The influence of organisational learning in defining digital strategies within South African banks

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ABSTRACT

This study investigates the role of organizational learning (OL) in the formulation of digital strategies (DS) within the context of South African (SA) banks. It employs a qualitative approach and drawing upon a comprehensive literature review and empirical data collected from interviews with key stakeholders, the study examines the critical elements, challenges, and enablers inherent in integrating OL into DS formulation processes.

The findings underscore the pivotal role of OL in shaping agile and responsive digital strategies that enable banks to navigate the dynamic digital landscape and drive sustainable growth. Key themes identified include the importance of clear organizational vision and strategic alignment, investment in talent development, cultivation of an agile and flexible organizational culture, and effective communication and knowledge-sharing practices.

The study concludes by offering strategic recommendations for SA banks to enhance their digital capabilities and achieve strategic objectives through the effective integration of OL into DS formulation processes. Additionally, limitations encountered during the study are discussed, and suggestions for future research are presented.

KEYWORDS

Digital Strategies, Organizational Learning, Digital Transformation, Digital Maturity, Digital Skills, Digital Technologies, and South African Banks.

DECLARATION

I, Alcinda Massango, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in the field of Digital Business at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Alcinda Massango

Signed at Kyalami

On the 24th of February 2024

DEDICATION

I dedicate this dissertation to my late father, Julius Jossias Massango. Your passion for education and its impact on us is a legacy that will forever live on.

ACKNOWLEDGEMENTS

Ephesians 3:20-21. “Now to Him who is able to do exceedingly abundantly above all that we ask or think, according to the power that works in us, to Him be glory in the church by Christ Jesus to all generations, forever and ever”. All glory, praise and honour be unto You!!

To my loving partner, my answered prayer, Tjade Moezelaar, no words could ever describe the gratitude I have for the support you have given me on this journey. Thank you for your patience, for being my biggest cheerleader and for pulling me up when I had no strength. May God add to your life tenfold for the man of character you are!

To my sister, Lillian, thank you for playing the unofficial co-supervisor role. Your guidance has been invaluable. And to the rest of my family, Mama, Sabelo, Olwethu Unathi, and Alakhe, thank you for always being there for me during the highs and lows of this journey.

To my supervisor, Dr Manessah Alagbaoso, I truly could not have prayed for a better supervisor. Your expertise, unwavering support, guidance, and invaluable feedback throughout the research process have been instrumental in shaping this thesis. Thank you, Sir!!

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LIST OF ACRONYMS

Acronym	Explanation
ACAP	Absorptive Capacity
BAAS	Banking as a service
BCG	Boston Consulting Group
DT	Digital Transformation
DBS	Digital Business Strategy
DM	Digital Maturity
DS	Digital Strategy
DTS	Digital Transformation Strategy
ICT	Information Communication Technology
IS	Information Systems
IT	Information Technology
OECD	Organisation for Economic Cooperation and Development (OECD)
OL	Organisational Learning
PWC	Price Waterhouse Coopers
SA	South Africa
WEF	World Economic Forum

CHAPTER 1. INTRODUCTION

1.1 Statement of purpose

This study aims to explore the influence of organisational learning on the formulation of an effective Digital Strategy in South African Banks.

1.2 Background of the study

Like many other industries globally, the banking industry is experiencing radical changes and disruptions owing to technological advancements. As reported by Shan & Wade, 2023, the Digital Vortex of 2023 has found Financial Services to be the third most technologically disrupted industry in the world. This can be exemplified by the integration of technologies such as blockchain, big data, advanced analytics, the Internet of Things (IoT), artificial intelligence (AI), robotics, chatbots, and digital currencies in traditional banking operations (Gartner, 2022). Digital technologies can also be understood as a combination of information, computing, communication, and connectivity technologies (Bharadwaj, Sawy, Pavlou & Venkatraman, 2013). This poses a threat to pre-digital organisations such as traditional banks by born-digital organisations such as Fintech companies, necessitating the need to change legacy business models through the adoption of emerging technologies. This threat is further exacerbated by the entry of non-banking corporate institutions (e.g., telecommunication companies) and informal banking markets that provide banking facilities to the underbanked and unbanked, creating a methodical change towards obtaining financial access (Brett, 2019). With all these options at their disposal, customers are inclined to switch their financial service providers rapidly (Schuchmann & Seufert, 2015). For incumbents to succeed in the competitive financial environment, they need to continuously challenge old ways of working and their current business models and modernize legacy systems to meet changing business objectives. This can be done by having a good understanding of how the world is changing and what risks and opportunities emanate from these changes so that they can adapt accordingly (Lin et al., 2022). This agility also helps them navigate the uncertainty and complexity of the banking industry in the digital era.

However, this evolution should not merely be approached from the modernization of the legacy technology perspective, as it is not only the digitization of legacy systems, but also the complete transformation of the organization. This process is referred to as Digital Transformation (DT).

When comparing digitally mature organisations to those that are not, Kane, Palmer, Philips, Kiron and Buckley (2017) indicate that the latter tend to lack a well-defined and consistent digital strategy, unlike their more digitally mature counterparts. Digital Maturity (DM) refers to the systematic preparation of organizations to consistently adjust to ongoing digital transformations and involves adapting the organization to compete efficiently in an increasingly digital landscape (Kane et al., 2017).

The initiation of a digital transformation process requires a clear vision and strategy to address tangible business problems (De Martini, 2018). Banks prioritize the development of a robust Digital Strategy (DS) to thrive and innovate during the 4th industrial revolution, and this strategy amalgamates various business models and strategies with technological tools (Priyanto, Murwaningsari & Augustine, 2023). It also needs to be dynamic and evolve at a pace parallel to changes in the internal and external environments (De Martini, 2018).

The concept of digital business strategy is broader than that of the traditional IT strategy, as it encompasses all functional areas and IT-enabled processes in a trans-functional manner (Matt, Hess & Benlian, 2015). Unlike cross-functional strategies, which are confined to specific areas, digital business strategy is a connective tissue that unifies all functional and process strategies under a single umbrella, making it inherently trans-functional (Bharadwaj, El Sawy, et al., 2013). As a result, the development of such a strategy requires collaboration and close alignment between the business and IT departments.

Executives are beginning to recognize the significance of digital technologies in shaping their future transformation strategies. Consequently, they enhance their digital literacy to cultivate strategy development skills (Holotiuk & Beimborn, 2017), which enables them to identify opportunities and challenges (Priyanto et al., 2023).

Schneider (2018) argues that digital transformation is not only about technology but also about organizational learning, process change, and effective leadership. To develop a successful digital strategy, managers must have a comprehensive understanding of digital technology and the digital business approach, and they should play a crucial role in identifying the opportunities and risks associated with a company's digital plan (Priyanto et al., 2023).

To ensure coherence and sustainability in the development of a digital strategy, stakeholders must continuously learn and adapt to a complex and rapidly changing technological landscape. Therefore, this study investigates the significance of organizational learning in formulating a digital strategy that aligns with an organization’s business objectives in the SA banking context.

1.3 Research Problem

For banks to evolve their current businesses, compete in the market, and meet their objectives in the digital area, they must leverage the power of emerging technologies as enablers. The digitalization of banking processes has been accelerated by the emergence of financial technologies and the shift in consumer behaviour (Mavlutova, Spilbergs, Verdenhofs, Natrins, Arefjevs & Volkova, 2023). This results in significant changes within the organization that focuses on meeting the needs of consumers (Schuchmann & Seufert, 2015).

The process of integrating digital technologies into business processes to achieve business objectives and enable other social benefits is referred to as Digital Transformation (Brown & Brown, 2019). It is one of the many types of business transformations and is considered crucial for the sustainable development of banks (Mavlutova et al., 2023), as well as for future-proofing traditional banks from rampant digital innovations (Naimi-Sadigh, Asgari & Rabiei, 2022).

For banks to successfully transition into their desired digital future state, they require a well-defined plan, an appropriate organizational framework, digital competencies, an encouraging company culture, and a well-balanced governance structure (Naimi-Sadigh et al., 2022). This is done through the formulation of a Digital Strategy (DS), which is a blend of Information Systems (IS) and business strategies, to outline the digital vision of the organisation that will help it achieve its desired business goals (Bharadwaj, Sawy, et al., 2013; Brown & Brown, 2019; Holotiuk & Beimborn, 2017). The DS should aim to address the real business challenges faced by both the organization and customers and determine whether the proposed digital technologies can aid in solving these challenges (De Martini, 2018).

The development of a DS that keeps banks competitive is a gradual and evolving process that is affected by the organization's changing capabilities and external environments and involves frequent reviews and adjustments (Yeow, Soh & Hansen, 2018). The frequency of strategy adjustment needs to match its renewal of dynamic capabilities through Organisational Learning (OL).

A study conducted by Chalal and Bakshi (2014) demonstrated that a bank's competitive advantage and performance can be directly and positively influenced by intellectual capital, which is a product of OL and innovation. OL is referred to as a process-based approach to maintaining and ensuring the alignment of an organisation’s resources and capabilities (Ruel, Rowlands & Njoku, 2020). It is key to protecting and renewing a bank’s resources, skills, and capabilities to stay competitive through rapid disruptive changes because of Industry 4.0 (Ruel et al., 2021). According to Teece, Pisano, and Sheun (1997), dynamic capabilities suggest an organization's capacity to refresh and reconstruct its strategic abilities in response to changing circumstances. As part of OL, understanding and effectively utilizing digital technology, also known as Digital IQ, is becoming increasingly crucial for ensuring business resilience (Bernard Marr, 2023).

Leadership and organizational learning processes help bridge the gap between the organisation's current and desired digital future state through the development of a Digital Strategy (Ruel et al., 2021). Thus, a digital business strategy should be the result of organizational group learning and change processes, which rely on effective leadership that supports and facilitates these processes (Ruel et al., 2021).

Learning organizations use organizational learning as a foundation to attain a competitive edge that can be sustained and improve their performance. As a result, these organizations are generally more agile and can respond to new challenges more rapidly than their rivals, which allows them to sustain a competitive edge in the long run (Jiménez-Jiménez & Sanz-Valle, 2011).

Digital transformation initiatives necessitate the adoption and integration of digital technologies, which in turn require organizations to acquire, share, and apply new knowledge. The review conducted highlights the importance of organizational learning in the context of digital transformation for organizations seeking to thrive in a rapidly changing digital landscape by continuously applying new knowledge. They further emphasise the role of organizational learning in facilitating the adoption and implementation of digital technologies, which is crucial for the successful execution of digital transformation. Schuchmann and Seufert (2015) further argue that the current dynamic changes in the finance market, the emergence of new competitors, and the lack of differentiation in banking services create pressure for organizations to enhance their continuous learning ability as a crucial prerequisite for effectively coping with innovations.

The existing literature, supported by works such as Argote and Miron-Spektor (2021), Crossan, Lane, and White (1999), Helfat and Peteraf (2015), March and Simon (1993), and Van den Bosch, Volberda, and de Boer (1999), has acknowledged the link between OL and DS. These studies highlight the significance of organizational learning processes in facilitating the formulation, adoption, and implementation of digital strategies. They emphasize the role of knowledge acquisition, the development of cognitive capabilities, and the co-evolution of organizational capabilities with the knowledge environment. However, despite the growing recognition of this relationship, there is a need for further empirical research to deepen our understanding of the specific mechanisms and practices through which organizational learning influences the development and execution of digital strategies.

1.4 Research Objectives

1. To explore the influence of organizational learning on the development of digital strategies in South African banks.
2. To identify the critical elements of a digital strategy necessary for the digital transformation of South African banks.
3. To explore the challenges and enablers that banks encounter in integrating organizational learning into the digital strategy formulation process.

1.5 Rationale

Digital transformation is an essential process and has become a strategic imperative for banks to remain relevant in the digital era and avoid disruption by meeting customer expectations and driving innovation. Other benefits of embarking on this transformation include the monetization of data assets, which can unlock new revenue streams (Carter, Vonno & Singh, 2017) and increase financial inclusion which in turn can help alleviate poverty (Lin et al., 2022). However, the success of digital strategies goes beyond technological implementation; it is deeply intertwined with an organization's ability to learn, adapt, and leverage its knowledge and capabilities effectively.

Organizational learning, as a theoretical lens, offers valuable insights into how banks can develop and refine their digital strategies. By understanding how organizations acquire, interpret, and apply knowledge, we can gain a deeper understanding of the processes and mechanisms that contribute to successful digital strategy formulation.

In the context of digital strategies, organizational learning can help leaders identify and understand the digital skills needed to develop a comprehensive digital strategy. With the constant evolution of emerging technologies, it is important for organizations to continually learn and update their knowledge to keep up with these changes. This enables them to identify opportunities for innovation, improve efficiency, and create value for their customers. It can also enable the organization to identify areas of improvement and develop an upskilling roadmap to bridge any gaps in knowledge and skills.

To prevent organisations from making capital investments in wrong emerging technologies, the contributors to the DS need to have a level of tech-savviness that will give them an understanding of these technologies, what they do, the business problems they seek to solve, and the implications of their deployment on staff. This is even more imperative, considering that the banking industry is said to spend three times more on IT investments than any other industry (Kitsios, Giatsidis & Kamariotou, 2021).

Furthermore, a learning organization culture encourages innovation and experimentation, leading to the continuous improvement of digital strategies. It also helps to create a culture that embraces change and continuous learning, which is essential for implementing successful digital strategies. Therefore, organizational learning is a critical component in the formulation and implementation of digital strategies that enhance the digital transformation journey, enabling organizations to thrive in the digital age.

While there is a growing realisation of the role of organizational learning in digital transformation, limited research has specifically focused on challenges and dynamics in the context of South African banks. These unique challenges and opportunities in their DT journey include addressing socioeconomic disparities, regulatory frameworks, and customer preferences specific to the region. The findings of this study can have practical implications for South African banks by offering guidance on how to effectively integrate organizational learning processes into their digital strategy formulation. This can help banks enhance their digital capabilities, align their strategies with organizational goals, and create a culture of continuous learning and innovation. Additionally, the study contributes to the theoretical understanding of the relationship between organizational learning and digital strategy formulation, thereby enriching the broader body of knowledge in the field of digital transformation and strategic management.

1.6 Delimitations of the study

i. DT is the overall transformation of the organisation using information systems to overcome disruptions in the digital era and meet business objectives. However, this study's focus was limited to the process of defining and formulating a Digital Strategy. By default, this excludes the implementation and execution of the digital transformation programme, which involves aspects such as change management, communication, and other related activities both internally and externally.
ii. From a sampling perspective, the participants that will be selected for this study will be senior managers and executives of banks in SA.
iii. This study does not examine regulation as a part of the innovation process.
iv. This study does not cover the collaborative process of developing digital business strategies within network organizations.
v. Finally, the study does not explicitly assess the digital literacy or competence of management but rather aims to understand what level is considered adequate to formulate a Digital Strategy.

1.7 Definition of terms

- **Digital Transformation**

  Chanias, Myers & Hess (2019) and Armstrong & Lee (2021) describe DT as the overall transformation of the organisation using information systems to overcome disruption in the digital era. This involves the revolution of business operations and the value propositions of an organisation and its structures through the exploration of the benefits of digital technologies (Matt et al., 2015). It infers the translational of a digital strategy into a road map with clear actions to ensure the successful execution of the plan (Correani, Massis, Fratinni, Petruzzelli, Natalicchio, 2020).

- **Digital Strategy**

  Chanias et al. (2019) and Brown & Brown (2019) define a DS, also known as a Digital Business Strategy (DBS), as a blend of a business and an IS strategy, resulting from the blurring of the two strategies (Yeow et al., 2018). It is a strategy crafted to achieve business objectives such as improving customer experience, increasing operational efficiencies, and deriving new value streams by leveraging digital capabilities (Chanias et al., 2019). The development of a digital strategy is a gradual and evolving process that is affected by the organization's changing capabilities and external environments and involves frequent reviews and adjustments (Yeow et al., 2018).

- **Digital Transformation Strategy**

DTS cuts across various business strategies of the organisation and draws in all aspects of digital transformation (Matt et al., 2015). While DBS looks at accomplishing new value opportunities through the digitalisation of the organisation, DTS serves as a blueprint that assists organisations in governing this process (Matt et al., 2015). It is the vehicle through which a DS is achieved (Brown & Brown, 2019).

- **Digital literacy**

Digital literacy is considered to be multidisciplinary. ICT skills consist of generic, specialist, and complementary aspects. Generic skills allow an individual to use skills for technology for professional purposes, and specialist skills allow the worker to program, develop applications, and manage the use of new modern technologies. Complementary skills allow the worker to use technical skills in multiple work settings (OECD, 2016). It is more than the ability to use digital devices or software but includes a variety of more complex skills. This definition should remain flexible owing to continuous changes in the digital era (Chetty, Qigui, Gcora, Josie, Wenwei & Fang, 2018). Digital literacy means more than just being competent in using digital tools; it involves a unique way of thinking or mindset (Bawden, 2008).

- **Pre-digital and Born-Digital Organisations**

According to Chanias et al. (2019), pre-digital organisations are traditional organisations that thrived economically in the pre-digital era but now find themselves under existential threats because of disruptions brought about by technological advancements. Examples include the traditional "Bricks and Mortar" financial services, retail, and manufacturing industries. Conversely, born-digital organisations are those that were established in the digital economy. Examples include FinTech and tech-savvy start-ups (Sachdev, 2021).

- **Organisational Learning**

  Organizational learning refers to the systematic process of acquiring new knowledge and insights from shared experiences within an organisation and has the potential to impact behaviours and enhance a firm's capabilities (Jiménez-Jiménez & Sanz-Valle, 2011). Incorporating OL and innovation into business operations leads to better business performance, and the impact of organizational learning extends to innovation (Jiménez-Jiménez & Sanz-Valle, 2011).

- **Digital Maturity**

  Digital maturity refers to the level of an organization's capability to effectively leverage digital technologies and strategies to achieve its objectives and stay competitive in a digitally driven business environment. It represents the organization's readiness, competence, and progress in adopting and integrating digital practices across various dimensions of its operations, including strategy, processes, technology infrastructure, culture, and talent (Westerman et al., 2014).

- **Dynamic Capabilities**

  Dynamic capabilities refer to a set of innovation-based organizational abilities that enable firms to create, extend, and modify their resource bases in response to rapid technological and market changes (Warner & Wäger, 2019). The initial definition of dynamic capabilities can be restated as an organization's capacity to effectively combine, develop, and modify both its internal and external competencies in response to rapidly shifting business environments (Yeow et al., 2018).

1.8 Assumptions

- Assuming that there is no existing Chief Digital Officer (CDO) or Chief Transformation Officer (CTO) position in the organization, as is typical in traditional corporate banks (although this is gradually evolving), the responsibility for creating a Digital Strategy (DS) falls to the CEO and other executives within the bank.
- It is also assumed that the progression of technology is expected to persist, following a trajectory like current trends. Therefore, customer preferences are affected, with future customers desiring hyper-personalized and encompassing experiences across various channels, including mobile platforms and digital media.
- Another assumption worth noting is that DT in the context under review is explored from Shareholder Theory, which argues that the purpose of the business is to make a profit and a portion needs to be returned to shareholders for investing in the organisation. Therefore, this study did not explore stakeholders, stewardship, and social capital theory views.
- The final premise is that banks possess the required competencies and assets, such as technological infrastructure, talented personnel, financial resources, and organizational culture, to implement digital strategies effectively.

1.9 Chapter Outline

Chapter 1: Introduction

This chapter presents an overview of the study, which includes outlining the problem statement and research objectives that aim to address the problem. It also covers the reasons for conducting this study and the potential contributions of this research. This chapter defines the primary constructs examined in this study and provides a list of those that will be excluded from the scope. Moreover, it identifies the assumptions that underlie this study.

Chapter 2: Literature Review

This chapter provides a review of the literature that addresses the study's research objectives. This involves exploring concepts such as Digital Transformation, Digital Strategies, Leadership, Organisational learning, digital literacy, and Organisational strategy formulation.

Chapter 3: Research Methods

Chapter 3 discusses the methods used to conduct the study, including the research approach, design, and data collection methods. The population and samples were specified from a sampling perspective. This chapter covers the validity and ethics of the study and outlines the research instruments and procedures for data collection.

Chapter 4: Presentation of findings

This chapter represents the data that was collected through semi-structured interviews held with participants in the banking sector of South Africa. It also describes the steps that were taken to codify the data collected into themes.

Chapter 5: Discussion of Findings

Chapter 5 merges the data collected with the literature reviewed and the conceptual framework laid out in Chapter 2 to gain deeper insights into the intricate relationship between organizational learning, the development of digital strategies, and the specific challenges encountered by South African banks.

Chapter 6: Conclusions and Recommendations

This chapter draws conclusions based on the research objectives in Chapter 1. It builds upon the groundwork established in preceding chapters and provides strategic recommendations to assist banks in devising and executing effective digital strategies that harness organizational learning to foster sustainable growth and competitive advantage amidst the swiftly changing digital terrain. Additionally, it acknowledges limitations encountered during the study. Lastly, it proposes areas for future research based on insights gleaned throughout the study.

CHAPTER 2. Survey of the Literature

2.1 Introduction

Digital transformation has become a critical imperative for banks worldwide, as they seek to adapt to the rapid advancements in technology and meet the evolving needs of customers in an increasingly digital landscape. To effectively navigate this transformation, banks must develop and implement **digital strategies** that leverage emerging technologies and align them with their organizational objectives. Understanding DS, its development, and successful execution are complex processes that require organizations to continuously learn, adapt, and innovate. **Organizational learning**, characterized by the acquisition, sharing, and application of knowledge within the organization, plays a crucial role in facilitating the development and implementation of digital strategies (Argote et al., 2021). By harnessing the power of OL, banks can enhance their capabilities, align resources, and remain competitive in the digital era. In the context of SA banks, where the finance market is experiencing dynamic changes and facing increased competition (Ajigini & Chinamasa, 2023; Jenkin & Naude, 2019), the role of OL in driving DT becomes even more critical. To address this paper's problem statement, it is important to understand how a DS is formulated, recognise the significance of OL, and ultimately the convergence between these constructs in the context of banks in SA, as illustrated in Figure 1.

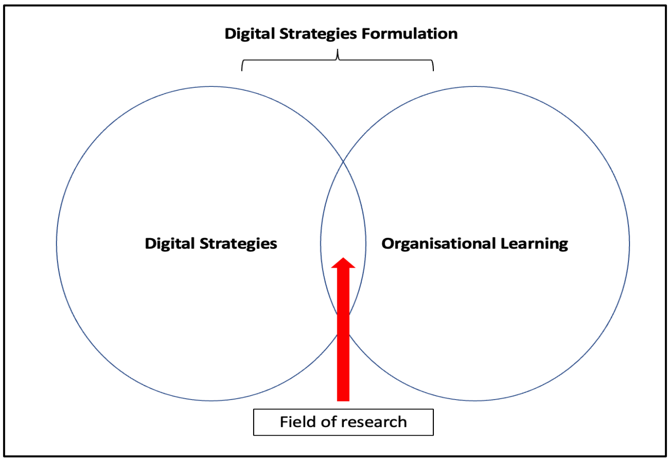

Figure 1: DS and OL

This field of research can also be viewed from the perspective of the relationship between Brown and Brown (2019) key drivers of DT, as shown in Figure 2. The key driver examined in this paper is Digital (Business) Strategy (DBS), as depicted by the authors, and how it is influenced by OL.

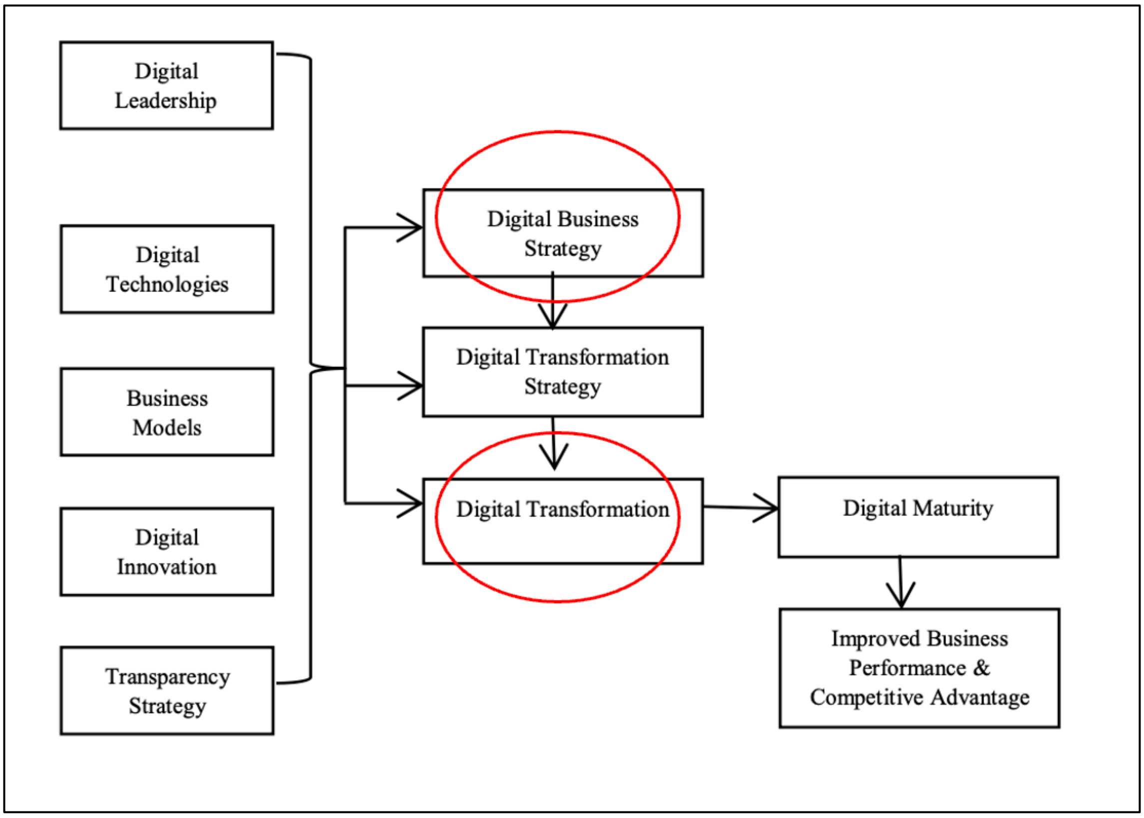

Figure 2: Relationship between key drivers of Digital Transformation (Brown & Brown, 2019).

