggesting that moderating effects, such as affective commitment, are typically not supported in empirical

studies (Baron & Kenny, 1986). While affective commitment is known to influence various organizational outcomes, including job satisfaction and organizational citizenship behavior (Meyer & Allen, 1991), its role as a moderator in the relationship between knowledge management behavior and knowledge-worker productivity appears to be limited. This finding highlights the complexity of organizational dynamics and emphasizes the need for further research to explore the nuanced interplay between affective commitment, knowledge management behavior, and knowledge-worker productivity outcomes in different organizational contexts.

Hypothesis 4

H4: Knowledge-oriented leadership will positively impact knowledge-worker productivity.

Similar to hypotheses one, two, and three a, the findings of this research provide strong support for hypothesis four, which posits that knowledge-oriented leadership positively impacts knowledge-worker productivity. Through the analysis of the participant responses, it became clear that an organization led by knowledge-oriented leaders exhibits higher levels of productivity among their knowledge-workers. This aligns with existing literature suggesting that leadership plays a crucial role in shaping organizational effectiveness and employee performance (Avolio & Bass, 1991). Similar to Jennx & Olfamn's (2005) findings, this study too found that knowledge-oriented leaders were found to prioritize knowledge-related activities which in turn fosters a culture of learning and innovation and provides support for initiatives (job autonomy, timeliness, work knowledge efficiency) aimed at improving productivity. Moreover, this research found that these leaders demonstrated a clear vision and strategy for leveraging knowledge within the organization through the transformational and

transactional leadership qualities supporting with the alignment of employee knowledge creation, sharing, storage, and utilization (Donate & Pablo 2015; Choi & Lee, 2003). Examining the direct correlation between knowledge-oriented leadership and the productivity of knowledge-workers responds to the growing need for a cross-cultural exploration of this relationship, alongside the call to analyze individual performance metrics such as knowledge-worker productivity, rather than solely focusing on organizational outcomes (Sahibzada et al., 2021). Previous research has predominantly concentrated on investigating the impact of knowledge-oriented leadership on organizational, team, or project performance (Donate & Pablo, 2015; Naqshbandi & Jasimuddin, 2018; Latif et al., 2020; Rehman et al., 2020; Zia, 2020; Jiang et al., 2021; Men & Jia, 2021; Sahibzada et al., 2021; Chaithanapat et al., 2022; Mansoor & Hussain, 2022; Mariam et al., 2022). The findings of this study show the essential role that the transformational and transactional qualities of knowledge-oriented leadership have and their impact in driving knowledge-worker productivity in supporting individual knowledge-worker job autonomy, timeliness, and work knowledge efficiency (Donate & Pablo, 2015; Sahibzada et al., 2021).

6.3.2 Quantitative Discussion Section Summary

This study examined the relationships between knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, affective commitment, and knowledge-worker productivity. The empirical findings provide strong support for most of the hypothesized relationships. Knowledge-oriented leadership was shown to significantly enhance both knowledge process capabilities (H1) and knowledge-worker productivity (H4), reinforcing the critical role of leadership in fostering knowledge management and productivity. Furthermore, knowledge process capabilities positively influenced knowledge management behavior (H2), supporting the notion that robust knowledge processes

encourage employees to engage in behaviors that promote knowledge creation, sharing, and utilization. Hypothesis 3a was also supported, indicating that knowledge management behavior positively impacts knowledge-worker productivity. However, hypothesis 3b, which suggested that affective commitment would strengthen the relationship between knowledge management behavior and knowledge-worker productivity was not supported, highlighting the complexity of factors influencing this dynamic. Overall, these findings emphasize the importance of leadership, knowledge management, and process capabilities in enhancing knowledge-worker productivity in today's dynamic knowledge-driven economy.

6.4 Chapter Summary

This chapter presents and discusses the findings of a mixed methods approach, incorporating qualitative semi-structured interviews, to investigate the interplay between transient advantages within organizations and knowledge management constructs such as knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, affective commitment, and knowledge-worker productivity. Three key themes emerged from the qualitative analysis being: 1) the impact of affective commitment on knowledge management behavior, 2) the influence of leadership on productivity, and 3) the relationship between knowledge-worker productivity and transient advantages. Qualitative findings confirmed the positive effect of affective commitment on knowledge management behavior, suggesting that employees' emotional attachment to the organization fosters behaviors conducive to effective knowledge management. However, quantitative analysis did not support the moderation of affective commitment on the relationship between knowledge management behavior and knowledge-worker productivity, indicating a discrepancy between qualitative and quantitative findings in this regard.

Nonetheless, the study provided robust support for hypotheses regarding the positive impact of knowledge-oriented leadership on knowledge process capabilities and knowledge-worker productivity. In studying the relationship between knowledge-oriented leadership on knowledge management processes, this answers the call for additional research on how leadership can influence organizational level processes (Donate & Pablo, 2015). In addition, the findings support the notion that enhanced knowledge process capabilities positively influence knowledge management behavior. This extends prior research by being one of the first studies to examine the relationship between knowledge process capabilities on knowledge management behavior, especially in the financial sector. Prior studies have directly analyzed the relationship between knowledge-oriented leadership and knowledge management behavior (Shamim et al., 2017; Zia, 2020; Le & Le, 2022; Liu et al., 2022). The positive relationship between knowledge process capabilities and knowledge management behavior shows the importance for firm wide knowledge operational standards which can improve the way knowledge-workers create, share, store, and utilize knowledge. When knowledge management behavior is present then there is a positive relationship on knowledge-worker productivity, as confirmed by this study. This extends prior literature by being one of the first studies to examine the relationship between knowledge management behavior and knowledge-worker productivity. Analyzing the direct relationship between knowledge-oriented leadership and knowledge-worker productivity answers the call for a cross-cultural examination of this relationship as well as the emphasis to examine individual performance such as knowledge-work productivity instead of organizational performance (Sahibzada et al., 2021). Prior research has focused on examining the relationship of knowledge-oriented leadership on organizational, team, or project performance (Donate & Pablo, 2015; Naqshbandi & Jasimuddin, 2018; Latif et al., 2020; Rehman et al., 2020; Zia, 2020; Jiang et al., 2021; Men &

Jia, 2021; Sahibzada et al., 2021; Chaithanapat et al., 2022; Mansoor & Hussain, 2022; Mariam et al., 2022).

Lastly, this study answers the call for multiple methods to be utilized when exploring knowledge management initiatives (Imran et al., 2016). This is one of the preliminary studies that examines the association of knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior and knowledge-worker productivity in the financial sector on a global basis using a mix methods approach. Overall, the findings illustrate the crucial role of leadership and organizational capabilities in driving productivity gains and achieving transient advantages within knowledge-intensive organizations finding themselves in dynamic environments, ultimately suggesting the importance of fostering a culture supportive of knowledge creation, sharing, storing, and utilization.

The researcher employed the mixed methods approach to address the business problems and questions at hand holistically. First, a qualitative approach was pursued to allow for a deeper exploration of the connections between the different constructs and the potential relationship between knowledge management and transient advantage. To enhance generalizability, both qualitative and quantitative methods were integrated within the same study (Creswell and Plano Clark, 2007; Molina-Azorin, 2016). This approach was based on the rationale that utilizing both methods offers a more comprehensive understanding compared to employing them individually (Creswell and Plano Clark, 2007). By combining qualitative and quantitative methods, the researcher aimed to achieve greater generalizability, which is displayed within this chapter.

After presenting and discussing the results of this study, the next chapter, Chapter 7, will explore the conclusions and contributions, both theoretical and practical. In addition, potential avenues for further research will be outlined, with attention given to the research's limitations.

Chapter Seven – Research Implications and Conclusion

This chapter provides an overview of the key findings from the study, along with the conclusions, recommendations, and avenues for future research. The emphasis lies on examining the implications of these findings for crafting knowledge management strategy to increase knowledge-worker productivity within the context of knowledge-intensive organizations, as well as their theoretical significance. Furthermore, the chapter addresses the study's limitations and proposes recommendations for future research endeavors. Further, a brief synopsis of the research is provided.

7.1 Synopsis of the Research

This research aimed to explore how organizational leadership promotes strategic knowledge management initiatives and their effects on individual employee productivity in order to achieve transient advantages in dynamic environments. The study focused on developing a comprehensive model to guide multinational enterprises within the financial services sector in proactively managing knowledge at both the organizational and individual levels. The resulting model is intended to enhance knowledge-worker productivity, equipping organizations to effectively respond to volatile and rapidly shifting market conditions.

The thesis began with a synthesis of the literature of the research field of the study being multinational enterprises within the financial services sector, more specifically the credit specialty sector within multinational enterprises. It was through this review where both the problem and potential avenue towards a solution came to light. The study highlighted the pivotal role of knowledge management in addressing the challenges faced by credit specialty divisions within multinational brokerage enterprises during market transitions. This exploration began with an acknowledgment of the complex landscape shaped by shifting

customer behaviors, demographic changes, and the pervasive influence of digitalization, all of which underscored the pressing need for strategic knowledge management. Throughout the investigation, various knowledge initiatives were meticulously examined including knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, affective commitment, and knowledge-worker productivity. In progression, a research aim, a series of three specific research objectives, and a research question, were established, thus delineating the purpose of the study. Subsequently, a thorough synthesis of the literature was undertaken to develop a theoretical framework and an initial research framework. This framework incorporated five operational hypotheses, reflecting the relationships identified within the model.

Drawing from the proposed research framework and insights gleaned from the literature review, the five research hypotheses were put into operation and subjected to empirical scrutiny in both qualitative and quantitative views. The qualitative study findings provided insights into the research problem and questions to better understand the connection between the different constructs as well as to better grasp the possible connection between knowledge management, knowledge-based dynamic capabilities view and transient advantages. The quantitative study empirically assessed the relationships outlined in the conceptual model utilizing PLS-SEM. In total, 294 employees finding themselves working for a multinational enterprise and within the credit specialties department were surveyed via the multinational enterprise's survey software of choice being Qualtrics. Data analysis was conducted through the utilization of SmartPLS 3 software.

Section 7.2 thus encapsulates the conclusions drawn from the data concerning the study's specific objectives, which can be found reiterated here:

Research objective one:

To identify key knowledge management initiatives - such as Knowledge-Oriented Leadership, Knowledge Process Capabilities, Knowledge Management Behavior, Affective Commitment, and Knowledge-Worker Productivity - that are critical for managing knowledge strategically within multinational enterprises in dynamic environments. These initiatives were derived through a comprehensive literature review of the Knowledge-Based Dynamic Capabilities (KBDC) view and transient advantage theory, as well as insights from pilot interviews with knowledge intensive firms.

While Knowledge Process Capabilities (firm-level) and Knowledge Management (individual-level) share common indicators – knowledge creation, transfer, integration, and application – both are necessary to connect the Knowledge-Based Dynamic Capabilities view with the concept of transient advantages. Knowledge Process Capabilities are embedded within the firm’s ability to sense opportunities, seize them, and transform resources to respond to dynamic environments (McGrath, 2013; Rifat et al., 2017; Zhang-Zhang et al., 2022). Simultaneously, Knowledge Management Behavior at the individual level ensures that employees actively engage in these processes, enabling the firm to sustain transient advantages through their knowledge-driven actions (Shamim et al., 2019). Together, these capabilities align the organization’s strategic efforts at both the macro (firm) and micro (individual) levels to maintain agility and competitiveness in volatile markets.

The objective is qualitative in nature, relying on literature review and pilot interviews to establish a theoretical foundation.

Research objective two:

To explore how individual knowledge-worker productivity is influence by these identified knowledge management initiatives (i.e., Knowledge-Oriented Leadership,

Knowledge Process Capabilities, and Knowledge Management Behavior). This exploration considers how these initiatives interact during dynamic environments, capturing both the firm-level and individual-level contributions to productivity and transient advantages.

This objective is qualitative in nature, achieved through ten semi-structured interviews to gain deeper insights into the impacts of these initiatives.

Research objective three:

To empirically test the relationships between the identified knowledge management initiatives (both firm-level and individual-level) and their influence on Knowledge-Worker Productivity. The goal is to develop a validated model that can be applied within multinational enterprises to maintain productivity and through this, secure transient advantages in dynamic environments.

This objective is quantitative in nature, involving a survey to test the proposed relationships and validate the research model.

7.2 Conclusions across Research Objectives

This section elucidates the primary conclusions derived from the research, addressing the specific research objectives outlined in Section 1.4 of Chapter 1.

7.2.1 Research Objective One

To identify key knowledge management initiatives - such as Knowledge-Oriented Leadership, Knowledge Process Capabilities, Knowledge Management Behavior, Affective Commitment, and Knowledge-Worker Productivity - that are critical for managing knowledge strategically within multinational enterprises in dynamic environments. These initiatives were derived through a comprehensive literature review of the Knowledge-Based Dynamic

Capabilities (KBDC) view and transient advantage theory, as well as insights from pilot interviews with knowledge intensive firms.

While Knowledge Process Capabilities (firm-level) and Knowledge Management (individual-level) share common indicators – knowledge creation, transfer, integration, and application – both are necessary to connect the Knowledge-Based Dynamic Capabilities view with the concept of transient advantages. Knowledge Process Capabilities are embedded within the firm's ability to sense opportunities, seize them, and transform resources to respond to dynamic environments (McGrath, 2013; Rifat et al., 2017; Zhang-Zhang et al., 2022). Simultaneously, Knowledge Management Behavior at the individual level ensures that employees actively engage in these processes, enabling the firm to sustain transient advantages through their knowledge-driven actions (Shamim et al., 2019). Together, these capabilities align the organization's strategic efforts at both the macro (firm) and micro (individual) levels to maintain agility and competitiveness in volatile markets.

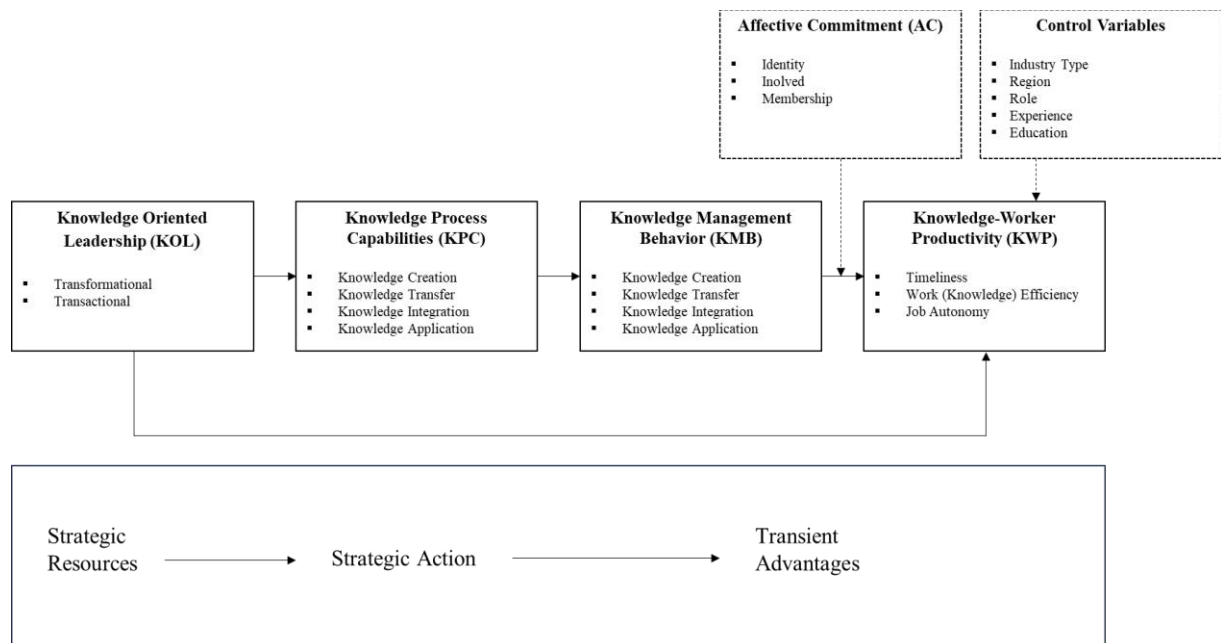
The objective is qualitative in nature, relying on literature review and pilot interviews to establish a theoretical foundation.

Knowledge management initiatives encompasses a multitude of constructs which fall under this classification. Hence, in order to ensure the inclusion of essential explanatory variables as stipulated in Objective One, literature was extensively examined. The literature review carried out in Objective One allowed for the progression of Objective Two where a qualitative study was undertaken. The qualitative study aimed to identify and confirm the pertinent constructs utilized in this framework of this study identified during the literature in Objective One. The indicators identified and confirmed from the preliminary qualitative study (i.e., Objective Two), along with a synthesis of the literature (i.e., Objective One), informed the design of the questionnaire (i.e., Objective Three). The questionnaire underwent statistical testing in a comprehensive quantitative survey. The survey incorporated five variables:

Knowledge-Oriented Leadership, Knowledge Process Capabilities, Knowledge Management Behavior, Knowledge-Worker Productivity, and Affective Commitment, with Affective Commitment being a moderator. Prior to the main study, the constructs and their corresponding indicators were pre-tested by the organization's marketing team and by friends working in multinational enterprises. Notably, the survey tested the relationship of knowledge-oriented leadership on knowledge process capabilities. Prior studies have focused on the relationship between knowledge-oriented leadership on innovation performance (Donate et al., 2011; Donate et al., 2015; Naqshbandi et al., 2018) on employee goal orientation (Shariq et al., 2019; Zia 2020), on knowledge management practices (Naqshbandi et al., 2018; Rehman et al., 2020; Latif et al., 2021; Sahibzada et al., 2021a), on team performance (Lin et al., 2019; Men et al., 2021), on knowledge management behavior or knowledge-worker productivity directly (Shamim et al., 2019; Sahibzada et al., 2021b). In this study, the relationship between knowledge-oriented leadership and knowledge process capabilities was tested and how this then effects knowledge management behavior. Prior studies have focused on the relationship between knowledge process capabilities on organization, project, or innovation performance directly (Gold et al., 2001; Lee et al., 2012; Wu et al., 2014; Masa'deh 2017; Kamasak et al., 2017; Asiaei et al., 2021; Sinshaw et al., 2021; Latif et al., 2021). This study instead involves a human component to test the relationship between knowledge process capabilities on knowledge management behavior before testing a 'performance' type construct. This is important because prior studies have tested knowledge management processes directly on knowledge-worker productivity (Ahmed et al., 2021 & Sahibzada et al., 2022b) which have shown positive correlation. However, knowledge process capabilities on knowledge management behavior and how this ultimately affects knowledge-worker productivity has not yet been studied, thus this research incorporated the element of knowledge management behavior.

The choice of constructs and their specific alignment came from three sources being prior literature on knowledge management initiatives, Ketchen et al., (2007), interviews, and a survey. Aligned with the Resource-Based View framework, which is a part of the Knowledge-Based Dynamic Capabilities View, this study follows the notion set out by Ketchen et al., (2007) that resources enable firms to enhance strategic actions (e.g., capabilities), thereby leveraging these resources to create advantages. The research framework in this study is aligned with this foundation premise as shown in Figure 14.

Figure 14: Conceptual Model Aligned with Foundation Premise



Source: Author (2024)

7.2.2 Research Objective Two

To explore how individual knowledge-worker productivity is influence by these identified knowledge management initiatives (i.e., Knowledge-Oriented Leadership, Knowledge Process Capabilities, and Knowledge Management Behavior). This exploration

considers how these initiatives interact during dynamic environments, capturing both the firm-level and individual-level contributions to productivity and transient advantages.

This objective is qualitative in nature, achieved through ten semi-structured interviews to gain deeper insights into the impacts of these initiatives.

The objective of exploring the extent to which knowledge-worker productivity is influenced by knowledge management initiatives, particularly those selected for their efficacy in dynamic environments (see Figure 4), was approached through a multifaceted methodological lens encompassing semi-structured interviews and survey questionnaires. Through semi-structured interviews, participants were provided with the opportunity to articulate nuanced insights and experiences, shedding light on the intricate dynamics between knowledge management initiatives and productivity in real-world contexts. This qualitative approach facilitated in-depth exploration, allowing for the identification of nuanced factors and mechanisms that may not be readily captured through quantitative methods alone. Participants' narratives provided rich, contextualized data that deepened the understanding of the interplay between knowledge management strategies and individual productivity within dynamic environments.

Through the qualitative exploration carried out in objective two, these qualitative insights obtained through interviews were then utilized to support objective three in building survey questionnaires. The quantitative data collected enabled a broader examination of the relationship between knowledge management initiatives and individual productivity across a larger sample. By quantifying responses, statistical analyses were conducted to elucidate patterns and correlations, providing empirical evidence to support or refute hypotheses derived from the qualitative findings. This mixed methods approach not only enriched the depth of understanding, but also bolstered the robustness and generalizability of the study's findings. By triangulating data from both qualitative interviews and quantitative surveys, this approach

facilitated a comprehensive exploration of the research objective, ensuring that insights gleaned were not only contextually grounded but also applicable across broader contexts. Through this integration of qualitative and quantitative methodologies, the study was able to provide a more holistic understanding of the complex relationship between knowledge management initiatives outlined in Figure 4 and knowledge-worker productivity in dynamic environments, thereby enhancing the generalizability and practical utility of the research findings.