This literature review aims to explore the understanding of DS in banks, examine how OL assists in their development, and unpack the relationship between these two concepts, which results in the successful DT of SA banks.

2.2 Background Discussion

The banking industry in South Africa has undergone significant digital transformation, owing to rapid advancements in technology and changing customer expectations (Louw & Nieuwenhuizen, 2020; Modiba, 2020). The emergence of digital-only banks and the increasing trend towards DT have intensified the need for traditional banks to develop effective DS to remain competitive in the market. DS plays a crucial role in enabling banks to adapt to evolving landscapes and to remain competitive. However, the formulation and implementation of effective DS require more than just technological investments; they also require a deep understanding of the organizational context and the ability to learn and adapt to new digital opportunities and challenges (Louw & Nieuwenhuizen, 2020). OL, encompassing the adoption, development, reconfiguration, and renewal of resources and capabilities, plays a vital role in enabling banks to navigate the digital landscape effectively (Louw & Nieuwenhuizen, 2020).

By embracing a culture of continuous learning, banks can acquire and integrate knowledge about emerging technologies, market dynamics, and customer preferences, which in turn informs the development of their DS. The capacity to leverage OL processes enables banks to identify and capitalize on digital opportunities, adapt to changing market conditions, and respond proactively to disruptive forces (PWC, 2017). Therefore, exploring the influence of OL on the development of DS in SA banks is crucial for understanding the mechanisms through which banks can enhance their digital capabilities and achieve a sustainable competitive advantage in the evolving digital landscape.

The literature review approach of this study involved a rigorous and comprehensive search of the existing literature to identify relevant studies that address the research topic. By following this approach, this study aims to minimize bias and ensure that all relevant literature is considered, thereby providing a comprehensive overview of the influence of OL in developing DS in SA banks.

2.3 Theoretical Frameworks

Within the existing literature, numerous theoretical frameworks are available to comprehend the internal and external contexts of organization, which are vital considerations in the development of a DS. For this study, **Porter's Five Forces** (Porter, 2008) will be employed to examine the external context supplemented by “**PESTEL**” (Political, Economic, Social, Technological, Environmental and

Legal) factors while the **Dynamic Capabilities** framework (Teece et al., 1997) will be used for analysing the internal environment within the context of DS formulation. To further augment the examination of the internal context and emphasize the significance of OL in this process, the theory of **Absorptive Capacity** (Zahra & George, 2002) is applied. Using these frameworks in the context of SA banks will facilitate the development of a conceptual framework that clarifies the influence of OL on the development of DS. The key constructs used in the application of these theoretical frameworks are **DS & OL** which results in the successful DT of an organisation.

2.3.1 Digital Strategies

The successful DT of an organisation hinges on a solid and integrated DBS with clear goals (Correani et al., 2020), as it is the starting point for transforming current business models (Schallmo, Williams, & Lohse, 2019). Although still in its early stages, DS is a prominent focus area across numerous industries states the authors. Holotiuk & Beimborn (2017) posit that this is mainly because traditional business strategies may not be the most suitable approach for addressing rapid technological changes experienced in many sectors. Brown & Brown ((2019) and Chanias et al. (2019) define a DBS as a strategy that uses digital resources that create competitive advantage and value, and why it is considered a high agenda for pre-digital organisations, which is typically a result of emerging technologies in different industries. Armstrong & Lee's (2021) definition is:

> "*Digital Strategy is simultaneously a) the collective view of those elements of corporate, business, and functional strategies which are enabled, supported, or delivered by 'digital' means; b) the means by which the organization delivers its digital aspirations and transformation objectives, and c) the means by which the organization attains its desired level of Digital Maturity*".

Among the literature, there is no universally accepted definition of DS yet (Schallmo et al., 2019).

DS needs to be in line with the overall corporate strategy of the organisation (Ruel et al., 2021). According to BCG (2022), supported by Correani et al. (2020), only 30% of companies successfully implement DT in their organisations. This is a result of a strategy that lacks a clear vision for the future and how it will build its resources, capabilities, and technologies to achieve its objectives (BCG, 2022).

In addition, as depicted in Figure 3, a DS is tightly linked to the IT architecture and strategy (Holotiuk & Beimborn, 2017) as well as the detailed process design at the business unit or departmental level, highlighting the critical role of IT system design in executing DS (Armstrong & Lee, 2021). This will ensure that there is an alignment of efforts from both the business and IT sides of the organisation (Brown & Brown, 2019; Yeow et al., 2018).

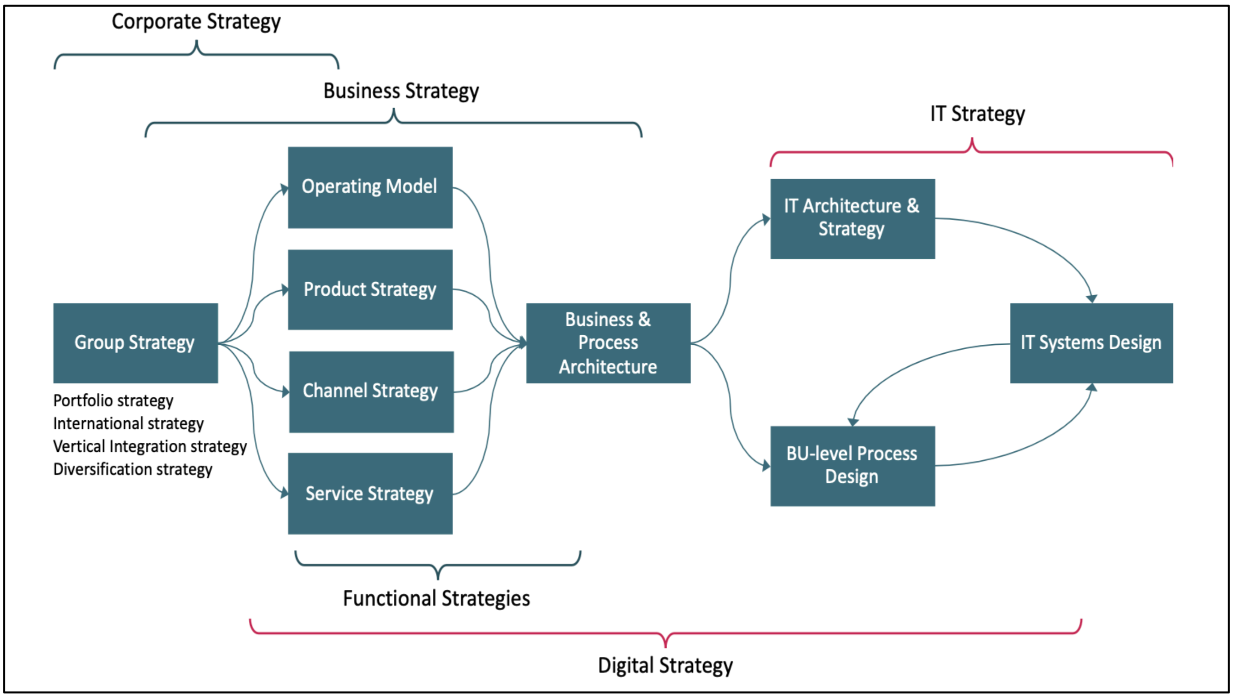

Figure 3: Scope of different layers of strategy (Armstrong & Lee, 2021)

For organisations to fully mature digitally, they need to ensure that the formulation of their DS is a fluid exercise that is not performed sporadically. This requires a level of nimbleness and agility by organisations to change their strategy when needed and adapt accordingly (Holotiuk & Beimborn, 2017), all of which need to be informed by data. However, the authors emphasise the need for a "multi-speed organisation" that presents a tension between agility to adapt given the rapid change of the technological landscape while preserving the right conditions for creating value. Ruel et al., (2021) observes the nature of a DS which he considers emergent due to its constant iteration and so should its formulation and implementation.

To date, there have been limited scholarly investigations regarding how a DS is developed (Holotiuk & Beimborn, 2017), necessitating delving into the process of strategy formulation to gain a comprehensive understanding. In their study, they identified eight dimensions underpinning a range of 80 critical success factors that can be used to determine the effectiveness of a DS. Ross, Sebastian & Beath (2017) identified two types of DS that ideally should be used in combination: one that is geared toward customer engagement and the other toward digitized solutions, both valuable in formulating the most effective DS of an organisation.

2.3.1.1 Strategy Formulation

In Figure 4 below, Armstrong & Lee (2021), supported by Grant (2022) illustrate how strategy plays out in practice. The authors highlight that examining the internal and external contexts of an organization is crucial for strategic decision-making. In addition, Schallmo et al. (2019) in their paper identified six stages in the formulation of a DS: external strategic analysis, strategic forecasting, internal strategic analysis, strategic principles, strategic options, and strategy formulation.

The **external context** involves an understanding of the external environment, including customers, competitors, suppliers, and market dynamics. The **internal context** entails objectively evaluating available resources, acquiring necessary resources, and leveraging core competencies for sustained competitive advantage (Armstrong & Lee, 2021). By considering both contexts, organizations can make informed strategic decisions aligned with their objectives and market realities.

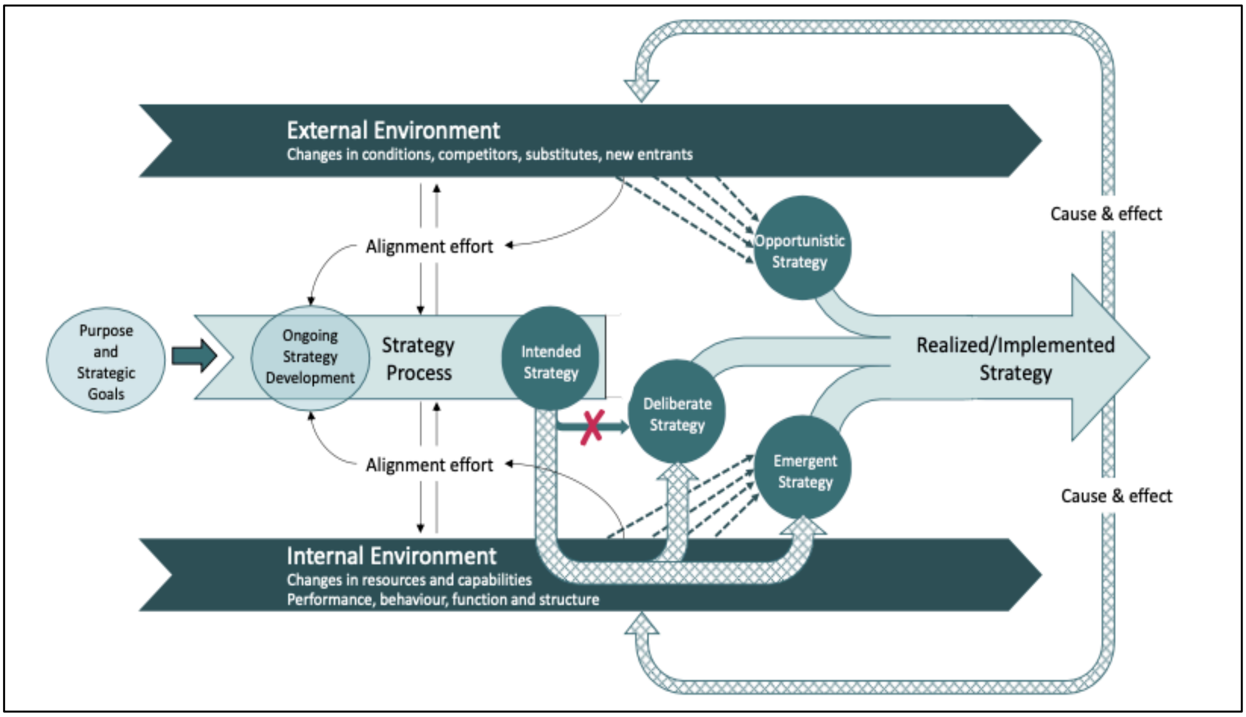

Figure 4: How strategy really plays out (Armstrong & Lee, 2021)

2.3.1.2 Application of Theoretical Frameworks

The analysis of the DS formulation employs theoretical frameworks that examine both external and internal perspectives. The external environment can be scrutinised from a range of micro- and macro-factors in combination (Schallmo et al., 2019). Specifically, **Potter's Five Forces** (Porter, 2008) will be employed to analyse the micro-external environment, whereas the **PESTEL** framework will be used to assess the macro-external environment; the internal environment will be observed using the **Dynamic Capabilities** framework.

2.3.1.2.1 External Environment

- **Macro-environment analysis**

When developing a DS for SA banks, it is crucial to consider the **PESTEL factors**, as they provide a comprehensive framework for understanding the macro-environmental factors and their potential impact on the bank's digital initiatives.

This can assist organisations in scenario analysis & planning for the unpredictable landscapes they find themselves in (Armstrong & Lee, 2021).

Political **factors** encompass government policies, regulations, and stability, which can influence the regulatory environment of digital banking and shape the legal framework for data protection and cybersecurity. Digitization creates data and with it becoming more of an asset and differentiator in this competitive landscape, it is important to intensify its safeguarding (Lin et al., 2022). Given that financial institutions are among the least trusted industries in the public perception, this is crucial as it will improve customer trust in this sector. More recently geopolitical instability caused by the war in Ukraine war has caused heightened risks and market volatility (Lin et al., 2022)

Economic factors such as inflation rates, interest rates, and economic growth are essential for assessing market conditions and consumer spending patterns that may impact the adoption and success of digital banking services.

Sociocultural factors involve understanding the preferences, behaviours, and demographics of the target customers. This includes factors such as consumer attitudes towards digital banking, cultural norms, and social trends that can affect the acceptance and adoption of digital banking services. This was evident during the Covid-19 pandemic which saw customers wanting a more digital experience and organisations needing to adapt to meet this need (Ivaldi et al., 2022). This need exposed the big digital divide experienced by many, globally, especially in developing countries due to the lack of internet access (Magida & Armstrong, 2023).

Technological factors play a pivotal role in DS as advancements in technology, including mobile devices, AI, and data analytics, have transformed many industries (Ellström et al., 2022) including the banking landscape. SA banks need to stay abreast of technological development and leverage them to enhance their digital capabilities. The development of DS should encourage the adoption of these emerging technologies so that organisations can improve their value propositions (Bharadwaj et al., 2013). The development of these technologies also brings rise to ethics around the use of these technologies which organisations need to consider (Lin et al., 2022).

Environmental factors entail considerations related to sustainability, green initiatives, and banks' impact on the environment. Banks must align their digital strategies with environmental concerns and contribute to sustainable practices (Bharadwaj et al., 2013). Climate change like global warming is an example of a rapidly growing environmental crisis worldwide (Lin et al., 2022).

Finally, **legal factors** encompass compliance with regulatory requirements, data protection laws, and intellectual property rights. SA banks must navigate the legal landscape to ensure that their DS are in accordance with the applicable laws and regulations. These strict guidelines outlined in the Financial Sector Regulation Act can influence "where" banks play thus the DS needs to consider this. Acts such as the Protection of Personal Information Act (POPIA) and Payments Association of South Africa (PASA) are such regulatory requirements that banks in SA need to comply with (Modiba, 2020).

Considering the PESTEL factors in the development of DS enables SA banks to anticipate and respond effectively to the external influences shaping the digital banking landscape. By analysing these factors, banks can identify opportunities, mitigate risks, and align their digital initiatives with prevailing market conditions and societal trends. This strategic approach enhances a bank's ability to develop customer-centric digital solutions, create a competitive advantage, and drive sustainable growth in the digital era.

- **Industry analysis**

Michael Porter's renowned framework, **Porter's Five Forces**, presents a valuable theoretical perspective for examining competitive dynamics within industries (Porter, 2008). This framework also referred to as the theory of competitive strategy, holds significant relevance when analysing DS. Applying this framework to the realm of DS offers valuable insights into the influential forces shaping the digital landscape and impacting strategic decision-making (Porter, 2008). In their study, Bharadwaj et al. (2013) stressed that developing a DS requires not only improving a company's operations on the inside or responding to competitors on the outside but also having a keen knowledge of, and being dynamically responsive to, the competitive environment. By applying Porter's Five Forces framework, organisations can gain a comprehensive understanding of the competitive landscape and make informed decisions to develop effective DS that aligns with the changing dynamics of the industry.

The five forces encompass the bargaining power of suppliers and buyers, potential threat posed by new entrants, risk of substitute products or services, and intensity of competitive rivalry, as outlined in Figure 5. Each of these will be discussed in the context of banks' DS.

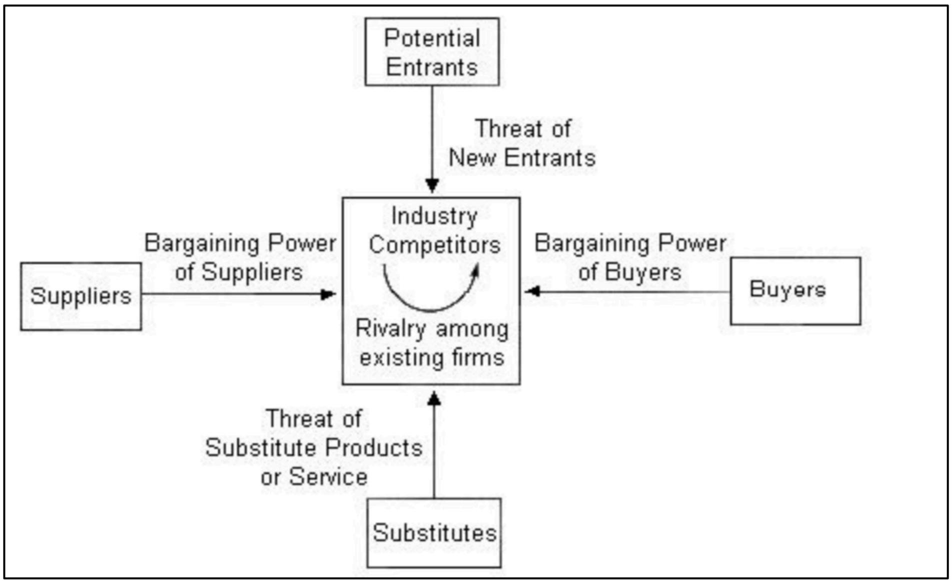

Figure 5: Schematic of Porter's Five Forces Theory

The **threat of new entrants** is a significant factor to consider in banks' DS. Advancements in technology and changing customer expectations have lowered barriers to entry, allowing new players such as fintech start-ups to disrupt the traditional banking model (Wewege, Lee & Thompsett, 2020; PWC 2017). The authors suggest that collaboration and partnership with Fintech companies present an effective strategy to address this threat by expediting the digital transformation process in traditional banks. In turn, this networking creates a digital economy offering panoramic solutions (Lin et al., 2022) that can generate beneficial synergies (Ruel et al., 2021). This digital ecosystem allows banks to better understand their customers' preferences which in turn helps them customise their offerings (Lin et al., 2022). Internet-based or digital-only banks provide alternative methods of conducting online transactions and banking. Examples in the SA context include Tyme Bank, Discovery Bank and Bank Zero to mention a few (Wewege et al., 2020). These banks exclusively offer their services through online platforms such as websites or smartphone apps, and as a result, pose a challenge to traditional banking models by eliminating the necessity of physical bank branches to establish and manage accounts (Louw & Nieuwenhuizen, 2020). Notably, in other industries, this threat can be seen through how companies such as Google, Uber, and Apple are participating in the production of autonomous vehicles, which were previously not their traditional business models (Correani et al., 2020). Ross et al., (2016) in their study emphasized the need to anticipate and respond to potential new entrants in the market as technologies are easily available, thus small businesses that can incorporate new applications fast have an early edge.

Second, **the bargaining power of customers** is significantly influenced by digital transformation. Owing to DT, many goods and services now have new features and functions that provide customers with more alternatives (Correani et al., 2020). Customers now have access to a wide range of banking options, can easily compare services, and switch providers. Banks must leverage DS to enhance customer experiences, improve customer loyalty and trust, offer personalized services, and build strong customer relationships to retain their customer base as a strategic lever (Ross et al., 2016).

Third, the **bargaining power of suppliers**, specifically technology vendors and platform providers, plays a crucial role in shaping banks' digital strategies. Banks must carefully assess their relationships with technology suppliers and negotiate favourable terms to acquire the necessary digital capabilities and innovations to remain competitive. For organisations that are in partnerships or outsource some of their activities, this threat can be even more pronounced, requiring continuous realignment of partners and suppliers in response to the changing environment (Bharadwaj, et al., 2013).

Fourth, the intensity of **competitive rivalry** is another key aspect to consider. Digitalization has intensified competition within the banking industry as traditional banks and new digital players vie for market share. Technological advancements have the potential to decrease barriers across industries and facilitate interactions, collaborations, and alliances among businesses operating in diverse sectors (Correani et al., 2020). This networking disrupts traditional business models and enables organizations to venture into new markets, opening opportunities for diversification that can be scaled up through the use of emerging technologies (Bharadwaj et al., 2013). Banks need to develop unique and differentiated digital strategies to stand out from their competitors and create value for customers. This could include novel business models that encourage partnerships like open banking, *BAAS (banking as a service) and platform banking* (Lin et al., 2022).

Finally, **the threat of substitutes** is ever-present in the digital era. Banks must be aware of alternative digital financial services and platforms that offer services comparable or, superior to these, to customers. To address this threat, banks must continuously innovate and adapt their DS to remain ahead of the curve and provide unique value propositions. The digitized solution DS identified by Ross et al. (2016), which looks at enhancing products and services through digitization, could serve as a solution to this threat. The authors found that adopting technologies such as big data and analytics can assist organizations in predicting new value proposition opportunities using analytical models.

Taking all of the above industry-level factors can help organisations determine the digital posture they want to assume in the market and design their DS to translate that.

2.3.1.2.2 Internal Environment

As depicted in Figure 4, examining an organization’s internal context is critical in strategy formulation. While other frameworks exist in the literature that analyse the internal environment of the organisation like the Resource Based View (RBV) by Barney (1991), scholars have found it to be static (Ellström et al., 2022) and not accommodating of the dynamic changes of the digital landscape many organisations find themselves in (Schallmo et al., 2019). With that in mind, the

Dynamic Capabilities Framework (Teece, 2007), as it can be considered an extension of RBV, will be applied as a basis for this study.

In the context of DS formulation within SA Banks, this framework is applicable to organizations experiencing rapid technological advancements and operating in uncertain environments. It emerges from the fusion of three existing paradigms, one of which has been discussed in this paper i.e., Potter's 5 Forces (Teece, 2007). It explores how dynamic capabilities play a pivotal role in facilitating strategic management processes such as strategy formulation, implementation, and adaptation. It also provides a powerful lens for examining the DT of incumbent firms in traditional industries as firms need to build strong dynamic capabilities to rapidly create, implement, and transform business models to remain relevant in the emergent digital economy (Armstrong & Lee, 2021).

Dynamic capabilities can be described as "the capacity of an organisation to purposefully create, extend, and modify its resource base" (Teece et al., 1997) to get competitive advantage. It consists of three broad clusters: sensing opportunities (and threats), seizing opportunities, and transforming the organization's business model and wider resource base (Teece, 2007).

- **Sensing Capabilities** enable banks to identify emerging digital trends, customer needs, and competitive factors. This is especially essential for organizations prone to disruption due to rapid technological changes. This involves scanning, learning, and calibration (Yeow et al., 2018).

- **Seizing Capabilities** involve effectively capturing and exploiting opportunities through strategic actions such as developing innovative digital products and services. This requires organisations to invest only in R&D and develop and protect their current IP, but also in technologies that will help them gain a competitive advantage.
  Developing the appropriate DS is imperative considering the investment made in technological products in the baking industry (Kitsios et al., 2021).

- **Re-configuring Capabilities** refer to an organization's ability to restructure its resources, processes, and relationships to adapt to the demands of digitalization.

2.3.2 Organisational Learning

OL has emerged as a critical determinant of sustainable success and adaptability in today's dynamic business environment and has attracted significant attention in both academic and managerial domains. It can be defined as “the process through which organisations change or modify their mental models, rules, processes, or knowledge, maintaining or improving performance” (Basten & Haamann, 2018). This is crucial for organisations that operate in an environment rife with disruptions from a technology, competitor, markets, and consumer point of view (Leavitt, 2011). Furthermore, it enables organisations to respond to unanticipated circumstances with more agility than their competitors (Basten & Haamann, 2018) who have lower levels of OL.

OL is informed by the principles of the Dynamics Capabilities theory, as it seeks to ensure the preservation of resources and capabilities using renewal (Ruel et al., 2021). The latter is **what** and the former is **how**. Although DS needs to be driven more by leadership, its input should also incorporate the involvement of stakeholders from all levels of an organization, thus implying that OL should be carried out across the organisation (Ruel et al., 2021). The authors refer to this as “bidirectional influence” being both top-down and bottom-up.

Basten & Haamann (2018), in their study provide, 5 building blocks to enable effective OL. These include “problem-solving, experimentation, learning from past experiences, learning from others and transferring knowledge”. Organizations’ ability to acquire, assimilate, and apply new knowledge and skills is crucial for maintaining competitiveness, fostering innovation, and driving growth. Among the various theoretical frameworks developed to understand organizational learning, **Absorptive Capacity (ACAP)** theory, pioneered by Cohen & Levinthal (1990), has gained prominence in examining the processes and outcomes of knowledge acquisition and utilization.

This literature review section aims to explore and analyse the existing body of research on absorptive capacity theory and its extension, particularly in the context of DS development. By synthesizing and critically evaluating relevant studies, this review seeks to enhance our understanding of how organizations effectively harness, internalize, and leverage external knowledge to foster learning, improve performance, and drive successful DS.

2.3.2.1 Application of the Theoretical Framework

The theory of **Absorptive Capacity** (ACAP) is based on the key constructs of a firm's ability to recognize and use external knowledge for innovation, the importance of prior related knowledge in assimilating new knowledge, and the role of diversity in knowledge backgrounds in enhancing Absorptive Capacity. It also explores how firms develop absorptive capacity, including R&D investment, manufacturing operations, and direct investment in training. This also suggests that certain types of ACAP are firm-specific and cannot be bought or quickly integrated into a firm. Zahra & George (2002) introduces several new dimensions to the concept of absorptive capacity, supplementing the initial work of Cohen & Levinthal (1990). One significant dimension is the recognition of multiple types of knowledge that organizations must absorb, including both explicit and tacit knowledge.

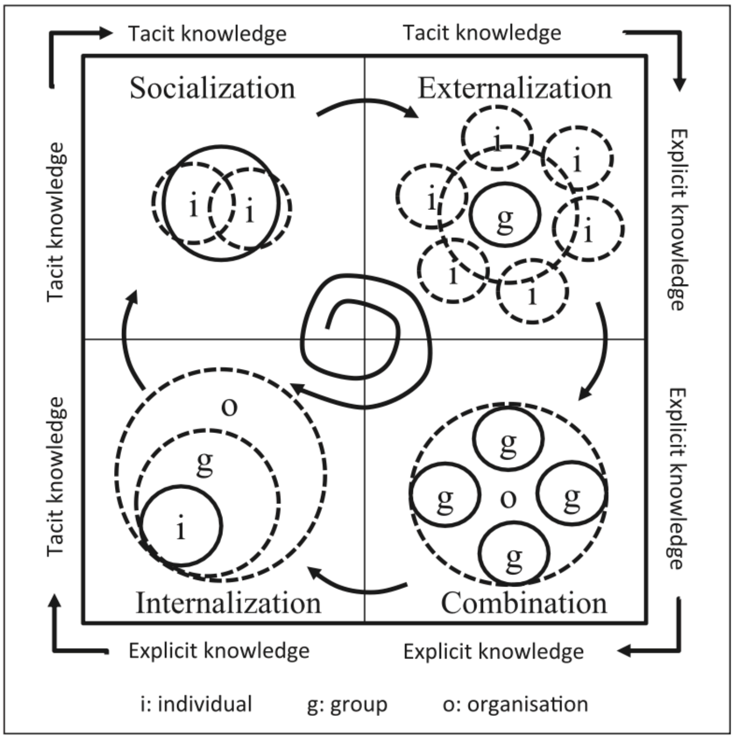

Figure 6: Spiral of organisational knowledge creation (Nonaka & Konno, 1998)

Tacit knowledge incorporates the unspoken insights, intuitions, and skills that individuals possess but find challenging to articulate through formal language or documentation. It's deeply rooted in personal experiences, often acquired through years of practice, observation, and immersion in specific contexts, while explicit knowledge refers to information that is formalized, structured, and easily communicable through written or verbal means. It encompasses facts, theories, procedures, and other forms of knowledge that can be codified into tangible formats such as documents, manuals, databases, or diagrams. Unlike tacit knowledge, explicit knowledge can be readily shared, learned, and transferred without significant loss of meaning (Basten & Haamann, 2018). The sharing of tacit knowledge within an organisation creates an irreplicable resources for competitors and this is a necessity in today's business landscape (Leavitt, 2011).

By acknowledging the importance of both codified and experiential knowledge, Zahra & George (2002) expand Cohen's original framework, providing a more nuanced understanding of the types of knowledge that contribute to absorptive capacity. Additionally, Zahra & George (2002) highlight the significance of an organization's internal knowledge base and its influence on absorptive capacity.

This dimension emphasizes that organizations with prior related knowledge and a strong internal knowledge base are better equipped to effectively absorb and integrate new external knowledge. By incorporating these new dimensions, Zahra & George (2002) enrich Cohen's initial theory by providing a more comprehensive framework for understanding and leveraging absorptive capacity in OL and innovation processes.

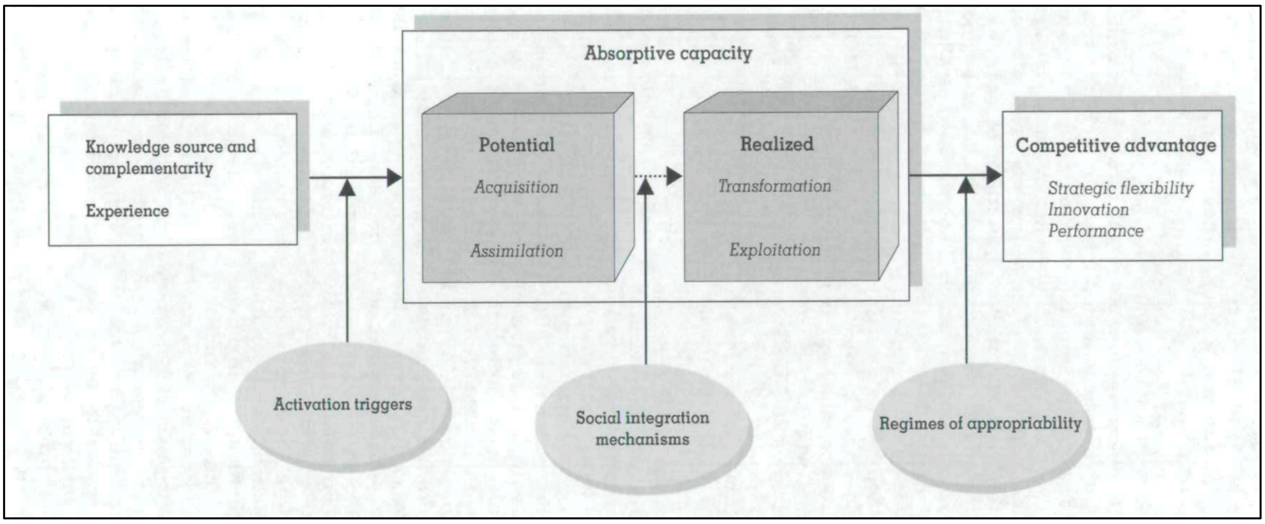

Figure 7: A model of ACAP (Zahra & George, 2002.)

ACAP can be defined as “a set of knowledge-based capabilities embedded within the firm's routines and strategic processes” (Zahra & George, 2002). Figure 6 highlights the key components of ACAP: Potential ACAP (PACAP) and Realized ACAP (RACAP).

- Potential ACAP
- Realised ACAP

The success or failure of digitalization hinges not only on the technology itself but also on the capabilities, skills, and mindset of employees (Ellström et al., 2022) yet there is limited understanding of the specific employee aspects crucial for achieving DS goals and implementing a DS, posing a significant challenge in transforming senior management's motivation for digitalization into organizational capability (Ritala et al., 2021). Holotiuk & Beimborn (2017) go on further to highlight that to inform and develop an effective DS, the workforce needs to be upskilled to have a digital mindset and develop them to have the necessary technical skills like programming & non-tech skills such as collaboration, critical thinking, ambiguity tolerance and change management (Ivaldi et al., 2022).

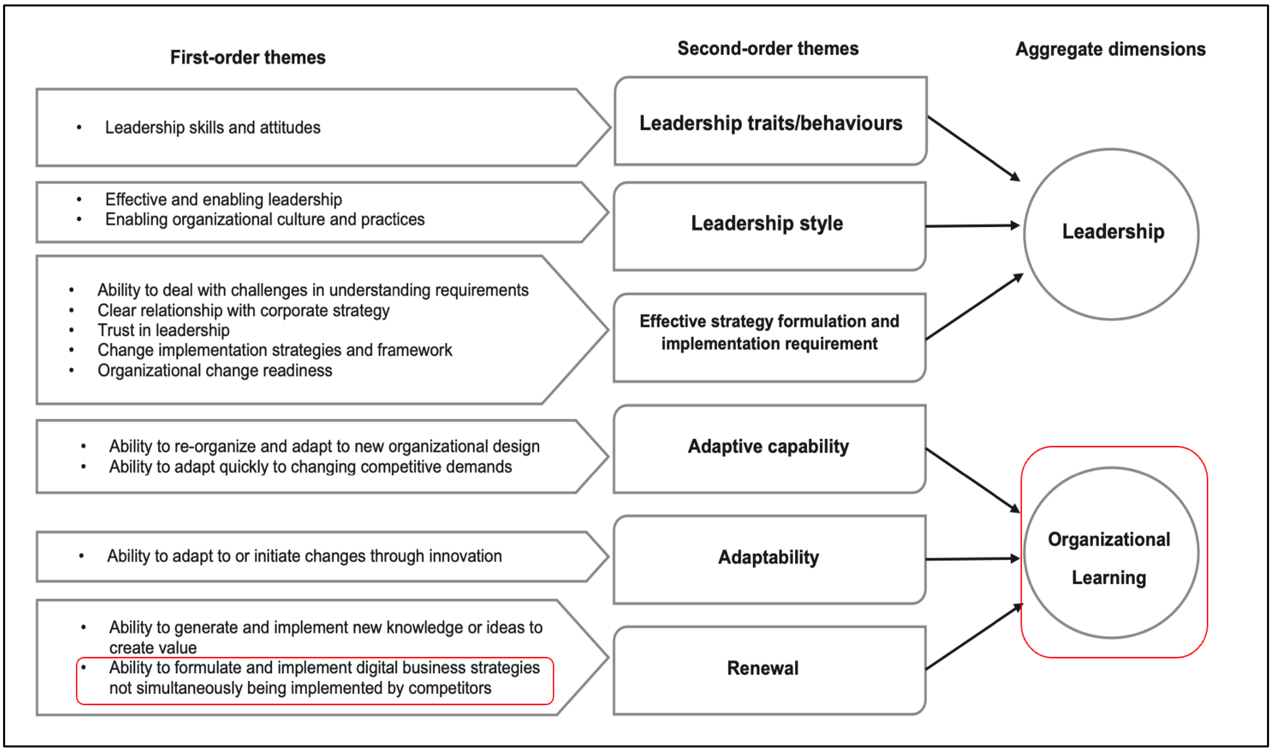

Figure 8: Thematic map connecting leadership and organizational learning to intra-organisational digital business strategizing (Ruel et al., 2021).

2.6 Conceptual Framework

Having analysed the theoretical frameworks applicable to addressing this study's research questions, the conceptual framework depicted below has been built using the works of Potter (2008), PESTEL and Teece (2007), and Zahra &

George (2002).

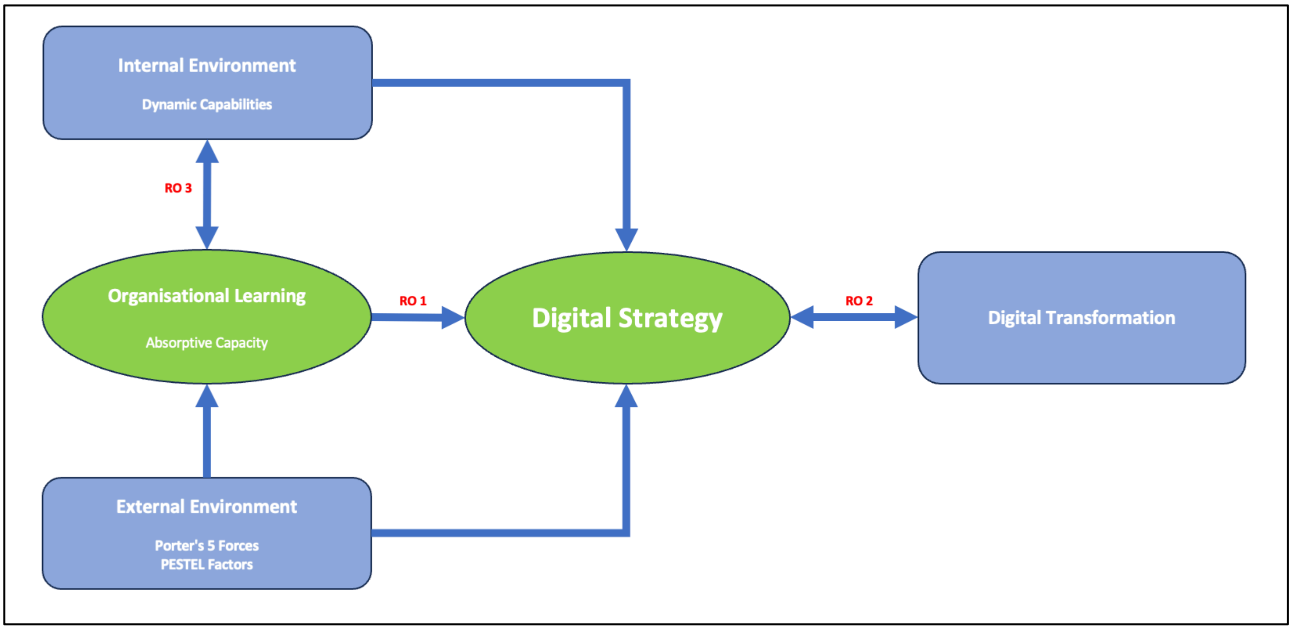

Figure 9: Conceptual Framework of OL's Influence on the Development of DS in SA Banks.

2.7 Conclusion of Literature Review

In conclusion, this literature review has explored the understanding of DS in banks, examined how OL assists in their development, and unpacked the relationship between these two concepts in the context of SA banks. The findings highlight the critical role of OL in driving DT in the banking industry, particularly in a dynamic and competitive market.

The review emphasized that DS formulation and implementation require more than just technological investments; they necessitate a deep understanding of the organizational context and the ability to learn and adapt to new digital opportunities and challenges. By embracing a culture of continuous learning, banks can acquire and integrate knowledge about emerging technologies, market dynamics, and customer preferences, informing the development of their DS. OL processes enable banks to identify and capitalize on digital opportunities, adapt to changing market conditions, and respond proactively to disruptive forces, ultimately enhancing their digital capabilities and maintaining a competitive advantage.

Theoretical frameworks such as Porter's Five Forces, the PESTEL framework, the Dynamic Capabilities framework, and the theory of Absorptive Capacity have been applied to analyse the external and internal contexts of DS formulation. These frameworks provide valuable insights into the competitive dynamics, macro-environmental factors, and internal capabilities that influence the development of DS in SA banks.

It is important to note that the formulation of a DS should align with the overall corporate strategy of the organization and be supported by a clear vision for the future. The strategic decision-making process should consider both the external and internal contexts, anticipate potential threats and opportunities, and be adaptable to changing market dynamics. Furthermore, the formulation of DS should involve a multi-speed organization that balances agility with value creation.

The literature review has led to the following research questions:

1. How does organisational learning influence the development of digital strategies in South African banks?
2. What are the critical elements of the digital strategy necessary for the digital transformation of South African banks?
3. What challenges and enablers do banks encounter in integrating organizational learning into the digital strategy formulation process?

CHAPTER 3. RESEARCH METHODS

The purpose of this study is to explore the influence of OL in the formulation of DS in the context of SA Banks. The research questions this study attempts to answer are based on the main research objectives highlighted above. This section provides the methodology for answering these research questions.

3.1 Research approach

To answer the research questions, a **qualitative paradigm** was identified as the most suitable approach for this type of exploratory study. This provided an opportunity to gain insights from stakeholders who form part of the DS formulation within a bank.

For this study, a qualitative research design using in-depth interviews was considered the most suitable. This allows for a systematic investigation of the research objectives. According to Leedy & Ormrod (2015), a qualitative approach offers six distinct advantages.

- Firstly, it enables exploration and facilitates an in-depth understanding of new or emerging topics.
- Secondly, it allows for multifaceted descriptions that enhance the clarity and comprehension of complex concepts.
- Thirdly, it provides a means for verification, enabling the testing of assumptions and generalisations in real-life contexts.
- In addition, a qualitative approach supports theory development, fostering the creation of novel theories and concepts.
- Furthermore, it aids in problem identification and sheds light on areas requiring further exploration.
- Finally, it facilitates evaluation, offering a valuable means of assessing the efficacy of practices and policies. Considering the nascent nature of the main research topic, these advantages support the appropriateness of the chosen approach.

Although this research approach is the most suitable, there are a few elements that need to be taken into consideration as highlighted by Jonker & Pennink (2010), which include the uncertainty that comes with working with open-ended questions and at times a reduced ability to distinguish between facts and opinions. Despite these, this paradigm will yield the best findings on a research topic that very little is known about.

3.2 Research design

The research design of this study serves as a blueprint for how the research process took place to best answer its research questions and objectives, including data collection, sampling data analysis, formulation of key findings based on the data, and conclusions on the findings (Creswell, 2013; Schindler, 2019). Creswell (2013) and Leedy and Ormond (2015) identified five types of qualitative design: case studies, phenomenological research, narrative studies, grounded theory research, and ethnographic research. A phenomenological research study was chosen as the best research design for this study because it is consistent with the qualitative research design adopted. This method is suitable for instances where lived experiences of individuals seek to be better understood (Leedy & Ormrod, 2015) specifically in the SA banking context for the purpose of this study.

This research design provided rich data to explore the relationships and key constructs of our research objectives and gained a deeper understanding of the context-specific dynamics and implications in the SA Banking landscape. This further contributed to the development of theoretical frameworks that capture this context.

3.3 Data collection methods

For this study, a qualitative approach was selected, and the primary data collection tool was in-depth interviews, which were conducted online. Interviews entail the asking and dialogue of individuals, using a variety of questions to gather comprehensive insights (Blaxter et al., 2006).

Open-ended questions were used to promote participants' unrestricted expression of their ideas, experiences, and viewpoints, enabling rich and in-depth responses. To delve further into participants' responses and look for more elaboration or examples, follow-up or clarification questions were used, which helped to understand the respondent's subjective viewpoints (McGrath et al., 2019). These question types collectively aim to provide a well-rounded understanding of the constructs and relationships under investigation, capturing nuanced qualitative insights and qualitative data. While enabling participants to express their opinions, the interviews were flexible and conversational to ensure that all pertinent subjects are covered.

3.4 Population and sample

To conduct a robust analysis using stipulated data collection methods, it is crucial to define the population of interest and determine an appropriate sample. This section provides an overview of the population and sample-selection process. Understanding the population allows for the generalisability of findings, while an appropriately chosen sample ensures representativeness and feasibility in line with the exploratory nature of this research. By exploring the characteristics of the population and the sample selection criteria, this research aims to establish a solid foundation for investigating the influence of OL on DS formulation in the SA banking sector.

3.4.1 Population

A population can be defined as "the total set from which individuals or units of the study are chosen" (De Vos, Strydom, Fouché & Delport, 2005). The population of interest for this research consists of executives and senior decision-makers in the banking sector in SA who have exposure to or deal with OL and DS formulation. These are stakeholders from a population of 14 locally controlled SA banks in the banking industry (Reserve Bank, 2023).

These individuals are particularly relevant to the research objectives and questions as they possess valuable insights into the influence of organisational learning on DS development and the challenges and enablers encountered in integrating organisational learning into the digital strategy formulation process. By studying a representative sample of this population, the research aims to gain a comprehensive understanding of the topic within the SA banking context.

3.4.2 Sample and sampling method

A purposive sampling strategy was employed to select senior decision-makers who have relevant knowledge and experience related to the research topic. This approach ensures that participants possess the expertise and insights necessary to examine the constructs and relationships of interest in this study (De Vos et al., 2005). Due to the transfunctional nature of a DS (Bharadwaj et al., 2013) explained in section 1.2, a total of 15 executive management, as well as senior management across various business functions including IT were targeted from at least five banks for this study. The selection of these five banks is justified based on their specific characteristics and relevance to the research objectives including their heavy investment in digital transformation initiatives. This strong transformational focus by a majority of these traditional banks seeking to change their business models using emerging technologies makes them ideal candidates to provide rich insights into the research objectives of this study.

Narrowing the sample to five banks allows for a detailed and comparative analysis to be conducted identifying similarities, differences, and patterns in the integration of OL into DS formulation as well as examination of their strategies, and practices. This also helped in the management of resource constraints, such as time and access, identified as possible limitations in section 3.8 thus increasing the feasibility and practicality of the research. As more time was allocated to each bank, this allowed for more thorough discussions, leading to a richer understanding of the topics at hand as well as an opportunity to delve into specific details, complexities, and nuances within each bank's context.

The sample size for this study was adjusted based on data saturation, which refers to the point at which new information or insights are no longer emerging from the interviews (De Vos et al., 2005).

3.5 The research instrument

In alignment with the research approach, the research instrument for this study consisted of an interview guide designed to gather data related to the theoretical constructs and explore deeper underlying concepts and reasoning specific to the environment in which the interviewees operate. This instrument is supported by Blaxter et al., (2006) & Creswell (2013) when following this kind of exploratory study research design. The interview guide was developed based on a combination of the theoretical frameworks applied, the literature review conducted as well as the conceptual framework developed.

3.5.1 Online Interviews

Interviews involve performing detailed and open-ended conversations with participants (Wilkinson & Birmingham, 2003) to gain a comprehensive understanding of their perspectives, experiences, and insights related to the research topic and it is suitable for several reasons. This enables a thorough exploration of the intricate connections among constructs, allowing a profound investigation into participants' viewpoints in a more relaxed manner. This approach uncovers the complex aspects of relationships and connections while assessing their usefulness within an organisational context. It also provides more information than other data collection methods like surveys (Carolyn Boyce, 2006). Engaging with senior decision-makers provides valuable insights into the practical implications and contextual intricacies of these constructs.

As identified by Carolyn Boyce (2006), some drawbacks of such interviews include their susceptibility to personal bias. The time it takes to conduct these interviews can also be rather extensive. For them to be successfully executed, they require the interviewer to have certain skills like communication which might require some level of training.

Adopting this instrument requires a few considerations to be kept in mind during the preparation phase of these interviews. This study encompasses the following parameters (Blaxter et al., (2006):

- Due to the remote working nature of most interviewees following the Covid-19 pandemic, the interviews were conducted online.
- The technology used to perform these online interviews was MS Teams.
- These interactions were recorded and transcribed to capture the verbatim responses of the participants, supplemented by manual notes that were taken by the interviewer.
- The interviews were semi-structured which included a combination of structured questions as well as open-ended questions to facilitate the discussion.
- Consent was sought from the participants prior to the interview, which also forms part of ethical considerations as described in section 3.10.

A well-designed interview guide (Appendix C) outlines the key constructs and relationships explored while allowing flexibility for participants to express their opinions and perspectives. The guide was developed based on the literature review and theoretical framework, ensuring alignment with research objectives.

3.6 Procedure for data collection

The procedure for data collection in this research involved a systematic approach to ensure the collection of accurate and reliable information. The researcher has established clear guidelines and protocols to conduct in-depth interviews as the chosen research instrument. These guidelines included instructions on participant selection, interview scheduling, and the use of standardised interview protocols. Before the interviews, the participants were informed about the intention of the study, confidentiality, safeguarding of the data collated and their voluntary participation. During the interviews, the researcher employed active listening skills, posed open-ended questions, and allowed participants to express their perspectives freely. The interviews were recorded on MS Teams to capture detailed responses, and thorough notetaking supplemented the recordings and the transcript from the tool. The data collection process was conducted in a respectful and ethical manner, ensuring the privacy and confidentiality of the participants.