7.2.3 Research Objective Three

To empirically test the relationships between the identified knowledge management initiatives (both firm-level and individual-level) and their influence on Knowledge-Worker Productivity. The goal is to develop a validated model that can be applied within multinational enterprises to maintain productivity and through this, secure transient advantages in dynamic environments.

This objective is quantitative in nature, involving a survey to test the proposed relationships and validate the research model.

The research objective aimed at developing a framework for organizational leaders to leverage transient advantages amidst continual and dynamic environments through strategic knowledge management. The study yielded significant findings supporting four out of the five hypotheses within the proposed framework. First, it was found that knowledge-oriented leadership significantly influences knowledge process capabilities, underscoring the pivotal role of leadership in fostering an environment conducive to effective knowledge management. In addition, the study revealed a positive relationship between knowledge process capabilities and knowledge management behavior, indicating that robust capabilities facilitate more efficient knowledge management practices within organizations. Moreover, the findings highlighted the positive impact of knowledge management behavior on knowledge-worker

productivity, emphasizing the importance of strategic knowledge management initiatives in enhancing individual performance. However, it is noteworthy that the hypothesized moderating effect of affective commitment on the relationship between knowledge management behavior and knowledge-worker productivity was not supported, suggesting that affective commitment may not play a significant role in influencing the link between these variables. Last, the study also found significant evidence supporting the relationship between knowledge-oriented leadership and knowledge-worker productivity. This highlights the essential role of leadership in shaping the productivity of knowledge-workers within organizations, emphasizing the importance of fostering a leadership culture that prioritizes knowledge management and supports the effective utilization of knowledge assets.

Overall, the supported hypothesis provides valuable insights for organizational leaders seeking to harness transient advantages in dynamic environments through the strategic management of knowledge, while the non-supported hypothesis offers avenues for further exploration and refinement of the proposed framework.

7.3 Contribution to Theory

This study tested and showed through knowledge-oriented leadership that an integral element of strategic management, leaders are required to actively monitor both internal and external changes and developments, such as advancements in technology and shifts in business models (Donate & Sánchez de Pablo, 2015). This enables organizational leaders to sense emerging opportunities, assess the direction of change, and effectively manage the evolving process (McGrath, 2013). As far as the researcher is aware, this study is the first attempt to empirically examine knowledge management initiatives being knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, affective commitment, and knowledge-worker productivity under the knowledge-based dynamic capabilities lens in the

connection to transient advantages. This study constructed a research model grounded in theoretical frameworks that delineate the factors influencing knowledge-worker productivity for transient advantages in dynamic environments. Employing initial qualitative interviews and subsequently extensive quantitative analysis, the study garnered empirical evidence supporting the relationships outlined in the proposed research framework (see Figure 4), thereby offering significant theoretical insights to knowledge management literature, with a specific focus on the financial service sector. Consequently, the findings of this research have contributed substantially to the theoretical underpinnings of knowledge-based dynamic capabilities by linking transient advantages to KBDC view (McGrath 2013; Zhang-Zhang et al., 2022). Within this section, notable areas of agreement, disagreement, or augmentation within existing literature are underscored to clarify the broader implications of the study.

This study marks a significant contribution to theory within the financial services sector by empirically examining several key constructs and their interrelationships (Hutchin, 2005; Donate & Sánchez de Pablo, 2015; Kamasak et al., 2017; Shamim et al., 2017; Sahibzada et al., 2020). By testing hypotheses related to knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, and knowledge-worker productivity guided by the knowledge-based dynamic capabilities view this research fills a notable gap in the existing literature (Zhang-Zhang et al., 2022). This study is also the first to examine the relationship between these specific knowledge management initiatives within the context of the financial services sector. The findings provide empirical validation for the hypothesized relationships, thereby enriching the theoretical understanding of how leadership styles, organizational process capabilities, and knowledge management practices influence productivity outcomes within organizations finding themselves within the financial service sector. By shedding light on these dynamics, the study offers valuable insights that can inform organizational strategies aimed at enhancing performance and competitiveness in this sector (McGrath, 2013).

Furthermore, the empirical support for these relationships underscores the relevance and applicability of established theoretical frameworks in understanding organizational dynamics within the unique context of financial services, thereby contributing to the advancement of theory in both fields of organizational behavior management, knowledge management, and financial services management.

Further, this study represents a significant theoretical advancement by examining knowledge-oriented leadership, knowledge process capabilities, knowledge management behavior, and knowledge-worker productivity and their relationships in the context of knowledge-based dynamic capabilities view on a global scale. By systematically testing these hypotheses across diverse geographic regions and cultural contexts, this research breaks new ground as the first study to explore these constructs and their interconnections on a global scale. The findings not only validate the hypothesized relationships, but also offer insights into how these relationships manifest across different organizational settings and cultural backgrounds. This contributes to the expansion of theoretical frameworks beyond localized contexts, enhancing the understanding of the universal principles underlying effective leadership, organizational process capabilities, and knowledge management practices. By transcending geographical boundaries, this study provides more comprehensive and nuanced understanding of the complex interplay between leadership, process capabilities, behaviors, and productivity outcomes, thereby enriching theory in the fields of organizational behavior, knowledge management, and international management. Lastly, the global scope of the study highlights the applicability and relevance of these theoretical constructs in addressing contemporary challenges faced by organizations operating in an increasingly interconnected and diverse global landscape.

In addition, this research makes a substantial theoretical contribution by being the first to explicitly link the concept of *transient advantage* with the *Knowledge-Based Dynamic*

Capabilities (KBDC) View. This novel integration enriches both the literature on transient advantage and knowledge-based dynamic capabilities, offering a deeper understanding of how organizations can leverage knowledge to navigate and succeed in rapidly changing competitive environments.

Historically, the concept of transient advantage, introduced by Rita McGrath, has primarily been explored through the lens of innovation, agility, and market responsiveness (McGrath, 2013; Kaharuddin et al., 2017; Gupta et al., 2018; Munner, 2019; Zhang et al., 2020; Salgado et al., 2022). While this has illuminated the importance of speed and adaptability in seizing fleeting competitive advantages, there has been limited theoretical exploration of the underlying mechanisms that enable firms to consistently adapt to these transient opportunities. This research addresses that gap by positioning knowledge-based dynamic capabilities view as the fundamental driver of transient advantage.

By linking transient advantage with the KBDC View, this study demonstrates that organizations can only effectively sustain temporary competitive advantages through the continuous management, creation, and application of knowledge (Wang et al., 2009; Zhang-Zhang et al., 2022). Knowledge-based dynamic capabilities—specifically the ability to sense opportunities, seize them, and transform organizational resources—serve as the key enablers that allow firms to rapidly adapt to changing market conditions (McGrath, 2013; Zhang-Zhang et al., 2022). This contribution is significant because it provides a more detailed, knowledge-centered explanation of how transient advantages are built, maintained, and relinquished, adding a new dimension to the transient advantage discourse.

This research also extends the existing KBDC framework by applying it to the context of transient competitive advantages. Traditionally, dynamic capabilities have been studied as the firm's ability to reconfigure resources in response to long-term environmental shifts (Teece et al., 1997; Zheng et al., 2011; Cheng et al., 2016; Faccin et al., 2019; Shamim et al., 2020;

Bhardwaj et al., 2022). By integrating transient advantage into this framework, this study reconceptualizes knowledge-based dynamic capabilities as being equally critical for short-term, temporary competitive moves (McGrath, 2013).

Specifically, this research elaborates on how firms utilize knowledge-based sensing, seizing, and transforming capabilities to continuously navigate markets characterized by rapid shifts in customer preferences, technological advancements, and competitive actions (Hutchin, 2005; McGrath, 2013). Knowledge-based sensing is vital for identifying opportunities before they emerge; seizing involves translating knowledge into swift and effective strategies; and transforming focuses on the continuous reconfiguration of knowledge assets and resources to respond to new opportunities. This theoretical expansion of the KBDC framework into the transient context highlights the centrality of knowledge process capabilities not only in long-term competitive adaptation but also in the creation of short-term, agile advantages (Kamasak et al., 2017).

Another key theoretical contribution of this research is its advancement of knowledge as a strategic asset within the dynamic capabilities' literature. By explicitly linking knowledge process capabilities with transient advantage, this study deepens the theoretical understanding of how knowledge acts as a dynamic, renewable resource that underpins a firm's ability to repeatedly generate and sustain temporary competitive advantages (McGrath, 2013; Kamasak et al., 2017; Sinshaw et al., 2021).

This study argues that knowledge, when effectively managed and leveraged, allows firms to continuously create value in environments where advantages are fleeting. It positions knowledge not merely as a static resource, but as the core mechanism through which dynamic capabilities are developed and executed. This perspective adds theoretical clarity to the role of knowledge in transient markets, showing that it is the firm's ability to harness and redeploy knowledge dynamically that enables it to stay competitive amid constant market flux.

In summary, this study advances the theory by introducing a new framework that integrates transient advantage with the Knowledge-Based Dynamic Capabilities View. It contributes to the literature by demonstrating how knowledge process capabilities—embedded within the capabilities of sensing, seizing, and transforming—are essential for sustaining transient advantages. This theoretical innovation offers a deeper understanding of the role of knowledge in dynamic markets and lays the groundwork for future research into how firms can effectively leverage knowledge-based capabilities to maintain agility and competitiveness in an era of constant disruption.

7.4 Recommendations for Practice

Based on the findings of this study, several recommendations for practice, specifically the financial sector, can be proposed to enhance productivity to ultimately achieve transient advantages in dynamic environments. First, organizations should prioritize the development of knowledge-oriented leadership practices, as supported by the empirical evidence indicating a positive influence on knowledge process capabilities. Leaders should emphasize fostering a culture that values knowledge creation, transfer, integration, and application to enhance organizational capabilities for managing information and expertise effectively. Further, investments in enhancing knowledge process capabilities should be prioritized, as evidenced by the positive impact on knowledge management behaviors. Organizations can achieve this by implementing robust knowledge management systems, providing training and resources for employees to acquire and share knowledge, and by establishing mechanisms for continuous learning and development. In addition, efforts can be directed towards promoting effective knowledge management behaviors among employees, recognizing their pivotal role in driving knowledge-worker productivity. Organizations can encourage knowledge-sharing practices, collaboration across departments, and the use of technology platforms to facilitate information

exchange and access. Finally, organizations should also ensure alignment between knowledge-oriented leadership practices and knowledge-worker productivity outcomes. By fostering leadership behaviors that prioritize knowledge management and support employees in their knowledge-related activities, organizations can enhance productivity and achieve transient advantages in the dynamic financial services landscape.

According to Khaksar et al., (2020) the knowledge-based dynamic capability view has not yet received the full attention from strategic management, however through this research, it is intended to show managers that through knowledge-based insights informed strategic decisions can be made through the understanding of the dynamic situation they find their industry to be in. In summary, the results show that to increase knowledge-worker productivity, knowledge-workers require a high level of knowledge creation, transfer, integration, and application to develop and process capabilities that enable them to respond to dynamic environments. Managers must continually develop knowledge standards and organizational processes to sustain knowledge management behavior to ultimately impact knowledge-worker productivity in the current dynamic environment. By leveraging knowledge-based insights, managers can anticipate and adapt organizational processes and tools to the current dynamic environment their organization finds itself in.

7.5 Transferability of Results

The transferability of results encompasses international management practices, given the global scale of this study. While research was conducted within the financial services sector on a global scale, the insights derived from the relationships between the specific knowledge management initiatives have broader applicability in diverse organizational contexts worldwide. Knowledge organizations operating internationally can leverage these findings to enhance their leadership approaches, cultivate a culture of knowledge exchange, and optimize

productivity on a global scale. The demonstrated relationships highlight universal principles that transcend geographical boundaries, making the insights acquired from this study pertinent to organizations navigating the complexities of international markets and cross-cultural dynamics. By adopting strategies informed by the findings of this research, multinational enterprises can effectively harness knowledge resources, capitalize on organizational capabilities, and knowledge-worker productivity across geographical contexts. Thus, the transferability of the results extends to the financial sector as a whole and also to international management practices, offering valuable guidance for organizations seeking to navigate dynamic global business environments.

7.6 Limitations of the Study

While this study makes significant theoretical and practical contributions, it is not without limitations, which in turn offer opportunities for further research. Like all studies, this research has its constraints, which should be acknowledged. Key areas of limitations include the specific singular organizational context, the narrow subsector focus, the sampling technique, and the use of a cross-sectional survey, all of which will be outlined in more detail in the subsequent paragraphs.

Although the study provides valuable insights into the dynamics of knowledge management within the brokerage sector of the financial industry, it is important to acknowledge several limitations that may impact generalizability and scope of the findings. First, the research focused exclusively on a single multinational enterprise within the brokerage sector, meaning that the findings may not be representative of other organizations either within the financial sector or across different industries. The unique characteristics and organizational dynamics of this specific enterprise may limit the applicability of the study's findings to a broader context.

Second, the narrow focus of the study on the brokerage sector within the financial industry may restrict generalizability of the findings to other sectors within the finance services sector, such as banking, insurance, or investment management. Each sector within the financial industry operates under distinct regulatory frameworks, market dynamics, and customer preferences, which may influence the implementation and effectiveness of knowledge management initiatives differently.

Third, the use of quota sampling in selecting participants for the study raises concerns about the generalizability of the findings. This may introduce bias into the sample selection process, as participants may not be representative of the broader population. With this said, the survey was sent out to the entire Credit Specialties department on a global scale. Therefore, the population in which this study aimed to explore was fully represented. However, the study's findings may not accurately reflect the perspectives and experiences of knowledge-workers across the financial sector.

Fourth, the study relies on the data from a cross-sectional survey which may limit the depth of understanding of knowledge management initiatives over time. A longitudinal study design, which tracks the evolution of knowledge management practices and their impact on organizational outcomes over an extended period, would provide a more comprehensive understanding of the dynamics at hand.

In addition, a significant limitation of this study is that, while the framework of transient advantage was conceptually integrated, it was not operationalized or tested within the quantitative portion of the research design. This omission limits the study's ability to assess how transient advantages could be practically applied or be measured in the context of knowledge management.

In summary, while the study has its limitations, the methodology employed remains robust, adhering strictly to fundamental principles of research. However, as detailed in this

section, certain limitations were identified, highlighting the need for future researchers to address these concerns. These limitations present the opportunity for further exploration and investigation.

7.7 Further Research

The research framework proposed and validated in this study not only offers avenues for additional research, but also serves as a foundation for further empirical investigations in the realm of knowledge management within the financial services sector.

This study employed a quota sample comprising of employees working for a specific multinational enterprise within a month period. Consequently, the extent to which the findings can be generalized to the broader financial services sector is constrained. Therefore, future research may benefit from employing alternative sampling methodologies, such as probability sampling, to enhance the generalizability of findings among knowledge-workers in the financial services sector. Subsequently, it is recommended that forthcoming studies replicate this research utilizing a representative sample of knowledge-workers in the Credit Specialties brokerage subsector of the financial services sector.

While cross-sectional surveys are convenient to implement (Setia, 2018; Thomas, 2020), they lack the ability to establish causality, unlike longitudinal studies. In this regard, sometimes knowledge decision-making processes unfold over time. Therefore, conducting a longitudinal study would be beneficial to obtain more comprehensive data on how knowledge management initiatives like knowledge-oriented leadership, knowledge management process capabilities, and knowledge management behavior affect knowledge-worker productivity. Longitudinal research holds the potential to mitigate memory errors and biases.

Unexpectedly, the study reveals that affective commitment does not have an impact on the relationship between knowledge management behavior and knowledge-worker

productivity. It is conceivable that affective commitment itself is dependent on external factors such as knowledge-oriented leadership. Therefore, further studies should explore affective commitment as a dependent variable within the knowledge management framework.

In future studies exploring transient advantages, researchers should aim to develop indicators for this construct that can be measured quantitatively, complementing qualitative insights with empirical data. By operationalizing transient advantages in a quantitative lens, researchers can systematically assess and quantify the extent to which organizations leverage transient advantages in dynamic environments. This may involve identifying key performance metrics or outcome variables that capture the transient nature of competitive advantages. Through this approach, future studies can provide a more comprehensive understanding of how organizations attain and sustain competitive advantages amidst continual business environment shifts.

7.8 Conclusion of Thesis

This section provides a comprehensive overview of the entire thesis. This thesis aimed to develop a framework to expound on knowledge management initiatives on knowledge-worker productivity to garner transient advantages for multinational enterprises finding themselves within the dynamic environment of the financial services sector. Notably, this study appears to be the first within the financial sector, particularly financial service brokering sector, taken on a global scale, to concurrently examine knowledge-oriented leadership, knowledge process capabilities, and knowledge management behavior and affective commitment on knowledge-worker productivity. Consequently, it addresses theoretical gaps identified in prior research, which predominantly focused on knowledge-oriented leadership, knowledge process capabilities, and knowledge management behavior and their influence on organizational, innovation, or team performance. Methodologically, the study was in line with

the ontological assumption of the pragmatist paradigm to account for the almost unforeseeable nature of knowledge management and its human characteristics. A questionnaire was developed and administered conveniently through an online survey platform. The sample comprised of 294 knowledge-workers who were working within the specific multinational enterprise at the one-month period of data collection. The data analysis was conducted through the utilization of SmartPLS 3 software.

The research's findings suggest that knowledge management initiatives being knowledge-oriented leadership, knowledge process capabilities, and knowledge management behavior have a positive relationship to knowledge-worker productivity. The relationship between knowledge-oriented leadership and knowledge process capabilities is supported. The relationship between knowledge process capabilities and knowledge management behavior is supported. The relationship between knowledge management behavior and knowledge-worker productivity is also supported. With this said, the relationship between knowledge management behavior and knowledge-worker productivity where affective commitment was the moderator is not supported.

Based on these findings, the thesis recommended for the cultivation of knowledge-oriented leadership practices such as the nurturing of a culture that esteems knowledge creation, transfer, integration, and application to bolster organizational capacities in effectively managing information and expertise. In addition, there should be a focus on investing in the enhancement of knowledge process capabilities, by implementing robust knowledge management systems, furnish employees with trainings and resources for knowledge exchange and to establish mechanisms for continuous growth and learning. Moreover, by fostering leadership behaviors that prioritize knowledge management and offer support to employees in their knowledge-related endeavors, organizations can elevate productivity levels and attain transient advantages in the dynamic landscape of the financial services sector.

Similar to numerous studies, this research is not without limitations. The applicability of the findings beyond the brokerage financial service sector may be constrained. However, knowledge management and international management practitioners in other subsegments of the financial services sector like banking can still derive insights from this study and consider the factors influencing knowledge-worker productivity. To obtain more representative data on knowledge management initiatives explored in this study, a longitudinal study would be beneficial.

The main aim of this study was to develop a framework for understanding knowledge management constructs and their impact on knowledge-worker productivity and ultimately on how these influence transient advantages in the dynamic environment of the financial services sector. This has been successfully addressed in this study. This study provided a framework for multinational enterprises within the financial services sector on how to increase knowledge-worker productivity for the aim of obtaining transient advantages in dynamic environments. This should support organizations to navigate the dynamic environment which they find themselves in.

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Appendices

Appendix 1: Interview Guide

Eligibility

Before each interview I will inform and assure the participant of the confidentiality of the interview. I will explain what the research is being carried out for and what it hopes to achieve without providing too much information as to jade the entire interview in itself. Lastly, I will ask the interviewee if I can have permission to tape-record the interview.

During each interview I will keep in mind certain tools, which I can use in the case that I may come across “difficult” interviews. For example, during an interview with an uncommunicative interviewee, a pause of silence can be helpful to give the interviewee space and time to answer questions without being overwhelmed by continuous probing. For the over-communicative interviewee, it can be helpful to find a natural break in the conversation to state something along the lines of, “could we go back to what you were saying earlier about...” to get back to the research questions. Along with the already mentioned strategies, I will stay aware to the interviewee and to their needs as to create a relaxed environment where the interviewee can express their opinions and experiences openly with little to no predisposition from my side.

Concluding the interview, I will thank the interviewee and provide them with feedback about the study he or she will receive and at least a rough idea of when he or she is likely to receive it.

Sampling Methodology

Before the data collection phase, it was critical to define the criteria on how the participants were selected. The researcher had the population of her Credit Specialties department within her own organization to draw from. The Credit Specialties department consists of about 1,000 people globally. This number cannot be defined, as employees decide to join or to leave the organization on a consistent basis. From the approximate 1,000 people, the range of language, experience, responsibility, and level of education is vast. Therefore, the literature was consulted to construct a fitting sampling methodology to guide in the selection of interview participants from the existing population. Based on the literature and the author's specific research case, a combination of single-stage probability and single stage non-probability methods were used. More specifically stratified, purposive, and snowball sampling were used which will be outlined below.

The Credit Specialties department at Marsh is active globally. To include the global aspect in the sampling, stratified sampling was used. Two participants from each Marsh defined geographical region are to be interviewed. The regions include Asia Pacific, Europe, Latin America, MEA, and North America.

Due to the diverse levels in education, responsibility, and experience, a combination of purposive and snowball sampling was used. In a large global organization, it is difficult to have a network which allows you to have access to the necessary population of the study. The researcher used snowball sampling to retain access to specific employees. Purposive sampling was used in combination of snowball sampling to differentiate between client facing colleagues and managers. Client facing colleagues can be defined as junior employees who have a maximum of five years of experience. Managers can be defined as colleagues who have over five years of experience and hold positions which carry additional responsibility. One client facing colleague and one manager colleague were chosen per Marsh defined region. Purposive

sampling supported the differentiation between client facing and manager colleagues and snowball sampling supported access to the larger network within the organization.