3.7 Data analysis strategies and interpretation

A qualitative data analysis approach was followed, in line with the research paradigm. The data collected from the interview process was converted into meaningful insights (De Vos et al., 2015).

For data analysis, the computer-assisted software tool Atlas.ti was employed to facilitate the organisation and coding of the interview data (Wilkinson & Birmingham, 2003). This tool assisted in managing large amounts of qualitative data, enabling systematic analysis and efficient retrieval of relevant segments. The below steps were followed in the data analysis process using this software tool:

Step 1: Preparation of the data i.e., transcripts and recordings

Step 2: Importing and organising data in the software

Step 3: Coding of the imported data either manually or automatically

Step 4: Creation of a codebook

Step 6: Querying and retrieving data

Step 5: Writing of memos based on the analysis

Step 7: Data visualization and exploration

Step 8: Outlining and presenting the results (for instance, in reports)

Figure 9: Data analysis process using Atlas Ti.

By employing a combination of inductive thematic analysis, categorisation and classification, this research study aims to capture the depth and richness of the interview data (De Vos et al., 2015). The use of these software tools facilitates the organisation and analysis process, ensuring rigour and efficiency. The interpretation of the analysed data provided a comprehensive understanding of the research findings, enabling the drawing of meaningful conclusions and implications for practice.

3.8 Possible limitations and challenges of the study

While performing a research study, some limitations and challenges could come up that would hinder the thorough execution of the study. Below are a few that were identified in this study:

- As stipulated in section 2.3.2 of the study that the formulation of the strategy needs to be "bidirectional", however, the sample was limited only to senior management and executives of banks in SA.
- The online nature of the interview process partially limited the detection of possible non-verbal gestures which could be indicative of discomfort by the participants.
- Another limitation of the study was the relatively small sample in comparison to the population of senior management stakeholders targeted in SA Banks which might have limited the amount of data collected.
- Time constraints also posed challenges considering this research was completed within a space of a year, but careful planning and scheduling was implemented to optimise data collection and comprehensiveness within the available time frame.
- Access to relevant decision-makers and obtaining their cooperation for the research hindered the sampling of the population.
- The researcher's values and beliefs could have influenced their bias in how the data is collected, analysed, and especially interpreted.

3.9 Quality Assurance

3.9.1 Transferability

Transferability, also known as external validity, refers to the extent to which the findings of a study can be generalised or applied to other contexts or populations beyond the specific sample or setting studied (De Vos et al., 2015). In the context of this study, which focuses on interviews and has the limitation of the banking sector, efforts were made to enhance the transferability of the findings. Firstly, selecting a diverse sample of senior decision-makers from different organisations within banking contributed to the broader applicability of the findings. By including participants from various backgrounds, experiences, and perspectives, the study captured a more comprehensive understanding of the phenomenon under investigation.

Additionally, employing a theory-driven analysis contributed to the transferability of the findings. Grounding the analysis in relevant theoretical frameworks and existing literature allowed for the identification of relationships or general principles that can potentially be transferable to other sectors or contexts.

3.9.2 Credibility

Credibility or internal validity refers to the accuracy, integrity, and trustworthiness of the research process and findings. Establishing internal validity is crucial to ensure that the conclusions drawn from the study are based on solid evidence and not influenced by extraneous factors or biases. The following steps were taken. First, ensuring data accuracy was prioritised. This involved conducting interviews in a structured and systematic manner, using standardised interview guides to maintain consistency across participants. Careful attention was given to recording and transcribing the interviews accurately, minimising errors or misinterpretations.

To maintain researcher neutrality, efforts were made to minimise biases and personal opinions that could have influenced the data collection and analysis process. This included adopting a reflexive stance, being aware of personal biases, and conducting interviews in an as objective and unbiased manner as possible. Additionally, the researcher was transparent about their backgrounds and potential influences to enhance the credibility of the study.

Rigorous data analysis techniques were employed to ensure the integrity of the findings. This included using qualitative data analysis software to maintain thoroughness and transparency in the analysis process. Another step followed involved the comparison of responses from participants in the same bank to ensure the data collected was indeed valid.

Implementing these steps and applying these practices contributed to the accuracy, integrity, and trustworthiness of the research process and findings, enhancing confidence in the conclusions drawn from the study.

3.9.3 Dependability

Dependability or reliability refers to the consistency and stability of the research process and results (De Vos et al., 2015). To enhance the reliability of this study, a clear and transparent audit trail of the research process was maintained. Detailed documentation of the research design, data collection procedures, the actual data collected such as recordings and transcripts and data analysis steps were maintained. This allowed for the study to be replicated or reviewed by other researchers, ensuring the transparency and consistency of the research process.

3.10 Ethical considerations

Ethical considerations are essential in any research study to ensure the protection and well-being of participants (Rashid et al., 2019). The authors, supported by Leedy & Ormrod (2015), Schindler (2019) and Kumar (2014), list the below considerations that researchers need to consider during the research process:

Table 4: Ethical Considerations

	Ethical considerations	**Mitigating measures**
1	Safeguarding against harm	To ensure safety both psychological and physical, the participants will be made aware of any potential harm that could take place during the interview process at which point the option to withdraw from the interview can be used. Should the participant opt for an in-person interview, a safe and comfortable environment will be created for and during interviews.
2	Choice	Participation in the interview process will be voluntary and the participant can exercise the right to withdraw from the interview at any point. Additionally, the participants will also be made aware of the complete purpose of the research as well as the data collection process.
3	Informed consent	Informed consent involves obtaining voluntary and informed agreement from participants to participate in the study. A consent form that clearly explains study's purpose, procedures, and potential risks and benefit study will be sent out to the participants prior to the interviews. Participants will have the opportunity to ask questions and freely decide whether they want to participate while also highlighting their right to withdraw from the study at any time without consequences.

4	Protection of participants': - Privacy - Confidentiality and - Anonymity	To conceal the personal identity information of the participants and ensure privacy, participant codes or pseudonyms will be utilised. The participants' data will be safeguarded by ensuring that information collected during the study (i.e. responses and identities) is kept confidential and not shared without consent. Data will be stored securely and only accessed by the researcher. When reporting the findings, aggregate data will be used to prevent the identification of individual participants. The steps taken to protect confidentiality and how the participants information will be handled and protected will be outlined.
5	Truthfulness	During the interview process, the researcher will maintain high standards of integrity through honesty and ensuring the study is not inaccurately depicted.
6	Professionalism	The researcher will ensure they have the competences required to carry out the interview while conducting themselves in a respectful and professional manner that is free from bias.
7	Legislative compliance	In compliance with the *Protection of Personal Information (POPI) Act* of SA the privacy and protection of the participants' personal information will be adhered to.
8	Access	Access to the collected data may be granted to the participants upon request after the data analysis has been concluded.

The above factors were taken into consideration to minimise any potential risks to participants and the data collection process.

CHAPTER 4. PRESENTATION OF FINDINGS

4.1 Introduction

This chapter concentrates on the presentation of the gathered data using the research instruments that are covered in Chapter 3 above. The data was gathered through online semi-structured interviews using Microsoft Teams and the transcripts, recordings as well as field notes made during the interviews form part of the raw data. Using the computer-assisted qualitative data analysis software, Atlas Ti version 23.2.1, this chapter outlines the findings of the data collected and analyzed with this tool.

The structure of this chapter follows the approach that for each research question, themes emerged from data gathered using interview questions posed to participants and this is supported by relevant verbatim quotes from the participants.

4.2 Profile of participants

To ensure the credibility of the study, a combination of 12 senior management and executives from 6 different banks in South Africa participated in the research. Collectively their banking industry experiences accumulate to a total of 166 years. Their participation was approved by the relevant human capital and/or risk departments of their respective organisations, aligning with ethical requirements. The reduction in the sample size relative to the initially proposed size outlined in Chapter 3 is due to a limitation in accessing relevant stakeholders and obtaining their cooperation for the research linked to intellectual property concerns.

Below is the profile of the participants that were interviewed:

Population	Bank	Number sampled	Position	Participant	Tenure within the Bank/ Banking Industry
SA Banks	**Bank 1**	3	Chief Information Officer	1	20yrs
			Head of Digital Interactions	2	15yrs
			Chief Operating Officer	9	10yrs
	Bank 2	1	Chief Information Officer	3	7yrs
	Bank 3	2	Digital Transformation Executive	4	9yrs
			Executive: Digital Fast Lane	12	13yrs
	Bank 4	4	Head of Channel Management	5	13yrs
			Head of Data Insights & BI/MI	6	7yrs
			Chief Executive Officer (Personal Segment)	10	23yrs
			Chief Executive Officer (BU)	11	19yrs
	Bank 5	1	Global Head of Digital and Technologies	7	22yrs
	Bank 6	1	Chief Information Officer	8	8yrs
Total number of participants		**12**			

4.3 Data Analysis process followed

An inductive data analysis process was chosen for this study to allow for the emergence of insights and patterns directly from the collected data, aligning with the exploratory nature of the research. Inductive analysis enables a bottom-up approach, letting themes and relationships surface organically without imposing preconceived notions or theoretical frameworks. This approach is particularly suited for understanding the nuanced and context-specific dynamics of organizational learning and digital strategy formulation within SA banks. By adopting an inductive process, the study thus aims to capture the richness and diversity of participants' experiences and perspectives, ensuring that the findings authentically reflect the complexities of the studied context and contribute to the existing body of knowledge.

Bernadette et al. (2021) highlight the cumbersome and daunting nature of manually analysing data due to the large volumes of data that typically need to be analysed during this phase. This manual technique raises concerns over the quality of the coding done in this way in addition to being extremely time-consuming and iterative. For these reasons and to further increase the rigour of the paper, a technological approach was chosen to do the analysis.

There are 3 key phases during this type of data analysis namely **Coding, Categorisation** and **Theming** as outlined in figure 11 below.

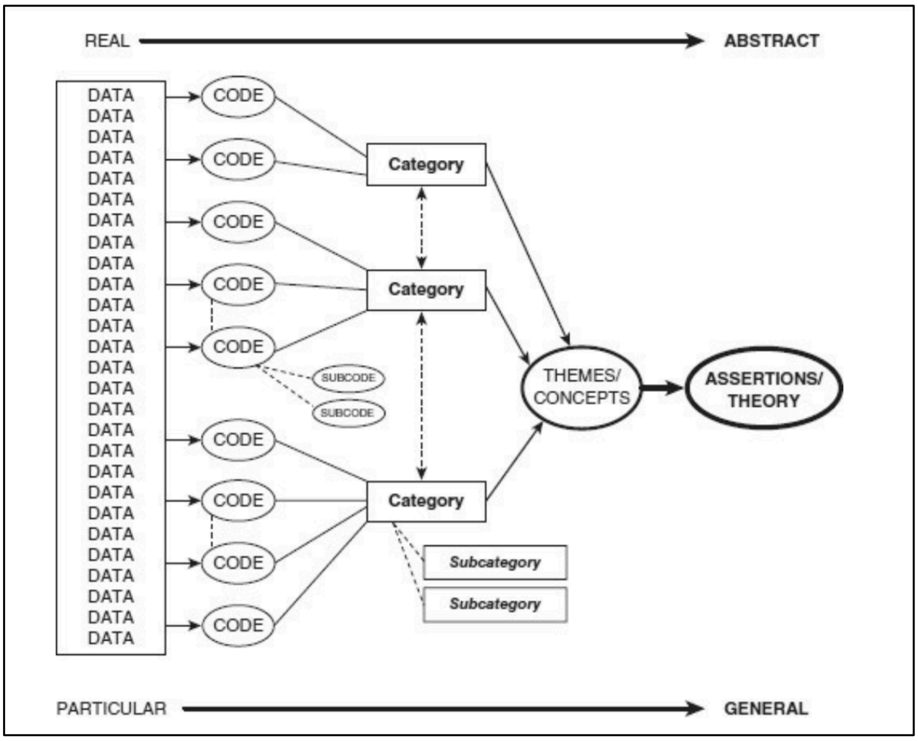

Figure 11: A streamlined codes-to-theory model for qualitative inquiry (Saldana, 2016)

- Coding: It involves the systematic process of assigning labels or tags (codes) to segments of text or data to identify and categorize patterns, themes, or concepts. Using the raw data gathered, codes were assigned to meaningful units within the data and labelling them with descriptive codes that capture the essence of the content.
- Categorisation: Using the codes assigned to the raw data, related codes were grouped into broader categories based on shared characteristics or concepts.
- Theming: The identified categories were then assigned a higher level of grouping that involved synthesizing and interpreting categorized data to develop overarching themes that capture the main ideas noted in the qualitative data.

This process was replicated, and this is depicted in relation to my data collection process as shown in the figure below.

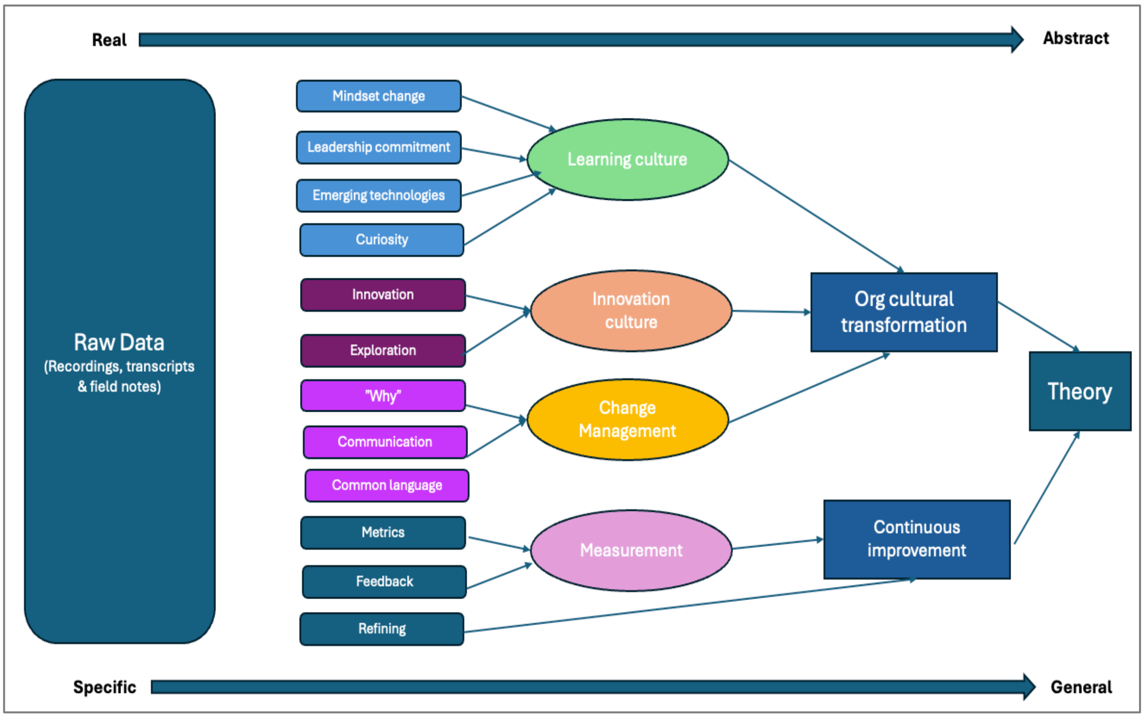

Figure 12: Example of code-to-theory model application for RQ1

Expanding on Figure 9 in Chapter 3, the steps below were followed in the analysis of the raw data collected in Atlas Ti.

Step 1: Preparation of the data i.e., transcripts and recordings.

This initial step involved cleaning the data collected before any analysis could be performed. First, the participant names were removed to ensure anonymity, and this is aimed at protecting the privacy of the individuals involved in the study. To further enhance the quality assurance of the data and ensure credibility, a thorough review of all transcripts was done. This involved going through each transcript individually to detect and rectify any potential errors or oversights. In instances where ambiguity arose within the text, careful listening to the original recordings was conducted to ensure the correct interpretation and representation of participants' responses. Throughout these procedures, the original transcripts were retained as an integral part of data management, providing a comprehensive record of the raw data before any alterations were made.

Step 2: Importing and organising data in the software.

A new project was created in Atlas Ti and the transcripts of the 12 participants were imported into the software as depicted in the report below.

ATLAS.ti Report

The influence of organisational learning in defining digital strategies within South African banks

Document Groups

Report created by Alcinda Massango on 18 Feb 2024

Bank 1

3 Members:
2 Participant 2
Groups:
Bank 1

6 Participant 1
Groups:
Bank 1

10 Participant 9
Groups:
Bank 1

Bank 2

1 Members:
1 Participant 3
Groups:
Bank 2

Bank 3

2 Members:
3 Particpant 4
Groups:
Bank 3

12 Participant 12
Groups:
Bank 3

Bank 4

4 Members:
4 Partcipant 5
Groups:
Bank 4

5 Particpant 6
Groups:
Bank 4

11 Participant 11
Groups:
Bank 4

13 Participant 10
Groups:
Bank 4

Bank 5

1 Members:
8 Partcipant 7
Groups:
Bank 5

Bank 6

1 Members:
9 Participant 8
Groups:
Bank 6

Figure 13: Document report of imported transcripts in Atlas Ti

Step 3: Coding of the imported data.

This reflective step helped in the reduction of the data collated by identifying redundant information that should be disregarded. It was performed both manually and automatically. Manual coding was done by attentively going through all the transcripts and individually allocating codes to relevant pieces of data. Automatic coding was also used through the AI coding functionality of the tool to cross-reference both methods and get full coverage. Oversight was given to codes that were technologically coded to ensure they aligned with the verbatim words of the participants.

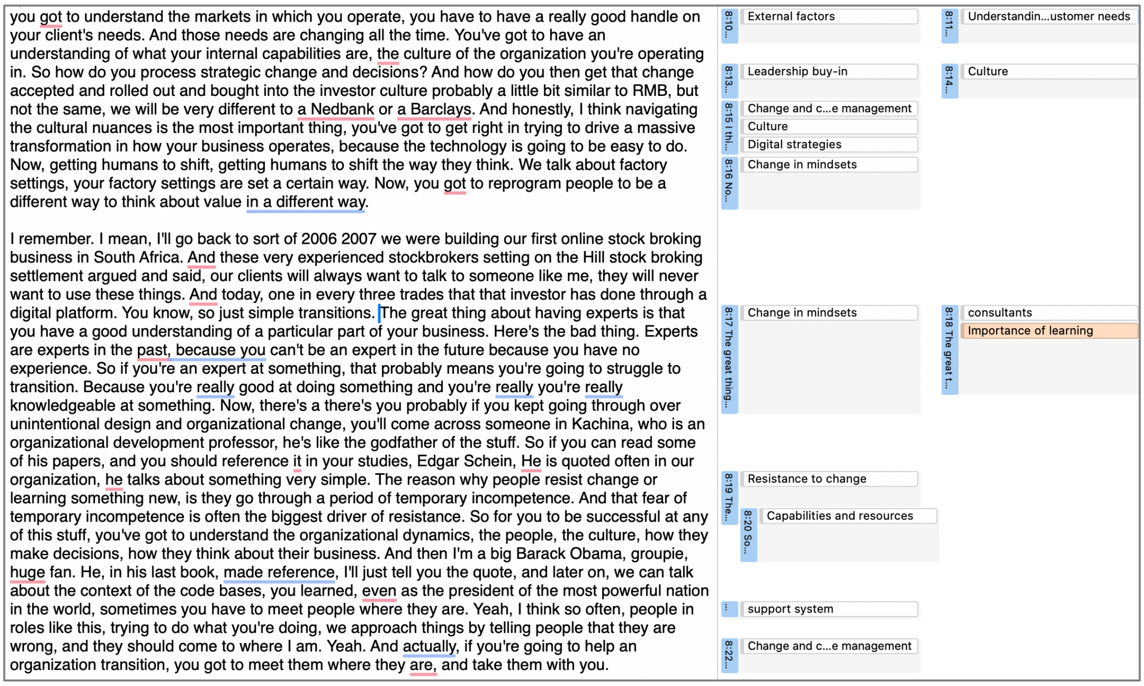

Figure 14: Snapshot of codes created using the transcript of Participant 7

Step 4: The creation of a codebook.

A codebook was created by exporting all the codes into an Excel spreadsheet and using it to create hierarchies/ groups with examples of each. This assisted largely with the theming process.

Step 5: Querying and retrieving of data.

This step involved using functions like the "query tool" which creates complex queries to search for specific patterns, codes, or text within the data and "text searches” which searches text across the entire project or within specific documents. This assisted in extracting specific information in the data and efficiently navigating and analysing data sets to identify patterns, trends, and relationships within the data.

Step 6: Writing of memos based on the analysis.

This step involved the critical reflection on the data collected and drawing insights from it. This was done while going through every single transcript and included handwritten field notes that were made during the interviews.

Step 7: Data visualization and exploration.

This involved the usage of visualisations to represent and explore patterns, relationships, and insights within the data. An example is the Word Cloud depicted in Figure 15 below.

Figure 15: Word cloud of all transcripts on Atlas Ti

Based on this Word Cloud visual in Figure 15, frequently used words start to emerge e.g. leadership, change, people, skills, customer, understanding, mindset, culture, training, etc. Those assisted in the coding and formulation of categories and themes process.

Step 8: Outlining and presenting the results.

This step is thoroughly unpacked in the rest of Chapter 4.

4.4 Findings pertaining to Research Question 1

This section represents the data collated per research question. Using interview questions 5, 6, 7 & 10 posed to the participants, the below themes emerged from the data for research question 1.

RQ 1: How does organisational learning influence the development of digital strategies in South African banks?

Code	Category	Theme
Fluid strategy	Strategy	4.4.1 Adaptability and Agility
Pivot		
Risk taking		
Rapid tech changes	Changes	
Customer needs		
Markets		
Skills	Upskilling and development	4.4.2 Digital Mindset
Progressive leadership		
Mindset shift	Mindset	
Legacy mindset		
Digital first		
Best practice	Learning culture	4.4.3 Organisational cultural transformation
Ideation platforms		
Information availability		
Harnessing value of learning		
Leadership involvement		
Investment		
Emerging technologies		
Competitive landscape		
Sponsorship		
Curiosity		
Innovation	Innovation culture	
Embrace failure		
Iterative process		
Patience		
Curiosity		
Experimentation		
Communication	Change Management	
Common language		
"Why"		
Adoption		
Support		
Empathy		
Training		

Conflicting strategies	Siloes	**4.4.4 Collaboration and co-creation**
Transparency		
Ambassadors of the strategy	Participation	
Engagement		
Change agents		
Knowledge sharing		
Alignment	Business strategy	**4.4.5 Strategic alignment**
Business objectives and purpose		
Business models		
Alternative revenue streams		
Audit of current state		
Leadership direction	Focus	
Clarity		
Test markets	Customer needs	**4.4.6 Customer obsession and centricity**
Client experience		
Inclusivity		
Digital vs human interactions		
Data	Personalisation	
Trust		
Behaviours		
Metrics	Measurement	**4.4.7 Continuous Improvement**
CSAT, NPS, ENPS		
Surveys		
Feedback	Refinement	
Evolving strategy		
Incremental exploration		
Resilience		
Tolerance for mistakes		
Business objectives		
Digitization	Risk	**4.4.8 Risk Management and Compliance**
Job loss as a result of automation		
Reputation		
Ethics	Compliance	
Regulations		

Table 5: Codebook for RQ1

4.4.1 Adaptability and Agility

Half of the participants felt strongly that organizational learning promotes adaptability and agility which allows banks to be better equipped to react to the rapidly changing digital landscape. The bank's response to changes in the market is improved by its capacity to quickly assimilate new knowledge into existing digital strategies and learn from past mistakes.

> *"There needs to be agile learning taking place to meet the rapid technological changes." (Participant 8)*

”I think people like FinTechs and their mobility and ability to, change business models very quickly is something that's quite important in terms of how we adapt in our world.” (Participant 9)

Other participants went on to highlight the fluid nature of the environment banks operate in and so the need for strategy to be flexible.

“I think there is that need for a paradigm my shift how we organize ourselves because why such rigidity when the problems that we are trying to solve in the environment to operate in is so fluid” (Participant 4)

“So let me maybe also say that strategy is fluid, so it has to be able to adjust, but massive pivots every 12 months are going to cause absolute chaos. That's just because change is hard, and change does take time.” (Participant 2)

4.4.2 Digital Mindset

Some participants noted that SA banks need to recognize and address the need for continuous skill development to align with digital strategy goals. This process of organizational learning stresses the importance of moving from legacy mindsets to acquiring and updating digital skills within the workforce.

“A strong part of I believe for organisational learning is that it helps shift the cultural dial and allows people to be able to get into this digital-first mindset.” (Participant 6)

“I think people also need to be able to upskill themselves to understand what is the skill set of the future required for them to put into the new strategy.” Participant 9)

“That’s where I think the organizational learning piece is very important because when you embark on the digital journey or digital transformation

strategy, you must already start thinking about what your future workforce must look like." (Participant 10)

4.4.3 Organisational cultural transformation

The need to transform the culture of the whole organisation was highlighted by many of the participants. In the context of SA banks, it speaks to the profound shifts in beliefs, values, and behaviours within the organization to align with the demands of the digital era.