Opening Remarks

To start, I will introduce myself and will give you an overview of my study and how this interview will work. Please feel free to ask any questions you have while I proceed through the introduction. My name is Emily Taherian, and I am a doctoral candidate at Sheffield Hallam University.

The research I am conducting revolves around knowledge management and how knowledge management can be used to increase knowledge worker productivity.

Today I am asking you to take part in a research study where I will ask you questions which relate to the field of knowledge management. The interview should take maximum one hour. The interview will be recorded so that I can go back and transcribe the interview for my data collection process. The recording will be deleted once the data has been transcribed. Please be assured that all data will be handled with the highest regards of confidentiality.

Your participation in this research is completely voluntary. You may choose only to answer certain questions and may end the interview at any time.

Do you have any questions about me, my research, or our interview before we begin? Do you consent to having this interview recorded?

Appendix 2: Semi-Structured Interview Questions for Upper Management

Control Variables

1. *Can you please introduce yourself? For example, what is your title and your role within your organization?*
2. *How long have been with your organization and how long have you been working in the industry?*
3. *Which region do you oversee?*

KOL

4. *In your personal view, what are some ideal qualities a leader/manager in your organization should have?*
 - a. *Is there an example of a time when you felt that you exemplified leadership qualities?*
 - b. *Is there an example of a time when you felt that someone else exemplified leadership qualities?*
5. *Do you believe that different leadership styles might be needed for employees in different industries?*
 - a. *For example, if you were to compare an organization like Marsh which has employees who mainly handle intellectual capital to an organization which has employees who handles more tangible products.*
 - i. *Why or why not?*

KPC

6. *Would you say that your organization leverages human and technology initiatives to embed organizational knowledge?*
 - a. *If yes or no, how so?*
 - b. *Is there a specific situation that comes to mind when you thought knowledge was being managed well or maybe not so well?*

7. *Do you believe leadership can influence how knowledge is handled within an organization?*
- a. *If yes or no, can please elaborate on why this might be?*
 - b. *Perhaps provide a real-life scenario to support your explanation?*

KMB

8. *In the context of your organization, can you please explain to me what your employees' relationship with knowledge looks like?*
- a. *For example, do your employees share their knowledge actively? Do employees go outside of the organization to search for information?*
 - b. *Please provide a scenario, which comes to your mind first.*

AC

9. *In general, do you feel that employees within your organization feel a belonging (whether to the organization, to a team or specific person(s))?*
10. *From your experience do you believe that employees are more willing to actively manage knowledge (i.e., share information) if they feel they belong to their organization?*
- a. *If yes or no, why, or why not and can you provide an example or elaborate on your answer?*

KWP

11. *Do you believe that leadership can play a direct role on the productivity of employees?*
- a. *If yes, how so? If no, why not?*

- b. *Do you have a personal example which you can share where you might have had a direct impact on an employee's productivity?*

Back-Up Questions:

12. *Can you please provide insights on how employees within your organization feel towards their work and towards their organization?*
13. *When thinking about your employees, can you provide insights on how well they fit to their role that they had been given?*
14. *If any, can you share if there are improvements that can be made to increase employee effectiveness?*

Appendix 3: Semi-Structured Interview Questions for Client Facing Employees

Control Variables

1. *Can you please introduce yourself? For example, what is your title and your role within your organization?*
2. *How long have been with organization and how long have you been working in the industry?*
3. *In which region do you work in?*

KOL

4. *In your personal view, what are some ideal qualities a leader/manager in your organization should have?*
 - a. *Is there an example of a time when you felt that someone exemplified strong leadership?*

5. *Do you believe that different leadership styles might be needed for employees in different industries?*
 - a. *For example, if you were to compare an organization like Marsh which has employees who mainly handle intellectual capital to an organization which has employees who handles more tangible products.*

KPC

6. *Would you say that your organization leverages human and technology initiatives well to embed organizational knowledge and to create new knowledge?*
 - a. *If yes or no, how so?*
 - b. *Is there a specific situation that comes to mind when you thought knowledge was being managed well or maybe not so well?*
7. *Do you believe leadership can influence how knowledge is handled within an organization?*
 - a. *If yes or no, can please elaborate on why this might be?*
 - b. *Perhaps provide a real-life scenario to support your explanation?*

KMB

8. *In the context of your organization, can you please explain to me what your relationship with knowledge looks like?*
 - a. *For example, do you share knowledge actively? Do you go outside of the organization to search for information?*
 - b. *Please provide a scenario, which comes to your mind first.*

AC

9. In general, do you feel a belonging within or to your organization?
10. *From your experience do you believe that you or your colleagues are more willing to actively manage knowledge (i.e., share information) if you or they feel a belonging to the organization?*
 - a. *If yes or no, why, or why not and can you provide an example or elaborate on your answer?*

KWP

11. *Do you believe that leadership can play a direct role on the productivity of employees?*
 - a. *If yes, how so? If no, why not?*
 - b. *Do you have a personal example in which you can share where you might have had a direct impact on an employee's productivity?*

Back-Up Questions:

12. *Can you please provide insights on how you feel towards your work and towards the organization?*
13. *When thinking about yourself, do you feel that you fit to your role within the organization? Why or why not, please feel free to provide a specific example where you felt either it was a good fit or a not so good fit.*
14. *If any, can you share if there are improvements that can be made to increase your work effectiveness?*

Appendix 4: Transcribed Interview Responses

Participant 1 Interview

Emily: I think it's in the Cloud. Okay. So, I just started the recording. Are you okay with me recording our interview for today? Did you say yes. Sorry.

Participant 1: I said yes.

Emily: Oh, okay. Perfect. Now I hear you. Okay. So, at any time, if you feel uncomfortable during the interview, please let me know and we can end the interview early. And if you don't want me to use the data from this interview today, you can tell me right away or in two months' time, or also more time [00:00:30] down the road. So just please let me know. This interview is strictly confidential, your data, like your name and your information will stay between us. And that's about it. Are you ready to start the interview?

Participant 1: Yes, I am ready.

Emily: Okay, perfect. So just to start off, can you please introduce yourself? For example, what is your title? What [00:01:00] is your role within your organization? How long have you been working?

Participant 1: Sure. So, I work for Firm XYZ five years ago. I started or more than five years now. And since two years, I'm at the credit department of Firm XYZ Credit Specialties. So basically, my title is Senior Client Advisor, which means I'm responsible for everything concerning my clients [00:01:30] in particular concerning their credit management, national and international clients.

Emily: Perfect. And in which region do you work in? I don't know. Did you say that?

Participant 1: Yeah, I work in Germany, especially for the south of German region. So, I'm sitting in Stuttgart. Mostly my clients also are in the region of Stuttgart [00:02:00] however, sometimes they're outside of this region as well.

Emily: Okay, perfect. So, then we'll move more into the more specific knowledge management questions. So would you suggest that your manager... I'm assuming that you have a manager?

Participant 1: Yes.

Emily: Okay. And so, based on the fact that you have a manager, would you suggest [00:02:30] that your manager has a specific leadership style? I can give you some-

Participant 1: Some?

Emily: ... more details. Yeah. So, if yes, if you think he or she does, can you maybe explain what the leadership style is? For example, maybe there was a time where you felt that [00:03:00] your leadership... Let me see.

Participant 1: So maybe because I have basically let's say two managers. So, let's say I have a direct one and I have an indirect one. So, my direct manager would be my team leader kind of, and the indirect one is the regional manager. [00:03:30] So, I actually guess the two styles of them are quite different. But if we now say my direct manager with whom I'm working on an everyday basis, I would probably say that this leadership style is quite in a whole coworking style. So, he is not [00:04:00] someone who always tells me what to do and who's always controlling me and gives me tasks to solve or who calls me and says, "Did you already do this and that?" So, he's basically more helping me when I need him. But besides of that, he lets me do my work.

So, to say, anyway, and my [00:04:30] regional leader, I'm actually not in that many contact with him. So, he's there when it's really, really difficult, or when I really need someone on a C level who maybe supports me with strategic things, for example, with a client or with insurer. So, he's more on a strategic level and on escalation level. So, if I really not [00:05:00] straight forward in some difficult tasks then he's there to support.

Emily: Okay. Do you feel that with this regional leader, that they would also let you do the work that you want, the way how your direct leader allows you to do this?

Participant 1: Yeah, the way how I do it is basically they let me do that on my own. And as long as it is done on the day when [00:05:30] it needs to be done, they're actually letting me do whatever I want, how I want. And obviously we all have business goals. So always we're always interested, in that and if I do not like reaching my goals or his goals or our goals, obviously then maybe the freedom of doing my work is little bit more tracked, let's say but I guess it's yeah, the model part of me because, they need to fulfill their [00:06:00] new business numbers. They make sure that we do it and if it's not working, obviously then they're closer on tracking you, how you work and what are your ways to gain new clients and stuff. But as long as I bring my numbers, they might let me do how and when I want.

Emily: Okay, perfect. So how do you [00:06:30] think knowledge is managed within your organization? For example, how do you think knowledge is organized, distributed, or applied within your firm?

Participant 1: So would knowledge mean the firm competency or...

Emily: Yeah. For example, if you learn something new from an insurer or maybe one of your colleague's learn something from an insurer, is it shared within your organization [00:07:00] or do people keep things to themselves? Maybe there's an example that you can give where you were really impressed, how well knowledge was shared or, and then again, another example, when you thought it didn't work so well.

Participant 1: Okay. Maybe if we take the whole last year and the whole Corona or COVID phase of the year, it was a time where we all [00:07:30] needed to know how, for example, insurers react on the COVID crisis. So, I guess it was a time when news really needs to be shared quite quickly because it changes maybe every second day, because it's so new and

stuff like this. So, it was not that easy, but I would say it was quite good managed actually, because when, for example, let's say [00:08:00] our managers get new information about how I insurers will react within the next weeks or within this year within the COVID crisis.

We had for example, weekly calls with the whole let's say region, or the whole country actually was on the German level. So, it was for the whole country. And inside of that we had I don't know twice a week or even more, [00:08:30] we had update calls within a smaller group. So, for example, for the south of German region or the Stuttgart region, and for example, if one person gets to know anything from, for example, the insurer, he always shared it via mail or via our chat group. So, we all always [00:09:00] knew what everybody knew, I hope.

Emily: Okay. So, you would say that the knowledge managed by leadership and managed in between colleagues it was working in this moment.

Participant 1: Yeah. I would say that, if we take the whole example, I would say yes. I mean, probably there are areas or colleagues [00:09:30] who would not always share their news probably, but then I would probably not know, but I guess that's also the case, but if you take the Corona which was the total crisis, which was quite a big, big thing, but then I think it was good. But if you take smaller things, for example, on a contractual side, for example, someone new or [00:10:00] will change that in the future. Maybe that took some time that this news is spread all over our team or country or probably yes. But if we take like really important things, the news concerning the public crisis, then I would say it was good manage. Yeah.

Emily: Okay. Do you think leadership [00:10:30] sets the tone for this, say you see leadership, your direct or indirect manager sharing knowledge, does that influence the way you share or manage knowledge?

Participant 1: I would definitely say that way. Because somehow, they did not born and raise me, but I [00:11:00] took a lot of the behaviors of them,

obviously, because for example, my direct manager is also kind of my mentor. So, I adapted a lot of his working styles and his behaviors. Yeah. So, I would probably say my direct manager is someone who always helps people always try that, everyone is fine [00:11:30] and everyone knows everything. So, I guess I probably adapted a lot of his behaviors styles.

Emily: Okay. I'm taking notes, in parallel, I'm going to write this down. Sorry.

Participant 1: I think that's not for everyone. Right? So, I have colleagues I think that they do not share everything or offer their help, they have all the time, but that's also [00:12:00] kind of a personnel as well. So, I think it's a mixture of probably how your leaders shows you, however also what kind of person you are, I guess it's a mixture.

Emily: Let me ask it differently, do you feel maybe connected to the organization [00:12:30] that you work at? Maybe do you feel like your organization, I wouldn't say so much family, but that you have a good feeling towards your organization or that you feel like you are part of a team at your organization?

Participant 1: Yeah. I would feel really connected to my team. If I would say that I'm connected to my company or to my... I personally think [00:13:00] that you always only feel connected or loyal to a person, like to your manager or to your direct leader, to your whole team members or for example, if you are a leader, probably you be connected to your team, you're leading. I guess for me, I'm not in a leading position, but for me, I obviously feel very connected to my direct boss [00:13:30] and to almost all the team members. Yeah. But if I would have the same team in another company, I would probably have no difficulties to change the company, I think. Because for me, I'm connected to not a logo or company.

Emily: Okay. That's really insightful. [00:14:00] So do you think, because you're more connected to your team that you're more inclined to share

knowledge with them? So maybe if I ask it in a different way, if you weren't so connected, maybe you would share information less.

Participant 1: I would probably not care that much that everyone is on the same page. I don't know that because I never experienced not to be not connected to meeting. I suggest [00:14:30] that if I would not care about them or not feel connected to them or also, I'm really keen on getting all the information's from my colleagues as well. So, I'm really thankful if, for example, my direct leader or my team members share their knowledge some more because I'm working in this business for two years, so I'm not that experienced for example, than [00:15:00] someone who's working in this area for 25 years. So, I'm really, really thankful. And I also need the input and the experiences and the knowledge some of my team members can give to me. So, it it's a giving and a taking. So as far as I see for working thing, so if I would not care about them and I would not meet them [00:15:30] as well, like if I would be total experience perfectly, I don't know, I probably would not be that interested in sharing knowledge. I would probably be better.

Emily: Okay. Perfect. Let me see what our next question is. All right. I [00:16:00] basically asked you everything that I wanted to.

Participant 1: Oh, that was quick.

Emily: Yeah. But our conversation was really nice. I guess I can ask one or so a couple more follow up questions. When you think about yourself, do you feel that you fit your role within the organization [00:16:30] and why or why not? Can give us an example, maybe there's a time you felt like you fit or maybe a time you didn't. But specifically, to the work that you do.

Participant 1: And you mean fit that I think that I'm in the right position?

Emily: Yeah.

Participant 1: Or that I fit in this?

Emily: No. That you think that what [00:17:00] you're doing is a good fit. Yeah.

Participant 1: Okay. There were definitely times where I thought, maybe on my personality side, but I'm probably maybe in the wrong business fear, like insurance broker. Because I'm more really emotional [00:17:30] person. So, I definitely had time, for example, before I started in my credit department where I thought, maybe the whole insurance industry, it's basically maybe not the right thing for me. However, then I got to know my team and obviously in other departments of the credit department. And I guess since obviously the staff was quite, quite hard because I have no idea [00:18:00] what I have to do, but I would say if we say now, two years later, I would probably say I made the right decision. And that I'm definitely in a good. That I fit in this position where I am. Yes.

Because I'm really interested in my client's needs if they fine with everything on the person side and always on the business side. And I always try to help them because [00:18:30] that's just how I am. That's also my personal side. So, I'm that with my friends as well. So, I'm on the same way with my clients basically. So, I guess I am right in the client contact that. You could fact that I'm really a lot in contact with my clients. I would probably say that I'm in a good position.

Emily: Perfect. [00:19:00] I guess, do you have anything else you want to add to the questions that I asked today? Or maybe there's something still on your mind that you wanted to say? Okay, perfect. Well, I don't have any more questions for today, so I'll stop the recording, one second. Okay.

Participant 2 Interview

Emily: So, yes. So, hi Subject 2. Thank you for joining our interview today. Before we get started, is it okay if I record our interview?

Participant 2: Yes.

Emily: Great. Thank you so much. So just before we get started, this will take about 45 minutes and I will be asking you about 10 questions today. Are you okay with this?

Participant 2: Yes.

Emily: Perfect. Okay. So, to get started, could you please introduce yourself with your title and your role within the organization.

Participant 2: Okay. I'm [Subject 2 00:00:39]. I'm with Firm XYZ since four years and I'm based in Berlin and I'm the Head of the Credit Specialties for our organization here in Germany.

Emily: Okay, perfect. So how long have you been with your organization?

Participant 2: With my organization, I've been since four years.

Emily: Four years. Perfect. And as you said, you oversee Germany. That's your region?

Participant 2: Yes. I'm in charge for Germany, for this Credit Specialty and in the market. For credit insurance, I'm working for nearly 19 years now. Before I worked 25 years for credit insurance companies.

Emily: Okay, perfect. Thank you.

Participant 2: And I have been in leadership since 2000.

Emily: Okay. So, quite a long time.

Participant 2: Yes.

Emily: Perfect. Just another question. How many people do you oversee, would you say?

Participant 2: Nearly 40 people.

Emily: Nearly 40 people. Perfect. That's a lot of responsibility.

Participant 2: Not direct, more indirect, but I don't or need to go into more details about that.

Emily: Yeah. Perfect. So, now that you've introduced yourself, we'll go more into the conceptual questions. So, the first question is, in your personal view, what are some ideal qualities a leader or manager in your organization should have?

Participant 2: This is not a simple question. From my point of view, it results from the leadership role and how objective one leader is. But I think in general empathy, [inaudible 00:02:52], positive thinking, goal orientation and communication are very important. And with our international network, very good English is also very important.

Emily: Okay, perfect. Thank you. Do you have a specific example in mind where you thought, "Oh wow, this person has really good leadership skills." Or maybe a time when you thought you were a strong leader, is there a specific example you could provide? If not, it's also fine.

Participant 2: As I thought before, I think communication is very important. For example, with positive attitude, I communicate how simple and understandable my language is and how I express my appreciation or this thing. I think it's important, if I want to reach the team or the addressee with my communication.

Emily: Okay. I'm taking notes. Just so you know.

Participant 2: As example, then it's my personal example. Perhaps our quarterly meetings. That I organize by myself every three months for the whole team here in Germany. It's very important for me and a good example for communication.

Emily: Okay, perfect. This is very helpful. No, this is great. Thank you.

Participant 2: Thank you.

Emily: Great. And then do you believe that different leadership styles might be needed for different industries? So, for example, if you compare your industry with maybe Daimler, 'Bandarbeit'. On the very different...

Participant 2: Yeah, yeah. Generally, not, because my point of view for leadership always had something to do with people. We don't lead machines. So, but I can imagine that someone who leads a technical team for Daimler and perhaps in the automotive industry, has to act differently in terms of their perhaps expertise and then someone leads on the other side, a creative marketing department. So, there are some difference.

Emily: Okay, perfect. So, you're saying that maybe in general, no different leadership styles are needed, but maybe-

Participant 2: Yes.

Emily: They have to just fit specifically to the type of team, perhaps?

Participant 2: Yes. It's dependent also from the type of the team and then the role and the objective. But generally, for all leadership roles, you need communication, empathy, all the things that I had told you before.

Emily: Okay. Got it. Understood. Perfect. Then we'll move on. So, would you say that your organization leverages human and technology initiatives well? So, that to embed organizational knowledge, to create new knowledge? So, I guess this is multiple questions, but...

Participant 2: I think we do a lot, but I'm not sure if we have the best way for all of that because of its complexity. But we have the clear target to create new knowledge and to use technology for this. Yes. I think I'm working in a company; they do a lot to find the right answers for the human and for creating new knowledge.

Emily: Okay. Is there may be a specific situation where you thought, "Oh wow, this went really well", within your organization when technology and human resources were used?

Participant 2: Yes, but I'm not really sure from my point of... Now, what is it? I know that you, Emily, have participated in organizing the Marsh Hackathon.

Emily: Right.

Participant 2: And I'm not really in this, what the main targets of Hackathon were. But I have seen there, it was a great format because for young people, for women, there's a lot of diversity and there's a clear focus on knowledge, and on technology. This is one of the initiatives that my company supported. So, and I think that's a great example.

Emily: Okay. Perfect. Okay. And so, do you believe that leadership can influence how knowledge is handled within a company?

Participant 2: Yes. Absolutely. As I told you before, perhaps also in communication. It's an important role in the communication with the right attitude, with positive thinking, with finding the right words and complexity. I think with many complexities, that you can translate it for the people, that they are not afraid about new situations, and about new technology.

Emily: Mm-hmm. Perfect.

Participant 2: I hope I find the right English words.

Emily: No, you're doing great. It's perfect. This is very helpful. Yeah. Okay. And then, so in the context of your organization, of your firm, can you explain to me what your employee's relationship with knowledge looks like? So, to be more specific, you said that you oversee about 40 people. How do they interact with knowledge? Sharing, gathering, saving? These types of actions.

Participant 2: Oh, sorry. I don't understand the question correct.

Emily: Okay.

Participant 2: Can you more explain it, please?

Emily: Yeah. So, just the people that you oversee, what do they do with knowledge? For example, do they go outside of the organization to get new knowledge, to bring back, to share with the team? Do they share knowledge at all? Or do they maybe keep it to themselves? Do-

Participant 2: Okay.

Emily: These types of things. How would you say that, on average, most people interact?

Participant 2: On average, all the 40 people here work very closely together and they see that they are a team, and they share information and knowledge. They give new ideas into the team. And we find solution that we organize some new meetings. Perhaps we have a format we know as Credit Campus Time where we bring external providers to the team. They give them the information about their knowledge, about the solutions. And for this format, one hour per month. It's a big, interesting for this new knowledge. And after that, we can also see that they share the knowledge into the team, and they help each other. Perhaps if you have an appointment with a client or with a prospect, and then they very often work together on the table from the client or the prospect as a team. With all these strengths and weaknesses, and that's for me good examples.

Emily: Yeah. This is good. So, you're saying that the group, it's like a team. So, that brings us into our next question. Do you feel that the employees feel a belonging then? Within the organization or within the team? Or maybe both?

Participant 2: What is belonging mean?

Emily: Belonging is you feel like you are part of the group. [German language 00:13:13].

Participant 2: Yeah. Yeah. Yes. I'm [foreign language 00:13:19]. Yes, I think for my specialty department, I hope totally yes. In the whole organization, because Marsh is big here in Germany, we have 805 people with all different... Okay, at the end of the day, we have one goal. It's the perfect service for the client or the prospect. But we have so many different solutions, so many different tasks. And I have the feeling that the more complexity you have, then it's not so easy to feel a belonging. And that's the reason that we from the management side, we put a lot into our... I don't know the right word in English, for our company 'leitfaden', for our vision or our mission. What are the key points we are staying for, so.

Emily: Okay. No, that's perfect. No, makes sense. Yeah. So, I guess then, yeah, just to summarize from what I heard is that because the organization is so complex, it

might feel hard to have a belonging. So, maybe having a vision or a mission that is defined, helps this complexity.

Participant 2: Absolutely.

Emily: Okay. Perfect. I guess, so, would you believe and from your past experience that employees are more willing to actively manage knowledge? For example, share knowledge, if they feel a belonging, within their organization?

Participant 2: Yes. Yes, absolutely. Now I understand what is belonging so that I see, yes, it's really important. And if I have this belonging, then I will more so share all of my knowledge.

Emily: Okay, perfect. And then this brings us to our last question. Do you believe that leadership can play a direct role on productivity of employees? So, for example, when you think about the 40 people that you're leading, would you say that you have a direct role on how productive they are?

Participant 2: Yes, absolutely. It's the same that I answered in our first question. One of your first questions. It is really important what is my point of view to some development into the company and also into the market. I've said positive thinking from my side and with this, I can give really good motivation to all the people. And with more motivation, you have more productivity because you feel better. You can go the extra mile then. I do it for a good team. I do it for a good company and all of them.

And from my point of view, my leadership, it's not a leadership with push or what is the right word? With this pressure. My leadership role, it's more with I go in front, and I will be the first one if I have the chance. And that once at the time, so. But then I will also go to the client and the prospect and will help the team with my person and with my title perhaps, but I'm not behind the team, I'm in front of the team. So, and that's very, very important for the productivity for all of my employees. It's my thinking about that.

Emily: Okay. Perfect. Wonderful. So, now we're done with all my questions. Do you have anything else you would like to add? You don't have to. It's up to you.

Participant 2: Yes. No, not really. Sorry.

Emily: But if anything comes to mind, you can always just send it to me later if you'd like.

Participant 2: Yeah. Okay.

Emily: Okay, perfect. So, I will stop the recording now.

Participant 3 Interview

Emily: All right. Thank you for joining us today, Subject 3, and thank you for being an interviewee. Before we dive into the questions. Are you okay with me recording this interview?

Participant 3: I am okay, yes.

Emily: Great. Thank you. So just to get started. Can you please introduce yourself, your title, your role within the organization, things like this?

Participant 3: Okay. So, my name is Subject 3. I'm based in San Paulo, Brazil. I work with Firm XYZ. Specifically with Firm XYZ's specialties team in Surety. Today, I am responsible for doing what we call the registration part in Brazil. So, acquiring credit limits for our clients within the insurance companies, the Sureties, but now I'm transitioning to a more technology focused position and transitioning to a position where I'll be able to help Latin America grow its technology potentials with new systems and beginning with transforming the actual system used in the U.S. and Canada today in Surety. To make it viable for use in the Latin America countries. It's more specifically starting with Brazil, which is where I'm from.

Emily: Perfect. And how long have you been working at Firm XYZ?

Participant 3: So, I came from Firm ABC.

Emily: Oh, yeah.

Participant 3: Combining Firm ABC and Firm XYZ together. It's about three years.

Emily: Okay.

Participant 3: But it's going to be four years beginning of next year. Yeah.

Emily: Okay, perfect. And then is that the same time that you've been in the industry or have you been-

Participant 3: Before joining. Yeah, sorry.

Emily Oh, no.

Participant 3: I can go. Before joining Firm ABC, I worked for about two years at the insurance company, Firm MNO now DEF. I used to work for the credit insurance team there, and I was an intern for the time where that I worked at MNO during my time there the company decided to not do credit insurance in anywhere except for the US. So, we had to kind of stop doing credit insurance there. So, I transitioned to a position in business intelligence at MNO. And then about a year after I was doing the structure in Brazil for them, I was invited to join Firm ABC.

Emily: Perfect. So, like all the years put together, how long would you say that is?

Participant 3: That would be so almost four years. Firm XYZ, Firm ABC. Two more. So about six years in the insurance industry. Yes.

Emily: Perfect. Thank you. All right. So, that kind of wraps up the intro part. So now I would get into the more conceptual questions.

Participant 3: Okay.

Emily: Perfect. So, in your personal view, what are some ideal qualities a leader or a manager in your organization should have?

Participant 3: Okay. I believe that first thing that a manager needs to have is a way to transmit its knowledge to its employees, its colleagues, the ones that answer to him, to the manager. I think it's very important that the manager has the technical qualities to support the team with whatever they need. And I also, I believe that those would be the two main qualities. So being able to transmit the knowledge with the team and having the knowledge to be able to help the team with their needs. But I also really think that empathy it's a very good quality for any manager. And I think those three are ones that come to my mind directly, when I think about it.

Emily: Okay. Sorry. I'm just taking notes for myself.

Participant 3: That's okay.

Emily: Perfect. Great. So, do you believe that different leadership styles might be needed for different industries? So, for example, if you compare like Firm XYZ, which kind of produces intellectual capital, so not really a tangible product. And if you need me to repeat any of the questions or go in more depth, please let me know.

Participant 3: Okay. I believe the core for leadership should work with most of the people in maybe an 80, 20 real role. I do think that different people might need different management styles, but not necessarily that a very good leader in one specific industry would not work for most of the industries. I think that if you are a good leader in one company, you would probably be able to translate into a good leader in other industries.

Emily: Okay. Perfect.

Participant 3: Well, sorry, one last thing.

Emily: No, yeah.

Participant 3: You probably would need the industry knowledge because that's.

Emily: Well, yeah.

Participant 3: You cannot be a leader in insurance and then be a leader of dentist company or its two worlds apart.

Emily: Okay. Got it. Okay. Perfect. So then moving on to the next question, would you say that your organization leverages human and technology initiatives well? So, to embed organizational knowledge and to create knowledge.

Participant 3: Can you repeat the question because it lagged a little bit, I'm sorry.

Emily: No, no, no, it's fine. This is kind of a longer question. Would you say that your organization leverages human and technology initiatives well to embed organizational knowledge. So does Firm XYZ, you or Firm XYZ use their people's knowledge and technology to leverage that knowledge in general.

Participant 3: Okay. I really think the company leverages the people, the potential that we have in the company. We have so many initiatives to get to grow our own people. And I've seen so many times in Brazil, for example, our leaders going inside our own company to get people to a different position, to a better position instead of hiring from outside. You would rather do that than hire from outside, which I think is great, in leveraging our people. In terms of technology, I think we're trying to get there. I hope we can. I hope I can help with that, but I think there could be some ways that we could do it better. And I do believe that this is a result of us being such a big company. You cannot ever compare a company like Firm XYZ to a startup, for example, because a startup it's their pathway.

It's very easy to change where they're going. I really like a comparison that once a professor made during my time in university. With big companies being like a Titanic where to steer it, you need to take your time and go slowly. So, to change a course, a startup is more like a, I don't know this translation for this in English, but it's like those speedboats, like the ones very fast that are smaller, but so to change the trajectory, you just turn it, and it will go anywhere you want it to go. So, for companies like us, big companies, it's harder to make changes. And technology usually involves a lot of changes but, we're getting there. I hope so.

Emily: Yeah. I think, yeah. Okay. Perfect. Yeah, and so do you believe that maybe leaders can influence how knowledge is handled within the organization? And if yes or no, maybe elaborate why you think this?

Participant 3: Definitely. I think that if you have a leader who shows the team that it values knowledge and people acquiring more knowledge, this helps the team to try to get more knowledge because it's a way for them to get a step up in their careers or try to ascend inside the organization. If you have a leader that does not show support for that kind of thing, people would start to get behind and not try to be their better selves. So, I think that the position of a leader is very important for making the people be their better selves that they can ever be.

Emily: Okay. Great.

Participant 3: And that involves knowledge.

Emily: Perfect. Thank you. Okay. And so, we're just cruising through this. In the context of your organization, can you explain to me what your relationship with knowledge looks like? So, for an example, do you like to share knowledge actively? Do you go outside of the organization to find knowledge that you haven't found within the organization? Do you create new knowledge, things like this.

Participant 3: I'm a very hungry person for knowledge. I love to learn new things, so I'm trying to learn as much as I can all the time. So, if I see something that I believe can help with what I do in my daily basis or what my team, that can help my team, I will look for that in like every way I can. And can you give me just one second?

Emily: Yes.

Participant 3: Sorry. I went to turn on the lights. So, there was, can you repeat the question again?

Emily: Yeah, of course.

Participant 3: Sorry.

Emily: So, in the context of your organization, can you please explain to me what your relationship with knowledge looks like?

Participant 3: Yes. So, as I said, I'm very hungry for knowledge.

Emily: Yeah.

Participant 3: I try to gain as much knowledge as I can on the things that I'm working on, the things that I might work on or things that I don't even might work on, but that I find interesting or that can and be helpful in the future. So, I think that a good example for this is technology sells. So, I've always been passionate about technology. My education is not exactly in technology. My education is in business. And I think because of my love for technology as kind of something I always enjoyed looking for and reading about and doing things related to it during my time when I was in the business course in university, there was some side courses that I could do about technology program and then creating websites or learning how to use Python or VBA, the Microsoft Office programming language.

I would take them because I like that kind of stuff, even if it wasn't exactly related to what I would do in my daily basis. And because I learned that I was able to find ways to use it in my daily work. So, an example for this is a spreadsheet that we created, me at Firm ABC to send emails. So, what our team would do with the insurance companies would create one, you may need different email for every insurance company, and write everything in each of the emails.

So, I created a VBA program on Excel to get everything, get the files from a folder in your computer and send to a different email for every insurance company with the click of a button. So, you just have to create one email text, put the files in the folder, click the button and boom, every insurance company in the deal had it. So, that was something that I would never have imagined that I would do when I was gathering the knowledge, but it ended up helping me very much in my daily work, because I knew that. And I think that is with everything that we, most of the things we learn. We might not even realize that

will be important for us and sometimes in the future, but you can use it for something. So, I think that, yes, I have a good relationship with knowledge. I do like learning new things.

Emily: Cool. And I guess your team was also probably very excited about this Excel spreadsheet that you created.

Participant 3: Yes. They loved it. It took a lot of time back into their hands.

Emily: Good. Yeah. Okay, perfect. So, in general, do you feel a belonging within your organization or within the team or with your coworkers maybe be specific.

Participant 3: I feel what? Sorry.

Emily: Sorry

Participant 3: I feel?

Emily: Do you feel like a belonging to your organization, to your team, to specific colleagues or all of the above? Maybe one more so than the other.

Participant 3: What do you mean by belonging? I'm sorry.

Emily: Belonging. You feel like you're a part, not like family, you know how you say, "oh, I belong, this is my family and I have a belonging to this family," but I wouldn't say that your work is your family, but you have a, you feel like you are part of a team or

Participant 3: That I have a place into, in the organization.

Emily: Yeah.

Participant 3: Or somewhere in the organization?

Emily: Yeah.

Participant 3: I would say yes. I think that every new employee can kind of, of create it's belonging in the organization, and it takes time for you to create that space that

I feel that today I do have that. I feel that I created, I have a really good relationship with the team in Brazil, especially with Person ABC, which is the Surety leader, Credit Specialties leader in Brazil. I've been working with her since I joined Firm ABC. And I started answering directly to her with the Firm XYZ acquisition of Firm ABC. Because of that, I was a part of a lot of decisions and, I'm very grateful for that, that she allowed me to be part of a lot of decisions and processes, and to help the team be the best version of itself.

And now I'm starting to feel like I'm also a part of XYZ's team, because I started to work with XYZ, with the technology part of the business and it's been a blast. She is amazing. I've really loved, enjoyed working with her and technology and I really like what I do.

Emily: That's great.

Participant 3: I have a couple of friends that we talk about work and what we do and how we're doing at work. And I always say, tell them I really like what I do. I enjoy doing what I do sometimes I'm like working, and it was like 10:00 PM. I don't see it's 10:00 PM. We're like, "what time is it?" Because I really enjoy what I do. So, it's, I wouldn't say a hobby, but it's really good. I really like it. You know? And they are always like, "what it's work? What, what is he saying?"

Emily: Yeah.

Participant 3: You like it?" So, it's sometimes very difficult to express that to someone who doesn't have a good relationship with what they actually do, but I really do feel like I belong.

Emily: Okay, perfect.

Participant 3: I don't know if that was too long. I'm sorry.

Emily: No, it was perfect. No, it was great. And then, so we have two more questions. So, from your experience, do you believe that you are then more inclined to share your knowledge or create new knowledge if you have more of a belonging?

So, say, I can rephrase it, so say if you didn't feel like you belonged, would you share knowledge or would you create new knowledge?

Participant 3: That is a tough question.

Emily: Yeah. Cause you don't know. Right. Because you,

Participant 3: Yeah. Cause I belong.

Emily: Have a belonging. Yeah.

Participant 3: Yeah.

Emily: Maybe if you think about other experiences that you had, even outside of working, I'm not sure.

Participant 3: Well, I think that what makes someone not share its knowledge, it's not, I wouldn't say it's even like belonging or not. It's with what environment you're in. So, I believe that if you're in a very competitive, non-friendly environment you wouldn't be as much inclined to share your knowledge with your colleagues because the environment makes you feel like if you share, you might be giving someone else your knowledge and they could use that against you. Something like that. And I've never been in a situation like that. I have friends who have, and that's why I think that's the case. So, I don't know, if I wasn't in their shoes, if I would of act like that. Because I like getting new knowledge, I usually like talking to people about new things and that allows me to gather more knowledge too. So, it's kind of a two-way street, right? Like it's difficult to imagine something that I haven't experienced.

Emily: Yeah. No, no, it's perfect. It was perfect. Okay. And then do you believe that leadership can play a direct role on the productivity of employees? So, if yes. How so? If no. Why not?

Participant 3: Definitely.

Emily: Okay.

Participant 3: Yes.

Emily: If you have a personal example or an example that you saw from someone else, then you can also share this.

Participant 3: Okay. I really do believe that a manager can, a leader can impact the productivity of the team cause the productivity I believe it's very much linked to how well you feel doing your job and how a manager portrays that to you. It's very important. The showing every step of the way what you're doing and how that impacts the local results, the regional results, the global results, the information you're creating, what you're doing, how it impacts the whole chain inside the company and the business. I think that if a manager doesn't give their employees a clear view of the importance of what they're doing, that might affect productivity, but I don't mean that's the only aspect that can impact. But I do think that it has a very important role in terms of how it affects their employees.

Emily: Okay. Perfect. So, do you think, I don't know, so coming back to you or to your colleagues around you, do you think that I guess having the decision to set up your workday to have decisions on how you go about certain work, that this is also important?

Participant 3: You mean strategy of micromanaging or non-micromanaging? Like what?

Emily: Yeah. So that you have your own decision-making capabilities.

Participant 3: I think that different people have different needs in terms of management. And it's important for a manager to notice what each person actually needs to make them be the more productive that they can. And I do have example for that by myself.

Emily: Okay.

Participant 3: So, while we were at Firm ABC, before I started to answer to Person ABC, I answered first to actually two managers at the same time. One, I was kind of a hybrid asset. I was working with credit insurance and Surety at the same time.

So, I was helping both managers, the manager for Surety and the manager for credit insurance. And they had very different management styles, completely opposite. One of them was micromanaging, very like, let me see everything you're doing. Every dot, every I, everything. And the other one was the completely opposite. Like, do it, show me the results. I'm good. Show me what you got.

Emily: Yeah.

Participant 3: I don't do very well with micromanaging.

Emily: Okay.

Participant 3: Not at all. I think that's me. I really don't like someone always coming in like, "well, what are you, what are you, what are you doing? What are doing? Come on, come on show me something."

Emily: Yeah.

Participant 3: It doesn't show that the person has confidence in you. And I think that can affect someone's productivity.

Emily: Yeah.

Participant 3: But that's even related to the other question. So, after we were acquired by Firm XYZ, and we went into the merger. I started reporting directly to Person ABC and she can bring the best out of people, really. She can find which management style works best for someone. And we have a very good relationship. So, she says to me what she needs, I'll do it. Tell me what you need the day you need. It's going to be done.

Emily: Yeah.

Participant 3: You don't need to be there constantly. So, but the other manager, the one that was the completely opposite of the micromanager, I think that's too much.

Emily: Too relaxed. Yeah.

Participant 3: Too relaxed.

Emily: Yeah.

Participant 3: You need to be somewhere in the middle.

Emily: Yeah.

Participant 3: So, I even forgot what the question was. I'm sorry.

Emily: No, it's okay, just having freedom to make decisions and do your own.

Participant 3: Yes. So, I believe that each person has to be able to do their own thing, but it is important that the manager identifies how much freedom that person needs to be their better versions, their better selves.

Emily: Perfect. Okay. Got it. And then that's all of my questions.

Participant 3: That's all?

Emily: Yeah.

Participant 3: Okay.

Emily: I even threw in a bonus question. So, we

Participant 3: Okay.

Emily: Could ask you more. Yeah. So, hold on. So, I guess, do you have anything else you want to add before I stop the recording?

Participant 3: No, that's okay.

Emily: Okay. One second.

Participant 4 Interview

Emily: All right. Well, thanks for joining me today. Is it okay if I record this interview?

Participant 4: Sure is, yeah. All good.

Emily: Okay, Perfect. So, just to get started. Can you introduce yourself?

Participant 4: Yep. My name is Subject 4. I am a colleague here at Firm XYZ, Australia. I'm an analyst across the Credit Specialties business line, but I predominantly work in the Surety business line.

Emily: How long have you been with your organization? With Firm XYZ?

Participant 4: I've been with Firm XYZ for just over or just under two years now. Before that I was at university. This was my first job out of university, which is exciting.

Emily: Perfect. Okay. So, now that we know more about you, we'll go more into the conceptual questions. [crosstalk 00:01:08] In your personal view, what are some ideal qualities a leader or manager in your organization should have?

Participant 4: I guess in the professional world. I think being knowledgeable about the business would probably be one of the most crucial things. And then some other soft qualities, I guess would be, to be approachable. Say, for me personally, if I have a question that I want to ask my boss, I want to feel comfortable with asking them and knowing they'll have the answer. It might be a tricky thing, but particularly in our business. I think being knowledgeable about it is probably one of the most important things.

Emily: Perfect. Do you want to add anything to that or...?

Participant 4: Well, obviously the soft skills and the communication skills are important as well. But you could say, if I asked my boss a question and they didn't have the answer, it wouldn't really help. So, someone that's approachable and knowledgeable and also easy to communicate with.

Emily: Perfect. Do you believe that different leadership styles might be needed for employees in different industries? For example, if you were to compare employees at Firm XYZ which mainly handles intellectual capital and you

compare this to an organization, which has employees who handle more tangible products.

Participant 4: I had that same thought. A company that was making a product... I know, this might be a bad example. Say they were just churning out clothing or shoes. A leader that's quite authoritarian. Is that the word? That direct leadership style would probably be best for that. But in our organization, I think having a leader that's quite democratic in how they make decisions would be the best thing for this business and industry. But I had that same thought that, it's a product based versus a task based.

Emily: So, you would say that there is a difference then? Between tangible alone?

Participant 4: Yeah.

Emily: Okay, perfect. I'm just taking notes.

Participant 4: And I think that would be the best way to achieve results as well. Going back to this clothing or shoe business. It would be best if they just had workers and a leader that was just like, "Yep, you have to do this. This is your tasks. Et cetera, et cetera."

Emily: Perfect. Would you say that your organization leverages human and technology initiatives well to embed organizational knowledge?

Participant 4: So, is that like being proactive and seeking out people's opinions on things or...?

Emily: Yeah, I guess you could look at it that way. Does your organization... Does it leverage the employees and technology to get leverage?

Participant 4: Well, I thought, particularly Firm XYZ. They don't particularly nurture it, but they don't discourage it either. From my understanding to say something that has come up quite often, recently is ESG stuff. They got some professionals that have a strong base in the ESG to come and speak to us about it. But I guess I don't really see much at Firm XYZ particularly that says, "If you have any great ideas come towards us." But again, they don't discourage it.

Emily: That's a good example. Do you believe that leadership then can... I mean, going with this example. Your ESG example. Do you believe that leadership can influence how knowledge is handled? [crosstalk 00:05:48]. So, maybe with the ESG example...? Maybe is there a different type of leadership that could have maybe...? [crosstalk 00:05:55].