"For me, it always comes down to culture. You can have the greatest strategy however, if your culture is not receptive then you run the risk of it being a failure, even though the technology works, but you just might not have the right type of mindset or people. Or the culture within the organisation that is receptive to this." (Participant 6)

This theme delves into the strategies required to initiate and sustain cultural change, looking at how the transformed organizational culture influences the development and execution of digital strategies. It underscores the crucial role of leadership, communication, innovation, and employee engagement in driving and embedding this transformative process, ultimately shaping the organization's digital trajectory.

"If you create a culture that you know allows people to reimagine things and unlearn certain things, management thinking, assumptions and stuff like that." (Participant 4)

"I think navigating the cultural nuances is the most important thing, you've got to get right in trying to drive a massive transformation in how your business operates because the technology is going to be easy to do." (Participant 7)

Participants identified that creating a learning culture is necessary throughout the organisation to empower employees. It needs to be valued, encouraged, and embedded in the organizational ethos from the executive level to the front-line staff. A culture of learning ensures that the organization can develop and implement digital strategies that align with customer expectations and industry trends, ultimately leading to successful digital transformation.

> *“Whatever organizational learning you’re trying to create, you’ve got to start to weave it into the DNA of the organization as well.” (Participant 3)*
>
> *“To be competitive, you need to have organisational learning as a big pillar.” (Participant 6)*
>
> *“If you have a culture of organizational learning, you will see where customer needs are going, what are some of the key drivers that are leading to either success or demise, what technologies are coming up and how the organization can leverage those technologies, which should then also feed into your digital strategy. ensures that your strategy never becomes stagnant.” (Participant 11)*

There also needs to be a concerted effort to make information speedily available before it gets outdated and harness the value that comes from the learnings as mentioned by some participants.

> *“So learning is one very important part. You have to create a learning culture in your organization, you have to make content available, you have to share content, all day every day because that content outside in which you're operating is changing by the second.” (Participant 7)*
> *“If you don't learn and if you don't harvest those learnings, you will have invariably a digital strategy that is not fit for purpose given how dynamic the markets change.” (Participant 4)*

“I think there's lots of people that have lots of knowledge that have upskilled themselves, but it doesn't always translate back to organisational benefit.” (Participant 9)

Some participants emphasized that harvesting the learning value could even lessen the requirement for hiring consultants.

“How are we working with so many different consultants on these digital initiatives? Surely, we have enough IP and we can almost do our own research around some of these things. It’s about how do you bring it together instead of bringing someone completely outside who doesn't understand our environment.” (Participant 9)

“Firstly, I’m not a fan of having consultants come in, who are digital transformation experts, because they typically will help give you a view on what they have seen, but they have not lived it.” (Participant 7)

“There's so much IP that sits within that has been layered over the years and I think you'd be doing yourself a disservice if you don't engage at every level of the organization to really come up with a solid digital strategy.” (Participant 5)

Leaders were highlighted to be playing a pivotal role in setting the tone for a proactive attitude toward the advancement of digital strategies and their adoption. Technology should be a key topic to achieve a cultural shift at the leadership level, and executives need to understand and embrace digital terminology and concepts.

“The long and short of it is that you need to be intentional, the leadership needs to be on the ground, walk the journey with the people and be seen to be practising what they are preaching.” (Participant 4)

“Leadership must not just bless this initiative; they must actually be actively involved in defending it.” (Participant 6)

This need for the learning culture to be driven top-down however is not always achievable for the reason cited by one of the participants.

> *"I think some sometimes leaders are hampered as a consequence of not being capacitated themselves." (Participant 5)*

In relation to the formulation of digital strategies, this involves having a very good understanding of emerging technologies and their potential disruption and the benefits that can be leveraged from using them. Some participants highlighted how this will ensure that the workforce is not only equipped for the current digital landscape but also adaptable to future changes.

> *"A lot of people don't know a lot of these technologies. They are absolutely clueless. They are just catchphrases that they pick up and then maybe reuse. But if you were to sit them down and say unpack for me what this means for you, and then what or how you think it would add value in your specific team, a lot of them are unable to make that translation because they don't have a deep enough understanding of what the technology is." (Participant 5)*

> *"People need to start at the executive level understanding the terminology that's being used" (Participant 1)*

Understanding the competitive landscape and market through research was also indicated as important as it forms input to the digital strategy being designed.

> *"A good understanding of the environment when it comes to where other banks are at when it comes to their technological advancements is key." (Participant 6)*

> *"It's important to test things with your local market. Not everything externally makes sense for your customer base or your organizational DNA." (Participant 5)*

One participant emphasised how best practice content can help inform the digital strategy.

> *”I think best practice is one of those things that an organisation can tap into that and keep abreast of what's happening from a best practice perspective, not just within your country but I think globally there's a lot that you can learn.” (Participant 5*)

However, this perspective was challenged by another participant who felt it more important to have a visionary rather than a comparative view of the external environment and create a blank slate to anticipate the future needs of customers and markets.

> *”So if we base some of our strategies around what currently is working out then there's a big risk that we copying something or we're trying something that might be irrelevant very soon. So I want to say being able to understand and anticipate the needs of the future by almost creating a blank slate is critical.” (Participant 9)*

This type of transformation requires leadership commitment to the learning and development of the workforce which can be financial and non-financial including creating platforms and time for ideation and and valuing diverse viewpoints and perspectives.

> *“It needs to come from leadership because a lot of learning, especially formal structured learning requires the right level of commitment and investment. Set aside budget for learning.” (Participant 5)*

> *“You need an executive team that is comfortable to sponsor quite a lot of the learning.” (Participant 7)*

> *”You need to consider what systems and processes do you actually put in place to ensure that you generate as much value out of the learnings that*

you make, whether it is failures, discoveries, whatever the case may be." (Participant 4)

Allowing for pure R&D projects without the pressure of immediate financial return was also highlighted as key considering the investment made, and this calls for resilience.

"The biggest part of creating an organizational learning culture is you have to find a way to create time and space to do so." (Participant 7)

"You need to consider the technical debt. You cannot throw the baby with the water. If you don't see the results you envisioned, you cannot reject the whole thing. It requires patience and the ability to pivot as and when needed." (Participant 8)

"You ultimately need organizations that accept that mistakes are lessons and not failures. So for me, mistakes need to be understood as steps in getting us to where we need to, because that's where our learnings come from and we uncover a lot of things provided we obviously reflect on what happened, what can be done differently versus them being seen by failures as the organization." (Participant 11)

A lever to encourage a learning culture mentioned frequently by many of the participants was curiosity which leads to a culture of experimentation and innovation.

"I think curiosity and a little bit of a tenacity in the sense that a lot of things that you do in digital transformation especially horizon three and maybe even Horizon-type things, you honestly don't know what you don't know." (Participant 4)

"How do you know what's going on, you've got to have lots of people who are curious, you have to have a leadership team and an executive team that are curious and that are willing." (Participant 7)

“So I've seen that some exceptional leaders are exceptional because they are very competent, but they are not the most curious people.” (Participant 5)

I definitely think curiosity is key because I guess when you are curious, you are always searching and you're always asking why and until you get to the bottom of the why you then continuously drive yourself to identifying solutions. Things change very quickly and what is required is the ability of an organization to create strategies that enable you to pivot where you need to.” (Participant 11)

The other cultural transformation that some participants felt it important to have in the organisation was an innovation culture which encourages experimentation and learning from failures. It explores how fostering a culture that embraces change and innovation contributes to the development of creative and effective digital strategies.

“It is absolutely crucial because if you can't learn, you can't innovate and it's as simple as that. The innovators are the learners because innovation means you become curious and curiosity is equated to learning. Those who are curious, learned.” (Participant 5)

“So I think you do need to cultivate an organisational culture that values innovation” (Participant 6)

There was emphasis from the participants that innovation should be an iterative and exploratory process. This incremental exploration process requires patience, perseverance, and the attitude of seeing failures as opportunities to learn because of the large investment in resources towards these initiatives.

“For everything that we create we have to maintain it we have to polish it. The digital ethos is also not build it and leave it. You can't build an experience and

leave it, you've got to build a digital experience and constantly monitor it and refine it." (Participant 3)

"So, I think to have the staying power sometimes, to continue to learn and explore is crucially important." (Participant 4)

"I've personally stopped using the words digital transformation because it implies an end, it implies that you have started and then you have transformed. It's a continuous exercise, you're never going to be done. operating in the digital era means that there's a reinvention needed, probably every two to three years of different propositions in order to remain competitive." (Participant 7)

"You've got to be able to adapt, need to know when you're going to persevere. When you're going to pivot when you're going to shut down. You've got to have the mindset to design those strategies in that way." (Participant 7)

For the cultural changes to take place, a majority of the participants have expressed the need for deliberate communication and change management processes.

"First and foremost, human beings need to understand why where we're going and then we'll work out the rest." (Participant 3)

"You need to bring everyone in the journey and get buy-in from the organisation as a whole." (Participant 8)

"So, I think that becomes quite important how you then share that message so that everyone understands it and understands it in a way that is executable?" (Participant 9)

A big component of this change management process as identified is support and training.

“If you're going to help an organization transition, you got to meet them where they are, and take them with you.” (Participant 7)

“I think you absolutely need to support people you know. You cannot take people with they've never been mentally. It's very hard.” (Participant 5)

Some participants went on to point out how this requires empathy.

As your organization evolves to its next level through digital strategies this can be extremely intimidating for certain workforces. They may be threatened by how quickly companies evolve through digital transformation. And so very key that there is empathy in leadership to understand how to then do that both for employees as well as for customers as well. (Participant 11)

Key to this is articulating to the people in the organisation the “why” behind the digital strategy in place for the organisation. To support this, it is of value to identify people in the organisation to co-own the “why” of the strategy.

“But if we don't get the why, and where we're going, we don't identify with it (strategy).” (Participant 3)

“People need to understand “why” for them to buy into your strategy. A lot of time needs to be spent on this as you will have your detractors however if you communicate your “why” people start to understand the vision.” (Participant 8)

“Create the why. Create the story. Create the narrative. Give people the time to digest, the time to identify with the strategy and also the opportunity to exit. (Participant 3)

Articulating well the “why” and vision will, in turn, ensure strategic alignment through the common language used within the organisation.

"If we want to achieve that change, we really all do want to speak the same language." (Participant 3)

"You have to create a common language and this creation requires change management and learning." (Participant 2)

4.4.4 Collaboration and co-creation

Effective organizational learning encourages knowledge sharing/transfer and collaboration among different departments and levels of the organization which will ensure continuity.

"I think it's so important that you co-create. I think it as much as you might have key individuals that help champion and ambassadors of the strategy. It's very important that before it's finalized, it's concluded, whatever the case may be, that at different levels of the organization, there's an element of co-creating and input into that particular strategy." (Participant 5)

This can be achieved through the elimination of siloes in the organisation and allowing for the co-creation of digital strategies that align with organizational objectives.

"I guess it's more of a leadership question, but you need people that embrace the strategy and that actually do not think in siloes." (Participant 4)

4.4.5 Strategic Alignment

Participants considered that the alignment of digital strategies with organizational goals and objectives is critical. Organizational learning processes contribute to ensuring that digital strategies are integrated seamlessly with the overall strategic direction of the bank.

"Strategically, the executive has to say this is where we're going. This is how we survive. OK, this is how I get the ship from here today. If you don't

like the fact that you have to row differently, then you don't have to be on the ship, but the ship has to survive." (Participant 3)

"I think the first thing that's key is having a solid business strategy because the digital strategy works in support of a business strategy." (Participant 5)

This requires transparency and clarity on the business purpose, objectives and ultimately the overarching strategy of the organisation.

"So I feel like there has to be a sense of clarity in terms of what underpins that particular digital strategy. We do have the fascination as digital practitioners to think of our strategies almost in isolation to that of the organization." (Participant 4)

4.4.6 Customer obsession and centricity

The sentiment that understanding customer needs and preferences is crucial for digital strategy success was shared by most of the participants. They expressed how organizational learning processes enable banks to gain insights into customer behaviour, leading to the development of customer-centric digital strategies.

"Customer behaviours evolve, particularly in the digital topic, you need to learn from those changes and then develop strategies that you know go hand in hand with the customer needs." (Participant 6)

"You have to have a really good handle on your client's needs. And those needs are changing all the time. We have to fundamentally shift the way we think about designing businesses, building products, thinking about client experiences to be relevant in a digital era." (Participant 7)

In the process of digitization, you also require a balance between digital and human interactions.

“You also can't necessarily go so digital that you lose the ability to understand things. That's your processes within the bank become so codified or so rudimentary that the customer leaves the bank because they had horrible experience. You don’t ever want to be that disconnected.” (Participant 3)

One of the participants went further to say how this understanding of clients' needs can help bridge the digital divide.

“This also extends to the divide in the African context where many people still do not have access to the internet, so you need to understand the market and ensure your digital strategy is inclusive.” (Participant 8)

4.4.7 Continuous Improvement

Some participants emphasised the importance of continuous monitoring and refining of the digital strategy. In turn organizational learning promotes a culture of continuous improvement.

“You have to be very clear about your measurable outcomes that you are requiring, and how do we get there based on your digital strategy… your revenue uplifts, technology innovation for product and for client engagements, your cost targets around efficiencies, your people happiness when giving them the right digital tools.” (Participant 2)

“So, I think the last thing is then measurements, which is really tough here. It's not easy, but if you don't have it, you're flying blind.” (Participant 1)

This requires banks to leverage feedback loops both internally and externally and identify performance metrics to continuously refine and enhance their digital strategies over time.

“Are customers actually using it, are they appreciating (digital experience)? Is it the right thing? Because that is the whole point of these digital interactions that they're replacing people interactions.” (Participant 3)

“I think if you don't have organizational learning that's continuous and you develop a strategy, you will have a stagnant strategy that is a snapshot at a point in time but never evolved and you need a strategy that has emerging ideas that grow it, evolve it, improve.” (Participant 5)

4.4.8 Risk Management and Compliance

As digital strategies often involve inherent risks, some participants emphasised how organizational learning contributes to the identification, assessment, and management of risks associated with the adoption and implementation of digital strategies. They also mentioned the importance of understanding, adapting, and complying with regulatory changes which could pose challenges in the development and implementation of digital strategies.

“If you have an executive team or control functions, internal compliance teams and legal teams and press teams who want you to eliminate all risk, you will never progress.” (Participant 7)

“I think through things like regulatory compliance it is critical especially as the business becomes more digitally integrated, you do need to have all of those regulatory tick boxes checked.” (Participant 6)

4.5 Findings pertaining to Research Question 2

RQ 2: What are the critical elements of the digital strategy necessary for the digital transformation of South African banks?

In a pursuit to answer this research question, interview questions 4 & 5 were posed to participants and themes pertaining to **Internal** and **External** factors that need to be considered when formulating a digital strategy were unpacked.

Participants mostly agreed that having a deep understanding of the internal and external value chains and identifying the opportunities and threats of digitization are essential when formulating a digital strategy. This was summed up by two of the participants.

> *"So, we focus on five things. What do we do for our clients? What do we do for our colleagues? How do we modernize our internal capabilities or the core business? How do we change the way we work to be relevant in a digital era? How do we digitalize our DNA? How do we add a new strand into the DNA that is a digital strand? And then the fifth thing is how can we accelerate our innovation and value creation to clients by tapping into this big ecosystem that exists out there? There are really smart people out there. How do we leverage them?" (Participant 7)*

> *"If you look at the internal value chain, understanding all those elements that feed into your internal value chains and looking at efficiencies as well as scale opportunities, acceleration, all of that inside your internal value chains and then your external value chain at an industry level to say what is happening in those industry value chains and what is happening from a digitisation perspective and how do we participate in that." (Participant 2)*

Table 6: Codebook for RQ2

Internal Factors

Code	Category	Theme
Business Objectives	Alignment	**4.5.1 Business Strategy**
Goals		
Clear Vison		
Purpose		
Direction		
Not in isolation		
Shareholder value		
Right audience	Focus	
Tools		
Training	Capabilities	**4.5.2 Internal Resources, Capabilities & Culture**
Employee experience		
People strategy		
Process		
Data and analytics		
Systems and infrastructure	Commitment	
Investment		

Buy-in	Engagement	**4.5.3 “Buy-In” and participation**
Participation		
Vision		
Leadership	Change Management	
Communication		
Employees		

External Factors

Code	Category	Theme
Pain points	Customer centricity	**4.5.4 Customer needs**
Behaviours		
Preferences		
Customer journey		
Needs		
Target audience	Customer experience	
Heightened expectations		
Stakeholder engagement		
Investment	Financial analysis	**4.5.5 Trends in the technology landscape**
Emerging technologies		
Cost vs benefit		
Caution	Good understanding of the tech	
Monitor trends		
Competitors	Market Research	**4.5.6 Market trends and competitor strategies**
Fintechs		
Improve efficiencies	Benefits	
Lower costs		
Customer experience		
Ethics	Compliance	**4.5.7 Ethics and Regulatory Compliance**
Brand reputation		
Cyber risk	Safeguarding of data	
Trust		
Security		
Data		
Open Banking	Partnerships	**4.5.8 Ecosystems**
Fintechs		
Risks	Risk assessment	

Internal Factors

4.5.1 Business Strategy

Participants emphasized the necessity of aligning digital strategies with the broader organizational goals and imperatives. The insights underscore the paramount importance of aligning digital strategies with well-defined business objectives, emphasizing the need for a clear understanding of organizational goals and client journeys.

> *“What's very important or the key component that you need to look into is the business objective.” (Participant 12)*

“I think one is understanding what our identity is going to be. Understanding what the leadership requires and what their vision is, ensuring that there is alignment around that particular vision.” (Participant 9)

Additionally, the strategic selection of tools and the focus on crystallizing business objectives, setting goals for different units, and engaging the right audience emerge as crucial elements for successful digital initiatives.

“I think that before you speak technology, you need to figure out what you want to do and where you want to see yourself as an organisation and kind of be clear on the journey that you want to take your clients on and then you'll start looking at the tools that help to support that will help make that happen.” (Participant 5)

“Digital transformation journey or strategy is basically just approach through which you would leverage digital technologies to achieve the bigger set of objectives. And so, I guess the key to that is an understanding of those business objectives, understanding what exactly is it that we're trying to achieve.” (Participant 6)

Strategic clarity is deemed paramount, with executives expected to articulate a clear vision that integrates digital initiatives seamlessly into the overarching business strategy. This alignment ensures that digital strategies work cohesively to support and enhance the core objectives of the bank.

“So, I feel like there has to be a sense of clarity in terms of what underpins that particular digital strategy.” (Participant 4)

“But I think in our changing world now, to be relevant we need to be able to make the right decisions and to be able to understand directionally what the strategy is going to enable. And I think it goes back to the strategy and making sure the vision is clear.” (Participant 9)”

"Another very key thing about digital strategy is focus. OK, don't do everything. The very successful platforms are actually very narrow. It's about just creating the direction and being absolute." (Participant 3)

It was emphasized that a solid business strategy serves as the foundation upon which digital strategies operate, emphasizing the symbiotic relationship between the two.

"I think the first thing that's key is having a solid business strategy because the digital strategy works in support of a business strategy." (Participant 5)

"But I think there's something around using your purpose as a guardrail as to how your organizational strategy must translate and then your digital strategy as well. It does need to be underpinned by where the organization is trying to go and what it is trying to do." (Participant 4)

The participants stress that the digital strategy should not operate in isolation but should strategically complement and advance the broader organizational objectives, fostering a cohesive and purposeful approach to digital transformation within SA banks.

"But within that you need micro strategies for different use cases or different players." (Participant 5)

4.5.2 Internal Resources, Capabilities & Culture

Internal resources, capabilities, and organizational culture emerged as pivotal considerations in the formulation of digital strategies within SA banks. Participants underscored the significance of assessing current capabilities and resources, both digital and non-digital, and leveraging them to drive digital initiatives effectively. These can be viewed in the lens of people, process, data, and systems, and identifying the gaps and opportunities for improvement and innovation.

"I think we cannot move away from the fact that for you to be able to drive a digital strategy, you need to understand the resources that you've got at your disposal and the resources that you need to build. If you package your strategy according to your people, your process, your data and your systems, you are then able to identify continuously what some of those elements need to be in the future and then future-fitting yourself through your digital strategies." (Participant 11)

"You've got to have an understanding of what your internal capabilities are, the culture of the organization you're operating in." (Participant 7)

"And then thereafter, I think for me what's quite important is to perform a very clear audit and understand your current capability versus your future capability and the gap between here and where we are trying to go." (Participant 5)

Participants highlighted people capabilities and a workforce equipped with the requisite digital skills and a leadership team capable of navigating the complexities of digital strategy formulation as key.

"You have to define there's an employee experience part of the strategy. You have to define and then you talk about what technology will enable it." (Participant 10)

"Training is also a key component. I mean, for people to be able to use the technologies, you know, they need to be trained up on them." (Participant 6)

Participant 10 went further to stress the importance of having a solid people strategy as an element of the business strategy.

"Then I think you also need to be quite clear on your people strategy because that's going to be critical in terms of enabling how and what

should the future of your organization look like. Organizational learning for me is so critical for the execution of your business strategy. It must be owned by business and not human capital. HC is your business partner." (Participant 10)

It is key to also understand the processes that can be optimised through the digital initiative to unlock opportunities.

"I think processes and your process engineering capability is really critical as well. Foundationally, whether it's an organization, whether it's a fintech, whether it's a system, we know that there are processes that determine how it should function, and so your process capability or process engineering capability also needs to be quite mature or rather you need to be working towards a mature process engineering capability. That's where you start seeing the opportunities, sorting out inefficiencies to identifying how to solve some of the pain points and also present different opportunities where you can identify new revenue streams." (Participant 11)

Financial analysis was highlighted as also important by Participant 12 in understanding the investment required and the expected outcomes. This includes legacy system modernization of channels, platforms, and stable technology infrastructure.

"The technology infrastructure is very important these days to have a stable environment. As a client yourself, you wouldn't want to go to your bank's system and find that is id not working because the system is down. So, I think identifying and doing a thorough correct assessment of what type of technology, tools or infrastructure you are going to adopt, that's very important." (Participant 12)

Participants also underscored the importance of leveraging robust data analytics for decision-making and to gain actionable insights into customer behaviours, preferences, and expectations within the digital landscape. The use of data-driven approaches enables banks to not only identify current customer needs but also predict future trends, ensuring a proactive rather than reactive strategy. By harnessing analytics, banks can refine their digital strategies in real-time, aligning them with the ever-evolving demands of their customer base.

> *“It's your personalization in that you understand that different clients require different things at different life stages and you're able to leverage data to be able to trigger things at the right point in time for a particular clan.” (Participant 5)*

> *“This involves analysing of customer data and trends to tailor digital services and products.” (Participant 6)*

> *“Important element is data and analytics, you will be you will agree with me that target market data interpreted allows you to make an informed decision making and as a business, you can make continuous improvement because now you know exactly who you are targeting, what their needs are or the product that you need to put across.” (Participant 12)*

> *“And then if I think about some of the foundational capabilities and I mean data really constantly remains the core of everything that is digital. This goes hand in hand with analytics. And I guess it's also ensuring that your data capabilities across the organization can be reused, repurposed, and synthesized in order for you to be able to determine what contextual solutions you require.” (Participant 11)*

4.5.3 “Buy-In” and participation

The successful implementation of digital strategies hinges on securing buy-in from key stakeholders at various organizational levels. Participants stress the importance of involving employees, from leadership to frontline staff, in the digital strategy formulation process.

> *”And also I want to say having a vision and leadership support and buy-in is quite important. The leadership and the people on the ground need to come together to understand how this now synchronously works together going*

forward. Otherwise, you're going to have a very disparate workforce versus the strategy that's being developed." (Participant 9)

"You need to define what the leadership DNA of this organization is going to look like in the future. Because if you think about it, a digitally transformed business and a business that operated on the traditional construct, the leadership needs to think very differently." (Participant 10)

"If your leadership isn't part of it, then it's not going to happen." (Participant 2)

"Don't ignore the structures of the social hierarchy. Ensure that leadership cascades things down and that it sticks from that perspective." (Participant 3)

External Factors

4.5.4 Customer needs

Understanding your target audience and aligning with customer needs surfaces as a paramount external factor in the digital strategy formulation for SA banks. The significance of comprehending customer behaviours, preferences, and evolving expectations in the digital realm was stressed by participants. This theme emphasizes the pivotal role of organizational learning in gaining insights into customer needs, fostering the development of customer-centric digital strategies.