Participant 4: That's another thing. With bringing in knowledge, outside knowledge and particular leaders being open to hear other people's opinions. I think, a leader has to be not threatened by others' opinions. I thought it was good that we as Firm XYZ did seek out someone that had a strong background and was external. It showed that, I guess, we weren't threatened by what they might say or discouraged by it.

Emily: Okay. Perfect. Do you want to add anything, or should we go to the next question?

Participant 4: Is that the right thought that you had in the... what this question was about...?

Emily: There's no right or wrong answer. [crosstalk 00:06:52]. Just what people feel.

Participant 4: Right. Well, just my understanding of it is that I guess why it should be...

Emily: Perfect. Okay. So, then we'll move on to the next question. In the context of your organization. Can you please explain to me what your relationship with knowledge looks like? Just before you get started. How do you... Do you actively share knowledge? Do you go outside of your organization to get new knowledge? Do you share it with colleagues or maybe you don't? And just why you... How you... How do you do it and why you do it?

Participant 4: Well, in Australia, at least they do encourage their employees to do the Tier One, which is an external program. I'm sure. Have you done that before? The Tier One insurance? It's like a course that is of... Well, it's external from Firm XYZ and they do encourage that. I guess, there is some learning and it's pretty open if you want to have questions for other business lines. They are willing to share, or other business lines are willing to share knowledge. I think the best... Well... I'm just thinking.

Another thing is... I think it is quite easy to say, with particularly what we did, how there was a... With the Credit Specialties, YP (referring to Young Professionals resource group within Firm XYZ) stuff... Resources like that. It's quite important and helpful if we do want to share our opinions and knowledge about things. Say, if I had a question about another market overseas, it's a good resource to access that information. I think that was more in a... It wasn't a Firm XYZ based... They encouraged it. It was more the initiative of some colleagues in and along Firm XYZ

Emily: So, it's like more of an individual initiative.

Participant 4: Yeah.

Emily: Okay. That's nice. That flows into our next question. Maybe we'll go a little out of order. So do you think these individuals who start these initiatives... Do you think that they feel a belonging to the organization?

Participant 4: I would think so. I guess it's... You have to understand someone's motive to do that sort of thing. I guess it might be a personal, not selfish motive, but they want to do it to look good. Perhaps in front of their leaders and such. But I guess there are some people that along or amongst the company that are genuine about improving all employees. And I guess that would be important for the CEO to encourage learning throughout and have some things in place to each employee level. You have to pass a course to go up. But I guess in another sense is... I read this as, "How would I feel?", or "Do I feel a sense of belonging to Firm XYZ?"

Emily: Yeah. Do you?

Participant 4: I guess at the moment. Obviously, working from home it's hard to. You don't get that face-to-face interaction and build connections with the organization. I guess we... This might be something different. We do... Firm XYZ does do programs to get us involved, but there's only so much we can do over Zoom interaction and email interaction.

Emily: Okay. So do you think if you were... If everyone was more... If things were more in person, you would probably have more of a feeling of belonging?

Participant 4: Yeah, I guess so. For sure. Well, I can say that is true for sure. My first year of working I was in the office. I did have that face-to-face connection with my boss and my manager. So, you did feel part of the team and part of the organization. We all had a better understanding of what we were trying to achieve as a company and what our goal was, I guess. Working from home, you're just staring at a screen, and you could just walk out the room and you are cut off from work again. It obviously makes it difficult. Being in the office and being around colleagues is quite important.

Emily: Okay. And then just to wrap it up. Do you feel that colleagues might be more willing to share information or handle knowledge if they feel belonging to the organization?

Participant 4: That's a good question. I would say so. Yes. If they do feel a part of the team and they have a real sense of connection to, "I want to see the business thrive, because that's what I'm a part of. I'm part of a team here." I would think they would go out of their way and try and work harder perhaps. I guess it depends again what the personal motives is for people as well. I know for myself, being a younger member or younger colleague, I want to do well for, not only my team, but I want to have a successful drive around me as well. I think that goes back to having strong leaders that if you, if we, or the colleagues believe or say, "I believed in what our leaders were doing, and I respected how they were and what direction they were going in." You feel more inclined to work hard and go out of my way to do better for the whole organization.

Emily: OK, perfect. That answers the next question a little bit. Do you believe that leadership can play a direct role on the productivity of employees?

Participant 4: I do. For sure. At the top level you want to see your leaders have good morals and have a good direction. Clear direction, I would think. And in particularly with my leaders... If I see them, they're trying their hardest to bring in new business and interact with clients. It inspires you to work hard and get involved

as much as you can. So, for example, when we have our... When my team has our weekly catch up. When I hear what my manager is doing to try and help our team reach our budget. They're going out of their way to call a whole bunch of clients. It's quite inspiring. But then, a few days later you can't really see that in process again. So, it's like, almost out of sight out of mind.

Emily: Okay.

Participant 4: You know what I mean?

Emily: Yeah.

Participant 4: If you believe in what your leaders are doing. It's really important for your own drive and productivity.

Emily: Perfect. So that's all of the questions I have for us today.

Participant 4: Cool.

Emily: Do you want to add anything before I stop recording?

Participant 4: I guess there wasn't anything particular that I had said. No. All good.

Participant 5 Interview

Emily: All right. So Subject 5, thanks for joining. Is it okay if I record this interview today?

Participant 5: Yeah, of course.

Emily: Perfect. So, to get started, can you just please introduce yourself, for example, your title, your role within the organization, how long you've been with the organization? Those types of things.

Participant 5: Okay. So Subject 3, I'm based out of Chicago, Illinois in the US. I've been with Firm XYZ for almost four years now. I am a surety broker, so

I am an intermediary between the marketplace and our clients for all things pertaining to surety bonding. I guess my official corporate title is an Assistant Vice President, but that doesn't really say anything about what I do so-

Emily: Perfect. And how long have you been in this industry altogether?

Participant 5: Four years. I came right out of college to Subject XYZ.

Emily: Okay, perfect. Did you say which region you worked in?

Participant 5: Yes, Central US I guess is the technical region.

Emily: All right, perfect. Okay. So then now we'll go into more of the conceptual questions.

Participant 5: Nice.

Emily: So, in your personal view, what are some ideal qualities a leader or manager in your organization should have?

Participant 5: I think number one should be empathy. Especially nowadays, I think it's more important that people are empathetic in regard to mental health. Life comes before work and I think a lot of the time in the US specifically, and I would imagine it's relatively similar in Germany too, to be quite frank, our culture tries to put work before life. So, it's really important, in my opinion, to have an empathetic manager who encourages you to put life before work and not penalize you when you do it. So, I think that's probably the first most important because, especially within service organizations like Firm XYZ, where we don't make a product, we're a professional service firm, your people are your product. So as a leader, you need to train, develop, and then retain the best people. You can't do that if people don't want to work for you, and people want to work for others who care about them or at least seem like they care about them. So, I think that empathy is probably the number one quality. After that, things start to matter a lot less.

Emily: Okay. Perfect. I guess you kind of already answered this question, but do you believe that different leadership styles might be needed for employees in different industries? For example, if you were to compare an organization like Firm XYZ, which has employees who mainly handle knowledge, and if you were to compare it to an organization which has employees who handle more tangible products, would there be different leadership styles needed?

Participant 5: It's tough to say because I don't have experience at a Ford or a BMW. I'm just trying to think of an industry that very clearly manufactures something. But I would presume that it probably does. I think that in those organizations there's more of an emphasis on project management, where there's a lot of boxes that you need to check in order to get to a finished product. I think that more knowledge based, as you defined it, more knowledge-based organizations like Firm XYZ, I think that there's less of an impetus on that. I think that it's important, like I said, it's more important to be in tune with how your employees are feeling and the product that they're putting out in a more loose and almost subjective basis rather than did you work this many hours, did you complete this many ... yada yada, whatever.

So, I think there probably is more project management and micromanagement that would make a better manager in an organization that's actually producing something, because your incentives are different. How do you make revenue at BMW? Well, you produce more cars and sell them. How do you make revenue at Firm XYZ? Well, you have the best employees selling to the clients and retaining the clients and servicing the clients. So, it's a different way to make money and so I would have to imagine that the managing needs to fit that if that makes sense.

Emily: Yeah. That's really good. Awesome. So, in the context of your organization, can you please explain to me what your relationship with knowledge looks like?

Participant 5: Yeah, it's like everything that I do. Our clients pay us to know the things that they don't, in the simplest terms. If they knew everything about surety and the marketplace that we play in, then I'm useless. So, I need to, not to use a Firm XYZ abbreviation and term, but I need to be an SME. I need to be a subject matter expert within my own practice. Otherwise, I'm useless. It's pretty essential.

Emily: So, would you say that you're the type of person that will go outside of the organization to get more information and share it within your team or with the organization? When I say outside, it can be an insurer. It could be ... I don't know.

Participant 5: Yeah. Honestly, no. I don't feel like I've done a good job about that in my career. I feel a lot of the learning that I've done has been drinking from a fire hose. I've done it because I've needed to. As you know, we run a very lean ship here at Firm XYZ. In the US, it's no different. It's not like we have people just waiting in the wings to take on work. So, within a year of me being at Firm XYZ, they're like, "You know enough. We need people on these accounts. Here are 15 of them." And it's like, "Just come to me if you need help or whatever." It's like, "Okay, all right. I guess I've learned enough to that point." And then that's the rest of it.

I do think that it was kind of okay to do it that way, because I think the learning curve was really sharp. And then now it's more incremental where it's like I understand the technical aspects of what my product is and how my job works. And excuse me, I have to switch to headphones right now because my partner is on a phone call. But like I understand all that, but I do think that learning through experience is really important. I mean I guess you could consider that external, but I'm not a big read all these articles about surety type of guy. That's just not what I do. That doesn't interest me at all.

Emily: It doesn't necessarily have to be reading. It could just be conversations, I guess.

Participant 5: Yeah, totally. Maybe not. It could be conversations and I guess that I do have those with carriers (referring to insurers who carry surety as product) sometimes. But it's not like, "Teach me about this." It's more like this is prevalent in the US, bank fronted surety. I've been taught that internally by Person ABC and Person XYZ and people like you and Person LMN where it's seen prevalently in your marketplace. So that's how I learn that. I guess it is external, but it's usually like, okay, I'm talking to Insurer ABC, just to use an example, "What do you guys think about bank fronted surety? How is home office (home office of the insurer in coordination of the client account) looking at this?" And then there's discourse within that but it's not like, "Teach me about that." I don't know. There's a lot of knowledge that flows all across it.

Participant 5: Anyway, yeah.

Participant 5: But I don't feel like I'm being really concerned about learning through external sources. I just feel like, because of my job, yeah, knowledge is just flying back and forth. It's not anything that I've put emphasis on.

Emily: Got it. Perfect. I kind of jumped around, so we will go back a question. So, would you say that your organization leverages human and technology initiatives well to embed organizational knowledge? So basically, in layman's terms, does Firm XYZ leverage human and technology initiatives?

Participant 5: I mean we could be better. Right? We could be worse, but we could be better. I think that human initiatives ... maybe I'll try to interpret what that is supposed to mean, but I think that with a lot of the D&I (diversity and inclusion) stuff specifically in the US post backlash on the racial riots and everything that was kind of going on last summer around George Floyd and all of that, I think that Firm XYZ responded very soundly. I think that our leadership, I mean I think they handled it well. They've established a lot of ESG initiatives and initiatives around D&I. They've hired a lot of people because that matters for our colleagues. And I think that inherently, as an organization, we do a really good job

at recognizing that people are our product. So, I do feel like my opinion's cared for and that. Especially me as a colleague in the US is concerned about diversity and inclusion as a half-Hispanic male in the US, that concern's being heard. I'm not yelling it into a void of white men. So, I guess that is good on the human side of things.

The tech side, though, I'm not so sure how great we are at that but it's hard in our business, right? I don't want it to be like I'm dumping on Firm XYZ for being behind on the times. Our business specifically in surety bonding, and then if you think about it as a global business, is difficult to create some uniform technology that's going to work. Just the antiquated nature of bids and having to have hard copies of bonds in contractors' hands to present to like the City of Chicago, for example, that's kind of the nature of our business. So, the technology hasn't necessarily needed to evolve that way.

Where I do think that we could do better, and we're starting to try, is on the data collection and then the data analysis side of things. I think we have been historically garbage at collecting the data that we have, which sucks because we should have access to so much data.

Emily: Yeah, I agree.

Participant 5: ... the best of the best. We're the world's largest insurance broker. Our data and analytics should outpace all the carriers tenfold-

Emily: Yeah.

Participant 5: ... in theory. Right? And I think because our data collection doesn't have a uniform process anywhere, I have no idea where that data would even be stored, who's responsible for keeping it up to date, who's responsible for running any analytics or benchmarking or blah, blah, blah, on all that stuff. I think that that is where we've struggled, and I think that we're starting to come to terms with that and move forward with strategic initiatives around that space. But I think, as of right now, not that we're

lagging the industry, I don't think we're lagging the industry. I think we're lagging the world in regard to that. So, I'd like to see more improvement there.

Emily: Do you have a thought or an idea why that might be?

Participant 5: Yeah, there are a couple of things. So, one of the biggest things in the US specifically ... Again, I can't really speak outside of my own knowledge, but in the US specifically, I think there's just a lot of turnover in this industry generally, because there are so many options for where you can work. People are willing to jump for another few thousand dollars in salary or whatever to a better opportunity. With a lot of turnover comes lack of consistency. So, if somebody's running with a project or whatever and then they leave, that project isn't ... We stop again. So that project isn't just like, "Oh, they were working on this. That's fine. You can take it over. You have the bandwidth type of thing." It's like that doesn't matter because it's not client service and it's not bringing us revenue. Like focus on retaining the clients and bringing in new business because that's how you're compensated.

So, I think it's a kind of a combination of, one, the turnover and then, two, that's not how we make money. So, we're not necessarily focused on that as a fire drill item. So, it really is a secondary or tertiary item because it doesn't bring in revenue directly. So, I think that kind of the combo of those two things, it's like, yeah, I mean a lot of the times it falls by the wayside and when you don't have one person or one team dedicated to improving something, it's usually going to take a while.

Emily: What do you mean by one person?

Participant 5: So just to use myself as an example, in the US, there's no uniform manner for financial benchmarking for our contractors, which is important ... I don't know how much I need to preface this for the interview type of thing ... which is important because what we do is we provide access to credit basically. Our clients need to have good

financials and sound financial health and solvency in order to have stronger access to credit in order to basically allow us an easier time to enable them to do their jobs. We're in the business of allowing our clients to do business. So, I think that an important thing in the US is understanding what impacts how the sureties look at your financial health. And in the US, we don't have a uniform, this is important, and this is what your ratio is and why you're lagging behind, and why you're seeing this, this does not come to fruition in terms of surety in the credit space. I think that we don't have that.

And I think that it would be really important. And also, I am fluent in data and analytics. I can put together some pretty sharp stuff. So, I took it upon myself for a couple of our clients, bigger clients in the central zone, to create a financial benchmark. That's been great for the pockets of clients and advisors that know that we can do that. But that was just me saying, "I don't like how this is going. I can do better than this," and then did better. And then a few clients have been like, "Wow, this is great. It is very helpful," blah, blah, blah. But it's not like we're rolling it out across the country.

Emily: Right.

Participant 5: Most of the country probably doesn't know that we can even do that, nor do I want them necessarily to know because then I have to do that, and I have a day job. So, it's like there are innovations happening, and that is simply an anecdote. There are innovations happening similar to that across the nation, across the globe, in pockets that are helping our clients do their business better, but there's no path or time or team with the ability to roll that stuff out uniformly, whether that's nationally or globally or whatever it might be.

So, I think that's kind of what I mean by one person is we have great people at this organization that are really sharp, that are the best in the business at what they do. They are innovating every day within their own jobs but there's no path to creating something that we can use

uniformly across our book. And I think that that is, again, kind of back to the data and analytics, we're not necessarily lagging the industry in that regard, but I think we are lagging the world in that regard.

Emily: Got it. Perfect. So then do you believe leadership can influence how knowledge is handled within an organization?

Participant 5: Yeah, absolutely. I mean do I need to elaborate more on that? Because the answer is yes. Of course, they can.

Emily: I guess it would be nice if you could say, or I don't know. Maybe you have a real-life scenario where you thought, "Oh wow, this leader did a really good job in supporting how" ... or maybe just say why you think it is.

Participant 5: Well, yeah. I mean you need buy-in from leadership to do anything, right? I mean that's the same thing in any organization. I can have a million good ideas but if there's not investment behind the good ideas, then none of it happens. So, you need leadership's buy-in to do anything, anything at all. Maybe that's different at other organizations, but I highly doubt it. If I had a million dollars to allocate to doing stuff within Firm XYZ, I would hire two people and then build this system out or whatever. I would do that, but I don't have that power, right? So, you need leadership buy-in to be able to even do any of that. So yeah, of course. They have the money, right? They have the keys.

Emily: Yeah, that's true. Okay. Perfect. I guess just a follow up question. Do you think that employees take on behaviors of leaders?

Participant 5: Yes.

Emily: ... like if someone were to say, "I see this manager as a leader, and they have certain qualities that employee's"-

Participant 5: Yes. I mean unequivocally yes. And I can say it because I do that. I mean, as a young professional, I do that, I look around and, again, between the

two of us, my manager right now is great at so many things but also not great at some things. It's up to me as the young employee to be like, "When I'm a manager" ... This is maybe just me that thinks this ... "When I'm a manager, I really like that he does this. I'm not so much of a fan about these things." And then there are other people that I work with, like our construction zone central lead where I think the world of him. He's so smart and he's incredible as a client executive and as an executive producer. He's great on the client side of producing and retaining business and servicing the business. But man, some of the things he does with people management, I harshly disagree with. So, it's finding that balance.

And then there's people like Person XYZ who's even more of a senior leader where basically his entire job is managing people and putting out fires and creating a culture. I think that's something that Person XYZ excels at as he has such an infectious personality. He's incredibly empathetic, a very emotionally intelligent man. He speaks very calmly. There are things about his presence and about the message that he sends that are, to me, I would love to be a leader like that.

So, of course, especially young people, I'm not going to sit here and say, "Oh, it's the 50-year-olds modeling who they are after Person XYZ." No, probably not. They're already who they are, but for new young talent and everything like that, absolutely, of course.

Emily: Okay. Perfect. Then I think we've got three more questions.

So, in general, do you feel like you belong, have a belonging within your organization or maybe within a team?

Participant 5: Yeah, no, I absolutely do. Yeah. One hundred percent. For sure. I'd rather not leave. I'd rather not leave. I'd rather stay here than go elsewhere in the industry.

Emily: Is that because of the organization or is it specific to a team?

Participant 5: I think it's specific to my team. Yeah. I think if I were on the casualty team or the property team or whatever, yeah, I'd probably want to leave. I mean I can't say but I mean the reason why I want to stay is because I get to do stuff like this with you and I love my boss and I do things nationally in the US with our construction team and I work with Person XYZ. We're in the CS Fellowship Program (Credit Specialties). I see a lot of opportunity ahead for myself and young professionals alike within the credit specialties, construction, surety umbrella. I find the space compelling. It's very interesting work that we do. Like I said, we're in the business of empowering our clients to do business which is super cool. I feel challenged at work. So yes, it's partially because of the organization but it's more detailed than that, I guess. It's my specific team within the organization.

Emily: Perfect. And then from your experience, do you believe that you or your colleagues are more willing to actively manage knowledge if you or if they feel a belonging to the organization?

Participant 5: That's a great question and absolutely, because I think that managing knowledge and, to use another word, innovating within your space, you're way more inclined to do that if you feel as if there's a reward at the end. I'm not just sitting here creating financial benchmarks just because I enjoy doing work. I'm doing it because I think it would help the team. It would help the clients and the end result is that then I get paid more money or promoted and accomplish my career goals.

Not to seem selfish about stuff like that, but that is how capitalism works. That is literally the game we're playing, that is how it's set up. I studied econ. I'm passionate about econ. So, if your incentives are not in the right place, then you're screwed, but the incentives, you have to have your people believing and, Lord, I hope it's true. But they have to believe that if they put in extra work, they'll be rewarded for it. They're not going to work for free. That's asinine. So yeah. They need to feel a belonging within that organization by extension. That's kind of part of it.

Emily: Okay. Perfect.

Participant 5: Not to be too brash.

Emily: No. It's perfect. I really like it. It's good.

And then last question. Do you believe that leadership can play a direct role on the productivity of employees? If yes, how so? If no, why not?

Participant 5: That's a tough question.

Emily: I know.

Participant 5: That's really ... That might be the hardest one you've asked. I mean the answer is yes and no and it totally depends on the employee in my opinion because I think, anecdotally within my own space, that my manager is great for that, for motivating my productivity. He allows me flexibility and he's very candid with our relationship and I don't feel like I need to be working by this time and ... It's like, "Just get your work done. Come to me with questions," and things like that. And for me, that is perfect. With a micromanager above my head, I would quit. Frankly, I would probably lash out. I would just be like, "I need you to F off seriously and let me do my job and I need you to trust me with this," and so on and so forth.

So, for me, he's the ideal manager. For other people, I can see his hands off approach being a real issue for productivity and them taking advantage of that. Because especially older employees, not to be ageist or whatever, but if a 45-year-old person is given that much flexibility, I'm not necessarily sure that their productivity would increase. I think that they would maybe take advantage of that a bit more and be like, "Well, I have to care for my kids," and yada yada, and then their work maybe falls by the wayside, which is interesting to think about because I couldn't see that happening with myself, but it just depends on who the person is. What's that phrase? There's a phrase in English that's like you give somebody a foot and they take a mile or something like that?

Emily: Yeah. that's it.

Participant 5: It's something like that. And some people would do that, but other people it's like you give somebody a foot and, all of a sudden, they're much happier, they're very flexible with their working arrangement. Their productivity goes up. They're doing these side projects that are totally not their day job but they're helping the organization, they're helping their clients. So, it totally depends.

And I think that the great leaders, not just the good leaders who are good managers or whatever, but the great leaders understand that each person that they're managing or leading requires a different touch. Because I would not approach myself the same way as I would approach a 55-year-old who's been in the industry for 30 years. That would be ridiculous. And it sounds ridiculous to say it out loud, but you and I both know, hell, anyone that's been in an organization should know that that's not necessarily the case.

You have the manager who has, in their mind, the managerial style and they want their employees to conform to it. That goes back to the answer to my first response, right? The workplace used to operate that way where it was just like, "This is my manager, and this is the way that we do things around here." No. This is back to the empathy point. The manager needs to have a high enough emotional intelligence and be empathetic enough to understand that, for the benefit of the entire organization, for the benefit of their entire team and therefore their profitability, but more importantly, for the benefit of each of the individual employees, they need to mold their managerial style to what's most effective for that. It needs to be a two-way street and I feel a lot of the time in the workplace prior to our generation, starting and everything like that, starting to people manage that is, it hasn't been that way.

I think boomers are, not to again be ageist or whatever, I think boomers, generally again, I'm generalizing, are like, "This is the way that I manage on my team and if you don't like it, then" ... but you shouldn't have that

freedom at Firm XYZ to be able to do that in my opinion because people are assets and you want to maintain the most of the good people that you possibly can. And so, if you truly believe that, then you need to manage individually.

So, like, okay, Subject 5 thrives with flexibility. Well, he's going to be more productive with the more space I give him and just allow him to reach out to me if he needs help. But Example Person 1 or Example Person 2 or pick a name, they're tenured, but I need to stay on top of them more because if I give them that flexibility, then all of a sudden, I see their numbers starting to slip or whatever it is.

Emily: Yeah.

Participant: So, it definitely ... I think that really ties to the first point that I made about empathy is we struggle not as an organization, but I think as a society specifically in the US around those points.

Emily: Perfect. That was a good answer. Thanks.

Participant 5: Cool.

Emily: That was all of my questions. Do you have anything else you wanted to add that maybe you couldn't say or-

Participant 5: No. I mean I think it's good. I don't know.

Emily: No. If you don't have anything else, it's fine. I just wanted to give you an opportunity.

Participant 5: Okay. Yeah. No, nothing else.

Emily: Perfect. Then hold on. Let me stop the recording.

Participant 5: Nice.

Participant 6 Interview

Emily: Okay. So, Participant 6, thank you for joining the interview today. Are you okay with me recording this interview?

Participant 6: For sure, yes.

Emily: Okay, perfect. Thank you. Okay. So, just to get started, can you please introduce yourself? For example, what is your title, what is your role, how long have you been with the organization?

Participant 6: Okay. Yes. Thank you very much for the invitation, for the opportunity. I am Subject 6. I am from Brazil. I work at Firm XYZ for seven years and I'm responsible nowadays for the new businesses at the Surety department. And I have a team divided in basically two pieces, one focus on business development and another one focus on the register of our clients. I am 39 years old and graduated in Business Administration and I've also graduated or specialized in finance. I have three kids. I'm married. I don't know what else to say.

Emily: That's perfect.

Participant 6: I love sports. I love animals. That's a little bit about me.

Emily: Perfect. So how long have you been in the credit specialties industry or insurance industry?

Participant 6: Yeah, I've been in the credit specialties industry for almost 15 years, and I started at Firm XYZ in 2007. I started as an intern; internship program and I left Firm XYZ two years later to work at one multinational Brazilian company called Firm ABC. Firm ABC was at the time one of the most important clients for insurance companies and brokers because they used to be one of the most recognized construction companies in Latin America and they used a lot of surety bonds. So, it was an interesting experience. And I come back to Firm XYZ in 2016. In 2016,

I come back to Firm XYZ to work doing the same thing that I'm doing nowadays. So, I have almost 15 years of experience in this industry.

Emily: Perfect. So, a lot of knowledge.

Participant 6: I have a little bit. I'd love any knowledge to learn, to gain.

Emily: That's good.

Participant 6: Yeah.

Emily: That's a good outlook. Yeah.

Participant 6: Yeah.

Emily: Okay. So now that you introduced yourself, maybe we can move into the conceptual questions.

Participant 6: Okay.

Emily: So, in your personal view, what are some ideal qualities a leader or a manager should have?

Participant 6: Yes, my opinion, and one of the skills that I try to use and to implement in my team is the collaboration between not only the leader of your colleagues, but also between the colleagues within the team. I think this collaborative spirit is very important because it creates a confidence between the people inside the team. And also, the confidence from the leader in front of the people that work with this leader. I don't like the micromanagement. I also try to delegate and to create the ownership in this process that the person is responsible for.

I think that when you are responsible, you have much more to think about, and you don't work in an automatic way. You need to think about the P&L and the results and the profit that the department that may produce for you, for the company, for example. And also, the ownership, it will support the person under the team, the team in the department. So,

they will take care of the department of a company. And I think this is the most important mindset that I would like to implement in the teams that I will be leading in the future.

Emily: Perfect. Thank you.

Participant 6: It's clear for you or...

Emily: Yeah, I'm taking notes, so this is perfect.

Participant 6: Oh, great. That's good.

Emily: Yeah. And then, so my next question is, do you think different leadership styles are needed for employees in different industries? So, for example, if you compared an employee at Firm XYZ to maybe an employee who is putting together automobile parts, do you think there's a different leadership style that is needed?

Participant 6: Yes. What is interesting, everybody at Firm XYZ or in other companies in our industry has their own profile, of course, and sometimes this person or these people needs one specific type of leadership, and they will produce more and better with one specific type of leadership. I don't think there is any type of leadership that can include every profile of person or people. You always need to adapt yourself for the type of leadership that this person needs to have. But of course, if we can consider a more collaborative leadership or more inclusive or transparent leadership, I think these profiles or these characteristics are universal for all types of leadership and all leaders must have to pass in these challenging times, because everyone have families and everyone needs to feel better and well doing their jobs.

And there is no more space for old manners of leadership as we were... We listened from our parents, from my father or my mother, where you can separate your personal life from your work life. There's no more possibility to do that. I think the leadership in all of the times needs to be more personal. You need to know about your team. You need to know

their hobbies and you need to listen for the things that they are afraid of. I don't think there is difference between the leader from Firm XYZ or leader from our main competitor. What happens is that these companies are looking for more leaders, human leaders, I think there is no more space for leaders that are not leaders focused on the humanity or the well-being of their teams.

Emily: Humanity is a good... It's an interesting, I like... That was good. Thank you.

Participant 6: Oh, no, thank you, Emily.

Emily: Okay.

Participant 6: It's difficult to say the ideas.

Emily: Yeah.

Participant 6: But I don't know, I'm trying to...

Emily: No, it's perfect. It's perfect. I'm learning a lot. So, this is good.

Participant 6: Thank you. I'm learning, too.

Emily: Okay.

Participant 6: When you speak, you start to think about...

Emily: Yeah, exactly.

Participant 6: It's like you materialize the things that you believe.

Emily: Yeah. Yeah. You have to think out loud.

Participant 6: Yes.

Emily: Yeah.

Participant 6: I agree.

Emily: I do that, too.

Participant 6: Great.

Emily: Okay. So, would you say that your organization does a good job of taking advantage of the human and technology within the organization?

Participant 6: Mm-hmm (affirmative). I think that in our industry the knowledge within the people is very important thing because there is no robot or there is no technology that can replace this. But at the same time, we need the technology to improve our processes and to give a better experience to our clients in terms of agility, in terms of facility or in an easy way to issue bonds or to issue policies and to give the responses to our clients.

I think that the technology feels its present and future. There is no other way to say that, because if Firm XYZ as a company or any other companies in this industry, don't adapt themselves on this issue, the technology, they will not survive much more. I think that they have two years of life if they don't adapt themselves in terms of technology, but we cannot dis-consider or not consider the people knowledge in this field or in the field that they work.

Our example is the surety bonds and the relationship with the marketplace is also another important thing that we can consider because this makes our industry interesting and resilient. I think this is an important word to use. Our industry is resilient because of the human beings, because of the professionals and the specialists that we have, because we can implement, and we can improve the experience of our client using technology. Because if we don't have this knowledge in the industry, you cannot think about the new technologies and new ways to provide solutions to our client.

Because if we hire a technology person, a person from Apple, for example, they will not understand and will not empower our industry.

So, we need to complement these two structures, person, and technology to provide us solutions.

Emily: Okay.

Participant 6: That's what I understand. Sorry, my kids are arriving from school.

Emily: Nice.

Participant 6: We're in a very sunny day today here.

Emily: Oh, I'm so jealous. It's not sunny here. It's been raining.

Participant 6: Really?

Emily: Yeah, but I'm flying to Portugal in three hours.

Participant 6: Oh, that's great.

Emily: Yeah.

Participant 6: Ah, amazing. I love Portugal.

Emily: Yeah, me too. I'm excited. Just to spend a long weekend there.

Participant 6: Oh, that's great. Let me show you here.

Emily: That's so nice. Oh, yeah. That's so nice. You shouldn't be inside; you should be outside.

Participant 6: Yeah. This is Brazil.

Emily: Oh, I'm jealous.

Participant 6: A lot of nature.

Emily: Yeah, that's nice. That's really nice.

Participant 6: We should continue.

Emily: Okay. So, the next question, do you believe that leadership can influence how knowledge is handled within your organization? So, do you think managers like yourself can set the tone for how knowledge is handled?

Participant 6: Yes. I do think that you create your own career, you as a team member, but of course the leader can promote and influence these people to understand better things and to pursue specific knowledge in some fields. Because in our industry, you are well known, you are more available with more knowledge acquired during your career. But if I influence or give some tips to my team in terms of the field that they need to have an in-depth knowledge or a better understanding, I will not do nothing if the person, the specific person, if the person wants to do that.

I think this is more of internal thing than any other thing. You as a human, needs to have this provocative sensation of trying to understand better the things and the technical things or the life things. You need to motivate yourself more than your leader do. But of course, I think the leaders have a special role during this process. They need always to provoke the team members to find field of interest and they need to also open doors and create the path to the team members that they may, of course, pursue or not. But the decision will not be from the leader, but it will be the team member.

Emily: Okay. Understood. Good. Okay. So, I guess, we'll go to the next question. So, within your organization, can you tell me... I mean, I guess you just already answered this, but maybe tell me how your employees, what their relationship to knowledge looks like. So, for example, are employees, do they share knowledge, or do they keep it to themselves or do they actively try to learn new things?

Participant 6: Yeah. Yeah, my job as a leader, I need to provoke these discussions within the team. And for example, yesterday, we had a conference call within the team and our leader, and there was a discussion about one specific issue related to RBI. I don't know if you heard about it, but it's a tool for data analysis and the information to check how we are doing

and for where we are going to, also. And 60% of the team doesn't know about this tool, this specific tool. So, I ask him the leader of this project to invite all the team, to have a training session and to present how we can use this. So, I think the leader... What I'm trying to say to you about this, I think the leader needs to see these weaknesses within the team and promote, I don't know what's the correct word, but within fast time in the training sessions, try to equalize the knowledge and the things that the people are specializing, trying to do equalization.

It's difficult to do that but we need to have consistence in our team. Of course, we have job grades, different job grades within the team. We can't expect that a lower job grade will have the same seniority or knowledge of our higher job grades, but we need to try to equalize as much as we can. And we will do that knowing the people, knowing the person, knowing the knowledge that this person has and trying to invest time and knowledge in this person too, within the team. I think this is one of our roles as the leaders and I've done this in the practical way, yesterday.

Emily: That was really good that you gave an example. That's helpful.

Participant 6: Oh, great, Emily.

Emily: Yeah.

Participant 6: It's my pleasure.

Emily: Okay. So, we have three more questions.

Participant 6: You were going to need to see this video three times to understand what I'm saying.

Emily: No, definitely not. No, no, no, no. It's perfect. This is really helpful. Yeah, so the next question. Do you feel that employees within your organization feel a belonging? So, what I mean by that is, do you think

that employees in your team or at Firm XYZ, that they feel like part of a team or like...

Participant 6: Part of the challenge? Yes.

Emily: Yeah, I guess so.

Participant 6: Yes, I think, and one of my main objectives is to make this happen in the team. So, I was talking about this some minutes ago with three people in my team that they need to belong and to feel this ownership of their unit as a business owner, giving them this delegation and giving them the responsibility of the numbers of few years, the result of the area and then the unit, they will feel this sensation of belonging to the team.

Emily: Yeah.

Participant 6: So, I think this creates... There are things that you cannot say to the people. You need to create actions that will result in this situation. This one way that I think about it a little bit and the way that I found that there's a consequence they will belong. They will feel the... They will have the sensation of belonging to the team or to the organization.

Emily: Perfect.

Participant 6: Because if I always say to the people, oh, you need to feel that you need to belong to the team, blah, blah, you do not have any results.

Emily: Yeah, it's more of -

Participant 6: You need to give them to think about the strategy that are in the background and the people will feel as a team member automatically as a consequence.

Emily: Okay. So more of like a feeling instead of just talking?

Participant 6: Exactly.

Emily: Okay.

Participant 6: Exactly.

Emily: So, I guess that's nice to go into the next question. So, do you think if employees have this feeling of belonging that they're more willing to actively manage knowledge?

Participant 6: Absolutely. Yes, absolutely. All things can be summarized as the feeling of belonging, because if you have an employee that does not have this sensation of belonging, they will not produce and will not be responsible as another one that has this sensation or this feeling.

Emily: Yeah.

Participant 6: I can say by myself, I feel a lot of belonging in my personal experience and I always wake up every day thinking, how can I do more? How can I do better? How can I improve my knowledge in this field? And I can give you this example as my personal example. If I don't feel this belonging feeling, for sure, I would not be motivated to learn more.

Emily: Yeah.

Participant 6: And I try to do the same thing with my colleagues and my team members, my staff. That's what I'm thinking about.

Emily: Perfect. All right. Last question.

Participant 6: Too short.

Emily: Do you believe that leadership can play a direct role on the productivity of employees?

Participant 6: Yes.

Emily: Okay.

Participant 6: Yeah. This question is like the summarization of everything that I said, the final intention or final interest of the leader.

Emily: Yeah.

Participant 6: The leader, the results of his team is his final result, as an outcome. Do you understand?

Emily: Mm-hmm (affirmative).

Participant 6: If I have a 10 members team and I don't have good results, the responsibility will be under my back. So, I need to count, and I need to have this responsibility of having the team working well and resulting well. And if the leadership is bad, the team will not produce well.

Emily: Yeah.

Participant 6: And I've heard a lot of examples about that, and I try always to not be this type of leader.

Emily: Okay.

Participant 6: With bad leadership. So, I always try to be a leader because I am interested in the result of the area in a not direct way.

Emily: Yeah. So...

Participant 6: Unfortunately, this is a... Sorry to interrupt you.

Emily: That's okay.

Participant 6: But we work in an American company that looks for revenue and profit.

Emily: Yeah.

Participant 6: And we need to transfer this responsibility to our colleagues. And if you don't have this vision, this is our capitalism, Emily, this is our capitalism. So, the people need to work and everyone needs to find the profit.

Emily: Yeah.

Participant 6: But we need to do in a different way that the people doesn't feel this sensation directly.

Emily: Not the pressure, but...

Participant 6: Not the pressure, but to be intentional to collaborate, to motivate the people, not say this straight directly to them.

Emily: Yeah. That was perfect.

Participant 6: At the end, the job of the leader is to create the environment for the employees to work well, looking for more knowledge including collaboration within the team and outside of the team.

Emily: Perfect. Do you have anything else you might want to add that you maybe didn't say? You don't have to...

Participant 6: No. No.

Emily: ... add anything.

Participant 6: Yeah, no, just thank you very much for the opportunity. For me, it's also a learning process. I just try to be 100% transparent and say to you what I believe as a leader and what I expect from my leader and my future leaders during my career.

Emily: It was perfect. I learned a lot. It was very helpful.

Participant 6: I hope that your expectations was well-attended.

Emily: Yeah, it was perfect.

Participant 6: That's great.

Participant 7 Interview

Emily: Alright. So, thank you for joining me today in this interview. Participant 7, is it okay if I record our interview today?

Participant 7: Yes, it is.

Emily: Okay, perfect. So just to get started, can you please introduce yourself, for example, what is your title, your role within your organization? How long you've been with your organization? Things like that.

Participant 7: Okay. Hello, Subject 7. I'm a 30-year veteran at Firm XYZ. My current role is, leader of the international Surety business that means leading a network of colleagues in more than 40 countries, numbering over 300 people. Managing a business that's [inaudible] \$50 million in revenue.

Emily: Perfect. And so how long have been in the industry also around 30 years? Would you say?

Participant 7: I've been in the industry since 1986. So, let's do the math. Is that 35? 35 years.

Emily: Yeah. Perfect. So now we'll go into the more conceptual questions. In your personal view, what are some ideal qualities a leader or a manager in your organization should have?

Participant 7: I think a number of things. Lately, I think the most important job of the leader is to build a culture and to cultivate that culture. And the culture that I believe in is one that is focused on the team. Where people are looking to work together towards some common objectives. This is a business. So, we have objectives to serve clients in the surety business, and we have growth objectives as a business. So most important thing for me is to have that culture of collaboration, culture of teamwork. And that means making sure that everyone's able to do a job that's delivering on our promises to clients, and doing work that's as flawless as possible, being error free and making sure we're meeting client expectations and needs. Also feel a very strong duty to help people do a really good job and do a job that they can be happy with and do a job that they're proud of.

Because I think it's so important to be proud of what you do for a living. It's such a big part of your life. And you have to understand and appreciate what you do for a living, the role that it plays in the community. I always talk about how surety is such an important part of an enabler of business, help our clients win business. And when our clients win business, they're able to achieve their goals. And one of the byproducts of that is to keep people employed.

Emily: Yeah.

Participant 7: Keep people employed so that they can really make as much money as they can. That's one byproduct so that they can take care of their family.

Emily: Yeah. Perfect. Okay. I'm going to go to the next question. Do you believe that different leadership styles might be needed for different industries? So, for example, if you were to compare employees in an organization like Firm XYZ, where it's more non-tangible products and you were to compare this to employees that work more with a tangible product, is there a different leadership style needed for these different organizations?

Participant 7: Oh yeah. I do. Some things that we... sometimes we sell ideas. Sometimes we sell... imagine we do sell product and...

Emily: Yeah.

Participant 7: Depending on the role that you play could be very process driven. Excuse me. So, let's say if your team or your organization has to deliver on the document, being able to manage our process of efficiently receiving the order, processing the order, delivering the order, now that's a different leadership style. And because the people who do that type of work will respond to a different leadership style.

Whereas somebody who is, excuse me for a second.

Emily: Yeah. Take your time.

Participant 7: I had to take a little sip of water there.

Emily: That's okay.

Participant 7: So... but when you lead a team of, let's say, advisors, you have to... it's up the higher value chain. And there it can be very conceptual it's not tangible. And there, we are leading a group of people who need to provide advice, need to be very collaborative with clients with underwriters, and to be more creative and innovative in bringing solutions and developing ideas. And in a sense, it's more relationship driven, right? And so, you have to be able to communicate well with your customers or including underwriters, such a big part of what we do is to deliver those new ideas, those solutions, and to be persuasive.

And it's a huge amount of likable factor to that. And because we can be argued that our competitors and us, sometimes we can be quite identical in many respects, then it boils down to a style.

Emily: Yeah.

Participant 7: A likability factor.

Emily: Okay.

Participant 7: Do I want to spend time with Participant 7, or do I spend time with some other person at Firm ABC? Because I like Subject 7 better, he's got the kind of personality that meshes well with me and he's got a positive attitude towards life or towards business, right? So, I think to be a leader, do you have to be always positive? Yeah. Of course, because we want to win, right? And we want to win, we want to win clients. We want to win for clients, and we want to be ambitious and that points to a different style being positive.

Emily: Okay, perfect. So just summarize, you said yes, there would be a different type of leader because it's not necessarily process driven because the industry that we're in, it's very relationship driven.

Participant 7: Yeah. There's some parts of our business is very process driven, right?

Emily: Yeah. Well, yeah that's true.

Participant 7: Yeah, of course, right? But I think what we're talking about here is relationship driven.

Emily: Okay.

Participant 7: And being able to spend time on being collaborative with clients, being able to draw things out of them and lead them and be persuasive, right? And you need to look group of people that can do that.

Emily: Yeah.

Participant 7: Do that and take a chance to do that.

Emily: Yeah.

Participant 7: Or sit back or allow them to sit back and just... maybe sit in their office and keep the door open and hope that business just walks in by itself.

Emily: Yeah. That's not how it works.

Participant 7: There are people who try that, right? This is the walk in and much more difficult to go out and actually get it.

Emily: Right. Yeah. That's true.

Participant 7: Or I could drag it in through that door.

Emily: Yeah. Perfect. I have to, okay. Let me see. Alright. Would you say that your organization leverages its human and technology initiatives well? And by well, to embed organizational knowledge.

Participant 7: Can we leverage, can you say that again one more time please?

Emily: Yeah. This one's kind of more complicated. So, in short, does Firm XYZ use its people and does it use technology well, to communicate knowledge, to share knowledge, to create new knowledge, things like this.

Participant 7: Using technology to do that, is that what you're saying?

Emily: Yeah. So, like, do you use technology for certain processes? Do you have technology that makes certain things easier to communicate?

Participant 7: Yeah. I...

Emily: I don't want to tell you too much. I want you to say what you think.

Participant 7: Yeah. As soon as I heard the question I thought about, I was leaning already towards no, we don't. Okay. I wanted to listen to the question so I can change my answers from no to yes, right? No, I don't think we do it really well and...

Emily: But just technology or also because it's a two-part question, I guess. So, it's human using your people, but also technology. So maybe one is over the other.

Participant 7: I think we do use our people well, because this is still very much a people driven business. And there's a lot of information contained inside people and the relationships that they own. There's a lot of institutional knowledge and experience contained in people, history that's contained in people, and I think that makes those people valuable that they have a experience and a history, and we can do a much better job at distributing that history experience and knowledge.

Emily: How do you think that could be better? Or how do you think that can be better done?

Participant 7: I think it has to be done by mentorship, apprenticeship programs, pairing people up. Less experience or junior members of the team with more senior people that happens already, but sometimes when we all get too busy and too siloed that it's not happening. And I know that when people leave or when people will retire or just leave the firm, a lot of that institutional knowledge goes with it. And then because we've not done a good enough job to hand it down from one site generation to the next. And I see that happening.

Emily: Okay. That was a really... That was perfect. Thank you. Do you believe leadership can influence how knowledge is handled? So, I guess you already said that, so pairing people mentoring, apprenticeship.

Participant 7: Yeah. I think the leadership, we need to have a vision and need to recognize that we have this problem. Alright. And we are serious about developing our young professionals. Then we better make sure that they are in these mentorship or apprenticeship types of relationship with our senior people, our most experienced people so that we can transition one generation to the next. Institutional knowledge is so important, and we brag about our company being 150 years old. And I've been asking people if they even know much about the history of our company. Yeah. We celebrate the fact that we're 150 years old, but it's a lot of history that people don't know anything about.

Emily: No, that's true. I definitely knew more when I first started at the company because I looked into it for my interview.

Participant 7: Yeah.

Emily: Because yeah. But...

Participant 7: Right. There are many milestone events.

Emily: Yeah. That's true.

Participant 7: Plenty that no one knows about and there are milestone events, even in surety businesses that people don't know about.

Emily: Yeah. That's true.

Participant 7: Yeah. Milestone...

Emily: Panama Canal.

Participant 7: Yeah. Advancements that we've done that no one else has ever done before. We need to talk about it and hand that information down to newer employees. Yeah. I'll talk about the Panama Canal forever.

Emily: I think we all will. Okay, perfect. So, then the next question. So, within your organization, can you talk about, or explain to me what your employee's relationship with knowledge looks like? So, I guess, do they gather knowledge

outside of the organization, if they don't know something, do they share it actively internally, maybe there's people who don't actively share it. I don't know, whatever you're comfortable talking about.

Participant 7: Yeah. I think we have within our own organization; I think we've done a pretty good job of sharing information. People are not afraid to ask, right? They're not afraid to ask how things are done. And I think I've been successful in creating that kind of environment to where people ask each other or ask me, and we will be very happy to share, right? And I think that's one of the wonderful attributes of our team. Sometimes it's kind of funny that we keep repeating the same things over and over. We have the knowledge exchange internet site, and we try to store documents in there, but is anyone looking at it? We've got that wonderful publication that [inaudible] put together and was updated by Jim Holland recently.

Emily: Yeah.

Participant 7: How many people have actually looked at that? A lot of work went into developing information about bonding practices within each country. So, we are actually trying to document this. So, it's not just inside someone's head or embedded in people's hard drives.

Emily: Yeah.

Participant 7: These are shared drives. I don't much of what the technological word would be, but I like knowledge exchange. It's a great tool to have information, knowledge stored centrally. Good start.

Emily: Yeah. I think so too.

Participant 7: Yeah. Bottom line is, I know people are not afraid to ask how to do something or what.

Emily: Perfect. And then in general, do you feel that your employees feel belonging to the organization, or maybe do they feel belonging to a team or a specific person?

Participant 7: I hope so. I work so hard at that. I make sure of printing out T-shirts and caps. I think when people in the group, I think most people can identify with being part of a global surety team. We have monthly calls. We have frequent communications. We have myself and our regional leaders promoting this kind of culture of collaboration very frequently, right? And our messages are so, I think, very clear and consistent. And I would say the underwriting community recognizes how we are set up and has compared us to our competitors and complimented on how we are structured and how we are different. So, if our own people cannot identify with that, I am going to be very disappointed. So, I would be very surprised if a large zone of people could say that they are not identifying with global surety practice.

Emily: Okay. Well, I guess, so. Going back to the point that you made, where underwriters, they complement on how collaborative the team is the global surety practice. So, I guess from your experience, would you think that employees are more willing to share knowledge if they have of this belonging, maybe that ties into it?

Participant 7: Yeah. When you feel you belong to a team, you feel safe and you feel it's well within your right to ask for help, ask for information. The opposite of that is not being able to identify with a team and you are really on your own or in your own small team, then safe.

Emily: Yeah.

Participant 7: Alright. We have a very safe environment to where people should be very comfortable to ask for help.

Emily: Okay.

Participant 7: To deliver results for clients.

Emily: Okay.

Participant 7: It makes me feel really good about ourselves.

Emily: Good.

Participant 7: Talking about ourselves. That's good.

Emily: Yeah.

Participant 7: I'm very proud of it.

Emily: Yeah. You should be. I'm proud of it. Don't need to be a part of it.

Participant 7: Good, I've succeeded.

Emily: Do you believe that leadership can play a direct role on the productivity of employees? If yes, how so? If no, why not?

Participant 7: Absolutely. Yes, no question. Of course, we have to encourage people to work hard and achieve goals. People have to understand what the goals are, right? In terms of numbers, in terms of objectives. And when things go off track leadership means that we have to call that out. I am responsible for the culture, and when someone steps out of line, that person has to be called out either for corrective measures or worse.

Emily: Yeah. Okay. Perfect.

Participant 7: We try to restore people. Of course, right?

Emily: Yes.

Participant 7: Because it's natural that people may wonder off because sometimes yourself interest will surface. Alright. And that's okay. We're humans, we can do that.

Emily: [inaudible] humanity.

Participant 7: Yeah.

Emily: All right. That was all of my questions. Do you have anything else that you'd like to add that maybe you didn't get a chance to say during the interview? You don't have to just want to make sure.

Participant 7: No.

Emily: Okay. Then I would stop the recording.

Participant 7: Okay.

Participant 8 Interview

Emily: Now. Okay. Perfect. So, thank you Participant 8 for joining me today. Is it okay if I record our interview?

Participant 8: Definitely. Yeah.

Emily: Okay. Perfect. So, if you're ready, I would ask you the first question.

Participant 8: I am ready.

Emily: Okay. So, can you please introduce yourself, for example, what is your title, your role within the organization and how long you've been with your company?

Participant 8: Okay. I joined Firm XYZ in 2007. Wow. It's a long time now. So, 14 years ago after my career at one of the Korean property casualty insurance companies, where I was handling mostly the insurance claims for marine and liability, aviation, etcetera. And now at Firm XYZ, I belong to the specialty group in Firm XYZ Korea, and I take the role of leading the surety business in Korea and also, I'm covering the Asia region. So, I'm the surety practice leader for Asia at the moment.

Emily: Perfect. Okay. So, I will ask you more of a conceptual question now. Now that we're warmed up. So, in your personal view, what are some ideal qualities a leader or a manager in your organization should have?

Participant 8: It's such a big question, I think.

Emily: It is.

Participant 8: Yeah. The leader and manager should retain the qualities of being a trusted partner basically. And so, in order to become a leader, he or she should lead the team for the organization in a mutually trusting environment and suggesting the goals and vision of the organization, which it is heading to. And the future vision is a must. The leader should be able to suggest to the members. And he or she must be equipped with the capability of solving any problems that must come up in the journey and in order to be capable of solving the problems, he should be equipped with a proper level of knowledge and market intelligence and also some humanity characteristics as well.

Emily: Perfect. I'm just taking some notes.

Participant 8: Okay.

Emily: Okay, perfect. So, do you believe that different leadership styles might be needed for different industries? So, if we take Firm XYZ for example, we sell ideas, solutions. So maybe not necessarily a tangible product compared to maybe someone who puts together like a car or a laptop, this is more tangible. So, do you believe that maybe different leadership styles would be needed for these different employees?

Participant 8: Yeah, I believe it's quite natural. Although leadership styles should be different for each different industry and for this risk management and insurance broking services. And actually, surety business is a bit different. But anyway, for this kind of not the manufacturing but service industry, the knowledge is very, very important to manage. Not just because this interview is themed knowledge management, but I believe I was always believing in knowledge through even business. And actually, I'm not boasting myself but to tell you my career at Firm XYZ for the last 14 years, because a surety business is not quite popular in the insurance broking market.

And when I joined Firm XYZ, I was assigned the task to develop a surety business. So, surety is a totally new product to me. So, I just started from the ground, from zero to now \$3 million USD revenue, brokerage revenue per year with just two colleagues around me. So, it's very high ROI performance team in

Asia. And I've always been thinking about how best to penetrate into our clients. And so, in this service industry, we are basically competing with the banks. And I had to be able to communicate and talk with the clients in a professional way. And I had to learn about the banker's language and bankers the many concepts that does not exist in insurance, but in the banking industry. So, I've always emphasized on the knowledge, so that we can become the real professionals.

And so just like the legal services that is performed by the law firms, we must excel our competitors in terms of the knowledge and solution providing capabilities, etcetera. And to that end we must learn, study every day. Redo the research and establish very systematic knowledge. And with inside our mind. And in Korea, the insurance market is very much driven by relationship. And I always thought that this will disappear. So, the future is knowledge-based. So, I've always put more emphasis on the knowledge, than relationship. So, I was successful. Because we were able to deliver messages in a more professional and in an accurate way while our competitors were not able to do it, because they did not spend time on readings and understanding, research. But they just spent on drinking with the clients at night. So, that was the differentiation I have always pursued in my career. So, leadership in insurance brokerage area should be more knowledge driven, I think.

Emily: No, that was perfect. When you mentioned that knowledge over relationship, because you think relationships might be going away that's very interesting. Thank you for sharing that. Okay. So, then that brings us, we're halfway through. Would you say that your organization leverages human and technology? Let me rephrase it. So, does Firm XYZ use their people and technology well, to leverage organizational knowledge or to store knowledge or to create new knowledge?

Participant 8: Actually, it is quite a difficult question, but I come to think about the web tool. It's just the website we at Firm XYZ delivered recently, the Knowledge Exchange. You know that?

Emily: Yes, yes, yes.

Participant 8: Yeah. Yeah. So, the Knowledge Exchange contains a very rich and ample resources of learning. And that can be a one type of very normal and natural tool for the people to learn something. And I don't know if it is a leverage on human or technology, but it's so simple technology, right?

Emily: Yes.

Participant 8: So, I really don't catch how to answer this item, leverage the human and technology initiative. I really don't know. But anyhow, we store the knowledge into that platform in a very organized way I think.

Emily: Yes, I would agree. More on the human employee side, do you think Firm XYZ uses their employees strategically? So maybe someone, I don't know, you say like in the surety practice has great knowledge of construction, so then you bring them in on a project. Maybe that could be an idea.

Participant 8: Yeah. For example, if we come across a chance to propose an RFP to a certain client, then the management would consider who is best fit for this task. And the RFP could comprise many areas. Okay. Like IT, or the usual property casualty side and IT if it is a construction company client, then there could be many aspects that we can cover. Not just the usual insurance programs, like EAR, CAR, but we also can cover, if it is in overseas project with equity investment, then we should engage the political risk and structure credit experts to deliver some services on it. So, the organization must analyze and keep of such data and record where each individual employee has a very profound knowledge and skills and know-hows about any specific areas of practice. So, that should be very thoroughly managed. So as to leverage the best human resources into the right task to perform.

Emily: Okay. So, I guess that goes into the next question. So, if the leaders are managing the RFP team, so the next question is, do you believe leadership can influence how knowledge is handled?

Participant 8: Yeah. Yeah, definitely. Yeah. The management they should be attentive to this issue, and they must have a sort of established program or data for which individual has which kind of scales to what level. They should be maintained.

Emily: Okay. Perfect. All right. And then the next question. So, within your organization, can you tell me or explain to me what your employee's relationship to knowledge looks like? Or not necessarily your knowledge or not necessarily your employees but also your coworkers maybe. So, do your coworkers share knowledge, maybe there's people who don't necessarily like to share knowledge. Do people go outside of the organization to find new knowledge? I think you already mentioned something like that.

Participant 8: Okay. Actually, in Firm XYZ Korea we run a learning program for the new employees. I mean the beginner, not the career hire, but the new employees like a graduate program. They go through one year learning program. Where they learn vast classes of insurance products and also the other administrative stuff, etcetera, to get them trained. It's actually a training program. And that is quite a basic program to get the employee to be knowledgeable to the job they are to perform. But the other knowledge management for the real employees, I actually was thinking about like this, I understand one of the very famous websites, Wikipedia?

Emily: Yes.

Participant 8: Where I understand that everybody can input their knowledge and thoughts into that.

Emily: Yes. Sorry, just this quick story. I had a professor, and he would change the Wikipedia pages before we had a test. So, he knew who got information from Wikipedia and who did not. Isn't that funny?

Participant 8: Right. So, I don't know if we have that kind of platform or not, but I can say that it is not actively utilized. So that platform can be introduced into Marsh and can enhance the knowledge sharing within the employees group. And-

Emily: More like a real-life platform. So, it's always constantly updating.

Participant 8: Yeah. Yeah.

Emily: Okay.

Participant 8: Actually, most of the trainings are performed by the learning connect programs inside Firm XYZ. And actually, the employees go outside of the organization to search for actually information and intelligence for mostly for the market trend. And like that. And actually, Korea insurance market is quite political and to do the business well, you need to become a good politician. So, that kind of very sensitive intelligence is a must for property and casualty side of the business.

Emily: Okay, perfect.

Participant 8: That's why many of our colleagues are going out for drinks with the clients and peers and competitors. They spend a lot of time on drinking at night.

Emily: Just to get all the information.

Participant 8: Yeah.

Emily: It sounds like a good time.

Participant 8: And also, to create relationships.

Emily: Yeah. Perfect. Okay. So, in general, do you feel that your coworkers and do your employees feel belonging to the organization or maybe to the team? I know you mentioned that you're part of the specialties group to the surety group, you're the surety leader in Asia. So maybe do your employees or coworkers feel a belonging to these specific groups or to the whole organization, or maybe no belonging at all? I don't know.

Participant 8: Actually, in Asia, I believe their sort of sense of belonging matters more than Europeans or US.

Emily: Interesting.

Participant 8: Yeah. In Asia they very much count on the feeling of belonging to a society and group. So, I should say yes, they do a lot.

Emily: Okay. Perfect. Okay. And then, so because of this belonging, do you feel that employees are more willing to manage knowledge? So, share, collect, do you think this has any connection belonging and knowledge management?

Participant 8: Sure. Yeah. Strong sense of belonging is just like, the team is a family. The family they do not hide information basically. They just share. And if you do not share, you'll be blamed and kicked out from the group.

Emily: Yeah. Okay. Perfect. Did you want to add anything before we go to the last question?

Participant 8: I don't think so.

Emily: Okay. Perfect. Last question. So, do you believe leadership can play a direct role on the productivity of employees?

Participant 8: Well, that's just the basic principle in the business management subject. Isn't it?

Participant 8: In my theory,

Participant 8: Leadership is very, very important in setting the productivity of employees. Under a good leadership and genuine leadership, each member of that group has the sense of ownership of the group, and they sense that the work they do is just for him, not for the company. So, if it is your own business, then you would do your best. And the leader will guide and lead each employee through to how most efficiently and effectively produce the result.

Emily: Perfect. That was all of my questions. Do you have anything you'd like to add that maybe you didn't get to say? You don't have to. Just making sure.

Participant 8: I see there are number of back-up questions.

Emily: Yes. There are. If you'd like to answer those, you can but I've-

Participant 8: No. I'd like to skip it.

Emily: Okay. Then I'll stop the recording. One second.

Participant 9 Interview

Part I

Emily: One moment. Okay. Now the recording has started. Participant 9, is it okay if I record our interview today?

Participant 9: Yes, you can.

Emily: Perfect. Just to get started, the first question is can you please introduce yourself? For example, what is your title and what is your role within your organization? These types of things.

Participant 9: Okay. It's Participant 9. I'm based in South Africa and responsible for two products within the credit specialty space. That would be mainly surety and political risk structured trade credit. I have a team that sits in Johannesburg in South Africa we would look to service the inquiries for surety and PRI on the continent.

Emily: Perfect. How long have you been with your organization?

Participant 9: Sure. I think it's with this company now, 12 years, I think. Thereabout.

Emily: That's great. Is that how long you've been in the industry or have you been-

Participant 9: No, no, no. That's with Firm XYZ. I've been in the industry since 1994.

Emily: Perfect. Okay. Now, getting more into the conceptual questions. In your personal view, what are some ideal qualities a leader or a manager in your organization should have?

Participant 9: I think crucial for me is one of an open-door policy. I think it's very important to, I don't, in my view, titles don't matter to me. So, when my colleagues, when we go to a meeting for example, and they would say, "This is Subject 9. She's the manager," or whatever title you want to call. I'm not actually keen on that. I believe we are colleagues. You know?

Emily: Mm-hmm (affirmative).

Participant 9: I think, for me that [inaudible 00:02:24]-

Emily: Participant 9, you're cutting out. Sorry.

Participant 9: [inaudible 00:02:37] this is not the Firm XYZ [inaudible 00:02:42] just my personal [inaudible 00:02:47] has worked from a leadership perspective and [inaudible 00:02:59]. Oh dear. Sorry. I-

Part II

Emily: ... yeah. And then it should just pick everything back up. Perfect. Okay. So, is it okay if I ask you the question again? In your personal view-

Participant 9: Cool.

Emily: ... what are some ideal qualities a leader and manager in the organization should have? You started with openness, open door.

Participant 9: Yeah. Yeah. So, I think also, very often, we're already listening to give an answer, but I think we miss the whole point. So listening is one that's also very important. I think from a leadership perspective, the mentoring is key. The reverse mentoring, as well, I think, makes, hopefully, the individual in the other side of utmost value as well. Because I, for myself, may struggle with technology. So, whilst I'm assisting an employee, they can help me. So, I think that reverse mentoring is key from a leadership perspective. Also, remaining calm so that they can see that bad and good claims do exist. That's why we're here as well in this business. So, I think just remaining calm, which is something that you get, I think, with experience and over the years. Yeah. So, I think in

summary, patience, yeah, it's a whole bunch of things that can... If I'm overlapping, apologies. Yeah.

Emily: No. No, that's perfect. Okay. And then do you believe that different leadership styles might be needed for different industries?

Participant 9: Oh, yeah. Yeah. Mm-hmm (affirmative).

Emily: Oh, sorry. I was just going to give the example. So, comparing employees at Firm XYZ where there's maybe not a tangible product per se, maybe it's we're advising with our thoughts. Whereas maybe if you compare it to someone who puts car parts together, things like this, maybe. That's what I was... Yeah.

Participant 9: Absolutely. I think you will find that not only per industry, yes, a hundred percent. To your example, yes, because they're totally chalk and cheese, miles apart. But I also feel that your leadership style can change from situation to situation as well.

Emily: Oh yeah.

Participant 9: How you need to handle that situation with the specific employee, or even given a situation. So broader industry, but I think from day-to-day, your style can change as well to adapt to the situation.

Emily: Okay. Perfect. Okay. So, then the next question, would you say that your organization uses its human and technology resources well? And what I mean well, to embed key knowledge into the organization.

Participant 9: So, I think at the beginning I said I've been in this industry well, for too long, but working with a company... I can say the name now for the purposes of this. So, working for Firm XYZ, I think was most valuable from that perspective, where, yes, it's corporate at its best. But I think the advantages, like with the facilities, the training, the things that you have access to, from an HR perspective, is massive. I think sometimes if you... I always say that Firm XYZ is not for everyone, because sometimes it's overload. It's too much sometimes. But I think yeah, Firm XYZ... Kudos to them. It's fantastic.

Emily: Perfect. And then, so do you believe leadership can influence how knowledge is handled within an organization?

Participant 9: Yes, absolutely. Because a lot of the... Like our belief-based engagement, there's a lot of things where you lead by example, from your experience. So yes, a hundred percent agree to that.

Emily: Okay. I'm just taking some notes.

Participant 9: No worries.

Emily: Perfect. And then, so in the context of your organization, can you please explain to me what your employee's relationship with knowledge looks like? So, I guess, do they actively share knowledge? Do they actively go outside of the organization to get new knowledge? Things like this.