"Our customers are becoming more and more sophisticated and their understanding of products, and they're becoming a lot more exposed to information. So, it's also about making sure that you're responsive to customer needs." (Participant 5)

“Customers' behaviours evolve, particularly in the digital topic, so you need to learn from those changes and then develop strategies that you know go hand in hand with the customer needs.” (Participant 6)

“I think our customers are getting very digitally affluent and I think gone are the days where customer expectations were all controlled by us. So, it becomes very important to understand how do we satisfy customer needs in a way that is convenient, that is cost effective, that also solves for not only the customer needs, but also the banks needs as well.” (Participant 11)

Acknowledging the diverse and dynamic nature of customers and their requirements, participants advocate for a strategy that is not only digitally advanced but also deeply attuned to the personalized demands of the target market.

“It's very important to know your target audience so that when you build whatever that you are building in the form of a digital future, it will be sort of positioned to serve that specific target market.” (Participant 12)

“The first one for me is just understanding who you are solving for, who your customer are and what are their needs and pain points are. When you are trying to come up with solutions, you want to identify solutions that are going to add value and that are going to create experiences for your customers that will make them want to come back.” (Participant 11)

“You have to have a really good handle on your client's needs. And those needs are changing all the time.” (Participant 7)

This external factor also emphasises the imperative for banks to continuously learn from customer interactions and find ways to differentiate themselves, ensuring that digital strategies remain agile, responsive, and finely tailored to meet the ever-changing expectations of their clientele and improve their experience.

"So I think we have to be comfortable with the fact that customers have choice, but in order to compete, you must find how to differentiate. And I think digital transformation allows that because customers will leave you if they feel that you are unable to meet their customer experience." (Participant 10)

Participant 10 highlights the importance of taking customers on the journey through change management to ensure their needs help to inform the digital strategy. This requires an outside-in view and engaging with clients to understand their needs as opposed to an inside-in view that assumes what the client needs.

"So, stakeholder engagement is key. There's a big need to take your customer on the journey through proper marketing communication like change management because when I think about feedback, we get complaints where customers are like, I'm just a number in your world, you guys are just worried about your app, you don't care about us. That's just because we haven't done a good job at actually taking our customers along the journey." (Participant 10)

4.5.5 Trends in the technology landscape

Participants mentioned the necessity for continuous learning and vigilance to monitor emerging technologies. Keeping abreast of current and anticipated technological advancements is vital for crafting digital strategies that are not only contemporary but also resilient in the face of future changes.

"Understanding the trends that are going on within the technological landscape." (Participant 6)

Get a full understanding of the technologies and be ready if one of them properly launches. A good example is "chat GPT" and generative AI, which has had a big disruption just because of it was how it was, how quickly it caught everybody." (Participant 1)

“There's always an important view around financials as obviously you are going to have to invest and you are going to have to understand what that means for your earnings profile for the initial phases of the investment because any board or any shareholder would want to understand, OK, but what is going to be the outcome of the digital initiative and how long is it going to take you.” (Participant 10)

Some participants however cautioned against blindly adopting new technologies without understanding the needs, costs and benefits they could unlock.

“But I also think that a lot of the time, but I've seen is that we often, we buy new technologies and either we get sold a story of, you know, this is what the solution is and then you kind of learn that actually they kind of are using you to build some of their own technology.” (Participants 9)

“External factor is understanding the true growth potential of what you're doing. The technologies are a means to an end, which is what we should all look at it as.” Participant 3

4.5.6 Market trends and competitor strategies

In the context of the imperative digital transformation of SA banks, recognizing and responding to market trends and competitor strategies emerge as pivotal components of crafting effective digital strategies. Participants emphasize the significance of conducting thorough research to comprehend the competitive landscape, technological advancements adopted by peer institutions, and dominant market trends.

“It's critically important to also assess where your competitors are in this journey. But my point is, it's important to understand what your competitors are doing because if you are embarking on a massive journey like this and with digital transformation, there's always going to be challenges, there's going to be implications of customs etc. You don't also want to end up with

a situation where customs said OK, sure, your business is now in this so internally focused on getting yourself transformed, you forgetting about me. So I'm going to move to another competitor in the meantime. So it is understanding the competitive forces at play." (Participant 10)

"A good understanding of the environment when it comes to, you know where other banks at when it comes to their technological advancements. So you do need to do some market research." (Participant 6)

Participant 4 sees this analysis as an opportunity to take lessons from competitors who have already been on the journey and factor those learnings into the digital strategy formulation process.

"You can consume capabilities that people have already built for you and that gives you firstly the speed to market, the ability to experiment, do tests and learn without having to pay any school fees if I can put it colloquially." (Participant 4)

A specific example was provided by Participant 11 of how understanding competitors like FinTechs can help inform traditional banks' digital strategies.

"You can imagine also that you know a lot of traditional banks have got legacy systems. They've got huge organizations with lots of employees. While a lot of Fintechs start off on the cleanest lead, so I think generally what happens is that they've got less employees, they've got less legacy systems, they've got a lot of integration in terms of the systems that they offer in the solutions that they offer. And so if you are competing in that realm, it becomes absolutely paramount to identify and understand what capabilities a bank would need in order to drive their own digital transformation in order to reduce the cost of doing business. Because the cost of doing business then gets passed on to the customer. So trying to reduce the cost of doing business and also ensuring that they are doing it to meet those customer expectations in a quick, easily accessible and efficient way." (Participant 11)

4.5.7 Ethics & Regulatory Compliance

Ethics and Regulatory Compliance were highlighted by many participants considering the complex landscape of digital transformation for SA banks. This includes adhering to ethical standards and regulatory frameworks governing the financial industry.

> *"So you want to make sure that always what you're doing is ethical. And with these digital interactions being so close to social, and so visible. You really have to make sure you protect your brand and your reputation in that regard as well. So you don't want to be negatively associated." (Participant 3)*

Participant 10 emphasised the importance of stakeholder engagement, particularly with regulators in digital transformation strategies for banks.

> *"So I think for banks win when you walk on a journey like this, I think it's critically important one to make sure that your regulators are comfortable with, with this journey that you're on because you are going to be transitioning between two worlds." (Participant 10)*

With digital strategies often involving data-driven processes and technological innovations, ensuring ethical considerations in data usage, customer privacy, and cybersecurity becomes paramount, cited many participants, which in turn improves trust.

> *"Another component also service security for your customers. They need to know that once they go into that app website that there is a security layer that protects them from any notorious sort of things." (Participant 6)*

> *"And then I think with digital transformations also important to consider, what are some of the risks that would have an implication on your journey? So with this thing, obviously heightened cyber risk comes to play. We see that now, so it's important to understand that it's important to also sit back and*

reflect on, OK. But if I do have a big cyber event, do I have enough appetite to be able to absorb that?" (Participant 10)

"And it's also very important to also have a protection of your sensitive data and compliance regulations. Your infrastructure capability will help also in ensuring that your space is being protected and secured to a point that you will avoid having lot of and privacy and compliance issues." (Participant 12)

Participant 5 mentioned how taking advantage of some of these emerging can assist in safeguarding sensitive information.

"So some of these technologies are quite great in bringing about new ways to protect our information, amongst many other things that we need to protect." (Participant 5)

4.5.8 Ecosystems

This theme emphasizes the strategic imperative of open banking and collaborative partnerships. Participants underscore the necessity of fostering an open and interconnected ecosystem, outside of traditional banking confines. Open banking, as a pivotal element, involves strategic partnerships with fintech entities, technology providers, and various stakeholders in the financial landscape.

"And I do see the new thing that is emerging is more partnerships." (Participant 1)

"We have to think about how we can capitalize on the big partner ecosystem." (Participant 7)

"Other banks, what they've done is they going open banking, they're opening everything and they saying we'll hold the license, we'll do the governance, you pay for everything that comes through us." (Participant 2)

Participant 10 went on further to highlight the importance of assessing some of the risks that come with partnerships.

> *"The other thing is, are you going to partner or are you going to build yourself? Now obviously internally we love building, but it's with its own challenges. But if you do partner another external risk to consider is has this company actually delivered something like this before in a similar environment to your own." (Participant 10)*

> *"So if this partner is based in a region that ultimately could be impacted by geopolitical risk, it will have an implication on your journey." (Participant 10)*

4.6 Findings pertaining to Research Question 3

RQ 3: What challenges and enablers do banks encounter in integrating organizational learning into the digital strategy formulation process?

Understanding the challenges and enablers that banks encounter in integrating organizational learning into the digital strategy formulation process is essential for fostering successful digital transformations. Identifying and addressing these factors ensures a strategic, adaptive, and culturally aligned approach, crucial for navigating the complexities of the digital landscape and sustaining innovation in the banking industry. The themes below were derived from the data collected using interview questions 8 & 9 posed to the participants to help answer research question 3.

Challenges & Enablers

Code	Category	Theme
Leadership Commitment	Transformation	**4.6.1 Clear Vision and alignment**
Organisational goals		
Resistance		
Communication	"Hearts and minds"	
Taking people on the journey		
Change Management		
Culture		
Remuneration	Incentives	
Scorecard		
Rewards		

Investment	Financial commitment	**4.6.1 Resource Allocation and Capability Building**
Budget		
Tools		
Legacy systems and mindsets	Talent Management	
Recruitment		
Continuous learning		
Upskilling		
Right Talent		
Rapid change	Agile Practices	**4.6.3 Agile and Flexible Culture**
Pivot		
Flexibility		
Technology environment		
Direction		
Podcasts	Types of training	**4.6.4 Communication and knowledge sharing**
Chat GPT		
Buddy system		
Champions		
Chatbots		
Group Learning		
Rotating of staff internally		
Prototyping		
Experimenting		
E-learning		
Structured learning		
Stakeholder engagement	Communication	

Table 7: Codebook for RQ3

4.6.1 Clear vision and alignment

Participants noted that employees and leadership resist adapting to new digital strategies due to a fear of job displacement, lack of understanding, or a preference for traditional methods. Resistance to change and a lack of leadership support can impede the integration of organizational learning.

> *"The reason why people resist change or learning something new, is they go through a period of temporary incompetence. And that fear of temporary incompetence is often the biggest driver of resistance." (Participant 7)*

> *"So organizational learning, firstly, we're asking people to change what they do, asking them to think about things in a different way. You're asking them also to absorb a certain level of intimidation. OK, not everybody absorbs it." (Participant 3)*

Some participants highlighted that a traditional organizational culture may resist adopting a more dynamic, learning-oriented approach and stems from ingrained organizational cultures.

> *“So top of mind would be again because this is a very cultural heavy shift and with the cultural resistance and people resisting it purely because traditional banks might not easily absorb new technologies because of how orthodox they are.” (Participant 6)*

> *“I think that the enabler is, the culture. If you create a culture that you know allows people to really reimagine things and unlearn certain things, management thinking, assumptions, and stuff like that.” (Participant 4)*

Strong leadership commitment and support was highlighted by participants as pivotal. If leadership does not champion a cultural shift towards embracing continuous learning and innovation, employees may be hesitant to adopt new digital strategies. Leaders should actively promote and model a culture of learning in the digital age.

> *“The C suite has to also go through the learning. They also have to go through the change and if they can't speak the language, no one will. So the top down element of it is incredibly important because change is hard. Make sure leadership is as involved and as invested in the learning.” (Participant 2)*

> *“So I think it's the responsibility of the leadership of the digital strategy journey working in tandem with the L&D communities or the human capital specialists.” (Participant 5)*

This includes recognizing and rewarding innovation, valuing experimentation, and fostering a mindset that views failures as learning opportunities and linking this to scorecards was mentioned by participants.

“You need to make it part of the scorecard so that they do make it top of mind when it comes to how can they best utilize the tools that are available at their disposal for their betterment and of their organization. People are sort of geared towards incentives.” (Participant 6)

“The only way you change is to change what you measure them on. What you measure is what you get done. I'm going to link that is what you remunerate them on. If my score card doesn't say I have to transform my business then let me tell you that it won’t happen. As much as we all love what we do, we must remember you will never remove the fact that what people get paid for is what drives them. So it is about measurement which goes back to culture. You have to make sure you change the hearts and minds of the people.” (Participant 10)

Integrating organizational learning into digital strategy works best when aligned with broader organizational goals and a clear connection between learning initiatives and strategic objectives enhances effectiveness was cited by Participant 4.

“And I think a lot of organizations and grapple with the how to translate a purpose into a framework that guides you on where your priorities must be, where you want to play and therefore how you must pursue the digital transformation and agenda.” (Participant 4)

“I think there's always got to be a clear understanding of what we're trying to achieve. And then alignment at leadership level.” (Participant 11)

4.6.2 Resource Allocation and Capability Building

Participants highlighted that limited resources , both in terms of time and budget, can pose challenges in establishing effective learning mechanisms. Additionally, a workforce with inadequate digital capabilities may struggle to keep up with the demands of digital strategy.

> *“So I think one of the challenges it's the legacy, you know legacy of systems and legacy of mindset. What systems and processes do you actually put in place to ensure that you generate as much value out of the learnings that you make, whether it is failures, discoveries, whatever the case may be, is an important consideration.” (Participant 4)*

> *“Then the second thing is how do you then enable the learning strategy? It's employing tools that also enables the learning strategy, like being able to do podcast, actually building chat bots that people can engage with doing away with the old way of procedures and policies. And you can actually use things like Chat GPT, go and feed the corpus with the information and allow your staff to interact all the time.” (Participant 10)*

The investment required for implementing new digital strategies and learning initiatives can be substantial thus budgeting for this as mentioned previously by Participant 5 becomes crucial.

> *“It needs to come from leadership because a lot of learning, especially formal structured learning requires the right level of commitment and investment. Set aside budget for learning.” (Participant 5)*

Integrating organizational learning into digital strategy requires a workforce with digital skills. Participants highlighted that banks may face challenges in upskilling existing employees or attracting talent with the necessary expertise.

> *“Now, that's not just employing data scientists and engineers, etc, but it's appreciating that the workforce you currently have needs to be skilled differently to truly add value to the new world that you're trying to create in the future.” (Participant 10)*

"There should be a need of emphasizing the importance of ongoing skills development within the space to keep up with the pace of technological changes." (Participant 12)

4.6.3 Agile and flexible culture

Rigid organizational structures and processes can hinder adaptability to new learnings and rapid changes in the digital landscape. Cultivating an agile mindset is critical. This involves restructuring processes to be more flexible and responsive to changes, encouraging experimentation, and creating an environment where employees feel empowered to propose and implement innovations. Banks that foster an agile and adaptive organizational culture are better equipped to integrate organizational learning.

"And for me, there's a big aspect that there is very fast and continuous evolution. So the inability to pivot when you need to will definitely impact the success of how you digital strategies are formulated. If through organizational learning you are not able to identify when to pivot and where you need to, this will be a challenge because as I said things evolve very, very quickly in this environment." (Participant 11)

"There's a need to adopt an agile practice which encourages flexibility and great adoption for these changes, but I think what's also important, it's also there's a need for a digital leader directing the ship in that space." (Participant 12)

4.6.4 Communication and Knowledge Sharing

Participants mentioned that actively involving stakeholders at all levels is essential and this includes leadership, employees, and even customers. Limited involvement and engagement from key stakeholders, including leadership and frontline staff, can result in a lack of diverse perspectives in the learning process.

“I'm coming back to the same point, for me taking people on a journey is critical. And ensuring that the different players understand their roles and responsibilities. I also think it's not just where we want to be, but a good articulation of how we want to get there, because that then informs how quickly you want to move and that informs how much we want to spend and what resources we want to put to this thing.” (Participant 11)

”You need the buy in and you need people to want to be different and to want to change. So I think for me the organizational learning piece also speaks to the why we need to change. Umm so that people can actually go and learn without us having to force that learning process?” (Participants 9)

Banks that establish continuous learning programs, including regular training sessions, workshops, and access to educational resources, create a culture of ongoing skill development. Other types of learning initiatives and learning platforms that enhance the sharing of knowledge were identified as enablers by participants.

“I think group learning prototyping first environment where people can try things out and it's not for any gain. It's just for us to learn.” (Participant 5)

“So how do you make sure information is flowing so that learning is continuous because it's not only structured learning.” (Participant 7)

There is buddy systems, there is assigning them to certain programs and tasks where we can start doing some on the job learning and we start getting them to think in different way. Rotating people, rotating teams is important.” (Participant 5)

“So I guess you must also leverage technology for learning like e-learning platforms so you need to be able to identify some of the tools or digital technologies that are available.” (Participant 6)

It was noted as important to ensure that the learning strategy is kept updated to ensure it is fit for purpose.

> *"So I think the first thing, the first challenge I see is when the organizational learning strategy has not kept up with the digital transformation strategy of the business." (Participant 10)*

> *"The other challenge is what speed can you disseminate the information before everything changes again. Keeping it relevant and keeping learning in line with your pace of the transformation, it's really, really important." (Participant 2)*

Some participants were of the opinion that making training mandatory is crucial to equipping employees with essential skills, fostering a unified understanding of digital strategies, and aligning teams toward shared goals in the dynamic digital landscape.

> *"I also think you need to a force people into discomfort on a very regular basis." (Participant 5)*

> *"That is a hard thing to do because you need to get people excited to want to be there, and you need to make it mandatory." (Participant 2)*

One participant had a varying view from this expressing that the need to avoid prescribing too much and allowing for individual learning and exploration that translates into organizational benefit.

> *"Think sometimes we've prescribed too much to an extent that it doesn't enable organizational learning. So I think that for me the learning is around, let's understand the principles around why we're doing what we're doing. And then let's the power people to go and get the relevant learning so that they can go and apply that in their various businesses. So there's honestly a little bit more autonomy around the learning process and the skills*

requirements etc., but more alignment to what it is that we're trying to achieve." (Participant 9)

4.7 Summary of the findings

This chapter delved into the findings pertaining to three RQ aimed at understanding the dynamics of OL, DS development, and their integration in SA banks.

The analysis of data collated to answer RQ1 unveils key themes that unpack the impact of OL on DS development in SA banks. Participants emphasized the pivotal role of OL in fostering adaptability and agility, facilitating a fluid mindset to navigate the dynamic digital landscape effectively. A digital-first mindset, innovation culture, and learning culture were underscored as essential for aligning strategies with digital goals and cultivating a workforce equipped for the evolving digital era. The transformation of organizational culture is deemed critical, requiring leadership commitment to innovation and adaptability. Effective change management, collaboration, and co-creation processes are highlighted for successful cultural shifts and strategy development. Themes also emphasize the significance of strategic alignment with organizational goals, customer-centricity, continuous improvement, and effective risk management and compliance. Collectively, these themes offer an in-depth understanding of the complex interplay between OL and the formulation of DS in the unique context of SA banks.

Regarding RQ2, and through the participant interviews, a consensus emerged on the importance of aligning DS with broader organizational goals, emphasizing clarity in business objectives. The internal factors of business strategy underscored the interdependent relationship between digital and overarching organizational strategies. Additionally, internal resources, capabilities, and culture were highlighted, emphasizing the need to assess and leverage existing capabilities for effective digital initiatives. "Buy-In" and participation were deemed crucial, stressing the need for leadership support and involvement across all organizational levels. Externally, understanding customer needs emerged as paramount, requiring continuous learning and personalized strategies. Trends in the technology landscape were highlighted, advocating for vigilance in monitoring emerging technologies. Market trends and competitor strategies were also cited as key, urging banks to conduct thorough research for effective digital strategies. Ethics and regulatory compliance were identified as crucial in the complex digital landscape, emphasizing the importance of ethical standards and stakeholder engagement. Finally, the ecosystem theme underscored the strategic importance of open banking and partnerships, encouraging collaboration beyond traditional banking.

RQ3 explored challenges and enablers in integrating OL into DS formulation. Challenges participants highlighted included the resistance to change among employees and leadership, stemming from a fear of job displacement or a preference for traditional methods, which may all impede the learning process. Organizational culture, especially in traditional banks, may resist adopting a more dynamic, learning-oriented approach. Limited resources, both in terms of time and budget, and the need for a skilled workforce present challenges. Enablers encompassed leadership commitment, innovation recognition, a learning culture, flexible communication, and continuous knowledge sharing. Participants were of the view that leadership commitment, recognizing and rewarding innovation, and creating a culture that views failures as learning opportunities are crucial enablers. A flexible and agile culture, effective communication, and continuous knowledge sharing emerge as pivotal factors in successful integration. The debate on making training mandatory was highlighted, with some advocating for a balanced approach that encourages individual learning and exploration. By addressing these challenges with corresponding enablers, banks can create a conducive environment for continuous learning and effectively integrate this into the DS formulation process.

Figure 16 below fuses the themes arising from the data collected and the conceptual framework developed in Chapter 2 to help answer the three research questions.

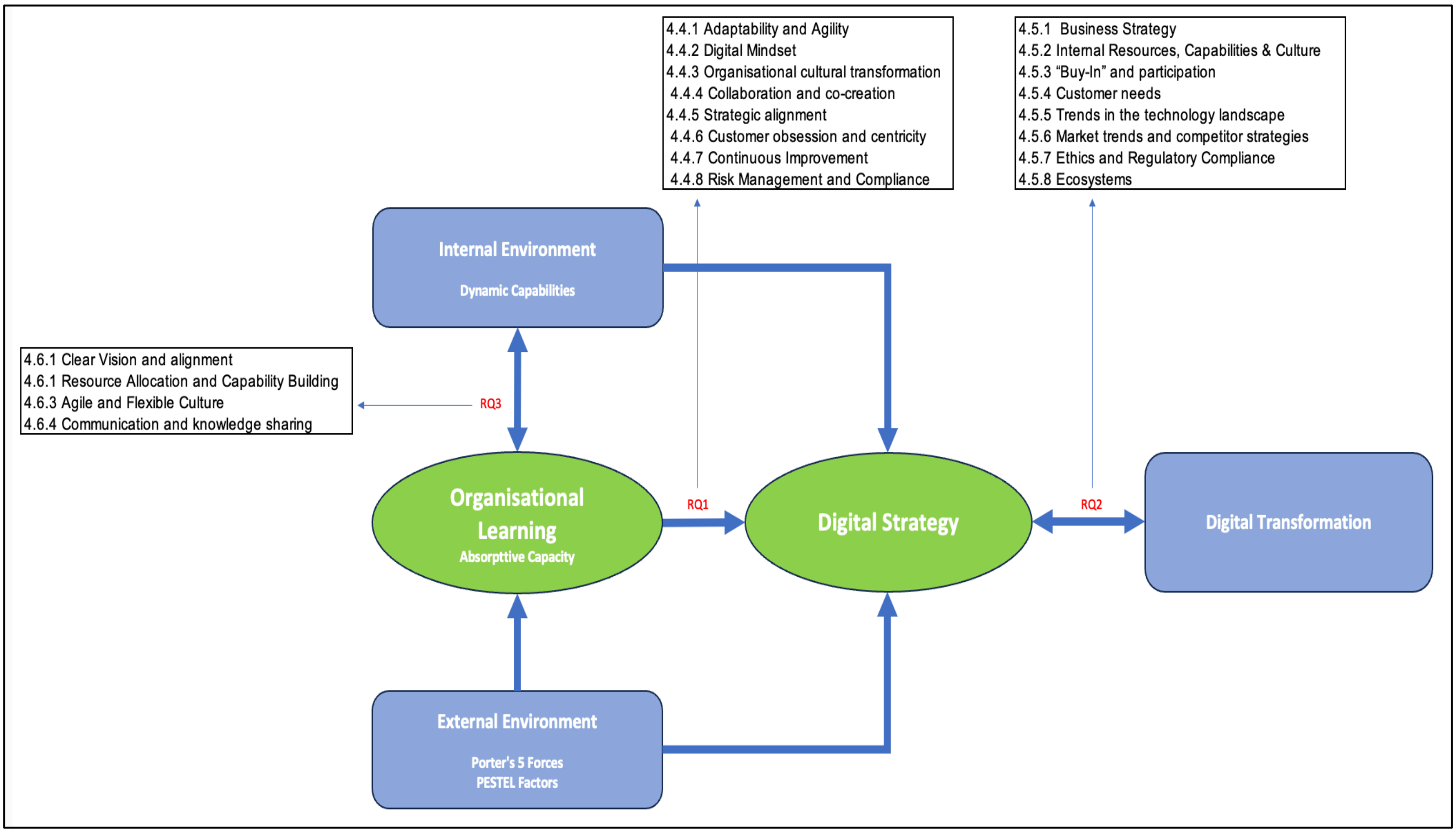

Figure 16: Conceptual Framework of OL's influence on the development of DS in SA Banks including related themes extracted from the data.

CHAPTER 5. DISCUSSION OF THE FINDINGS

This chapter looks to create a critical juncture where the results obtained from the data presented in Chapter 4 are discussed in the context of the literature reviewed and the conceptual framework established in Chapter 2. By adopting this approach, the discussion within this chapter aims to extract meaningful insights from the dataset, thereby contributing to a nuanced understanding of the complex relationship between OL, DS development, and the unique challenges faced by SA banks. The insights will be presented using the dominant themes that emerged from the data while attempting to answer the 3 RQs and validated against the literature review which ensure credibility, dependability, and confirmability of the collected data.

5.1 Introduction

The banking industry, globally and in SA, faces significant technological disruptions (Shan & Wade, 2023), driving the need for continuous adaptation and modernization. DT is imperative for banks to meet evolving customer needs and navigate industry complexities. Understanding and implementing DS require ongoing OL, essential for enhancing capabilities and remaining competitive in the digital era.