Participant 9: So, like I said from Firm XYZ, I think from over the years, the amount of resource that's available is immense. So, I think first of all, if you've been able to tick all the boxes from an in-house training, I don't think one would ever run out of things to be trained on. Secondly, in the past, if, for example, regulation or something changed where I felt that I needed to outsource from outside, we would do that, and the guys would be receptive to that because it's topical. So, the resource within Firm XYZ, yes, and outside is readily available, depending on, obviously, what type of training or regulation or what's happening in the industry at the time.

Emily: Perfect. Do you think, because it is overload, is there maybe... Do you think the organization could maybe store this knowledge better?

Participant 9: So, I think it's there. So as a manager, you have a... So just say you're doing the reviews, the KPIs, and you say, "Oh, but I think this employee would benefit from presentation skills," for example. So, you would then map the development and all the different courses, and then you can allocate that training. So, you can plan this. So, for example, because of the wealth of training that's available, you can manage that. So, you can say, "Listen, let's get some objectives in place. We're going to do presentation part one in Q1. Then in Q2,

we're going to look at this part of it." So, I believe it's there. Overload, if it's a compliance and training that come from Firm XYZ, those are mandatory. So, I think with COVID, everything's been too much because of the Zoom calls. It's just been a lot. But from a training and how you can manage it, I think you can, and the resources just get updated all the time. So, if you pick up an employee that reaches out for something, you can pace it according to their work, their specific needs.

Emily: Okay, perfect. In general, do you feel that employees within your organization feel a belonging? So maybe to a team, a specific person, or to the organization as a whole, or maybe not at all.

Participant 9: Yeah. I think they do. The surveys will speak to that, the kind of responses that we get there, where they are in the organization, they feel one of belonging because of the information shared, the knowledge, or communication. So yes. Yeah.

Emily: Perfect. And then from your experience, do you believe that employees, if they feel more of this belonging, that they're more willing to share, store, collect data or knowledge?

Participant 9: Yeah. So, it all starts out with that. Happy employees, then you're going to have... It pulses through from happy clients all the way through. So, I do feel that that has a positive impact on them. If the reverse, then you wouldn't want to be sharing. Sometimes if somebody's working on something that's not your traditional vanilla type thing and you've put something together. So, you want to share this so that others can say, "Listen," or "This is a solution we put through." So, I find that comes quite easily, but it's one from a happy team. If there are employees that are content or feel or have a sense of belonging, they are definitely more inclined to share and to participate, et cetera.

Emily: Okay. And then last question, we breezed through this. Do you believe that leadership can play a direct role on the productivity of employees? Yes, or no? And why?

Participant 9: Absolutely. So, if... I'd use myself, and then I can talk through the team. So, if I had a boss that wasn't productive and... Listen, it depends on yourself. But obviously, I feel that if your manager is quite involved, that kind of rubs off into the team. Because you are managing that you wanted to go in a certain direction, so of course, it's going to rub off onto the team. So, for example, we've all seen what COVID, what happened last year. And it was quite a challenge. Some managers and some teams were battling with it because it was quite difficult. Suddenly, we were managing remotely. But then it was up to me now. And then we had a problem we couldn't spend money, because now we are working from home, but we got to look at expenses, et cetera. So, there's a lot of things that I was trying to do, to keep up that momentum, to keep up that interaction. So, I believe the manager is key. It's absolutely key to impact the team. Yeah.

Emily: Okay. Perfect. That was all my questions.

Participant 9: Really? Oh, wow. You want me to elaborate on anything, or was that sufficient for now?

Emily: That was perfect. But if there was something that you might want to add that you felt like you couldn't, also you can feel free to do so.

Participant 9: No, no, no, no. I think... I just feel that leadership is key. And Firm XYZ identifying, we have this talent grid, et cetera, where they identify for leaders. For example, just say, I'm not one for listening, for example. And if I say, "Listen, I need some help with that to do better from a leadership perspective," or you get various leadership courses, I feel that they empower you. So, we have the tools.

And then a lot of the times, maybe managers, you just tick the box, because this was handed to you. You're doing this course for a leadership, whatever. But taking that back into the actual live world, to your team, and actually testing out concepts that you've learned is important, but not everyone does that. I think it is important that we roll out at least one item that you've picked up. Sometimes you're overwhelmed with lots of things, but if you can try one thing, and it can change. Or you can say, "Listen, I've tried this in this team," because dynamics

in teams differ. So do managers differ. Sometimes they're even not compatible with the team, or their style is different, you have issues, et cetera.

But I think sometimes you have to understand that you need to adapt. When you learn a skill, try it. And you can always say, "Listen, it didn't work," but doesn't mean it's a bad thing. If it didn't work, maybe the dynamics of that team, for those reasons. So, I think it is important to open up as a leader as well and to reflect areas for development in the team, what you can do better. And then again, like I said, to draw down when we attend all of these trainings. Best way is to go and do it in the team for whatever you've learned. Yeah.

Emily: That was helpful.

Participant 9: Okay. Well-

Emily: Okay. Then I would stop the recording if that's okay.

Participant 9: Sure.

Emily: Okay.

Participant 10 Interview

Emily: I started the recording. Is it okay if I record our interview for today?

Participant 10: Yes.

Emily: Okay, perfect. So, to start, could you please introduce yourself. For example, your title and your role within the organization?

Participant 10: Okay. My name is Subject 10. I am a Vice President at Marsh Israel. I have a few years of experience in insurance, 38 years. And I've been in the past, Deputy Managing Director of insurance company of Israel. This is my second time, by the way, at Firm XYZ. I was previously at Firm XYZ from 2009 until 2017 and rejoined just more than a year ago. In September last year.

Emily: Okay, perfect. Okay, so then we'll go into the first conceptual question. In your personal view, what are some ideal qualities a leader and a manager in your organization should have? So maybe you'll think about yourself or just in general.

Participant 10: I think two major points. One, the ability to get along with people. I mean, good relationships. Second, which is part of the first one, have a nice sense of humor. And third, which is most important, the ability to make decisions quickly.

Emily: Okay.

Okay, perfect. Do you believe that different leadership styles might be needed for different industries? So, if you take Firm XYZ, where we are mainly people who share ideas and sell our knowledge, and then if you compare this to maybe an automobile manufacturer, these employees.

Participant 10: It does make sense, there is some sort of a difference. In most cases you deal with people and motivating people and get the best out of them, which is theoretically identical. But I believe there are different types of people doing different type of jobs. So, you may need different types of management techniques. Maybe some people would need more a disciplined way of operation, in some operations you would like to cultivate original thinking and thinking out of the box. So, all my life is in the insurance industry. I don't have any experience in other industries. But I assume that managing a warehouse or automobile parts manufacturer is somewhat different.

Emily: Okay, perfect. So, the next question, would you say that your organization leverages human and technology initiatives? So, this basically means, does Firm XYZ use its people and technology to make sure that knowledge stays within the company?

Participant 10: Basically, yes. Yes, I would say that there are efforts and acts, which stores knowledge, which is available to people who know where to look. But I can say technology developments... Sometimes very annoying, but it's another issue.

But there are changes both on the technology side and also on the information side, which are designed basically to assist.

Emily: Great. So, do you believe leadership can influence how knowledge is handled within the organization?

Participant 10: Yeah, absolutely. I mean, I think it's the job of management to make comments or suggest how to handle information. If I remember in my history, when I joined Firm XYZ in 2009, everyone was printing every piece of mail and document and put them in big binders, which were then sent to the archives. I took the initiative to change all that, storing everything on the outlook and the famous online files that we have today. That we filed that, you filed the whatever.

It's developed enormously since then. I mean, the system today is nothing compared to what I started long time ago. But clearly yes, that's our job as managers to get in, shout when needed and recommend if we have some good ideas.

Emily: That was a really good example. So, you led the change of processes of storing and collecting data?

Participant 10: Yeah, definitely.

Emily: Wonderful.

Participant 10: Definitely.

Emily: That was great.

Participant 10: I don't think that anyone remembers that, but.

Emily: Well, it'll be used for my research. So, then people will know. Well, not that it was you, but that it did take place. So, in the context of your organization, can you tell me how your employees... What is their relationship with knowledge? Do they like to share knowledge? Do they like to collect new data? Or maybe you say there's employees who don't like to share at all. These kind of things.

Participant 10: Basically, there's a tendency to share that (referring to knowledge). I know that there are some organizational files, there are some personal files. And occasionally I can see somebody asking a question, who has what, or who has some knowledge about what? And I see answers being given, documents being shared, so yeah, it is understood. First of all, it's there. Second, I think, it is important to be willing to share information.

Emily: Okay. Yes. So, do you feel that in general, the employees that you work with, that they feel belonging? Maybe they have a belonging to the organization, to a specific person or to a team?

Participant 10: It's always a delicate issue. I mean, basically Firm XYZ Israel at least, is a small firm, we have 35, 36 people. So, everyone is close to the other guy and basically, it's a good sense and a good feeling. But I always say that the workplace is not a Catholic marriage.

Emily: That's true.

Participant 10: Divorce is allowed. And one of the most important jobs of a manager, is to treat the employees, not as part of the walls, but as part of the furniture. I mean, walls you cannot change, furniture you can. So, this is not downgrading the people, on the contrary, you need to make sure you keep the people. And this is one of the biggest mistakes that managers do. They don't think that an employee can find an alternative. And you encourage a sense of belonging, it helps, but you also need to take care of other issues as well, money, et cetera. So, cultivating the belonging is important. And I think in Firm XYZ Israel, most people feel comfortable.

Emily: Wonderful. So, from your experience, you say that most people feel comfortable, or they have a belonging, do you think that they're more willing to manage knowledge, share or store these types of things?

Participant 10: Yeah, definitely. Clearly.

Emily: Why do-

Participant 10: They store, they manage, they share, no one looks at it like it's their own.

Emily: Okay. And do you think it has something to do with belonging or?

Participant 10: I'm not sure this is coming from that. It just, that's how it's done, that's practical. I mean, no one expects the information to be his own only, to use it as it's advantage. But I think you may be right... Maybe a good point. I mean, if you are belonging, you are more inclined to share. Makes sense.

Emily: Okay. And then the last question, do you believe that leadership can play a direct role on the productivity of employees?

Participant 10: Certainly, I think we can.

I think there are, two angels at least to look at it. One is, the managing aspect, I mean employee, which is being managed, will at the end, will be more productive. I mean, not all of us are saints and we do whatever we are asked, we need to do without any... Someone looking at us and controlling us and asking us what we can do, what are we doing. So yes, a manager should have an interest, let's say to put it mildly, into what the employee is doing.

And once the employee knows that he has to answer, whether to quality or to a timeframe it helps. I mean, I believe that the manager should also be friendly and encouraging, not just be a disciplinary functionalist. So that the combinations of the two helps because in many cases, I have the feeling that someone who works for me was happy to assist, because he knows I'd do it if it's vice versa. When he needs it or she needs assistance, they get it as well. Being an example, giving an example, the way you behave as manager encourages the employee to do the extra bit.

Emily: So, leading by example, I guess.

Participant 10: Pardon?

Emily: Leading by example and just-

Participant 10: Yep.

Emily: I'm just taking notes. Is there anything that you would like to add? Were there any points that maybe you didn't have a chance to say?

Participant 10: Not... Usually, I'm not a big talker. So, I think I said enough.

Emily: Okay, perfect. Then I'll stop the recording, because I am done with my questions. One second.

Appendix 5: Survey

This survey is being conducted the researcher at Sheffield Hallam University. The main purpose of the study is to understand knowledge management in the context of the financial services industry. This questionnaire can be completed in about 15 minutes. You have the right to decline to participate and to withdraw from the research once participation has begun; there are no consequences of declining or withdrawing. Participation in this study is completely voluntary. All of your answers will be kept strictly confidential. I will be happy to answer any questions or concerns you may have. Please contact:

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PART A: RESPONDENT INFORMATION

A1. Select the cell that best describes your gender:

Female	1
Male	2

A2. Select the cell that best describes the department in which you work in:

Factoring	1
Lenders Solutions Group	2
Political Risk	3
Surety	4
Trade Credit	5
Other	6

A3. Select the cell that best describes the region you work in

Africa	1
Asia / Pacific	2
Europe	3
Latin America	4
Middle East	5
North America	6

A4. State your current position within your organization:

Chief Executive Officer (CEO)	1
Managing Director	2
Senior Vice President	3
Vice President	4
Assistant Vice President	5
Analyst	6
Trainee/Working Student/Intern	7
Other	8

A5. Select the cell that best describes how long you have been with your organization:

Less than 5 years	1
5 but less than 10 years	2
10 but less than 15 years	3
15 but less than 20 years	4
More than 20 years	5

A6. Select the cell that best describes the level of education:

No formal education	1
Secondary (high school)	2
Bachelor's degree (B.A., B.Sc., BAS, etc.)	3
Master's degree (MA, MBA, MSc, etc.)	4
Doctorate (PhD, MD)	5
Professional / Vocational Qualifications	6
Other	7

PART B: KNOWLEDGE-ORIENTED LEADERSHIP (Donate et al., 2015, p. 369)

Place an 'X' in the cell that best describes your perceptions concerning knowledge-oriented leadership based on the 7 response sets given below. Please indicate your choices by placing an 'X' on 1 of the 7 options, as given below:

1 – Strongly disagree, 2- Disagree, 3 – Somewhat disagree, 4 – Neither agree nor disagree, 5 – Somewhat agree, 6 – Agree, 7 – Strongly agree

7. Leadership has been creating an environment for responsible employee behavior and teamwork.	1	2	3	4	5	6	7
8. Leadership promotes employee job autonomy, i.e., innovative behavior and freedom to make decisions on work projects.	1	2	3	4	5	6	7
9. Managers are used to assuming the role of knowledge leaders, which is mainly characterized by openness, tolerance of mistakes, and mediation for the achievement of the firm's objectives.	1	2	3	4	5	6	7
10. Managers promote learning from experience, tolerating mistakes up to a certain point.	1	2	3	4	5	6	7

11. Managers behave as advisers, and controls (i.e., deadlines) are just an assessment of accomplishment of objectives.	1	2	3	4	5	6	7
12. Managers promote the acquisition of external knowledge.	1	2	3	4	5	6	7
13. Managers reward employees who share and apply their knowledge.	1	2	3	4	5	6	7
14. Managers themselves share and apply their knowledge across all organizational levels.	1	2	3	4	5	6	7

Question 2: Refers to the job autonomy item in the knowledge worker productivity construct

Question 5: Refers to the timeliness item in the knowledge worker productivity construct

Question 8: Refers to the construct knowledge process capabilities

PART C: KNOWLEDGE PROCESS CAPABILITIES (Kamasak et al., 2017, p. 361)

Place an ‘X’ in the cell that best describes your perceptions concerning knowledge management processes based on the 7 response sets given below. Please indicate your choices by placing an ‘X’ on 1 of the 7 options, as given below:

1 – Strongly disagree, 2- Disagree, 3 – Somewhat disagree, 4 – Neither agree nor disagree, 5 – Somewhat agree, 6 – Agree, 7 – Strongly agree

13. Our firm has the capability to distribute relevant knowledge throughout the organization (via collaborative platforms like Knowledge Exchange, social software like MS Teams, blogs, and wikis in MarshForce etc.).	1	2	3	4	5	6	7
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14. Our firm has the capability to share relevant knowledge among business units i.e., within credit specialties and with other industry practices such as renewable energy	1	2	3	4	5	6	7
15. Our firm has the capability to develop knowledge from internal and external knowledge sources (via IT systems, call centers, CRM tools [e.g. Salesforce], and ERP technology).	1	2	3	4	5	6	7
16. Our firm has the capability to transfer relevant knowledge to employees across all organizational levels.	1	2	3	4	5	6	7
17. Our firm has the capability to apply knowledge to develop new products/services.	1	2	3	4	5	6	7
18. Our firm has the capability to organize and manage knowledge.	1	2	3	4	5	6	7
19. Our firm has the capability to apply knowledge to solve new problems.	1	2	3	4	5	6	7
20. Our firm has the capability to apply knowledge to change competitive conditions.	1	2	3	4	5	6	7
21. Our firm has the capability to store acquired knowledge into organizational knowledge repository.	1	2	3	4	5	6	7
22. Our firm has the capability to integrate different sources and types of knowledge.	1	2	3	4	5	6	7
23. Our firm has the capability to codify acquired knowledge into accessible and applicable formats.	1	2	3	4	5	6	7

24. Our firm has the capability to interpret new knowledge based on prior knowledge.	1	2	3	4	5	6	7
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Question 1: Specific technology which Marsh uses to make the question more specific to the organization

Question 2: “Within credit specialties and with other industry practices such as renewable energy” was added to make this more specific to the Credit Specialties practice within the Marsh organization

Question 3: Specific technology to the Marsh organization included and supply chain and logistics systems removed as this is not necessarily applicable to the credit specialties insurance/finance industry

Question 4: “across all organizational levels” was included to emphasize the potential impact of management knowledge behavior on employee knowledge behavior.

PART D: KNOWLEDGE MANAGEMENT BEHAVIOR (Shamim et al., 2017, p. 2417)

Place an ‘X’ in the cell that best describes your perceptions concerning knowledge management behavior based on the 7 response sets given below. Please indicate your choices by placing an ‘X’ on 1 of the 7 options, as given below:

1 – Strongly disagree, 2- Disagree, 3 – Somewhat disagree, 4 – Neither agree nor disagree, 5 – Somewhat agree, 6 – Agree, 7 – Strongly agree

13. When I need certain knowledge, I ask my colleagues about it.	1	2	3	4	5	6	7
14. I like to be informed of what my colleagues know.	1	2	3	4	5	6	7
15. When one of my colleagues is good at something, I ask him/her to teach me how to do it.	1	2	3	4	5	6	7
16. When I have learned something new, I tell my colleagues about it.	1	2	3	4	5	6	7

17. I share information I have with my colleagues.	1	2	3	4	5	6	7
18. I regularly tell my colleagues what I am doing.	1	2	3	4	5	6	7
19. I often document knowledge that I create.	1	2	3	4	5	6	7
20. I often document the knowledge shared within my team (e.g., reports, e-mails, flyers)	1	2	3	4	5	6	7
21. I often convert my knowledge into codified procedures	1	2	3	4	5	6	7
22. I incorporate the suggestions acquired by clients and colleagues, into product, process, or service.	1	2	3	4	5	6	7
23. My knowledge helps me to serve clients in a better way.	1	2	3	4	5	6	7
24. My knowledge helps me in day-to-day problem-solving activities.	1	2	3	4	5	6	7

Question 7: The original question, “How often do you document knowledge that you create” was changed to “I often document knowledge that I create.”

Question 8 : The original question, “How often do you document the knowledge shared within your team (i.e., reports, e-mails, flyers)?” was changed to “I often document the knowledge shared within my team (e.g., reports, e-mails, flyers)”

Question 9: The original question, “How often do you convert your knowledge into codified procedures?” was changed to “I often convert my knowledge into codified procedures.”

PART E: AFFECTIVE COMMITMENT (Martin-Perez et al., 2015, p. 1185)

Place an ‘X’ in the cell that best describes your perceptions concerning affective commitment based on the 7 response sets given below. Please indicate your choices by placing an ‘X’ on 1 of the 7 options, as given below:

1 – Strongly disagree, 2- Disagree, 3 – Somewhat disagree, 4 – Neither agree nor disagree, 5 – Somewhat agree, 6 – Agree, 7 – Strongly agree

5. I would be happy to spend the rest of my career with this organization.	1	2	3	4	5	6	7
6. I feel as if this organization's problems are my own problems.	1	2	3	4	5	6	7
7. I am emotionally connected to this organization.	1	2	3	4	5	6	7
8. This organization has a great personal meaning to me.	1	2	3	4	5	6	7

Changed Affective Commitment questions from (Allen & Meyer, 1990, p. 17) to (Martin-Perez et al., 2015, p. 1185) to reduce the number of questions overall as suggested by management at Marsh.

Question 1: The original question, "Employees would be very happy to spend the rest of their career with this organization" was changed to, "I would be happy to spend the rest of my career with this organization."

Question 2: The original question, "Employees really feel as if this organization's problems were their own problems" was changed to "I feel as if this organization's problems are my own problems."

Question 3: The original question, "Employees are emotionally attached to this organization" was changed to, "I am emotionally connected to this organization"

Question 4: The original question, "This organization has great personal meaning for their employees" was changed to, "This organization has a great personal meaning to me."

PART F: KNOWLEDGE WORKER PRODUCTIVITY (Sahibzada et al., 2022a):

Place an 'X' in the cell that best describes your perceptions concerning job performance based on the 7 response sets given below. Please indicate your choices by placing an 'X' on 1 of the 7 options, as given below:

1 – Strongly disagree, 2- Disagree, 3 – Somewhat disagree, 4 – Neither agree nor disagree, 5 – Somewhat agree, 6 – Agree, 7 – Strongly agree

8. I achieve satisfactory results in relation to my goals.	1	2	3	4	5	6	7
9. I am usually able to carry out my work tasks efficiently (smoothly, without problems).	1	2	3	4	5	6	7
10. I am able to use the majority of my working time for conducting relevant tasks related to my goals.	1	2	3	4	5	6	7
11. My job mainly includes tasks in which I am able to exploit my knowledge and skills efficiently.	1	2	3	4	5	6	7
12. I am able to meet customers' expectations.	1	2	3	4	5	6	7
13. The quality of my work output is high.	1	2	3	4	5	6	7
14. The group(s) I work in work(s) efficiently as a whole.	1	2	3	4	5	6	7