It was established in the preceding chapters that the successful DT of an organization is contingent upon the establishment of a robust and integrated DS with clearly defined objectives (Correani et al., 2020). Such a strategy serves as the foundation for reshaping existing business models to align with digital imperatives (Schallmo, Williams, & Lohse, 2019), thereby facilitating the organization's transition into the digital era while ensuring strategic alignment and coherence.

To comprehensively explore the relationship between DS and OL within the context of SA banks, various theoretical frameworks were leveraged. Porter’s 5 Forces (Porter, 2008) and PESTEL analysis were employed to gain insights into the external environment, while the Dynamic Capabilities framework (Teece et al., 1997) was used to delve into the internal organizational dynamics during DS formulation. Additionally, to deepen the understanding of OL, the Absorptive Theory was examined. Furthermore, to underscore the importance of OL in this process, the theory of Absorptive Capacity (Zahra & George, 2002) was integrated. The following section of this paper will use these frameworks and overlay them with themes identified in the data collection process to derive meaningful insights.

5.2 Discussion pertaining to Research Question 1

RQ 1: How does organisational learning influence the development of digital strategies in South African banks?

Embracing a culture of continuous learning enables banks to acquire knowledge about emerging technologies, market dynamics, and customer preferences, informing the development of their digital strategies (PWC, 2017). Basten & Haamann (2018) have noted the importance of OL for organizations to react swiftly to unforeseen situations, providing them with a competitive edge over rivals with lesser OL capacities, which according to (Leavitt, 2011) should be high in priority for organisations. Banks need a clearly defined strategy, suitable organizational structure, digital skills, supportive culture, and balanced governance to effectively move towards their desired digital future state (Naimi-Sadigh et al., 2022). Understanding the influence of OL on DS development in SA banks is thus crucial for enhancing digital capabilities and achieving sustainable competitive advantage in the evolving digital landscape. The next section will look into the themes identified from the data collection process while attempting to address RQ1.

5.2.1 Adaptability and Agility

Louw and Nieuwenhuizen (2020) underscore that effective DS formulation and implementation transcend mere technological investments. Their assertion emphasizes the imperative of a profound comprehension of the organizational context and the capacity to learn and adapt to emerging digital opportunities and challenges. This view was shared by half the participants stating that OL fosters agility and flexibility, enabling banks to be more responsive to the quickly evolving digital world. The necessity for organizations to continuously evolve their DS (De Martini, 2018), requiring agility and responsiveness to changing environments (Holotiuk & Beimborn, 2017) was also emphasised in the literature review. This is due to the time and speedy sensitivity of consumer, market, technology changes taking places in the business landscape (Ellström et al., 2022). The authors argue that maintaining a swift strategic response to shifts in the business environment is crucial for survival. Two participants agreed with this standpoint highlighting that the strategy should not be rigid and needs to move in parallel with the changes in the environment.

5.2.2 Digital Mindset

Seizing opportunities in DS development necessitates the continual enhancement of digital skills and supplementary resources (Teece, 2007). In agreement with this viewpoint, Holotiuk & Beimborn (2017) stated that companies need to increase their digital literacy to foster the competencies needed for strategy formulation, allowing them to identify opportunities and challenges (Priyanto et al., 2023). Bernard Marr (2023) goes as far as saying that Digital IQ is key to ensuring business resilience. Participants concurred by emphasizing the imperative for SA banks to prioritize continuous digital skills development to align with DS objectives. They also highlighted how OL is pivotal in shifting cultural norms towards a digital-first mindset and ensuring the workforce acquires and updates relevant digital skills, thus anticipating the demands of future strategies. This shift in mindset was noted by Bawden (2008) while giving meaning to the concept of digital literacy to be more than just the ability to use digital tools but a change in unique thinking. This proactive approach anticipates the demands of future strategies, emphasizing the importance of investing in both technical and non-technical skill sets (Ivaldi et al., 2022) required for navigating the evolving digital landscape.

5.2.3 *Organisational Culture Transformation*

Organisations need to cultivate a culture that embraces continuous learning and innovation to effectively adapt to the dynamic digital landscape (Ruel et al., 2021) and drive successful DS formulation. This strengthens an organisation's sensing capabilities necessary for DT (Ellström et al., 2022). A majority of participants believed that to effect any transformation there needs to be a fundamental shift in the culture of the organisation.

According to Ruel et al. (2021), an effective DBS emerges from organizational group learning and change processes, which are facilitated by the transformation of individual knowledge to organisational knowledge (Basten & Haamann, 2018) and supported by effective leadership. While some individuals within the organization may possess the necessary skills, it is preferable to incorporate scanning, interpretative, and creative processes within the organization itself (Ivaldi et al., 2022). The company becomes vulnerable if it depends only on a small number of people's cognitive capacities for sensing, creativity, and learning activities thus it needs to be an organisation-wide endeavour (Teece, 2007). Participants agreed with this standpoint and stressed the importance of fostering a learning culture throughout the organization to empower employees at all levels. This culture should be ingrained from top executives to front-line staff, encouraging continuous learning as part of the organizational ethos. Jiménez-Jiménez and Sanz-Valle (2011) state that organizations that have a strong learning culture establish a robust foundation to gain a competitive advantage and enhance their performance. Consequently, these entities exhibit greater agility and can swiftly adapt to emerging challenges compared to their competitors, enabling them to maintain a sustained competitive edge over time.

Discovering opportunities hinges on both information accessibility and the capacity to perceive, discern, and influence developments, which, in turn, depends on individual competencies and the organization's knowledge and learning capabilities, particularly in understanding user needs and pioneering solutions (Teece, 2007). The importance of swiftly accessing and leveraging information to avoid obsolescence and derive value from learning was noted as key by participants. Creating a learning culture, sharing content continuously, and harvesting insights were highlighted as crucial steps to ensure the relevance of DS amidst dynamic market changes and then linking it back to organisational benefit. For incumbent banks, it becomes even more important to build more digital sensing capabilities for example knowledge repositories in order to identify opportunities and threats (Ellström et al., 2022).

Seizing capabilities entails effectively capitalizing on opportunities through strategic initiatives like creating innovative digital offerings (Teece, 2007). This necessitates organizations not only investing in research and development and safeguarding their intellectual property but also adopting technologies to gain a competitive edge. Participants agreed by emphasizing the importance of allowing for pure research and development initiatives without immediate financial pressures, stressing the need for resilience in investment. This was supported by Teece (2007) and Kitsios et al. (2021) with a viewpoint that investment is paramount for an innovative organisation, necessitating significant expenditures on R&D alongside the careful cultivation and protection of intellectual property, as well as the generation and implementation of innovations vital for sustaining competitiveness. Additionally, participants highlighted the necessity of creating time and space to foster an OL culture. Moreover, participants emphasized the importance of considering technical debt and maintaining patience and adaptability when outcomes do not meet initial expectations, emphasizing the need for flexibility and perseverance.

Jiménez-Jiménez and Sanz-Valle (2011) assert that incorporating OL and innovation into business operations leads to better business performance, with the impact of OL extending to innovation. This necessitates organisations to create a culture that embraces failure as a "prerequisite for success" (Holotiuk & Beimborn, 2017). Participants in support of the authors underscored the significance of fostering a culture where mistakes are viewed as opportunities for learning and growth rather than failures, emphasizing the importance of reflection and continuous improvement in OL processes. This cultural transformation towards innovation, according to participants, is essential for the continuous development of creative and effective DS in the ever-evolving digital landscape. The pressure for organizations to enhance their continuous learning ability as a crucial prerequisite for effectively coping with innovations is further emphasized by Schuchmann and Seufert (2015). They argue that the current dynamic changes in the finance market, the emergence of new competitors, and the lack of differentiation in banking services contribute to this urgency.

Effective storytelling and communication of the digital vision which is part of change management were highlighted as success factors of a DS (Holotiuk & Beimborn, 2017). This was highlighted by many of the participants as this will win the "hearts & minds" of the organisation and ensure buy-in of the workforce.

5.2.4 Collaboration and co-creation

It was noted in the literature that a DS is intrinsically trans-functional as it functions as a connective tissue that brings all functional and process strategies together, in contrast to cross-functional strategies, which are limited to certain domains (Bharadwaj, El Sawy, et al., 2013). The idea of DS is more expansive than that of traditional IT strategy (Matt, Hess & Benlian, 2015), consequently, the business and IT teams must work closely together and in tandem to design such a strategy. This position was shared by participants highlighting the need to remove siloes within the organisation and for co-creation to take place across various departments and levels in the organisation and leadership needs to drive this. Holotiuk & Beimborn (2017) have found that the process of collaboration drives idea generation and innovation which could thus form input into a DS. Moreover, Leavitt (2011) stresses that the challenges that organisations face today require the intelligence of a collective group and that individual learning is simply not enough. This was backed up by one of the participants who agrees that there is value in having key individuals who can champion the strategy, but its formulation should incorporate the inputs of the collective.

5.2.5 Strategic Alignment

As highlighted in the above theme, strategic alignment is important in the formulation of a DS through collaboration. This is supported by Ruel et al. (2021) when they identified strategic alignment to be one of the key factors that DS emerge from. They note that the effectiveness of OL in achieving desired business outcomes relies on its fittingness to support the overarching business strategy. Participants agreed and went on further to emphasize the critical importance of aligning DS with organizational goals and objectives, stressing that OL processes contribute significantly to this alignment, ensuring seamless integration with the bank's overall strategic direction. Transparency, clarity, and a solid understanding of the business purpose and objectives were highlighted as essential for effective alignment and strategic coherence.

5.2.6 Customer obsession and Centricity

This theme emphasizes the need for banks to prioritize understanding and meeting customer needs and preferences in the digital landscape. OL processes enable banks to continuously gather insights into customer behaviours, preferences, and trends, facilitating the development of customer-centric digital strategies. As mentioned in the preceding themes, it is important for banks who are prone to disruption due to rapid technological changes to bolster their sensing capabilities including for changes in customer behaviours and preferences (Yeow et al., 2018). Most participants highlighted how OL processes provide insights into evolving customer behaviours, facilitating the development of customer-centric digital strategies. Emphasizing the need to adapt strategies to align with changing customer needs, participants stressed the importance of rethinking business design and client experiences to remain relevant in the digital era.

By fostering a culture of learning and adaptation, banks can refine their digital offerings to provide personalized experiences and innovative solutions that resonate with their customers, ultimately driving competitiveness and success in the digital era. This holds significance for conventional banks facing competition from internet-based or digital-only counterparts, as the latter provides services solely through online platforms like websites or smartphone apps, posing a challenge to traditional banking models by removing the need for physical branches to handle account establishment and management (Louw & Nieuwenhuizen, 2020). One participant emphasized the risk of becoming excessively digital-centric, cautioning against the potential consequences of overly standardized or rudimentary processes within banks. Such an approach may alienate customers, leading to poor experiences and ultimately prompting them to seek alternatives. Therefore, maintaining a delicate balance between digital innovation and human touchpoints is crucial to ensuring a positive customer journey and fostering long-term relationships in the digital banking landscape.

5.2.7 Continuous Improvement

Continuous improvement, as highlighted by Ruel et al. (2021), mirrors the iterative nature of DS, emphasizing the need for ongoing refinement and evolution in both formulation and implementation processes. This iterative approach acknowledges the dynamic nature of the digital landscape, encouraging organizations to continuously adapt and enhance their strategies to remain relevant and effective. Most participants agreed with this and underscored the necessity of continual monitoring and enhancement of the DS, aligning with the idea of continuous improvement advocated by OL. Louw & Nieuwenhuizen (2020) and Ellström et al. (2022) all support that OL, involving the uptake, enhancement, restructuring, and rejuvenation of resources and competencies, is crucial for empowering banks to adeptly manoeuvre through the digital terrain. Teece (2007) further states that organizations must continuously create novel goods, services, or processes in response to new technical or market opportunities. This usually requires funding as well as commercialization initiatives. This is in line with the opinion of other participants, who stressed the need to invest in the creation of digital strategies to take advantage of new possibilities and maintain competitiveness in the ever-changing market. They also emphasized the importance of setting clear measurable outcomes and metrics to guide the refinement process, recognizing the challenges yet essentiality of effective measurement in driving strategic success which is an insight that did not come out strongly in the literature.

A critical success factor of DS can be exemplified by feedback loops both internally and externally which ultimately enhancement of the DS through refinement (Holotiuk & Beimborn, 2017; Yeow, Soh & Hansen, 2018). This key insight was echoed by participants in that banks need to enhance their DS, by using feedback loops internally and externally, along with defining performance metrics to iteratively refine their approaches over time. This entails assessing customer engagement and satisfaction with digital experiences to ensure they effectively substitute human interactions. Without ongoing OL, strategies risk becoming static snapshots, rather than evolving frameworks that integrate emerging concepts and improvements.

5.2.8 Risk Management and Compliance

In the process of identifying opportunities, organisations need to also sense investment, regulatory, and cybersecurity risks associated with the digital journey they wish to embark on and adapt the DS accordingly (Lin et al., 2022; Schallmo et al., 2019). Several participants also highlighted how OL plays a pivotal role in identifying, evaluating, and managing risks inherent in DS. They underscored the significance of comprehending, adjusting to, and adhering to regulatory modifications, which may present hurdles during the formulation and execution of DS. "Eliminating all risk impedes progress," noted one participant, emphasizing the need for balance in risk management. Another participant stressed the criticality of fulfilling regulatory requirements, particularly in an increasingly digitally integrated business environment.

5.3 Discussion pertaining to Research Question 2

RQ 2: What are the critical elements of the digital strategy necessary for the digital transformation of South African banks?

According to Holotiuk & Beimborn, 2017, there has been scarce scholarly research to date into the development of a DS underscoring the need to explore the process of strategy formulation to achieve a thorough comprehension. In order to answer RQ 2, PESTEL, Potter’s 5 Forces and Dynamic Capabilities theories were employed. This is as depicted by Armstrong & Lee (2021) and further corroborated by Grant (2022). Figure 4 in Chapter 2 illustrates how strategy unfolds in real-world scenarios, emphasizing the essential role of assessing both internal and external organizational contexts in strategic decision-making. Understanding the external context involves gaining insights into various factors such as customers, competitors, suppliers, and market dynamics, while the internal context necessitates a thorough assessment of available resources, acquisition of necessary resources, and use of core competencies to maintain a competitive edge (Armstrong & Lee, 2021). Bharadwaj et al. (2013) supported by Teece (2007) highlighted the importance of not only enhancing internal operations or responding to external competition, but also dynamically adapting to the competitive environment when developing DS.

5.3.1 Business Strategy

The start of a DT journey requires a clear vision and business strategy to address business problems (De Martini, 2018). Similarly, an organization's DS ought to complement its overall business strategy (Ruel et al., 2021). BCG (2022) supported by Correani et al. (2020) has stated that only 30% of organisations successfully implement DT programs inside their enterprises. This shortcoming is frequently linked to a strategy that does not outline how it will use resources, capabilities, and technology to achieve its goals or have a clear vision for the future (BCG, 2022; Ellström et al., 2022). Most participants were in agreement with these views as they stressed the critical need to ensure that DS are closely aligned with the overarching organizational goals and objectives. They underscored the importance of establishing a clear connection between digital initiatives and broader business imperatives, highlighting the importance of comprehending organizational objectives and customer journeys. One participant emphasized the centrality of business objectives, while another highlighted the necessity of understanding organizational identity and leadership vision to ensure alignment with the overarching vision. In their study (Ellström et al., 2022) have identified another challenge when aligning the DS to a business strategy, and it is that, or focus and prioritization, which necessities clear goals that need to be well communicated to the whole organisation.

5.3.2 Internal Resources, Capabilities & Culture

Organisational capabilities are the dynamic internal capabilities that an organisation uses to adapt to the changing factors using internal processes resulting in a competitive advantage (Ruel et al., 2021). The process of modernizing or reconfiguring capabilities, known as capability substitution, is crucial as it allows organizations to replace obsolete capabilities with newer ones, often requiring them to challenge existing norms and directives (Teece, 2007). To address the ever-present threats in the digital era, banks must continuously adapt their DS and the frequency of strategy adjustment needs to match its renewal of dynamic capabilities through OL.

For organisations to harness the value of the opportunities being sensed, they need to ensure there are capabilities ready to capture these opportunities. This can be done through the mordenisation of legacy systems which requires investment, and updating of processes (Ellström et al., 2022). The authors also went on to say that infrastructure management is key, so that innovative and business models are not built on old infrastructure which can result in high maintenance costs. These decisions would need to be considered when formulating a DS to ensure there is an alignment of efforts from both the business and IT sides of the organisation (Brown & Brown, 2019; Yeow et al., 2018), especially given the significant investments in technological products within the banking sector (Kitsios et al., 2021). Participants supported this view and emphasised the need to evaluate the financial investment required to update and maintain the technology infrastructure.

The usage of digital tools results in the creation of large amounts of data. With this data, Ross et al. (2016) found that adopting technologies such as big data and analytics can assist organizations in predicting new value proposition opportunities using analytical models and help them make better data-driven decisions (Holotiuk & Beimborn, 2017). This was supported by participants who emphasized the crucial role of leveraging robust data analytics for informed decision-making and gaining actionable insights into customer behaviours and preferences within the digital landscape. Using data-driven approaches enables banks not only to understand current customer needs but also to predict future trends, facilitating proactive strategy development. By harnessing analytics, banks can continuously refine their digital strategies in real time, ensuring alignment with the evolving demands of their customer base.

The renewing of people capabilities should be the result of organizational group learning and change processes, which rely on effective leadership that supports and facilitates these processes (Ruel et al., 2021). Participants were in agreement with this and went on further to assert that a solid people strategy is crucial in the execution of the digital business strategy.

5.3.3 "Buy-In" and participation

Ruel et al., (2021) recognized that while leadership should take the lead in propelling DS, it's equally important to engage stakeholders from all organizational levels in its formulation, underscoring the need for OL to be embraced throughout the organization. This requires executive alignment of the goals and objectives of the organisation which will cascade down to the rest of the business (Kimberling, 2023). Participants were in support of this view and stressed the crucial role of strong leadership commitment in fostering a cultural shift towards continuous learning and innovation. Leadership, including the C suite, was deemed essential in modelling and promoting a culture of learning in the digital age. Without active support from leadership, employees might be hesitant to embrace new digital strategies, highlighting the importance of top-down involvement in the learning journey.

5.3.4 Customer needs

DT has significantly influenced the bargaining power of customers as many goods and services now have new features and functions that provide customers with more alternatives (Correani et al., 2020). Customers also now have access to a wide range of banking options, can easily compare services, and switch financial service providers rapidly (Schuchmann & Seufert, 2015). This poses a threat to traditional banks which is further exacerbated by the entry of non-banking corporate institutions and informal banking markets that provide banking facilities to the underbanked and unbanked, creating a systematic change towards obtaining financial access (Brett, 2019). Banks must thus leverage DS to enhance customer experiences, improve customer loyalty and trust, offer personalized services, and build strong customer relationships to retain their customer base as a strategic lever (Ross et al., 2016) This need geared towards customer obsession was shared by many participants highlighting how gaining these insights can contribute to the development of customer-centric DS. They also stressed the need to continuously engage with customers and ensure their DS remain flexible, responsive, and finely tuned to meet evolving customer expectations and enhance their overall experience. This was echoed by De Martini (2018) who states that a DS should aim to address the real business challenges faced by both the organization and customers and determine whether the proposed digital technologies can aid in solving these challenges. When considering sociocultural factors, the Covid-19 pandemic magnified the digital divide between developing and developed countries (Magida & Armstrong, 2023) contributed by the need for more digital interactions. This was touched on by one of the participants who emphasized the need to deeply understand customer needs and how strategies can be designed to bridge these digital divides. Throughout another participant highlighted the need to take customers on a journey through the change management process to ensure their needs inform the DS.

5.3.5 Trends in the technology

The role of technological factors is paramount in DS formulation, with advancements such as mobile devices, AI, and data analytics reshaping the banking sector. SA banks must remain vigilant of technological advancements and use them to bolster their digital prowess. The evolution of DS should promote the monitoring of trends and integration of emerging technologies to enhance organizational value propositions, as advocated by Bharadwaj et al. (2013). Participants echoed the importance of continuous learning and vigilance in monitoring emerging technologies, aligning with the literature's emphasis on technological factors as pivotal in DS formulation. They stressed the need to understand technological trends and anticipate disruptive innovations, highlighting the significance of being prepared for rapid advancements. However, participants also emphasized the importance of a thorough understanding of the financial implications associated with adopting new technologies, indicating a pragmatic approach to investment decisions. Some cautioned against blindly embracing new technologies without assessing their alignment with organizational needs and the potential risks involved. This aligns with the literature's call for strategic adoption of technologies to enhance organizational value propositions rather than hasty implementation. Overall, while participants emphasized the transformative potential of technological advancements, they also underscored the need for strategic evaluation and prudent decision-making to maximize the benefits of digital initiatives while mitigating risks. This consideration when formulating a DS is summarised by literature using the statement: “It’s not about changing the way we do technology, but changing the way we do business” (Holotiuk & Beimborn, 2017)

5.3.6 Market trends and competitor strategies

Digitalization has intensified competition within the banking industry as traditional banks and new digital players vie for market share. Ross et al. (2016), in their study emphasized the need to anticipate and respond to potential new entrants in the market as technologies are easily available, thus small businesses that can incorporate new applications fast have an early edge. This requires having a good understanding of how the world is changing and what risks and opportunities emanate from these changes so that they can adapt accordingly (Lin et al., 2022) Participants emphasized the significance of conducting thorough research to comprehend the competitive landscape, technological advancements adopted by peer institutions, and dominant market trends. One participant further recognised the opportunity of taking lessons learned from competitors to inform the development of DS to avoid the same pitfalls.

5.3.7 Ethics & Regulatory Compliance

Organisations need to consider the ethics concerning the use of emerging technologies (Lin et al., 2022). The authors also mentioned that the use of these technologies creates large data which is becoming more of an asset and differentiator in this competitive landscape; it is thus important to intensify the safeguarding of it. One participant cited how taking advantage of some of these emerging can actually assist in safeguarding sensitive information. Research has found that financial institutions are the least trusted industries in the public perception, it therefore becomes paramount to improve customer trust in the sector. Many participants were in support of this highlighting that ensuring ethical considerations in data usage, customer privacy customer privacy, and cybersecurity becomes paramount, which in turn improves customer trust. To ensure that their DS are in accordance with the applicable laws and regulations, banks need to navigate the legal landscape which encompasses compliance with regulatory requirements, data protection laws, and intellectual property rights. These strict guidelines outlined in the Financial Sector Regulation Act 9 of 2017 can influence “where” banks play thus the DS needs to consider this. In the context of SA banks, acts such as POPIA and PASA are such regulatory requirements that banks in SA need to comply with (Modiba, 2020). One participant supplemented this view by emphasising the importance of stakeholder engagement, particularly with regulators in DT strategies for banks.

5.3.8 Ecosystems

Correani et al. (2020) have found that technological advancements and changing customer expectations have the potential to decrease barriers across industries allowing new players such as Fintech start-ups to disrupt the traditional banking model (Wewege, Lee & Thompsett, 2020; PWC 2017). This has also facilitated interactions, collaborations, and alliances among businesses operating in diverse sectors which presents an effective strategy to address this threat by expediting the DT process in traditional banks. In turn, this networking creates a digital ecosystem that allows banks to better understand their customers’ preferences which in turn helps them customise their offerings and offer panoramic solutions (Lin et al., 2022) that can generate beneficial synergies (Ruel et al., 2021). It also enables organizations to venture into new markets, opening opportunities for diversification that can be scaled up with emerging technologies (Bharadwaj et al., 2013). Participants were in agreement with these stances and underscored the necessity of fostering an open and interconnected ecosystem, outside of traditional banking confines. They encouraged partnerships like open banking, BAAS (banking as a service) and strategic partnerships with fintech entities, technology providers, and various stakeholders in the financial landscape. Although this collaboration can bring about benefits, two of the participants highlighted the importance of assessing some of the risks that come with partnerships; one was the credibility of the partners and the geopolitical risks depending on where the partner is based. This can be exemplified by the recent geopolitical instability caused by the war in Ukraine resulting in heightened risks and market volatility (Lin et al., 2022). For organisations that are in partnerships or outsource some of their activities, the threat of bargaining power of suppliers, specifically technology vendors and platform providers can be even more pronounced, requiring continuous realignment of partners and suppliers in response to the changing environment (Bharadwaj, et al., 2013). This plays a crucial role in shaping banks' DS and requires banks to carefully assess their relationships with technology suppliers and negotiate favourable terms to acquire the necessary digital capabilities and innovations to remain competitive.

5.4 Discussion pertaining to Research Question 3

RQ 3: What challenges and enablers do banks encounter in integrating organizational learning into the digital strategy formulation process?

This section of Chapter 5 navigates the complex landscape wherein financial institutions strive to harness the power of OL to direct their DT journey. Amidst the dynamic shifts and heightened competition within the financial market of SA (Jenkin & Naude, 2019), the significance of OL in steering the process of DT assumes a very important role for banks. By thus identifying the challenges and enablers in this integration process, we can gain valuable insights into the complexities inherent in shaping effective DS that propel banks towards sustainable growth and competitive advantage in today's rapidly evolving digital ecosystem. The dominant themes identified during the data collection in answering RQ3 supported by literature will be discussed next.

5.4.1 Clear vision and alignment

As previously identified by De Martini (2018) the start of a DT journey requires the identification of clear goals of the organisation, and then crafting a roadmap of how the digital vision will help the organisation reach its goals (Bharadwaj, Sawy, et al., 2013; Brown & Brown, 2019; Holotiuk & Beimborn, 2017). The integration of OL to the DS was noted by participants to work best if it aligned with the goals of the organisation. They further highlighted that a lack of vision and understanding of the vision leads to resistance to change and adoption of the DS. Another contributor to DT failure noted by Ellström et al., (2022) lies in leadership's inability to translate the vision and create urgency for mobilization in the organisation around it (Senge, 2006). Participants agreed with the authors and emphasized the crucial role of strong leadership commitment and support in driving cultural shifts toward continuous learning and innovation. They stressed that leaders need to actively promote and model a culture of learning to encourage employees to adopt new DS.

5.4.2 Resource Allocation and Capability

Ritala et al. (2021), also supported by Ellström et al. (2022), point out that the success or failure of digitalization depends not only on the technology itself but also on the capabilities, skills, organisational habits and mindset of employees. It therefore becomes very crucial to understand how the organisation restructures its resources, processes, and relationships to adapt to the demands of digitalization (Teece, 2007). This was supported by many of the participants who highlighted how limited resources, can present obstacles in establishing effective learning mechanisms, which may hinder the workforce's ability to keep pace with the demands of DS. Participants also noted challenges related to legacy systems and mindsets, highlighting the importance of implementing systems and processes to maximize value from learning experiences.

Chalal & Bakshi (2014) indicated in their study that intellectual capital, both technical and non-IT skills (Holotiuk & Beimborn, 2017), stemming from OL and innovation, directly and positively impact a bank's competitive advantage and performance. Participants stressed the challenge that organisations face in attracting talent that has the required expertise in this digital era which necessitates ongoing skills development to align with the rapid pace of technological changes in the digital landscape.

Seizing opportunities in DS development necessitates the continual enhancement of technological capabilities, complementary assets, and the development of innovative competencies (Ivaldi et al., 2022). The choice of what technologies to invest in needs to be tightly aligned to the overall strategy of the organisation which requires a shift in how organisations think and deploy technologies (Ellström et al., 2022). This is even more imperative, considering substantial investments directed towards technologies and designs anticipated to gain widespread marketplace acceptance (Teece, 2007) and that the banking industry is said to spend three times more on IT investments than any other industry (Kitsios, Giatsidis & Kamariotou, 2021). One participant agreed and highlighted the need for resource planning as the investment required for implementing new DS and learning initiatives can be substantial, thus budgeting for this becomes crucial.

5.4.3 Agile and flexible culture

Holotiuk & Beimborn (2017) have noted that the core of a DS lies in the ability of the organisation to swiftly move at the pace of the changes taking place in their environment which allows them to learn and scale rapidly. The concept of dynamic capabilities is key in this regard. Furthermore, Ivaldi et al., (2022) have highlighted in their study the need for the global workforce to reconsider career paths due to disruptions brought about by the 4th industrial revolution such as AI and automation of processes. This requires organisational structures to be nimbler and more responsive to cater for these changes and allow for upskilling of its current workforce. Participants agreed with this perspective and emphasised the importance of rapid and continuous adaptation in the digital landscape. They highlighted the necessity for organizations to pivot swiftly when needed and to effectively identify the right moments for strategic adjustments through OL. Additionally, participants stressed the significance of adopting agile practices and having digital leadership to steer organizations through the dynamic digital environment.

5.4.4 Communication and Knowledge Sharing

Harnessing the value of the internal knowledge base through knowledge management practices (Basten & Haamann, 2018) like organisation, communication, and dissemination of knowledge as well as that from external sources adds to an organisation's competitive advantage (Ivaldi et al., 2022). This is imperative for organisations operating in a volatile business landscape (Basten & Haamann, 2018; Leavitt, 2011).

The deployment of new technologies in the organisation is likely to bring about a gap in the current workforce (Ellström et al., 2022) which needs to be bridged through learning interventions like training. Participants similarly identified this knowledge gap and noted that it is important to ensure that the learning strategy is kept updated to ensure it is fit for purpose. The establishment of continuous learning programmes, including regular training sessions, workshops, and access to educational resources, creates a culture of ongoing skill development. Other types of learning initiatives and learning platforms that enhance the sharing of knowledge were identified as enablers by participants. To avoid unintended consequences that come as a result of the knowledge gap, organisations need to also implement systematic approaches to learning (Basten & Haamann, 2018). This helps to address the debate amongst some of the participants of whether training should be made mandatory or if individuals in the organisation need to be given autonomy to manage their own development.

5.5 Conclusion

For RQ1, it can be concluded that the development of DS in SA banks is significantly influenced by OL, which fosters a culture of continuous learning and adaptation. This culture enables banks to acquire knowledge about emerging technologies, market dynamics, and customer preferences, informing the formulation of agile and responsive digital strategies. Effective OL processes enhance strategic alignment, collaboration, and customer centricity, enabling banks to adapt to dynamic market changes and drive sustainable competitive advantage. However, banks must also prioritize digital skills development, foster a culture of innovation, and effectively manage risks to successfully navigate the evolving digital landscape and achieve strategic objectives.

Pertaining to RQ2, it was found that the DT of SA banks hinges on critical elements inherent in the development of their DS. These essential components encompass various facets, including business strategy, internal resources, capabilities, culture, stakeholder engagement, customer needs, technological trends, market dynamics, ethics and regulatory compliance, and ecosystem collaboration. A robust business strategy aligned with organizational goals and customer needs lays the foundation for digital transformation, emphasizing the importance of clear vision and strategic alignment. Internally, banks must modernize capabilities, leverage data analytics, and cultivate a culture of continuous learning to adapt to the dynamic digital landscape. Stakeholder engagement, particularly strong leadership commitment, is crucial for fostering organizational buy-in and participation in the digital journey. Understanding customer needs and market trends enables banks to develop customer-centric strategies that enhance customer experiences and drive competitiveness. Moreover, staying abreast of technological advancements and regulatory requirements while fostering collaboration within digital ecosystems facilitates innovation and agility in DS formulation.

Addressing RQ3 on the challenges and enablers of integrating OL into DS formulation revealed several critical themes. Firstly, a clear organizational vision aligned with DS goals is imperative, with strong leadership commitment necessary to translate this vision into actionable steps and foster a culture of continuous learning and innovation. Secondly, challenges stemming from resource constraints, legacy systems, and skills gaps hinder effective learning mechanisms, emphasizing the need for investment in talent acquisition and ongoing skills development. Thirdly, cultivating an agile and flexible culture is essential to adapt swiftly to the dynamic digital landscape, requiring nimbler organizational structures and responsive workforce upskilling. Lastly, effective communication and knowledge-sharing practices are vital for leveraging the internal knowledge base and staying competitive, with regular training sessions, workshops, and access to educational resources fostering ongoing skill development and bridging knowledge gaps. Overcoming these challenges and leveraging enablers such as strong leadership commitment, investment in talent development, and effective communication channels can enhance banks' digital capabilities and drive sustainable growth in today's rapidly evolving digital ecosystem.

CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS

6.1 Introduction

This Chapter outlines the conclusion based on the research objectives identified in Chapter 1. Building upon the foundation laid by the preceding chapters, this section also outlines strategic recommendations aimed at guiding banks in formulating and implementing effective DS that leverage OL to drive sustainable growth and competitive advantage in the rapidly evolving digital landscape. Limitations encountered during this study will also be touched on, and lastly, suggestions for further research based on observations made throughout the study are presented.

6.2 Overview of the study

Many organisations globally have been disrupted by the emergence of digital technologies and the banking sector is no exception. To remain competitive in today's rapidly evolving financial landscape, it is critical for banks to embrace digital transformation as a strategic imperative. As emerging technologies and shifting consumer behaviours continue to reshape the banking sector, the integration of digital technologies into business processes becomes increasingly essential (Mavlutova et al., 2023). Central to this transformation is the formulation of a robust Digital Strategy that not only aligns with organizational objectives but also enables banks to leverage digital initiatives effectively (Bharadwaj, Sawy, et al., 2013; Brown & Brown, 2019). However, the development and successful execution of DS hinges on the organization's ability to bridge the gap between current operations and the envisioned digital future as well as its capacity to adapt to dynamic environments and renew its capabilities, highlighting the pivotal role of Organizational Learning (Ruel et al., 2021).

Through OL, banks can enhance their digital IQ, fostering agility and resilience in the face of disruptive changes (Bernard Marr, 2023). This study thus aims to provide actionable insights that guide banks in navigating their digital transformation journey effectively. The literature reviewed underscored the interplay between OL and DS, emphasizing knowledge acquisition, cognitive development, and the evolution of organizational capabilities. Based on the growing recognition of the relationship between OL and DS and the pressing need for empirical research to deepen our understanding of the specific mechanisms through which OL influences DS development and implementation, thereby informing strategic decision-making in the banking industry, this study looked specifically to address these research objectives:

1. To explore the influence of organizational learning on the development of digital strategies in South African banks.
2. To identify the critical elements of a digital strategy necessary for the digital transformation of South African banks.
3. To explore the challenges and enablers that banks encounter in integrating organizational learning into the digital strategy formulation process.

These research objectives are directly linked to the research questions posed, aligning with the overarching aim of understanding the intersection between OL and DS formulation in SA banks.

6.3 Conclusions regarding Research Objective 1

Digital transformation initiatives necessitate the adoption and integration of digital technologies, which in turn require organizations to acquire, share, and apply new knowledge. Learning organizations use organizational learning as a foundation to attain a competitive edge that can be sustained and improve their performance. The successful digital transformation of SA banks relies on solid DS. It is deeply intertwined with an organization's ability to learn, adapt, and leverage its knowledge and capabilities effectively and goes beyond technological implementation. Research objective 1 looked at exploring the influence of organisational learning on the development of digital strategies in SA banks. The study reveals that OL serves as a foundational element, enabling banks to acquire essential knowledge about emerging technologies, market dynamics, and evolving customer preferences. This knowledge acquisition forms the bedrock upon which agile and responsive digital strategies are crafted. As previously elucidated, effective OL processes enhance strategic alignment, collaboration, and customer centricity, thereby positioning banks to adeptly respond to dynamic market changes and drive sustainable competitive advantage. However, while OL offers tremendous potential, its successful integration into DS formulation requires concerted efforts to prioritize digital skills development, nurture cultures of innovation, and adeptly manage associated risks. SA banks must invest in talent acquisition and ongoing skills development to overcome challenges stemming from resource constraints and skills gaps. Additionally, fostering an agile and flexible culture is imperative to adapt swiftly to the dynamic digital landscape, necessitating nimbler organizational structures and responsive workforce upskilling. Effective communication and knowledge-sharing practices, as highlighted, play a vital role in leveraging the internal knowledge base and staying competitive. By fostering a robust learning environment and leveraging enablers such as strong leadership commitment, investment in talent development, and effective communication channels, SA banks can bolster their digital capabilities and drive sustainable growth amidst the evolving digital ecosystem.

6.4 Conclusions regarding Research Objective 2

Banks aiming to transition into a digitally advanced future must establish a unified strategy. This strategy should comprise key elements such as a clear plan, a suitable organizational structure, digital expertise, a supportive corporate culture, and a balanced governance framework. At the core of this transition is the creation of a Digital Strategy which should effectively confront the real business challenges encountered by both the organization and its customers, evaluating the potential of digital technologies to address these challenges. Developing a competitive DS for banks is a gradual and evolving process influenced by changes in the organization's internal capabilities and external factors, necessitating regular reviews and adjustments. Research Objective 2 looks to identify the critical elements of a digital strategy necessary for the digital transformation of South African banks. The combination of the literature review conducted, and the data collated has found that these essential components encompass various facets, including business strategy, internal resources, capabilities, culture, stakeholder engagement, customer needs, technological trends, market dynamics, ethics and regulatory compliance, and ecosystem collaboration. A robust business strategy aligned with organizational goals and customer needs lays the foundation for digital transformation, emphasizing the importance of clear vision and strategic alignment. Internally, banks must modernize capabilities, leverage data analytics, and cultivate a culture of continuous learning to adapt to the dynamic digital landscape. Stakeholder engagement, particularly strong leadership commitment, is crucial for fostering organizational buy-in and participation in the digital journey. Understanding customer needs and market trends enables banks to develop customer-centric strategies that enhance customer experiences and drive competitiveness. Moreover, staying abreast of technological advancements and regulatory requirements while fostering collaboration within digital ecosystems facilitates innovation and agility in DS formulation.

6.5 Conclusions regarding Research Objective 3

In the context of digital strategies, organizational learning is crucial in helping leaders identify and understand the necessary abilities and knowledge needed to create a comprehensive digital strategy. Even while the importance of organizational learning in digital transformation is becoming more widely acknowledged, there is still a shortage of research that focuses on the dynamics and issues that South African banks face. Examining these areas may give banks important information to improve their digital capabilities, align their plans with company goals, and promote an innovative and constantly learning culture. Research objective 3 aimed at understanding challenges and enablers that banks encounter in integrating organizational learning into the digital strategy formulation process.

Firstly, lacking to establish a clear organizational vision harmonized with DS objectives poses a paramount challenge for organisations looking to integrate OL into DS development. This necessitates robust leadership commitment to translate the vision into actionable strategies and instil a culture of continual learning and innovation throughout the organization.

Secondly, obstacles arising from resource limitations, outdated systems, and skill deficiencies impede effective learning mechanisms, underscoring the imperative of investing in talent acquisition and ongoing skills enhancement initiatives.

Thirdly, fostering an agile and adaptable culture emerges as essential for navigating the dynamic digital landscape. This entails cultivating organizational structures capable of swift adaptation and facilitating continuous upskilling of the workforce.

Lastly, fostering effective communication and knowledge-sharing practices emerges as vital for capitalizing on internal knowledge assets and maintaining competitiveness. Initiatives such as regular training sessions, workshops, and accessible educational resources are pivotal in nurturing ongoing skill development and bridging knowledge disparities. Overcoming these challenges while leveraging facilitators like strong leadership commitment, investment in talent development, and robust communication channels holds the key to enhancing banks' digital capabilities and fostering sustainable growth amidst the ever-evolving digital terrain.

6.6 Limitations of the study

A total of 15 executive and senior managers were targeted as the sample for this study however due to the time constraints and the availability and willingness of some stakeholders, this number reduced to 12 participants. Within this sample of 12, there was no representation of a stakeholder in Learning & Development which is a limitation as one of the key constructs of this paper pertains to Organisational Learning.

6.7 Recommendations

The leadership that is involved in the formulation and execution of DS in SA banks can benefit from adopting some of the recommendations that are based on the findings and insights generated from addressing the research questions to improve strategic management and enhance their DS formulation process:

1. **Development of a Clear Vision and Align Digital Strategy Goals**: Establishing a clear organizational vision that aligns with the goals of the digital strategy and ensuring that leadership effectively communicates this vision throughout the organization and fosters a culture of innovation and continuous learning is key.
2. **Investment in Resources and Capability Development**: Organisations need to allocate resources and invest in talent acquisition and development to address skills gaps and adapt to the demands of digitalization. Implementation of learning initiatives, training programmes, and knowledge-sharing platforms to enhance organizational capabilities is also crucial.
3. **Promoting an Agile and Flexible Culture**: Foster an agile and flexible organizational culture that enables swift adaptation to changes in the digital landscape -- encourage experimentation, risk-taking, and rapid iteration to drive innovation and respond effectively to emerging opportunities and challenges.
4. **Facilitate Communication and Knowledge Sharing**: Implement effective communication channels and knowledge management practices to leverage the internal knowledge base and stay competitive. Promote collaboration, information sharing, and cross-functional learning to enhance organizational learning and decision-making processes.
5. **Staying Abreast of Technological Trends and Market Dynamics**: Continuously monitor technological advancements, market trends, and competitor strategies to anticipate emerging opportunities and threats. Align digital strategy initiatives with emerging technologies and evolving customer preferences to maintain relevance and competitive advantage.

6. **Ensure Compliance and Ethical Considerations**: Prioritize compliance with regulatory requirements, data protection laws, and ethical considerations in digital strategy formulation. Engage with regulators and stakeholders to ensure alignment with applicable laws and regulations and build trust with customers.
7. **Foster Strategic Partnerships and Ecosystem Collaboration**: Explore opportunities for collaboration and strategic partnerships with fintech entities, technology providers, and other stakeholders in the digital ecosystem. Leverage ecosystem partnerships to access complementary resources, enhance customer experiences, and drive innovation.
8. **Evaluate and Adapt Strategy Continuously**: Implement mechanisms for evaluating and adapting digital strategy initiatives continuously. Monitor key performance indicators, solicit feedback from stakeholders, and adjust strategy based on evolving market dynamics and organizational goals.

By implementing these recommendations, banks can enhance their digital strategy formulation process, drive organizational learning, and navigate the complexities of the digital landscape to achieve sustainable growth and competitive advantage.

6.8 Suggestions for further research

For future research in the domain of digital strategy formulation and organizational learning in the banking sector, several avenues could be explored to further deepen our understanding and address emerging challenges. Studies could be conducted to track the implementation and outcomes of digital strategy initiatives over time, providing valuable insights into the long-term effectiveness of organizational learning interventions and their impact on digital transformation outcomes. Comparative analysis across different financial institutions could illuminate how organizational size, structure, culture, and leadership influence the integration of organizational learning into digital strategy formulation.

Additionally, extending research beyond the banking sector to explore digital strategy formulation and organizational learning practices in other industries could identify transferable lessons and best practices that inform digital transformation efforts in banking. Exploring the role of emerging technologies such as blockchain, artificial intelligence, and quantum computing in shaping digital strategy formulation and organizational learning would provide insights into how banks can harness these technologies for innovation and competitive advantage.

Furthermore, investigating strategies for enhancing employee engagement and buy-in during the digital transformation process, exploring customer-centric approaches to digital strategy formulation, and examining the role of ecosystem collaboration and partnerships in driving digital transformation efforts are important areas for future research. Addressing these research areas can contribute to advancing knowledge in the field and inform practice, ultimately driving innovation in the banking industry.

Table 8: Consistency table: research questions, propositions, data collection and data analysis

RQ #	Research Questions	Data collection detail	Data analysis method
1	How does organisational learning influence the development of digital strategies in South African banks?	Interview guide questions 5, 6, 7 & 10.	Thematic using computer aided software Atlas Ti
2	What are the critical elements of the digital strategy necessary for the digital transformation of South African banks?	Interview guide questions 4 & 5.	Thematic using computer aided software Atlas Ti
3	What challenges and enablers do banks encounter in integrating organizational learning into the digital strategy formulation process?	Interview guide question 8 & 9.	Thematic using computer aided software Atlas Ti

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APPENDIX A – Participant Information Sheet

Dear Sir / Madam

My name is Alcinda Massango. I am a Masters student in Digital Business at the University of the Witwatersrand, Johannesburg. I am conducting a research study about the Digital Strategy formulation process and the factors that need to be considered during its development. The key factor highlighted in this study is Organisational Learning and how it is integrated into the digital strategy crafting process. The study title is ***"The Influence of Organisational Learning in Defining Digital Strategies within South African Banks."***

As part of the data collection phase of my study, I would like to invite you to take part in an interview. The interview will give me the opportunity to gather rich and nuanced information that can contribute significantly to the findings of my study. The interview will take place online via MS Teams and if you decide to participate, it will last approximately of 60mins.

With your permission, I would like to audio record the interview and the recording and transcript will be my raw data. This is done solely for the purpose of ensuring the accuracy of the data collected during the interview. Upon completion of the interview, this data will be stored in a password-protected manner and deleted after five years. Only the researcher will have access to the data during this time.

Rest assured the interview will be confidential and anonymous to ensure privacy and anonymity of the participant. When I share the results of the research study, I will not include your name or anything else that could identify you such as your position and/ or the name of the institution you are employed by or might refer to.

Should you decide to take part in the research study, your participation should be completely voluntary. You thus do not have to take part and have the option to withdraw from the study at any time. You also do not have to answer any questions if you do not want to during the interview.

If you have any questions during or afterwards about this research study, feel free to contact me on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Alcinda Massango

Researcher:

Ms. Alcinda Massango

1321163@students.wits.ac.za

Supervisor:

Dr. Manessah Alagbaoso

Manessah.Alagbaoso@standardbank.co.za

APPENDIX B - Consent Form

Title: The Influence of Organisational Learning in Defining Digital Strategies within South African Banks

Please complete the below form to consent to participate in my research study.

I, ……………………………………….., agree to participate in this research project.

I agree to the following:

(Please circle the relevant options below)

- The research study was explained to me, and I understand what this study is about.
  (YES / NO)
- I understand that I can volunteer to take part in the study.
  (YES / NO)
- I understand that I can end the interview at any time, and I do not need to answer all the questions posed.
  (YES / NO)
- I agree that direct quotations from my interview may be used by the researcher in their research report.
  (YES / NO)
- I agree that my participation will remain anonymous thus my name or other identifying data will not be used by the researcher in their research report.
  (YES / NO)
- I agree that I have the option to withdraw from participating in the study and all data gathered be deleted within one week of the interview.
  (YES / NO)
- I understand that my data will be safeguarded for the duration of the study and can be made freely available to me after the interview at my request.
  (YES / NO)

Researcher: Ms Alcinda Massango

Research Supervisor: Dr. Manessah Alagbaoso

……………………………………	………………………	……………………………………
Name of Participant	Signature of Participant	Date

APPENDIX C – Research Instrument

Interview Guide

1. **Introductions**
    a. Welcome the participant to the interview.
    b. The interviewer introduces themselves to the participant to build rapport.

2. **Consent matters**
    a. Confirm that the consent letter has been received, understood, and signed by the participant.
    b. Check if they are comfortable to proceed with the interview.
    c. Request permission to record the session. If permission is not granted, take active notes during the interview as part of the data collection process.
    d. Outline the research objectives that this interview pertains to.

3. **Background and Role**
    a. Ask the participant how long they have been working at the banks and briefly describe their role and responsibilities within the bank over their tenure.

4. **Digital Transformation**
    a. What is your general understanding of the concept of Digital transformation?
    b. Why is it important for this transformation to take place in the context of your bank?
    c. What role do you think emerging technologies play in the digital transformation process of banks?

5. **Digital Strategies**
    a. What is your experience or involvement in the digital strategy formulation initiatives of the bank?

b. What do you think are the critical elements of a digital strategy necessary for the successful digital transformation of banks?
c. What are the key internal and external factors that require consideration when formulating a strategy, particularly in the context of developing a digital strategy?

6. Organisational learning

a. What is your involvement in the organizational learning initiatives of the bank?
b. In your view, how important is organisational learning in the banking context?

7. Organizational Learning and Digital Strategy

a. How do you perceive the relationship between organizational learning and the development of digital strategies in SA banks?
b. What skills or competencies do you think are important as part of organisational learning to meaningfully contribute to the development of digital strategies?
c. Can you provide examples of how organizational learning has influenced the development of digital strategies in your bank or within the industry?

8. Challenges in Integrating Organizational Learning

a. What challenges do you think banks encounter when trying to integrate organizational learning into the digital strategy formulation process?
b. How do these challenges affect the effectiveness or success of digital strategy implementation?

9. Enablers for Integrating Organizational Learning

a. What factors or enablers can you identify that facilitate the integration of organizational learning into the digital strategy formulation process?

b. Can you share any success stories or best practices in this regard?

10. Recommendations and Lessons Learned

a. Based on your experience, what recommendations would you provide to banks seeking to enhance the role of organizational learning in digital strategy development?
b. Are there any key lessons learned or pitfalls to avoid when integrating organizational learning into the digital strategy formulation process?

11. Closing

a. Is there anything else you would like to add or discuss related to the topic?
b. Thank the participant for their time, insights, and participation.
c. Make the participant aware that the data can be made available post the data analysis process and the research paper can also be made available when it is completed.

APPENDIX D – Ethics Clearance Certificate

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg

Wits Business School Ethics Committee
Constituted under the University Human Research Ethics Committee (Non-Medical)

Ethics Clearance Certificate

Ethics protocol number: WBS/DB1321163/991

This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below)

Project title	The influence of organisational learning in defining digital strategies within South African banks
Investigator / Researcher	Ms Alcinda Massango
Nature of Project	MM (Digital Business)
Decision of the Committee	Approved, provided stakeholders and participants are guaranteed confidentialty.
Issue Date of Certificate	24/08/2023
Expiry date	Date of submission of the project / research report
Chairperson	Dr Pius Oba ☎ +27 11 717 3976 +27 82 733 6587 pius.oba@wits.ac.za

Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.

	13 September 2023
Signature	Date: