

# **Gordon Institute of Business Science**

University of Pretoria

**Leadership Imperative: Leveraging Digital Transformation for Enhanced Project Effectiveness**

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration

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## **ABSTRACT**

This study investigated the influence of leadership in enabling effective digital transformation (DT) within organisations, emphasising critical competences, styles, and tactics for overcoming DT issues. As digital transformation redefined industries and business processes worldwide, leaders' capacity to adapt and navigate their companies through these intricate changes became essential success determinants.

A qualitative methodology was employed, collecting insights via semi-structured interviews with 18 senior executives from several industries. Thematic analysis indicated that leadership styles, including transformational and adaptive approaches, positively influenced digital transformation success by motivating teams, managing opposition to change, and cultivating an innovative culture. Identified key talents included visionary thinking, change management expertise, and technological competency, all essential for guiding teams through the complexity of digital transformation.

The findings emphasised problems such as resource limitations, skill deficiencies, and employee opposition, highlighting the necessity for strategic planning and effective communication. This study enhances academic literature by elucidating the role of leadership in digital transformation, providing practical insights for businesses to improve their digital transformation capabilities through leadership development in change management and technology adaptability. The conclusion is that effective digital transformation is primarily propelled by leadership rather than only by technology, offering a framework for developing adaptive and resilient companies in a progressively intricate commercial landscape.

**KEY WORDS**

Digital Transformation, Leadership Competencies, Change Management, Technological Agility, Organisational Adaptation

## DECLARATION

*I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.*

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Jabulani Mtsweni

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Date

# Table of Contents

<b>KEY WORDS</b> .....	<b>ii</b>
<b>DECLARATION</b> .....	<b>iii</b>
<b>LIST OF FIGURES</b> .....	<b>viii</b>
<b>LIST OF TABLES</b> .....	<b>viii</b>
<b>ABBREVIATIONS</b> .....	<b>ix</b>
<b>1. INTRODUCTION TO THE RESEARCH PROBLEM</b> .....	<b>1</b>
1.1 Background .....	1
1.2 Research Problem .....	5
1.3 Research Purpose .....	8
1.4 Significance .....	9
1.4.1. Significance for Business .....	9
1.4.2. Academic and Scholastic Significance .....	12
<b>2. LITERATURE REVIEW</b> .....	<b>13</b>
2.1. Introduction .....	13
2.2. Theoretical Foundation of Leadership in Digital Transformation .....	14
2.2.1. Digital Transformation vs Leadership .....	15
2.3. Digital Leadership .....	21
2.3.1. Transformational Leadership .....	22
2.4. Strategic Leadership Competencies .....	22
2.4.1 Digital Literacy .....	23
2.4.2. Innovation Management Competency .....	23
2.5. Change Management Competencies .....	24
2.6. Common Challenges in Digital Transformation .....	25
2.6.1 Security Concerns and Cyber Threats .....	26
2.6.2. Continuous Evolution of Customer Needs .....	26
2.6.3. System Integration and Technological Disparities .....	26
2.6.4. Budget Constraints and Digital Transformation Budget Planning .....	27
2.6.5. Lack of a Digital Transformation Strategy .....	27

2.6.6. Inefficient Data Management.....	27
2.6.7. Skills Gap and Talent Shortage.....	27
2.7. Strategies for Overcoming Challenges.....	28
2.8. Integrating Leadership Theories with Digital Transformation .....	29
2.9. Conclusion of Literature Review .....	29
2.9.1 Academic Gaps.....	29
2.9.2. Business Gap.....	30
<b>3. RESEARCH QUESTIONS .....</b>	<b>32</b>
<b>4. RESEARCH METHODOLOGY .....</b>	<b>35</b>
4.1. Introduction .....	35
4.2. Choice of Research Methodology and Design .....	35
4.2.1. Justification for a Qualitative Approach.....	35
4.2.2. Research Design .....	36
4.3. Population .....	37
4.4. Unit of Analysis .....	37
4.5. Sample Method and Size.....	38
4.6. Measurement Instrument and Data Collection Tool .....	39
4.7. Data Gathering Process and Collection Method .....	39
4.7.1. During Data Gathering .....	39
4.7.2. After Data Gathering .....	40
4.7.3. Data Storage and Management .....	40
4.8. Data Analysis Approach .....	41
4.9. Quality Controls.....	42
4.9.1. Reliability and Validity .....	42
4.9.2. Triangulation .....	43
4.9.3. Researcher Bias.....	44
4.9.4. Research Limitations .....	44
4.10. Research Ethics .....	44
4.11. Research Limitations .....	45
<b>5. RESULTS .....</b>	<b>46</b>

5.1. Introduction .....	46
5.2. Sample Description .....	46
5.3. Data Saturation .....	52
5.4. Data Analysis Process and Coding .....	52
5.4.1. Coding Process and Overview .....	53
5.4.2. Emergence of Key Themes .....	55
5.4.3. Coding Consistency and Validation .....	55
5.5. Presentation of Results .....	55
5.5.1. Results for Research Question One .....	57
5.7. Summary of Outcomes .....	92
5.8. Conclusion .....	93
<b>6. DISCUSSION OF RESULTS.....</b>	<b>95</b>
6.1. Summary of Key Results .....	96
6.3. Discussion of Research Questions .....	98
6.3.1. Discussion of Research Question 1 .....	98
6.3.2. Discussion of Research Question 2 .....	108
6.3.3. Discussion of Research Question 3 .....	117
6.4. Overall Chapter Conclusion.....	124
<b>7. CONCLUSION AND RECOMMENDATIONS.....</b>	<b>126</b>
7.1. Introduction .....	126
7.2. The Outcomes of the Study and Its Significance .....	126
7.3. Principal Findings.....	127
7.3.1. Conclusion on Research Question One .....	128
7.3.2. Conclusion on Research Question Three .....	130
7.4. Contributions of the Study .....	131
7.4.1. Theoretical Contributions .....	131
7.4.2. Practical Contributions .....	132
7.4.3. Methodological Contribution .....	134
7.5. Implications for Managers and other Stakeholders .....	135
7.5.1. Senior Executives .....	135

7.5.2. Middle and Project Managers .....	135
7.5.3. Change Management Specialists .....	136
7.5.4. HR Function .....	136
7.5.5. IT and Technical Team .....	136
7.5.6. Employees Across the Organisation .....	137
7.6. Limitations of the study .....	137
7.7. Recommendations for future research .....	138
7.8. Conclusion on conceptual Framework .....	141
7.9. Conclusion .....	143
<b>8. REFERENCES.....</b>	<b>145</b>
<b>9. APPENDIXES .....</b>	<b>155</b>
Appendix 1: Interview Guide .....	155
Appendix 2: Informed Consent Form.....	159
Appendix 3: Consistency Matrix .....	160
Appendix 4: Code Book from Atlas ti .....	161

## **LIST OF FIGURES**

Figure 1: Adoption Rate of Digital Transformation

Figure 2: Conceptual Framework of the Study

Figure 3: Top Company Initiatives Year-over Year

Figure 4: Theoretical Framework for Literature Review

Figure 5: Greatest Change Management Obstacles

Figure 6: Evidence of Data Saturation

Figure 7: Overview of coding process: Open, Axial and Selective Coding

Figure 8: Overview of coding process: Open, Axial and Selective Coding

Figure 9: Hierarchical Process of Coding

Figure 10: Categories to Theme Mapping to Research Question One

Figure 11: Categories to Theme Mapping to Research Question Two

Figure 12: Categories to Theme Mapping to Research Question Three

## **LIST OF TABLES**

Table 1: Comparison of digital transformation definitions

Table 2: Types of Individuals Interviewed

Table 3: Data Gathering Process

Table 4: Unit of analysis criteria and standards

## **ABBREVIATIONS**

DT	:	Digital Transformation
AI	:	Artificial Intelligence
ML	:	Machine Learning
IoT	:	Internet of Things
ERP	:	Enterprise Resource Planning
ROI	:	Return on Investment
CIO	:	Chief Information Officer
CTO	:	Chief Transformation Officer
PM	:	Project Manager
CMS	:	Change Management Specialist
DTL	:	Digital Transformation Lead
HOD	:	Head of Department
RQ	:	Research Question

# 1. INTRODUCTION TO THE RESEARCH PROBLEM

## 1.1 Background

*“Digital Transformation Is a Fundamental Reality for Business Today” - Warren Buffet*

The global economy is seeing extraordinary technological innovation, which affects practically every industry. Artificial Intelligence (AI), big data, cloud computing, and the Internet of Things (IoT) are transforming company operations, customer interactions, and competitive dynamics (Banks et al., 2022). According to McKinsey & Company (2023), Companies that have successfully adopted digital transformation have experienced increased productivity, cost savings, and market responsiveness. Despite the obvious benefits, many organisations fail to execute these changes effectively. Connecting with this (Matthews et al., 2022) highlight that the gap between technological potential and actual business impact often lies in the ability of leadership to guide the organization through the complexities of digital transformation.

To remain competitive in today's rapidly changing digital landscape, organisations must constantly adapt and innovate. Digital transformation (DT) has emerged as a significant strategy for organisations wanting to increase efficiency, stimulate innovation, and improve overall project outcomes. However, the successful implementation of DT initiatives is heavily dependent on effective leadership (McCarthy et al., 2024). As the digital landscape continues to evolve at an unprecedented rate, the ability of the organisation to successfully navigate this transformation is not only a competitive advantage but a fundamental prerequisite for survival in today's business environment (Chen et al., 2024, Fan et al., 2024, Manny et al., 2022).

Further building on this, both Schiuma et al. (2024) and Khan & Sarkar (2024) suggests that the stakes are higher than ever, as emerging technologies like artificial intelligence, machine learning, and advanced data analytics are rapidly shaping the entire industry. Combining these insights, it is evident that the transformation impact of emerging technologies cannot be overstated. As artificial intelligence (AI), machine learning (ML), and advanced data analytics continue to evolve, they are not merely enhancing existing business processes but are fundamentally redefining the competitive landscape of entire industries AlNuaimi et al. (2022).

These technologies enable for unparalleled levels of efficiency, predictive capabilities, and personalised client experiences, making them crucial tools for organisations looking to maintain a competitive edge. Organisations that fail to adapt to these technological breakthroughs risk being left behind as the pace of innovation intensifies (Marnewick & Marnewick, 2022).

Research by (Marrucci et al., 2022) and subsequently followed by (Chen et al., 2024) indicate that integrating digitisation into business objectives is no longer optional, but rather required for survival in an increasingly data-driven environment. Similarly, Khan and Sarkar (2024) emphasise that the adoption of new technologies extends beyond operational efficiency, it is about reinventing business models and producing value in previously unimaginable ways.

Linking back to the theories mentioned earlier the researchers underscore the heightened stakes in the new digital era. The rapid adoption of DT Is not just transforming industries it is creating new standards for success (Khan & Sarkar, 2024). Building up on the idea Khan & Sarkar (2024), (Vescovi, 2021) expands, stating that as companies strive to use these tools, the ability to successfully exploit data and continuously innovate becomes an increasingly important determinant of long-term sustainability and growth. The researchers suggest that those who can navigate the DT in business successfully navigate this digital revolution will not only survive but thrive, whilst those who resist or delay will be confronted with increasing difficulty in remaining relevant in a rapidly changing market.

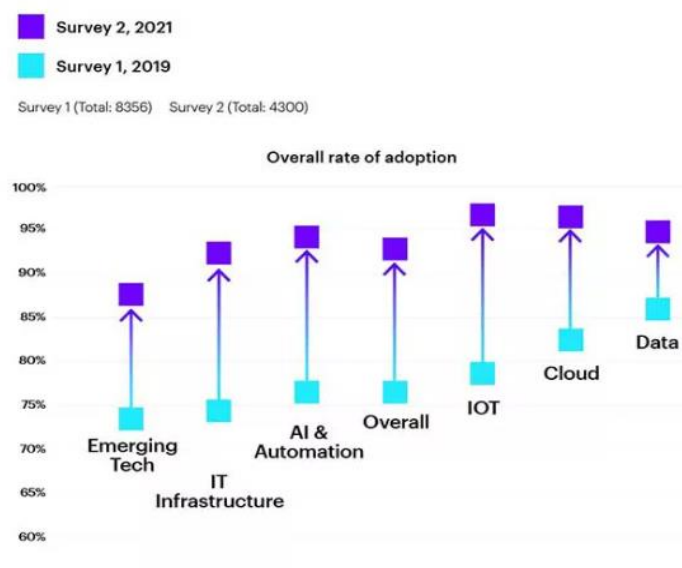
When considering the broader perspective, Digital Transformation entails integrating digital technologies into all aspects of a business, resulting in major changes in how organisations operate and provide value to their consumers, while technology plays an important part in this change (Okano et al., 2020). In light of these discussions, it is evident that the capacity to successfully harness DT will be a decisive factor in determining which organisations prosper and which struggle to keep pace. Findings by Schiuma et al. (2024), demonstrate that, DT is more than just installing new technology; it necessitates a shift in organisational culture, business models, and operational processes. This shift often encounters resistance from all levels within the organisation, emphasising the necessity for strong, visionary leadership to drive and sustain change (Zoppelletto et al., 2023).

While the previous paragraphs focused more on the theoretical perspective, we now take a turn to industry research. Figure 1 reflects the overall adoption rate of various technologies between two surveys done in 2019 and 2021. The data suggests a strong increase in all categories, with the 2021 poll indicating greater adoption rates than in 2019. Emerging technologies, AI & Automation, IT Infrastructure, IoT, Cloud, and Data all saw significant growth, with overall adoption rates growing from 75-80% in 2019 to 90-95% in 2021.

This trend indicates a strong and growing commitment to digital transformation across industries, with significant progress in the adoption of these technologies over the last two years. Prior to the COVID-19 epidemic, digital transformation was primarily focused on the customer experience. Then things shifted and accelerated. Now, digital transformation is the centrepiece of operational efficiency and innovation throughout the organisation (Accenture, 2021).

Building on this is McKinsey & Company (2023) noted that, across industries, change is happening faster than ever before, and CEOs are feeling the strain while also seeing the opportunity for the entire organisation. According to the most current poll, accelerated digital transformation, including cloud and data, has become the top item CEOs prioritise for the board since the pandemic hit.

**Figure 1: The Rate of Digital Transformation**



Source: Accenture, 2021

Following the outlined findings, it's evident that digital transformation has become a critical imperative for organisations aiming to stay competitive and relevant in today's fast-evolving market. This leads us to the subject of leadership, the challenge for leaders is not merely to accept new technologies, but also to embed them into the organisational fabric in a way that supports sustainable development and innovation (Rialti & Filieri, 2024).

The importance of leadership in this regard is supported by both (Fan et al. (2024) and Guggenberger et al. (2023) who state that, Leadership in the digital age necessitates a distinct set of abilities and competences. Traditional leadership styles, which frequently emphasise stability and control, may not be adequate to traverse the dynamic and uncertain world of digital transition (Marrucci et al., 2022). This aligns with the work of Peter et al. (2020) when he state that, leaders must be very adaptable, open to change, and able to foster innovation, these leaders need to have a thorough understanding of technology and business, allowing them to make sound judgements that match DT with organisational goals. Moreover, leaders an important role in creating an atmosphere that promotes continual learning and growth, which is necessary for developing the workforce's digital capabilities.

In summary, this study emphasises the vital role of leadership in driving successful digital transformation, which is required for organisations to remain competitive and achieve long-term success in the quickly changing digital ecosystem. By investigating the intersection of leadership and digital transformation, this study hopes to provide valuable insights and practical strategies that will enable leaders to effectively guide their organisations through the complexities of technological change, ultimately increasing organisational success and sustainability.

## 1.2 Research Problem

Transitioning from the background of the study, which examined the growing imperative for organisations to embrace DT as a means of remaining competitive and achieving long-term success, it is evident that leadership plays a critical part in the process. While the background emphasised the broad significance of digital transformation and the critical role of leadership in guiding these efforts, the focus now shifts to the specific challenges and gaps that exist in understanding how leadership directly influences the success of digital transformation initiatives.

Despite the acknowledged importance of leadership in navigating the challenges of digital transition, there is a major gap in the literature regarding the leadership behaviours and methods that are effective in this environment (Santarsiero et al., 2023; Parts, 2023, Matthews et al., 2022).

This research seeks to close these gaps by exploring the role of leadership in promoting digital transformation, with a focus on how these leadership efforts contribute to increased organisational success. DT, which entails integrating digital technologies into all aspects of an organisation, offers substantial prospects for boosting operational efficiency, consumer engagement, and promoting creativity (Rialti & Filieri, 2024).

Despite the obvious benefits, a significant minority of digital transformation programs fail to meet their planned goals. According to research by McKinsey & Company (2023).

As noted by Guerra (2023) and later supported by Fan et al. (2024), Only about 30% of digital transformation initiatives are successful in organisations, resulting in considerable financial losses, wasted resources, and missed strategic possibilities. This high failure rate highlights the challenges inherent in managing digital transformation, notably the essential role that leadership plays in leading these programs to success (Guggenberger et al., 2023). Leadership is widely recognised as a critical aspect in the success of digital transformation initiatives. Leaders are responsible for defining a strategic vision, directing organisational transformation, and cultivating a culture that promotes innovation and flexibility (Manny et al., 2022).

Building on the discussion, Santarsiero et al. (2023) states that, existing research frequently approaches leadership and digital transformation as distinct domains, with little study of how leadership directly affects the success of digital transformation activities, this lack of clarity poses a substantial barrier to organisations wanting to provide their leaders with the tools and strategies required to drive effective digital transformation.

Furthermore, digital transformation requires more than adopting new technology, it involves deep organisational change, which frequently encounters resistance from employees, disrupts existing process, and reveals skill gaps (Zoppelletto et al., 2023). Emphasising the initial discussion on leadership, Zoppelletto et al. (2023) and (Shen et al., 2024) note that, leaders play an important role in navigating these challenges, nonetheless, the precise leadership styles and tactics that effectively handle such complexities remain underexplored.

Transformational leadership, which focuses on vision, inspiration, and change management, has been identified as particularly useful in promoting organisational change (Bonnet & Westerman, 2020). However, the intricate ways in which different leadership styles influence digital transformation outcomes, and thus organisational success, not sufficiently understood (Belli et al., 2024). While the previous paragraph focuses on the lack of research that touches on the direct relationship between leadership and the specific success metrics of digital transformation projects. Many studies focus separately on leadership or digital transformation but do not adequately bridge the two, becomes necessary to explore the practical implications for the organisation. According to studies by AlNuaimi et al., (2022) and Belli et al. (2024), organisations frequently struggle to equip their executives to manage digital transformation effectively. The absence of clear guidelines or frameworks for leaders to successfully drive these efforts creates a practical difficulty, leaving organisations open to the risks associated with failed transformations.

(Chen et al., 2024) progressively expanded on this by stating that, Organisations risk failing on these crucial activities, which can have long-term negative consequences for their competitiveness and market position. As a result, there is an urgent need for research that bridges this gap by investigating the relationship between leadership and digital transformation results, with a particular emphasis on finding the key leadership behaviours and competencies that improve organisational performance (Guggenberger et al., 2023; kano et al., 2020).

Given these considerations, the research problem can be framed with the following emphasis, the high failure rate of digital transformation initiatives within organisations is a progressive concern, which is frequently linked to insufficient or ineffective leadership. While leadership is acknowledged as a critical aspect in the success of major transitions, there is a considerable gape in understanding the key leadership qualities and behaviours that directly affect digital transformation success. Existing literature does not sufficiently address the connection between leadership and the success metrics of digital

transformation, leaving organisations without clear guidance on how to equip their leaders for this challenge (Marnewick & Marnewick, 2022).

In conclusion, this section addresses the significant issue of high failure rates in digital transformation initiatives, emphasising the critical yet underexplored role of leadership in ensuring success. It emphasises the importance of research that bridges the gap between leadership theory and digital transformation outcomes, as well as the practical requirement for actionable frameworks to help leaders navigate this complicated process.

**Figure 2: Conceptual Framework of the Study**

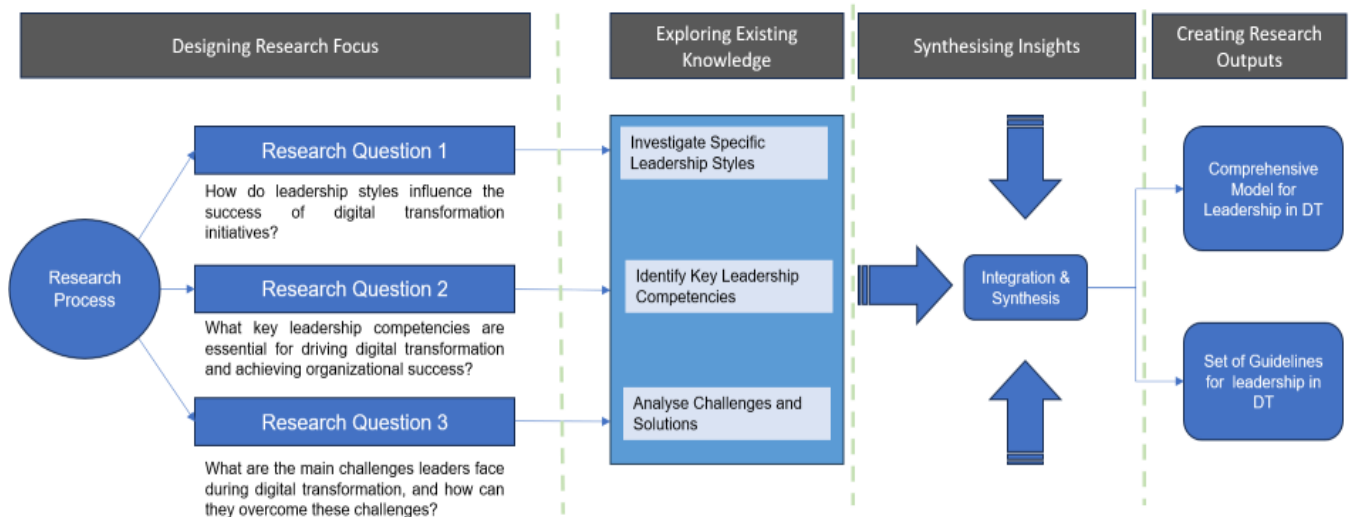


Figure 2 visualises the research method, beginning with the definition of the research focus via three key questions about the impact of leadership on digital transformation.

It advances by looking into specific leadership styles, identifying key leadership qualities, and analysing the issues that leaders confront during DT. The findings from these investigations were combined and synthesised, resulting in the creation of a comprehensive framework and set of principles aimed at improving organisational success through effective leadership in digital transformation. This systematic methodology ensures that the study was methodical and produces practical results.

Very important to note is that, in this research, project management was identified as the specific organisational setting in which the research would be done. While project management serves as the lens through which leadership in digital transformation is examined, it is crucial to note that the primary focus of this research is on leadership dynamics rather than project management methods themselves.

The decision to use project management as the environment for this study is based on its relevance to digital transformation initiatives, as projects are often the primary vehicles through which organisations implement and manage change. Project Management settings include established processes, clear objectives, and specified timetables, making them perfect for studying how leadership affects the effective implementation of digital initiatives.

### **1.3 Research Purpose**

Building on the stated research problem, which emphasise the crucial but underexplored role of leadership in enabling effective digital transformation, this study sought to bridge the gap between leadership theory and practical outcomes in DT efforts. The high failure rate of digital transformation programs, as described in the research problem, highlights the need for a better understanding of how leadership influences these results. Specifically, this study investigates and identifies the leadership behaviours, competencies, and strategies that are most effective in supporting successful digital transformation, hence contributing to increased organisational performance.

Secondly, this study aimed to uncover the critical leadership skills needed to navigate the difficulties of digital change. DT entails not just the implementation of new technologies, but also significant cultural and operational changes within organisations (Fan et al., 2024). As a result, leaders must have a unique set of abilities to effectively manage these changes, integrate digital activities with strategic goals, and promote an innovative and adaptable culture (McKinsey & Company, 2023). By defining these competencies, this study hopes to give practical insights that may influence leadership development programs and prepare leaders to achieve effective digital transformation.

Thirdly, the research examines the issues that leaders confronted throughout digital transformation and devises solutions to overcome them. Resistance to change, talent deficits, and disruption of established processes are significant obstacles that might impede digital transformation attempts (Ravi et al., 2022). Understanding how leaders may effectively address these difficulties is crucial to the success of digital initiatives and

delivering the desired organisational goals. This analysis not only adds to the scholarly conversation but also provides practical guidance to the field.

By integrating these objectives, the study provides a holistic framework and guiding principles that connects leadership behaviours to successful digital transformation outcomes. This standard will be a useful resource for both scholars and practitioners, providing a clear knowledge of how leadership may be exploited to achieve organisational success in the digital age.

## **1.4 Significance**

### **1.4.1. Significance for Business**

This significance section builds directly on the research problem and purpose outlined earlier. This research is significant in multiple ways, including practical implications for businesses as well as contributions to the academic and intellectual communities. By investigating the role of leadership in driving digital transformation, this study provides significant insights that are directly applicable to organisational practice while also adding to a theoretical knowledge of leadership and change management in the digital age.

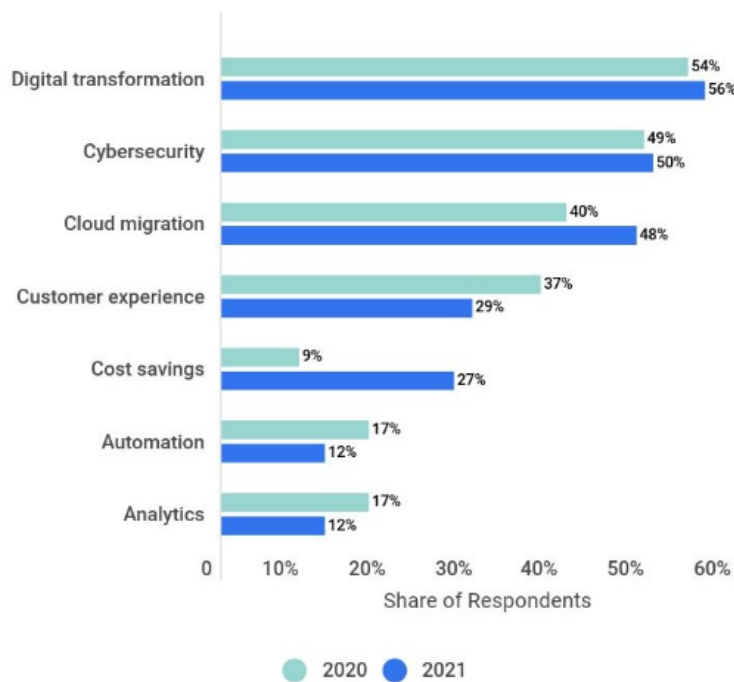
As noted by Guerra (2023) and later supported by Fan et al. (2024) in the previous sections, that, only about 30% of DT initiatives in organisation are successful, Grivas et al. (2024) echoes this by stating that, approximately 70% of digital transformation projects fail to achieve their goals, frequently owing to weak or inefficient leadership. This study is crucial for businesses because it directly addresses this critical issue by identifying the most effective leadership styles, competencies, and methods for guaranteeing the success of digital transformation initiatives. Correani et al. (2020) also supports by stating that there is clearly an opportunity for research on this topic.

The study's findings provide practical assistance for leaders in organisations, allowing them to better understand how to guide their organisations through the complexity of digital transformation. By identifying the precise leadership behaviours and competencies that correspond with successful outcomes, this study will enable leaders to adopt best practices that align with their organisational goals. Martínez-Caro et al. (2020) and Rialti & Filieri (2024) both confirm that properly implemented DT ensures that the business is connected across every aspect of the business, such that consumers have the greatest experience possible, and that staff are engaged in their work.

Furthermore, the comprehensive framework and guiding principles that this research provides will be a useful tool for organisations attempting to negotiate the complexities of DT. Business frameworks help influence crucial decisions and provide scenarios and insight into what options to adopt, a business framework is a set of rules that govern a process or decision (Yusuf et al., 2024).

This framework will not only give a road map for effective leadership throughout digital transformation but will also allow for the measurement and assessment of leadership's impact on organisational performance. This research will help to build more resilient, flexible, and inventive organisations that can survive in the digital age.

**Figure 3: Top Company Initiatives Year-over-Year**



Source: (ZIPPIA, 2023)

To illustrate this point further, figure 3 shows that digital transformation was the top priority for organisations in both 2020 and 2021, with a modest increase from 54% in 2020 to 56% in 2021. This consistency highlights the ongoing importance of digital transformation as a crucial strategic focus for businesses, demonstrating the increasing reliance on digital activities to preserve competitiveness and drive growth in a fast-changing market context.

Connecting this to the findings stated in earlier parts by Guerra (2023) and later corroborated by Fan et al. (2024), which say that only 30% of these programs are successful, emphasises the need for businesses to put in more effort.

Drawing from the discussion in the earlier paragraph, we take a turn to look at two business aspects which link very closely the statistic already discussed:

### *Maintaining Competitive Advantage*

To be competitive in today's digital age, businesses must continually innovate. Companies that effectively employ digital technology are better positioned to develop, adapt to market changes, and meet customer expectations. Furthermore, according to a McKinsey & Company analysis (2023), businesses that have embraced digital transformation are 26% more profitable than their competitors. Thus, understanding the role of leadership in driving digital transformation is crucial for retaining a competitive edge.

Vial (2019) backs this viewpoint by adding that digital skills enable organisations to flexibly reorganise resources and adapt to changing circumstances, which is crucial for maintaining a competitive edge. Understanding leadership's role in driving digital transformation is crucial for preserving a competitive edge. In 2022, global businesses will spend approximately \$1.6 trillion on digital transformations. This figure is expected to reach \$3.5 trillion by 2026, with almost 90% of enterprises in wealthy nations currently undergoing digital transformation (Statista, 2023).

### *Enhancing Operational Efficiency*

Building on this, Rialti and Filieri (2024) observe that the outcomes of digital transformation programs can vary. The key benefits include improved operating efficiency, inventive capabilities, shorter product lead times, increased profitability, and overall competitiveness. In response to this, Khan and Sarkar (2024) review these perspectives and conclude that leaders of digital transformation must communicate a vision capable of persuading employees to embrace change, specify the path to be taken by everyone engaged, and establish conditions conducive to technology adoption.

According to the World Economic Forum (2020), digital transformation can help businesses streamline operations, reduce operating costs, and boost productivity. However, successful adoption necessitates strong leadership to navigate the complexities of implementing new technologies. By addressing these business needs, the study will provide valuable insights that will assist organisations in realising the full potential of digital transformation (WEF, 2020). Parallel to the findings Manny et al. (2022) states that, recent project studies show.

that significant organisational initiatives are increasingly driven by factors other than the iron triangle (Schedule, Cost, Scope), and that project organisation must be handled through digitalisation of information and leadership that understands the intergration (Winch and Cha, 2020),

#### **1.4.2. Academic and Scholastic Significance**

In addition to having practical implications for business, this study is important to the academic communities. The convergence of leadership and digital transformation is a relatively underexplored area within the larger domains of organisational behaviour and business studies. While there is significant research on leadership and digital transformation individually, the unique relationship between these two variables, particularly in the context of attaining organisational success, remains little understood (Peter et al., 2020; Peter et al., 2020; Schiuma et al., 2024). This study seeks to close this gap by offering empirical evidence and theoretical ideas that enhance our understanding of how leadership affects digital transformation results.

## 2. LITERATURE REVIEW

### 2.1. Introduction

Based on the study objectives mentioned in Chapter 1.4, this part seeks to expand the conceptual understanding of leadership in achieving successful and effective digital transformation. The literature review for this study is structured to give a comprehensive investigation of the fundamental concepts pertinent to the role of leadership in driving digital transformation for increased organisational success.

This section dives into the theoretical foundations of leadership, the growing idea of digital leadership, and the specific competencies needed for leaders to successfully manage digital change. By incorporating these ideas, the review intends to create a solid relationship between the available literature and the research issues that will guide this study.

**Figure 4: Structural Outline for Literature Review**

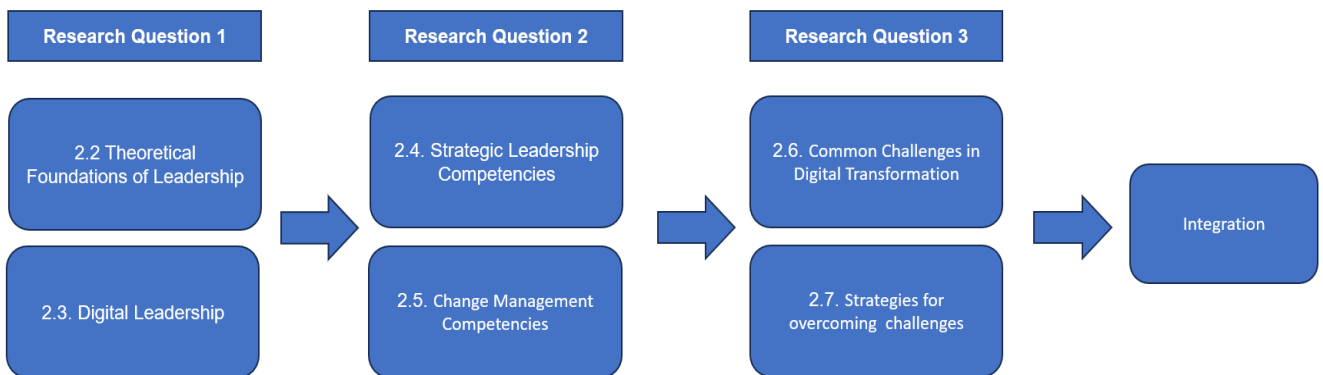


Figure 4 outlines a thorough investigation process flow of leadership's role in digital transformation, the diagram gives an organised summary of how the literature review will methodically answer all the study's research questions. There is an integration phase that synthesises ideas for a cohesive analysis after the three primary blocks of the diagram, which correspond to individual research questions.

The initial section examines Research Question 1, which investigates the impact of leadership styles on the efficacy of digital transformation programs. The review begins by delineating the theoretical underpinnings of leadership in section 2.2, utilising established theories such as transformational and transactional leadership to construct an academic framework. Subsequently, section 2.3 concentrates on digital leadership, analysing the particular styles and behaviours that leaders must demonstrate to effectively navigate organisations through digital transformation.

The second block examines Research Question 2, concentrating on the leadership abilities necessary for facilitating digital transformation and attaining organisational success. Section 2.4 addresses strategic leadership competencies, highlighting essential skills. Section 2.5 subsequently addresses change management competencies, highlighting the critical role of leaders in navigating their teams through the human and operational problems linked to digital transformation. This section emphasises competencies, examining both the leadership traits that drive transformation and the specific skills leaders must cultivate to navigate the difficulties of digital transition.

The final block addresses Research Question 3, concentrating on the problems leaders encounter throughout digital transformation and the strategies they might employ to surmount these impediments. Section 2.6 addresses prevalent difficulties, including opposition to change, technological integration, and resource constraints. Section 2.7 offers an overview of solutions to surmount these hurdles, emphasising best practices such as incremental change, clear communication, and the cultivation of a culture of continuous improvement. This section outlines difficulties and provides actionable insights on how good leadership can overcome them.

The last phase of the graphic is Integration, wherein the motifs from the three sections are synthesised. This integrates diverse aspects of leadership theory, competencies, and problems, offering a comprehensive understanding of how leadership facilitates the achievement of successful digital transformation.

## **2.2. Theoretical Foundation of Leadership in Digital Transformation**

The study of leadership has advanced greatly over time, with several theories providing insights into how leaders impact organisational outcomes. Traditional leadership theories, such as trait theory, focus on the innate attributes that create good leaders (Wang & Zhao, 2024). However, as organisational dynamics got more complicated, behavioural theories evolved, proposing that leadership effectiveness is dependent not just on qualities, but also on behaviours that can be trained and learnt (Yusuf et al., 2024; Guggenberger et al., 2023). Transformational leadership has gained popularity, particularly in situations demanding considerable organisational change. Transformational leadership is defined by the ability to inspire and encourage followers to attain better levels of performance, which frequently leads to innovation and organisational success (Görçün et al., 2024).

### 2.2.1. Digital Transformation vs Leadership

#### Digital Transformation

Expanding on this concept, we consider Digital Transformation, the importance of business digital transformation is becoming more obvious. Nonetheless, many businesses continue to face the difficulty of wanting to adapt but lacking the courage to do so. Digital transformation is the full integration of digital technologies into all aspects of a business, substantially altering how organisations run and create value to customers (Fan et al., 2024). This process entails shifting from traditional corporate paradigms to more innovative, technology-driven approaches that increase productivity, enhance customer experiences, and drive competitive advantage (Chau et al., 2022).

**Table 1: Comparison of Digital Transformation Definitions**

Concept	Fundamental Themes of DT	Author
<b>Digital Transformation</b>	Technology-Driven Change	(Banks et al., 2022) (Belli et al., 2024)
	Business Model Innovation	(Chau et al., 2022)
	Cultural and Organizational Shift	(Aras & Büyüközkan, 2023) (Correani et al., 2020)
	Customer-Centric Approach	(Fan et al., 2024); (Bican & Brem, 2020) (Chen et al., 2024)
	Process and Operational Optimization	(Grivas et al., 2024) (Guerra, 2023)

According to Banks et al., (2022), DT refers to the systematic and comprehensive process of integrating digital technology into an organisation, radically altering how firms' function, deliver value, and interact with customers. It entails more than just implementing new tools or software; rather, it is a comprehensive transformation that redefines processes, roles, and business models using technology.

Belli et al., (2024) progressively expanded on the theory, stating that, this change is being driven by significant advances in technologies such as artificial intelligence, cloud computing, and data analytics, which enable organisations to boost efficiency, innovation, and agility. The foundation of DT is its capacity to utilise technical developments to generate meaningful, long-term change, transforming not only operational capabilities but also organisational culture to better meet changing market needs and consumer expectations.

Viewed through the lens of “Business Model Innovation”, Chau et al., (2022) defines it as the process by which organisations fundamentally rethink and rebuild their business models to capitalise on the opportunities presented by digital technologies. It entails a strategic rethinking of how value is created, delivered, and captured within the organisation, rather than simply implementing new tools or processes (Kürpick et al., 2023). This transformation often results in new revenue sources, enhanced customer interaction strategies, and improved operational efficiencies by using digital capabilities like data analytics, artificial intelligence, and automation (Chau et al., 2022). Reinforcing on Chau et al., (2022) definition, Mondejar et al., (2021) state that DT, driven by business model innovation, entails reconfiguring conventional business processes and models to maintain competitiveness and relevance in the digital era, enabling organisations to adeptly address the rapidly changing market and technological demands.

Based on both the "Technology-Driven Change" and "Business Model Innovation" viewpoints on digital transformation, we can conclude that DT is a complicated process that goes beyond simply implementing new technology. It requires a comprehensive rethinking of an organization's technological infrastructure as well as its strategic framework. Together, these perspectives show that successful digital transformation necessitates not only technological advancements, but also a significant strategy shift that aligns technology with the organization's overall aims and business model. In essence, DT is a technological and strategic evolution, and leadership is critical to ensuring that these changes are properly integrated to generate long-term organisational success.

Aras & Büyüközkan, (2023) comes in strongly with his definition arguing that DT is more than just technology or procedures; it is also about changing attitudes, behaviours, and organisational culture to adapt and succeed in the digital age. This shift necessitates the organisation cultivating a culture of creativity, agility, and openness to change, ensuring that all employees are on board with the digital transformation objectives. It entails

fostering continual learning, cooperation, and adopting new modes of working, which are frequently more flexible and data-driven (Correani et al., 2020; Chedid & Teixeira, 2021).

Integrating these perspectives, while "Technology-Driven Change" provides the tools and systems required to improve efficiency and competitiveness, and "Business Model Innovation" redefines how value is created and captured, the cultural and organisational shift is the foundation that allows these technological and strategic changes to be sustained. Building on this point, Aras & Büyüközkan (2023) expands by saying Even the most cutting-edge technologies and creative business concepts might not reach their full potential in the absence of a supporting culture and organisational alignment. Therefore, the success of digital transformation is on an organization's ability to combine technology and business model innovation within a culture that embraces change, ensuring the transformation is not only adopted but also ingrained in the organisational DNA (Lazzeretti et al., 2023).

Meanwhile, Fan et al., (2024) adopts a different stance, proposing Digital Transformation as a "Customer-Centric Approach" that prioritises the customer in an organization's digital evolution, emphasising the enhancement of customer experience through smart technological implementation. This viewpoint suggests that the principal catalyst of digital transformation is not technology per se, but the necessity to enhance comprehension, interaction, and service to customers in an ever-evolving digital landscape. This research is supported by work done by Bican & Brem, (2020) and subsequently by (Chen et al., 2024)alluding that In a competitive market characterised by evolving customer expectations, organisations must innovate their products, services, and interactions by utilising digital technologies and data to deliver personalised, seamless, and value-oriented experiences.

To further underscore this argument (Fan et al., 2024), expands his idea by stating that customer-centric approach to digital transformation rests on the notion that technology serves as a tool to achieve the ultimate objectives of customer happiness and loyalty. Modern consumers need increasingly personalised, immediate, and accessible experiences, anticipating that companies will fulfil these expectations across all platforms. A Bughin et al., (2019) analysis indicating that organisations emphasising customer experience are more likely to exceed their competitors in revenue growth by as much as 85%. This highlights how a customer-centric strategy fosters operational enhancements and yields clear financial advantages. Moreover, the rise of agile and adaptive business models in digital transformation underscores the need for a customer-centric strategy.

Conventional business models typically are centred on efficiency and cost minimisation, are becoming supplanted by more adaptable and dynamic frameworks that emphasise consumer requirements and swiftly respond to market fluctuations (Dong & Verhoef, 2024).

To further illustrate this point, Tsvetkova, (2020) and Vescovi (2021) highlight that the emergence of digital platforms and ecosystems like Uber, Airbnb, and Alibaba exemplify the efficacy of customer-centric digital transformation. These platforms have transformed their businesses by establishing ecosystems focused exclusively on providing value to clients through new and innovative methods. To sum it all up, Chen et al., (2024) concludes by noted that seeing digital transformation as a customer-centric strategy helps one to focus more on a strategic enabler of improved customer experiences than on technology as a tool. Organisations may build significant, long-lasting relationships with their consumers by using data-driven insights, encouraging omnichannel interaction, implementing agile business models, and transforming customer service (Wang & Zhao, 2024).

Lastly, we explore research from Grivas et al., (2024) and Guerra, (2023) who interpret DT from a “Process and Operational Optimisation” perspective. The two researchers define it as the deliberate use of digital technologies to upgrade and simplify corporate procedures, increase operational effectiveness, and finally stimulate organisational output. From this point of view, DT is not only a technological improvement but also a basic rethink of how companies run. Building on this perspective Guerra, (2023) continues to state that, businesses can lower inefficiencies, enhance decision-making, and build more agile and responsive operational models using automation, data analytics, and real-time systems integration and optimising operations. This point of view is based on using digital tools to enhance the fundamental operations of a company, therefore increasing its efficiency, economy, and competitiveness.

Building upon this theory Ariella (2023) adds in by stating that, in industries such as healthcare, where operational efficiency is of the utmost importance in order to provide timely patient care, there is a compelling argument for digital transformation as a process and operational optimisation. The implementation of digital transformation in the healthcare industry has made it possible to improve a variety of procedures, including the management of patient records, the scheduling of appointments, and diagnostics.

The transition from paper-based systems to electronic health records (EHRs) has not only simplified administrative procedures but has also enhanced the precision and accessibility of patient data, which has enabled healthcare clinicians to make decisions that are both more timely and more informed (Mukesh, 2022). This is consistent with findings from Cozzolino & Geiger (2024) saying that another area that demonstrates digital transformation as process optimisation is the financial services sector. Everything from payment processing to customer support has been optimised as a result of automation and digitisation made possible by digital transformation. The reduction of processing times, the improvement of security, and the reduction of operational expenses have all contributed to the revolution in financial transactions brought about by digital platforms such as online banking, mobile payments, and systems based on blockchain technology (Kraus et al., 2022).

In essence, despite their different points of view, the several approaches on DT have important commonalities in their conception of the transformation process. While the Business Model Innovation approach stresses the strategic overhaul of how value is created and delivered, the Technology-Driven Change view stresses the acceptance of digital tools. The Culture and Organisation Shift method complements both by underlining that no change can happen without matching organisational culture with technical developments. Likewise, the Customer-Centric Approach emphasises the requirement of making sure that every digital project improves customer experience, a goal that closely relates to the need of operational efficiency stressed in the view of Process and Operational Optimisation.

Moreover, despite these differences, the fundamental themes are clear-cut, technology serves as a facilitator, leadership is essential for fostering strategic and cultural alignment, and operational efficiency and customer experience are key to long-term success in digital transformation. These points of view taken together offer a whole picture of DT, demonstrating that it is a diverse, complicated journey rather than a one-dimensional process.

Gong & Ribiere (2021) argues that the existence of several definitions or descriptions of DT has resulted in an increase of a hype and buzzword throughout both academic and practitioner literature. Conversely, insufficient emphasis has been devoted to defining what digital transformation DT truly entails and how it should be conceptualized.

Echoing these sentiments, Guerra, (2023) states that, In the absence of a standardised definition, researchers and practitioners will ultimately be unable to "advance the theory and application" of the subject. Although current literature indicates a heightened study interest in this domain, there is a lack of a universal and thorough understanding of the concept (Vial, 2019).

Additionally, from the literature explored thus far, it is clear that while interpretations may differ, common themes emerge around the comprehensive integration of digital technology into all aspects of an organisation to fundamentally improve processes, customer experiences, and operational efficiency. Whether DT is perceived as a technological overhaul or a strategic reevaluation of the role of businesses in the digital era, its success depends upon the leadership that oversees its implementation, in addition to the technology itself (Nambisan et al., 2019). Providing a broader context, Verhoef et al. (2021) state that, DT includes a wide range of changes, such as the adoption of new software and hardware technologies, the application of data analytics and artificial intelligence, and the development of new business processes and organisational cultures. Companies that effectively undergo digital transformation are better positioned to gain operational efficiency, save costs, and improve overall performance (Winch and Cha, 2020).

Furthermore, McKinsey & Company (2021) states that organisations that have successfully adopted digital transformation efforts have seen considerable improvements in key performance measures, highlighting the significance of this strategic undertaking. Despite the widely acknowledged relevance of digital transformation, there is a major vacuum in understanding the specific leadership behaviours and methods that directly influence the success of digital transformation programmes (Khan & Sarkar, 2024).

*"Digital Transformation leads to successful outcomes"*, Most of the DT research done shows insights on several angles on successful DT. This supports the presumption that starting a DT project always results in success which is not the case (Oludapo et al., 2024). Highlighting a different aspect, Oludapo et al. (2024) argues that though DT has numerous advantages, there is increasing evidence that many of DT projects fall short of their expected results. Many times, these failures can be attributed to a variety of factors, including weak leadership, reluctance to change, poor alignment between technology and business strategy, and the difficulty of including new technologies into current systems (Wessel et al., 2021; Oludapo et al., 2024).

Drawing from these theoretical arguments, it is clear that leadership is crucial to DT success. Cultural resistance and inadequate strategic alignment underline the need for strong leadership that drives technological adoption, organisational change, and employee engagement. This study will examine the leadership's role in examining DT for improved success, which examines how leadership styles, competencies, and strategies may overcome digital transformation challenges.

### **2.3. Digital Leadership**

Digital change is strongly reliant on leadership. According to Khan and Sarkar (2024), digital leadership is the strategic use of a company's digital resources to effectively achieve business objectives at both the collective and individual levels. In support of this view, AlNuaimi et al. (2022) extend by noting that, Digital leadership has been conceptualised as a style that integrates leaders' technical competencies, such as observing technological trends, choosing the path of digital transformation, and addressing the team about changes that need to be made.

Effective leaders have the vision and capacity to promote organisational transformation by adopting new technology and processes. According to Bonnet & Westerman (2020) successful digital transformation needs executives cultivating a digital-first mentality, encouraging innovation, and managing change efficiently.

Leaders must also guarantee that their teams have the expertise and resources to adopt new digital technologies and processes (Bonnet & Westerman, 2020). Leaders with a transformative style may build an innovative and adaptable culture, which is critical for managing the intricacies of digital efforts (Onesi-Ozigagun et al., 2024) Digital Leaders inspire people, encourage risk-taking, and promote continuous learning, all of which are necessary for successful digital transformation (Onesi-Ozigagun et al., 2024)

Drawing on this, (Benitez et al., 2022) explains how leaders' and employees' technology competencies may differ. For example, a company could have a technologically skilled workforce but insufficiently skilled leaders, or vice versa.

### **2.3.1. Transformational Leadership**

Transformational leadership is defined by the ability to inspire and encourage followers to attain better levels of performance, which frequently leads to innovation and organisational success (Nguyen et al., 2023). According to (Chau et al., 2022) transformational leaders are differentiated by their vision, ability to explain it, and ability to create a culture of trust and support in which workers feel empowered to contribute to organisational goals. This leadership style has proven to be extremely effective in generating significant organisational change, making it highly relevant to the context of digital transformation (Ariella, 2023).

Both Belli et al. (2024) and (Ngoc Khuong et al., 2022) emphasised that in the context of digital transformation, transformational leadership is crucial for negotiating the complexity of adopting new technology and executing extensive organisational change. Transformational leaders excel at handling the uncertainty and opposition that frequently accompany digital transformation endeavours (Marrucci et al., 2022). They accomplish this by developing a compelling future vision, articulating the benefits of digital efforts, and cultivating an innovative and continuous improvement culture (Rialti & Filieri, 2024). This section explores the specific ways in which transformational leadership can help with the effective adoption of digital transformation, connecting these findings directly to the research question on the impact of leadership styles on digital transformation outcomes.

### **2.4. Strategic Leadership Competencies**

Strategic leadership competencies are essential for connecting digital transformation activities with overarching organisational goals and ensuring that these efforts yield long-term success. (Kaur Bagga et al., 2023) and (Madi Odeh et al., 2021) define strategic leadership as the ability to anticipate trends, question the status quo, analyse complicated situations, and make decisions that are consistent with the organization's strategic vision.

In the context of digital transformation, these skills are critical for navigating the quickly changing technology landscape and ensuring that digital efforts are integrated into overall business strategy.

### **2.4.1 Digital Literacy**

Digital Literacy is an important component of strategic leadership in the context of digital transformation. Digital literacy is more than just knowing how to use digital tools; it also includes a thorough awareness of how digital technologies may be used to gain a competitive advantage and drive innovation. According to (Görçün et al., 2024). This supports and extends the work done Kaur Bagga et al. (2023), leaders with high levels of digital literacy are better able to assess the promise of new technologies, make educated digital investment decisions, and guide their organisations through the challenges of technology adoption. By uniting these concepts, it becomes evident that competency is critical for ensuring that digital transformation efforts are not only technically sound but also strategically aligned with the organization's long-term goals (Nguyen et al., 2023).

### **2.4.2. Innovation Management Competency**

In the context of digital transformation, innovation management skills are critical for instilling a culture of creativity and continual improvement (Görçün et al., 2024; Parts, 2023). Leaders must be able to foster and manage innovation within their organisations, fostering experimentation, risk-taking, and the investigation of novel ideas.

Jia et al., (2022) emphasise the necessity of ambidextrous leadership in managing innovation, stating that leaders must strike a balance between the need for exploration (innovation) and exploitation (efficiency). This ability is especially important in digital transformation, as organisations must innovate to remain competitive while keeping operational efficiency.

Innovation management also entails building an environment conducive to ongoing learning and development (Madi Odeh et al., 2021). Okano et al. (2020), has progressively expanded in stating that, as digital technologies rapidly advance, executives must ensure that their organisations are adaptive and responsive to new opportunities. This necessitates creating a learning culture in which people are encouraged to acquire new skills, experiment with new technology, and constantly improve their processes. Li et al. (2020) found that executives who prioritise continuous learning are better positioned to deliver effective digital transformation because they can adapt quickly to changes in the technical landscape.

### **2.4.3. Integration of Leadership Competencies in Digital Transformation**

Having established the competencies, the next logical aspect to look at is Integrating these competencies, strategic leadership, change management, and innovation management create a comprehensive framework for understanding the leadership skills required for digital transformation. These competencies enable leaders to effectively navigate the challenges of digital transformation, align digital projects with strategic goals, manage the human aspects of change, and build an innovative culture (Peter et al., 2020; Wang & Zhao, 2024).

### **2.5. Change Management Competencies**

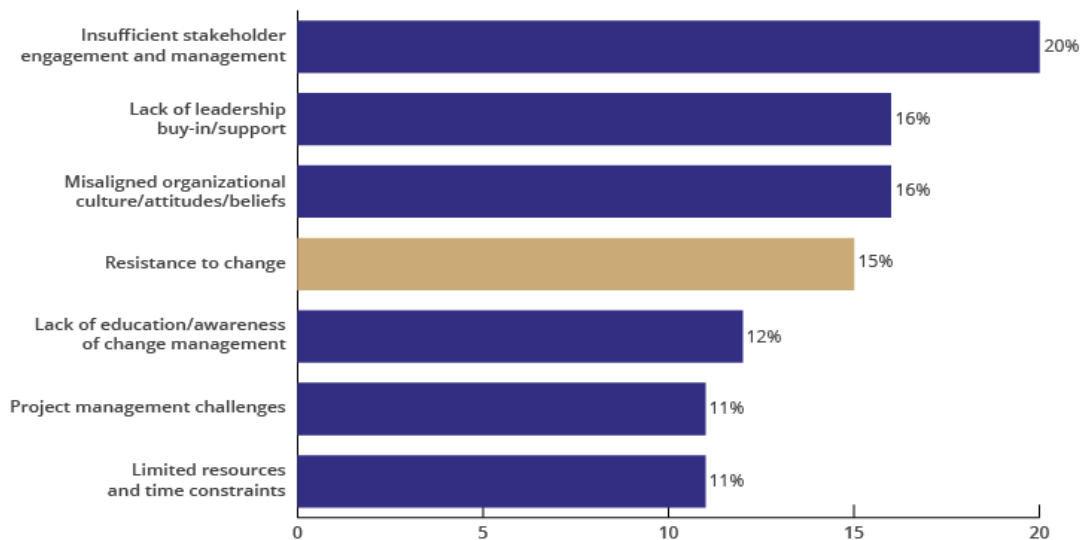
The previous section draws us to the next discussion, Change Management. Change management becomes another critical area for leaders who want to successfully undertake digital transformation efforts. Because digital transformation frequently requires considerable changes to organisational culture, processes, and structures, leaders must be skilled at managing these changes in order to minimise resistance and ensure a smooth transition (Belli et al., 2024). Building on this idea Kotter (2020) outlines several critical components of effective change management, including instilling urgency, forming a steering coalition, and expressing the goal for change. These factors are especially important in the context of digital transformation when the pace and scope of change can be overwhelming for employees (Trzeciak, 2023; Torbacki, 2024).

One of the most crucial skills in Change Management is the capacity to manage resistance to change. Employees may fear job displacement, struggle with new technologies, or just reject changing long-standing traditions. Studies done by Gangl et al. (2024) and later reinforced by (Grivas et al., 2024) found that executives who can successfully handle resistance to change are more likely to succeed in digital transformation programs. This entails not only addressing employee issues but also including them in the change process, instilling a feeling of ownership and dedication to the transformation.

In conjunction with these findings, Gangl et al., (2024) touches on Stakeholder Engagement, is another key change management ability. Employees, managers, consumers, and external partners must all actively participate in and support digital transformation for it to be successful.

Leaders must be able to identify and engage stakeholders, understand their requirements and concerns, and match their interests with the transformation's goals. This ability is critical for forming the coalitions required to promote change and assure the success of digital transformation programs (Matthews et al., 2022).

In summary the findings demonstrated already draws us to research by Kempton (2024), which highlights critical barriers to successful change management, with "insufficient stakeholder engagement and management" (20%) and "lack of leadership buy-in/support" (16%) being the top two factors. These findings highlight the vital relevance of prioritising stakeholder management and leadership participation in any change endeavour, especially in digital transformation. Emphasising these areas is likely to address the underlying causes of resistance and misalignment, increasing the overall efficacy of change management tactics.



**Figure 5 : Greatest Change Management Obstacles**

Source : Prosci, 2024

## 2.6. Common Challenges in Digital Transformation

Despite the potential benefits, digital transformation programs are frequently challenged with obstacles that can jeopardise their success. Common challenges include resistance to change, talent shortfalls, and disruptions to existing processes (Schiuma et al., 2024; Wang & Zhao, 2024).

This section examines the literature on these issues, offering a detailed analysis of the elements that contribute to the high failure rate of digital transformation initiatives. According to studies done by Li et al., (2024) and Bican & Brem (2020), the discussion emphasises the role of leadership in resolving these difficulties, drawing on the

Now that we have discussed the overarching challenges and complexities associated with implementing digital transformation, it's time to look deeper into the specific impediments that organisations typically face. Understanding these obstacles in depth will not only emphasise the varied nature of digital transformation but will also provide a more direct path forward for efficiently tackling these issues:

### **2.6.1 Security Concerns and Cyber Threats**

As organisations become more digitally integrated, security concerns and cybersecurity risks grow more urgent (Li & Liu, 2021). The rise of digital infrastructure, which includes cloud computing, IoT devices, and mobile technologies, creates new vulnerabilities that hackers can attack (Ruohonen, 2019). For example, the proliferation of connected devices expands the attack surface, making it more difficult to secure all entry points properly.

### **2.6.2. Continuous Evolution of Customer Needs**

In the digital age, customer needs and preferences evolve rapidly, driven by technological advancements and the proliferation of digital channels (Trzeciak, 2023). Customers now expect personalized, seamless, and omnichannel experiences, which require organizations to be agile and responsive to these changing demands. However, keeping pace with the continuous evolution of customer needs is a significant challenge for many organizations, particularly those with legacy systems and rigid processes (Shen et al., 2024).

### **2.6.3. System Integration and Technological Disparities**

Research by Torbacki (2024) suggests that systems integration is a critical aspect of digital transformation, as organizations often operate multiple legacy systems that were not designed to work together. Torbacki further continues stating that, Integrating these systems with new digital platforms can be complex and costly, leading to delays and disruptions. Technological disparities within the organization, such as different departments using incompatible software, further complicate the integration process.

A successful digital transformation necessitates a comprehensive strategy to system integration, ensuring that all technologies collaborate seamlessly to achieve the organization's objectives. This could entail implementing middleware solutions, APIs, or even replacing obsolete systems entirely (Trzeciak, 2023). Many organisations, for example, are transitioning to integrated ERP (Enterprise Resource Planning) systems that provide a uniform platform for managing a variety of company operations, including finance and supply chain management (Ruohonen, 2019). However, the cost and complexity of such integrations can be enormous, necessitating meticulous planning and expert IT workers (Trzeciak, 2023).

#### **2.6.4. Budget Constraints and Digital Transformation Budget Planning**

Budget constraints are a typical barrier in digital transformation, as the expenses of new technology, system integration, training, and cybersecurity can be high. Many organisations struggle to get finance for digital transformation programs, particularly when the return on investment (ROI) is unclear (Ravi et al., 2022).

#### **2.6.5. Lack of a Digital Transformation Strategy**

One of the most significant impediments to success is the absence of a cohesive digital transformation plan. Fan et al. (2024) Without a clear vision and strategy, digital transformation efforts can become disjointed, resulting in mismatched goals, duplicative activities, and wasted resources. A well-defined digital transformation plan outlines how digital activities will match with the organization's overall goals, ensuring that all stakeholders are working towards the same goal (Fan et al., 2024; Grivas et al., 2024)

#### **2.6.6. Inefficient Data Management**

Data is the foundation of digital transformation, but many organisations suffer from poor data management processes. Poor data quality, siloed data systems, and a lack of data governance can all limit the ability to use data for decision-making, personalisation, and automation. Inefficient data handling can also cause compliance challenges, especially in businesses with strict data protection rules (DalleMule & Davenport, 2017).

#### **2.6.7. Skills Gap and Talent Shortage**

As noted by Chen et al. (2024) The rapid pace of digital transformation has led to a growing skills gap, as the demand for digital skills outpaces the supply of qualified talent. Organizations often struggle to find and retain employees with the necessary skills in areas such as cybersecurity, data science, and software development.

This talent shortage can slow down digital transformation efforts, as organizations lack the expertise needed to implement and manage new technologies (Bughin et al., 2018).

## **2.7. Strategies for Overcoming Challenges**

To ensure the success of digital transformation programs, leaders must devise strategies that successfully address the identified issues (Gangl et al., 2024). This section delves into best practices and successful case studies from the literature, providing evidence-based ways for leaders to overcome challenges in digital transformation. By emphasising practical solutions, this section bridges the gap between theoretical discoveries and real-world applications, confirming the research's relevance to both researchers and practitioners (Correani et al., 2020).

Saarikko et al. (2020) shares insights on overcoming some of the challenges, as he states that, to successfully implement digital transformation, it is critical to match your programs with well-defined business outcomes. This guarantees that every digital endeavour directly contributes to attaining strategic objectives such as revenue growth, increased customer satisfaction, or improved operational efficiency. (1) Aligning digital transformation programs with business outcomes not only gives direction, but also allows the organisation to track the performance of its activities using actual results. Furthermore, (2) making organisational change a core component of digital transformation is critical because it addresses the human aspect of change. Digital transformation frequently necessitates a shift in culture, procedures, and behaviours; incorporating organisational change management into the transformation strategy reduces opposition and promotes a smoother transition.

Furthermore, (3) maintaining open communication at all levels of the organisation is critical to ensuring that all stakeholders are aware, engaged, and committed to the transformation goals. Clear and consistent communication promotes trust and decreases ambiguity, making it simpler to execute change. (4) Developing a good implementation plan is another key tactic since it gives a roadmap for carrying out digital transformation activities in a systematic and staged manner. This strategy should include critical milestones, timetables, resource allocation, and risk-management methods. Finally, (5) strategising technology procurement plans is critical to ensuring that the appropriate technologies are picked and effectively incorporated into the organisation (Saarikko et al., 2020).

## **2.8. Integrating Leadership Theories with Digital Transformation**

Finally, this literature study has covered the important concepts and theories connected to leadership and digital transformation in a systematic manner, resulting in a thorough and focused exploration of the relevant literature. By organising the review around the research question and incorporating ideas from diverse leadership theories, the study shows a clear trend towards a more in-depth knowledge of how leadership affects digital transformation results. This organised approach not only increases the theoretical framework of the research, but also assures that the study is well-positioned to make valuable contributions to academic and business leadership development.

## **2.9. Conclusion of Literature Review**

This study emphasises major areas that require further exploration and actionable insights by providing a summary of the gaps that were identified in the literature review for both academic and business contexts.

### **2.9.1 Academic Gaps**

There is a significant gap in the literature about the direct relationship between leadership styles and digital transformation (DT) outcomes (Tsvetkova, 2020). While substantial research has been undertaken on leadership and digital transformation separately, the convergence of two topics, particularly how leadership effects specific DT success measures, has received little attention. Existing studies generally neglect how diverse leadership competencies such as visionary talents, change management experience, and technical adaptability contribute to overcoming DT difficulties like resource constraints, skill gaps, and reluctance to change (Winch & Cha, 2020). Gaps From a practical standpoint, organisations frequently lack detailed frameworks or rules outlining how to successfully educate leaders for digital initiatives. Ruohonen, (2019) states that, according to the literature, while transformational and digital leadership styles are desirable, organisations continue to struggle to execute leadership techniques that are appropriate for DT's specific needs. Furthermore, the issues of allocating resources, improving technical compatibility, and upskilling employees in the face of rapid technological breakthroughs necessitate structured leadership techniques. Shamna (2023) mentions that, without such frameworks, firms risk inefficient transformations, leading to high failure rates for DT programs.

## 2.9.2. Business Gap

In the realm of business, there is a significant shortage in practical frameworks that guide organisations in preparing leaders for effective digital transformation (Kraus et al., 2021). While transformational and digital leadership styles are increasingly recognised for their potential benefits, there is still a dearth of clear, concrete solutions for firms to develop and support leaders in a DT environment. Building upon this conclusion Li et al., (2024) notes that existing literature frequently acknowledges the importance of leadership, but it lacks specifics on how to match leadership techniques with the special requirements of DT, such as agile resource allocation, workforce upskilling, and technological integration.

Parallel to the views shared on the previous paragraph Ivančić et al., (2019) notes that, a fundamental business gap is overcoming resource constraints that impede DT initiatives, such as restricted finances, competing departmental goals, and insufficient technology infrastructure. Furthermore, it is critical to consider how leadership styles, challenges, and abilities can be effectively blended to fit certain situations or projects. The lack of a personalised approach to selecting and adapting leadership practices, whether transformational, agile, or change-oriented, frequently leaves organisations without the flexibility required to manage specific DT needs (Brown & Brown, 2019).

Reflecting on the discussed theory, this gap emphasises the importance of contextually suitable leadership frameworks that can help leaders overcome impediments and promote successful DT in their individual operational settings (Nieken, 2023). Without organised methodologies, organisations struggle with inefficient resource utilisation, resulting in sluggish transformations and, eventually, failed DT attempts.

Furthermore, technological compatibility creates a business gap because many organisations lack guidance on integrating new digital tools with old legacy systems. The absence of leadership models designed to address such integration difficulties might result in costly disruptions and inefficiencies (Vaska et al., 2021). Additionally, upskilling employees to handle rising digital responsibilities is frequently overlooked, as organisations struggle with skill gaps in the absence of effective leadership initiatives for continuous learning and development (Yusuf et al., 2023).

To overcome these difficulties, organisations would benefit from leadership frameworks that prioritise agility, adaptability, and technology knowledge. Such frameworks could provide leaders with a road map for building organisational resilience and optimising DT outcomes, reducing the danger of common transformation mistakes. Filling this business gap allows organisations to lay a solid platform for long-term digital growth and competitive advantage.

### 3. RESEARCH QUESTIONS

Building on the comprehensive review of the literature, this section provides the research questions that will guide the study. The literature research has shed light on the complicated relationship between leadership and digital transformation, stressing the important qualities that leaders must possess to manage this process effectively. It has also identified the most significant problems that organisations encounter during digital transformation, which range from opposition to change to technical integration and budget constraints. By synthesising lessons from multiple leadership theories, such as transformational and digital leadership, the literature review has laid a solid foundation for formulating research questions.

The study questions are intended to delve into the intricate relationships between leadership and digital transformation results, offering a framework for investigating how leadership styles, competencies, and strategies influence the success of digital transformation programs (Park & Chang, 2024).

By addressing these questions, the study hopes to create new insights that might inform both academic theory and practical leadership development.

***Research Question 1 : How do leadership styles influence the success of digital transformation initiatives?***

The first research question is based on the literature on transformational and digital leadership, which implies that leadership style can have a major impact on the success of organisational change initiatives (Chen et al., 2024; Khan & Sarkar, 2024; Li et al., 2020)

Transformational leadership, for example, is defined by the ability to inspire and encourage employees to achieve a shared vision, which is especially important in the context of digital transformation (Li et al., 2024). On the other hand, digital leadership emphasises the integration of digital technologies and methods to drive creativity and adaptation (Guggenberger et al., 2023).

***Research Question 2 : What key leadership competencies are essential for driving digital transformation and achieving organizational success?***

Talking the second research question. The significance of distinct leadership qualities has been a repeating subject in the literature, particularly in the context of strategic thinking, change management, and innovation management (Schiuma et al., 2024). This research question seeks to identify and investigate the most important qualities for leaders to successfully manage their organisations through digital transformation. Vescovi (2021) emphasised that by focusing on competencies like as digital literacy, strategic vision, and emotional intelligence, this question addresses the requirement for leaders to have a diversified skill set that allows them to handle both the technological and human components of DT.

The outcomes of this investigation will provide significant insights for leadership development programs, assisting organisations in cultivating leaders who are well-suited to lead in the digital era.

The literature has identified various problems associated with DT, such as reluctance to change, talent gaps, and the complexity of system integration (Wang & Zhao, 2024; Trzeciak, 2023). This research topic seeks to go deeper into these problems from a leadership perspective, specifically investigating how leaders perceive and respond to the challenges that develop during digital transformation. Furthermore, it aims to provide tactics and best practices that leaders may use to overcome these obstacles and assure the success of their digital efforts. By analysing these concerns, the study will contribute to a more thorough knowledge of the most effective leadership tactics for navigating the complexities of digital change.

***Research Question 3: What are the main challenges leaders face during digital transformation, and how can they overcome these challenges?***

The third research question seeks to go deeper into these problems from a leadership perspective, specifically investigating how leaders perceive and respond to the challenges that develop during digital transformation. Furthermore, it aims to provide tactics and best practices that leaders may use to overcome these obstacles and ensure the success of their digital efforts. By analysing these concerns, the study will contribute to a more comprehensive understanding of the most effective leadership strategies for navigating the complexities of digital change.

In summary, the research questions presented here are intended to provide a focused and thorough examination of the relationship between leadership and digital transformation. These questions, based on the literature and guided by the identified gaps, will guide the empirical inquiry into how leadership affects the success of digital transformation programs. By addressing these concerns, the study hopes to offer actionable insights that will improve both the theoretical knowledge of leadership in the digital age and the practical application of leadership tactics in organisational settings. The following chapter covers the research design and technique for answering the three research questions.

## **4. RESEARCH METHODOLOGY**

### **4.1. Introduction**

The research methodology section describes the systematic approach that will be used to carry out this investigation, this section also describes the approach and design used to answer the research questions provided in Chapter 3. It describes fully the research design, data collection methods, sample tactics, and analytic methodologies (Saunders & Lewis, 2018), assuring that the study is carried out rigorously and produces reliable, legitimate results. This part is critical for establishing the credibility of the research findings and ensuring that the study may be reproduced or expanded on in future research.

### **4.2. Choice of Research Methodology and Design**

#### **4.2.1. Justification for a Qualitative Approach**

Qualitative research is excellent for this study because it enables a thorough exploration of leadership behaviours, competencies, and difficulties in the context of digital transformation. The goal of this study is not to quantify relationships or test hypotheses, but to understand the "how" and "why" of leadership techniques in real-world contexts. This is consistent with the need to investigate leaders nuanced and subjective experiences as they negotiate digital transition, which cannot be fully represented by quantitative approaches.

Qualitative research allows for more in-depth exploration of complicated subjects, making it especially effective for studies seeking rich, specific insights rather than generalisable data (Chaturvedi, 2023). This approach is especially suitable in light of the literature already explored, which highlighted the necessity of a methodology that allows for an exploration of the leadership dynamics at work in digital transformation (Parts, 2023).

In addition, the research questions addressed in this study are fundamentally qualitative, focussing on leaders' experiences, perspectives, and strategies, necessitating a qualitative methodology. Compared to quantitative research, which is often focused on measuring variables and evaluating hypotheses across large samples, qualitative research excels at capturing the richness and depth of human experience in individual situations (Saunders & Lewis, 2018; Chaturvedi, 2023).

Building on this approach, Ajimotokan (2023), state that one of the primary characteristics of qualitative research is its capacity to investigate contextual and relational dynamics, which are critical for understanding leadership. According to Indrayan (2024), qualitative research is particularly useful for analysing how contextual elements such as organisational culture, industry norms, and external pressures influence leaders' behaviours and decisions. This is especially crucial in digital transformation, as efforts' success often depends on leaders' ability to navigate and align with various contextual elements (Oludapo et al., 2024).

Furthermore, leadership is fundamentally relational, with interactions between leaders and their followers, colleagues, and other stakeholders. Qualitative methods, such as in-depth interviews, are well adapted to capture these relational dynamics, providing insights into how leadership practices are formed and in turn, shape organisational connections (Indrayan, 2024; Marnewick & Marnewick, 2022). Mukesh (2022) supports this by stating that, this level of insight is especially crucial for this study, which tries to understand not just what leaders do, but also why they do it, how they perceive their responsibilities, and how they make sense of the issues they encounter in the context of DT.

Another key advantage of qualitative research is its flexibility and adaptability, which is essential for exploring emergent phenomena like DT (AlNuaimi et al., 2022). Unlike quantitative research, which frequently relies on rigid, predetermined variables, qualitative research allows researchers to change their strategy when new insights arise during the study (Ruohonen, 2019). This is especially useful in a study of digital transformation, where the continuously changing nature of technology and organisational practices necessitates a research approach that can respond to new advances and investigate them in depth.

#### **4.2.2. Research Design**

The research was carried using an interpretivist approach since the study intended to seek meaning regarding the phenomenon of DT and beneficial organisational outcomes, from the leaders and followers' perspectives, given that people's awareness of their social realities is subjective. This is consistent with Saunders and Lewis (2018), who defined interpretivism as "the study of social phenomena in their natural environment" (p. 109), with findings based on participants' viewpoints and interpretations.

Due to time constraints, the study project only conducted interviews with participants only once in 2024. As a result, the research findings will only apply to the year 2024, and no conclusions will be drawn from them for previous or future years. A cross-sectional study, as defined by Saunders and Lewis (2018), is a snapshot of participants' perspectives at a single point in time.

A semi-structured, face-to-face or virtual, in-depth interview technique was employed to gather data because it allowed for personal connection and rapport to be created between the researcher and the interview participant, which is required given the sensitive nature of the study issue. Furthermore, face-to-face or virtual interviews were chosen to reduce the likelihood of misinterpretation. The semi-structured, in-depth interviews provide a unique depth of understanding regarding the phenomenon and allows for changes to interview questions based on the insights discovered (Saunders & Lewis, 2018). The interview questions Appendix 1, that were used were based on the current literature.

#### **4.3. Population**

The study's population consists of senior leaders and important stakeholders from organisations that have implemented digital transformation initiatives primarily from the Project Services Environment. These professionals are chosen for their strategic involvement in the planning, execution, and oversight of digital transformation projects. Their experiences and perspectives are critical for understanding the leadership dynamics that influence the success or failure of digital transformation initiatives. The study focuses on individuals who have direct control over decision-making processes, change management methods, and digital technology adoption in their organisations.

#### **4.4. Unit of Analysis**

The unit of analysis in this study was individual leaders from different organisations with diverse industry experiences but the same discipline experience. Each leader's experiences, perceptions, and strategies was analysed to understand the role of leadership in digital transformation. The focus on individual leaders as the unit of analysis is justified by the research questions, which aimed to explore how specific leadership styles, competencies, and behaviours influence the success of digital transformation initiatives.

**Table 2: Unit of Analysis Criteria and Standards**

<b>Leadership Tiers</b>	<b>Criteria</b>
Strategic Leadership	Principal decision-makers who are primarily concerned with the overarching plan and direction
Operational Leadership	Those in leadership positions who are accountable for managing day-to-day operations and delivery.
Functional Leadership	The heads of particular departments or functions, who are responsible for ensuring that the organization's goals are aligned.
Specialist Role	Those individuals who have specialised skills and provide support to particular departments inside the organisation.

A very diverse sample was used (Table 2) based on the methodology of employing a diverse sample comprising participants from various industry backgrounds, alongside extensive expertise in DT, is based on the theoretical framework of maximum variation sampling, which seeks to encompass a broad spectrum of perspectives to clarify the principal themes that arise across different contexts. (Ames et al., 2019).

#### **4.5. Sample Method and Size**

The sample size was determined by the principle of saturation, which refers to the point at which no new information or themes emerge from the data (Edwards & Holland, 2020). It was initially anticipated that a sample size of 10-15 leaders would be sufficient to achieve saturation, but ultimately, 18 participants were interviewed to ensure comprehensive coverage and depth in the findings.

Since there are no fixed rules for sample size in qualitative research (Hackfort & Schinke, 2020), the researcher set up the interview numbers. These restrictions are defined with the condition that interviews will cease whenever data saturation is reached for the specific sample. Saunders & Lewis (2018) argue that the appropriateness of data obtained is just as crucial as the quantity of participants in determining sample adequacy. Because the purpose is not to perform a set number of interviews, but rather to acquire data in sufficient depth to answer the research questions, the researcher remains flexible in terms of the size of the samples.

#### **4.6. Measurement Instrument and Data Collection Tool**

According to Rodríguez-Dorans & Jacobs (2020), the researcher or interviewer acts as a measurement instrument in a qualitative study by gathering information and interpreting the interview environment. As a result, an interview guide in Appendix 1 was used as a practical tool to ensure that data is obtained uniformly across several participants in each sample. This guide included open-ended questions designed to elicit detailed responses regarding the participants' experiences, strategies, and challenges with digital leadership and initiatives. A semi-structured qualitative interview guide combines a planned set of open questions (questions that stimulate conversation) with the interviewer's ability to go deeper into certain topics or responses (Saunders and Lewis, 2018).

#### **4.7. Data Gathering Process and Collection Method**

##### **4.7.1. During Data Gathering**

Mohajan & Mohajan (2022) outlines ethical guidelines for data collecting, emphasising respect for humans, beneficence, and fairness. In practice, these principles highlight the necessity of gaining informed permission, maintaining confidentiality, and minimising potential harm to participants. Adhering to these principles, 18 semi-structured interviews were utilised to gather primary data, the data collection approach included in-depth, one-on-one interviews with chosen participants. These interviews were conducted in person some via video conference (Microsoft Teams), transcribing on Microsoft Notes. depending on the participants' availability and preferences. It can be used in extrapolatory studies when the interviewer has a set of questions but has some flexibility to change the order of posing the questions and also has the room to ask other questions (Braun & Clarke, 2019; Bell et al., 2022).

Each interview was anticipated to run between 60 and 90 minutes, which gave participants enough opportunity to discuss their experiences and viewpoints in depth. All interviews were audio-recorded with the participant's permission and transcribed verbatim to assure data accuracy. Probing questions were used to uncover deeper insights using the interview guide in Appendix 1, notably about leadership styles, capabilities, and the specific issues encountered during digital transformation activities. Field notes were taken to preserve instant observations and nonverbal clues, which added context to the recorded data. The data collection process was very adaptable, allowing us to investigate emergent themes in real time based on participant replies.

#### **4.7.2. After Data Gathering**

Following data collection, the recorded interviews were transcribed verbatim using Microsoft Notes to ensure that all details were correctly preserved. Transcriptions were compared to recordings for quality assurance, allowing for explanation of any ambiguities. Participants were given the option of reviewing their transcripts, which allowed them to confirm the authenticity of their responses and clarify statements as needed. This approach added a layer of validity to the data and guaranteed that participants' perspectives were correctly reflected.

#### **4.7.3. Data Storage and Management**

Data management theory emphasises the importance of secure and organised data storage procedures to protect data integrity and participant privacy (Chaturvedi, 2023). Data security and confidentiality were prioritised throughout the study. All recordings, transcripts, and related documents were safely saved on a password-protected computer system and backed up to an encrypted external storage device. To preserve participants' privacy, only the research team had access to the data, and identifiable information was anonymised. Data will be securely maintained for a period designated by the research organisation before being permanently deleted to protect participant confidentiality.

Saunders and Lewis (2018) define this as a useful way for collecting data in order to acquire new insights into what is observed in reality. Given the complex nature of the study questions, semi-structured interviews allowed the researcher to direct the conversation using an interview guide (Rodríguez-Dorans & Jacobs 2020), providing for more flexibility to probe for more insights.

The data gathering process followed the following approach:

**Table 4: Data Gathering Process**

Steps	Process Description
Preparation	Developing and testing the interview guide to verify that the questions are clear and relevant.
Recruitment	Identifying and contact potential participants, explaining the purpose and scope of the study.
Interviews	Semi-structured interviews will be conducted in person or via video conferencing platforms, depending on the availability and preferences of the participants.
Recording	Audio-recording of the interviews (with participant consent) and take detailed notes to ensure accurate data capture
Transcription	Transcribe the interviews verbatim for detailed analysis.

Source: Edwards & Holland (2020)

#### 4.8. Data Analysis Approach

Data collected from both Level One and Level Two interviews were evaluated in a similar manner. Edwards & Holland (2020), identified the following processes in doing a thematic analysis of qualitative data acquired across all interviews:

**Table 5: Thematic Analysis Approach Steps**

<b>Step 1:</b>	Familiarisation with data to gain an understanding of deeper meanings in accordance with the philosophy of interpretivism (Saunders and Lewis, 2018) applied throughout the study
<b>Step 2:</b>	Generate initial codes and code interview data
<b>Step 3:</b>	Search for themes emerging from the initial codes allocated to data
<b>Step 4:</b>	Review themes and create a thematic map of the analysis
<b>Step 5:</b>	Refine the specifics of each theme through an ongoing analysis
<b>Step 6:</b>	Produce a design framework for devices for this study.

Source: Edwards & Holland (2020),

The data analysis approach for this study was thematic analysis, a widely used method in qualitative research that involves identifying, analysing, and reporting patterns (themes) within the data (Braun & Clarke, 2019). Thematic analysis was particularly suited to this study because it allowed for a detailed examination of the data while also providing the flexibility to capture the complexity of participants' experiences.

The analysis involved coding the data in order to identify key themes related to leadership styles, competencies, challenges, and strategies, followed by the interpretation of these themes in the context of the research questions.

#### **4.9. Quality Controls**

Several quality control methods were put in place to guarantee that the research is rigorous and credible. These included triangulations, member verification, and keeping a thorough audit record. Triangulation is the use of several data sources or methodologies to cross-check findings, which improves the validity of the conclusions (Braun & Clarke, 2019; Mustafa 2021). Member verification will entail sharing the findings with participants to confirm the accuracy of the interpretations and ensuring that their perspectives are appropriately represented. Throughout the research process, an audit trail was maintained, documenting the decisions made and the reasoning behind them, increasing the study's transparency and replicability (Braun & Clarke, 2019).

##### **4.9.1. Reliability and Validity**

Bell et al., (2022) argue that reliability and validity are critical in determining and verifying the quality of business research. The study's reliability and validity were assessed using many aspects, which are detailed below. Reliability was addressed by using a standard interview technique, which was evaluated in a pilot interview before being implemented. All paperwork in this regard was maintained and saved in AtlasTi.

Accuracy was handled using a variety of checking techniques. First, the interview tapes were used to guarantee the correctness of the transcribing process, and second, accurate quotes were used in Chapter 5. The original coding procedure was checked multiple times based on the transcripts and categories in AtlasTi.

Informant bias was mitigated by employing open-ended questions directed at experienced and knowledgeable participants, alongside ensuring anonymity to facilitate uninhibited engagement (Lê & Schmid, 2020). In accordance with Williams & Moser (2019) recommendations, the researcher employed participant validation procedures during the interviews by paraphrasing and soliciting confirmation from participants regarding the researcher's comprehension of their statements.

Inconsistent evidence that did not appear to be explained by theory in the literature study was not overlooked (Ngoc Khuong et al., 2022). It was further examined and provided to the reader so that they might form their own conclusions while also considering the researchers' probable answers (Lester & O'Reilly, 2021). In this regard, answers to some research questions were deemed inconclusive due to discrepant evidence.

#### **4.9.2. Triangulation**

Triangulation is an essential research approach that improves the validity and dependability of findings by cross-verifying information through other methods, sources, or theoretical frameworks (Dong & Verhoef, 2024). This methodological approach is an effective instrument for enhancing the strength of research conclusions and alleviating the drawbacks of a single-source data collection method (Ajimotokan, 2023).

This study employed triangulation by interviewing individuals from various industry sectors and with differing levels of expertise in digital transformation. By involving participants from several sectors, each possessing distinct organisational dynamics, issues, and viewpoints on digital transformation, the research might get a more comprehensive and nuanced comprehension of leadership responsibilities and challenges in this domain. This methodology facilitated cross-industry comparisons, enhancing the findings and guaranteeing that the conclusions were not confined to a singular sector or viewpoint. The diverse professional backgrounds of participants augmented the data, facilitating the triangulation of findings across many professional perspectives and, consequently, improving the trustworthiness and applicability of the research results. Ajimotokan (2023) state that, Triangulation is a powerful technique that facilitates validation of data through cross-verification from two or more sources. Bell et al., (2022), progressively expands stating that Involving participants from many backgrounds and sectors enables researchers to have a more holistic view of the research issue.

### **4.9.3. Researcher Bias**

In this study, researcher bias was an important factor, especially considering the interpretive nature of qualitative research. Researcher bias is the influence that a researcher's own beliefs, attitudes, or assumptions might have on the study process and conclusions, potentially skewing the results (Ajimotokan, 2023). Recognising this risk, the researcher implemented numerous techniques to reduce bias and improve the study's objectivity. Reflexivity was a fundamental strategy, in which the researcher constantly reflected on their own positionality and how personal experiences or prejudices can influence data interpretation. Reflexivity is vital for openness because it allows researchers to publicly admit their effect on the research and distinguish their views from those of the participants (Ames et al., 2019).

In order to reduce the impact of researcher bias, peer debriefing and member checking were also implemented. Peer debriefing includes discussions with colleagues or supervisors, which allowed for external perspectives and interpretation questioning, ensuring that the researcher's position did not impact the conclusions (Braun & Clarke, 2019). Member checking, on the other hand, entailed validating findings with study participants themselves, decreasing the possibility of misinterpretation and ensuring that the researcher's conclusions truly reflected participants' perspectives (Edwards & Holland, 2020; Lester & O'Reilly, 2021)

Furthermore, an audit trail was kept documenting all decisions taken during the research process, including data analysis and interpretation. This strategy provided a public record of the study's methodology, allowing others to evaluate the research rigour and identify any potential biases that may have influenced the findings (Mohajan & Mohajan, 2022). By combining these strategies reflexivity, peer debriefing, member checking, and an audit trail the researcher hoped to reduce bias and improve the dependability of the study's findings.

### **4.9.4. Research Limitations**

### **4.10. Research Ethics**

Ethical considerations are critical in this study, especially considering the sensitivity of leadership and organisational transformation. All participants were asked to complete Consent Form (Appendix 2) before the interviews, ensuring that they are fully aware of the study's goal, their right to withdraw at any time, and the safeguards in place to preserve their anonymity. All their identity was anonymised to safeguard the participants' privacy, and the study will followed the ethical rules established by the Ethics Committee of Gordons Institute of Business Science (GIBS).

#### **4.11. Research Limitations**

While this study aimed to provide valuable insights into the role of leadership in DT, it is essential to acknowledge its limitations. The qualitative nature of the research meant that the findings may not be generalizable across all organizations or industries. Additionally, reliance on self-reported interview data introduced potential biases, as participants might have provided socially desirable responses or recalled events inaccurately. Moreover, the limited timeframe for the overall project restricted the opportunity to include additional expertise that could have further enriched the analysis (Williams & Moser, 2019). Nevertheless, the breadth of the study and the incorporation of multiple case studies mitigated these limitations, offering a robust foundation for understanding the complexities of leadership in digital transformation.

## **5. RESULTS**

### **5.1. Introduction**

This chapter outlines the essential discoveries derived from the thorough examination of the data gathered via a series of detailed interviews. This chapter opens with a detailed overview of the sample, highlighting the varied backgrounds and positions of the participants, which include project managers, senior specialists, and leaders in digital transformation. This overview offers essential context to guarantee that the sample corresponds with the previously defined selection criteria, thereby enhancing the credibility and relevance of the gathered data.

This chapter expands upon the established foundation, exploring the significant themes that surfaced from the qualitative analysis, while directly responding to the research questions outlined in Chapter 3. These themes offer valuable insights on the impact of leadership on digital transformation efforts, shedding light on the various leadership styles, challenges, and strategies that contribute to the success of these initiatives. This chapter connects the findings to the research goals, providing a comprehensive narrative on the role of leadership behaviours, communication strategies, and adaptability in facilitating digital change within organisations.

The results highlight the complex interplay between leadership and digital transformation, offering a detailed insight into the challenges encountered, the strategies implemented, and the skills necessary for leaders to effectively manoeuvre through this intricate environment. Every theme is examined through the lens of the participants' experiences, ensuring that the findings are rooted in real-world applications and offering a strong foundation for the discussions.

### **5.2. Sample Description**

This research involved the conduction of 18 interviews, encompassing diverse leadership tiers within different organisations. A pilot interview was conducted before the primary data gathering period to evaluate and enhance the interview guide. This pilot facilitated modifications to assure the clarity and efficacy of the questions, so improving the quality of the interviews and the data gathered during the research.

Table 6 presents a comprehensive analysis of the individuals according to their leadership tiers engaged in the research for this study, focusing on digital transformation across diverse industries. Every participant has been distributed a distinct code to ensure confidentiality and enable an organised and systematic study of the interview data. Table 4 classifies participants according to their leadership roles, industry, age, and gender, offering context for the diversity of viewpoints collected.

Participants for this study were meticulously chosen based on their roles and direct engagement in digital transformation initiatives across several industries. The selection sought to encompass a varied array of experiences and views from several leadership tiers strategic, operational, functional, and specialist to guarantee a comprehensive grasp of the influence of leadership on the success of digital transformation. The industries represented include, Petrochemical, Energy, Construction, Mining, and Information Technology, were chosen for their diverse levels of digital transformation maturity, offering a wide range of insights. The diversity of these industries was critical since it allowed for a broader understanding of digital transformation across diverse sectors, focussing on overarching leadership strategies and approaches. This broader viewpoint allowed the study to investigate leadership's involvement in digital transformation on a much wider level, highlighting common practices and insights that cross industry boundaries.

The coding system was designed to maintain anonymity during the organisation of data for structured analysis. Every participant received a distinct identifier (e.g., P1-CIO or P3-PM), representing their role and industry, thereby facilitating the analysis of responses according to their leadership level and sector. This method helps comparisons across various industries, roles, and leadership tiers while maintaining confidentiality and allowing for the identification of significant themes associated with leadership in digital transformation. The careful selection and coding of participants guaranteed that the study would offer in-depth insights into the role of leadership across various industries and organisational contexts.

The sample exhibits clear heterogeneity, with participants representing a diverse array of industries, leadership levels, and organisational roles. The variety facilitates a deeper comprehension of leadership in DT, as it encompasses diverse viewpoints and experiences from various sectors, Table 6 provides professional information on the participants.

The inclusion of strategic leaders alongside operational and specialist roles ensures that the study does not focus on uniform group, but instead exploring the subject from various perspectives, resulting in a sample that is richly diverse in industry experience while also deeply enriched with expertise in DT, providing a broad yet focused insight into how leaders steers and navigates DT initiatives across different industries.

Building on the previous paragraph, the variety within the sample facilitates the recognition of prevalent patterns that may arise across various industries, while also enabling the discovery of distinct challenges and strategies pertinent to specific sectors.

**Table 6: Professional Experience of the Participants**

	<b>Participant Code</b>	<b>Industry</b>	<b>Position</b>	<b>Professional Background</b>
<b>Strategic Leadership</b>	P1 -CIO	Petrochemical	Chief Information Officer	Lots of experience with strategic planning and IT infrastructure. Oversaw several major digital transformation initiatives spread throughout international sites.
	P2-CTO	Petrochemical	Chief Transformation Officer	Previously Head of Operations; focused in using new technology to improve operational effectiveness and cut expenses.
<b>Operational Leadership</b>	P3-PM	Construction	Project Manager	Having managed projects in the building industry, she concentrated on simplifying processes using digital technologies for logistics and project tracking.
	P4-PM	Mining	Project Manager	Background in mining operations; lately oversaw digital initiatives to improve resource management and automate reporting systems.

	P5-PM	Information Technology	Project Manager	Expert in software project management, focused in cloud implementation and agile approaches for digital product development.
	P6-PM	Project Services	Project Manager	Concentrated on using project delivery tools; knowledge of ERP software to increase project effectiveness.
	P7-PM	Project Services	Project Manager	A seasoned professional in the field of project management, with vast experience in digital strategy for big infrastructure projects that involve multiple phases.
	P8- CMS	Petrochemical	Change Management Specialist	Organisational psychology background; focusses on change management and employee engagement in digital transitions; background in organisational psychology.
	P9-CMS	Petrochemical	Change Management Specialist	Highly skilled in the implementation of change frameworks and training programs to facilitate the adoption of digital technology and reduce resistance among staff members.
	P10-DTL	Energy	Digital transformation Lead	knowledgeable about lean concepts and digital process optimisation in the energy industry; recently oversaw an AI integration project for predictive maintenance.

	P11-DTL	Energy	Digital transformation Lead	Background in the operations of renewable energy; specialised in the implementation of digital projects to improve energy efficiency and make decisions based on data.
	P12-DTL	Project Services	Digital transformation Lead	Focused on using automation and analytics driven by artificial intelligence in order to improve project outcomes and reduce the amount of manual work.
Functional Leadership	P13-HBU	Operations Improvement	Head of Department (Operations Improvement)	A former process engineer, he now leads initiatives to improve operational key performance indicators (KPIs) and streamline workflows through the use of digital solutions.
	P14-HBU	Information Technology	Head of Department (Operations Excellence)	The individual has a background in information technology service management and focusses on promoting digital transformation across departments in order to improve administrative effectiveness.
	P15-HBU	Project Services	Head of Department (Digital Delivery)	Experienced in digital project management and execution; known for pioneering digital integration across complex service projects.
	P16-HBU	Project Services	Head of Department (Change Management)	Provides expertise in change management, with a particular emphasis on digital transitions; has led change efforts that involved multiple departments in order to promote digital

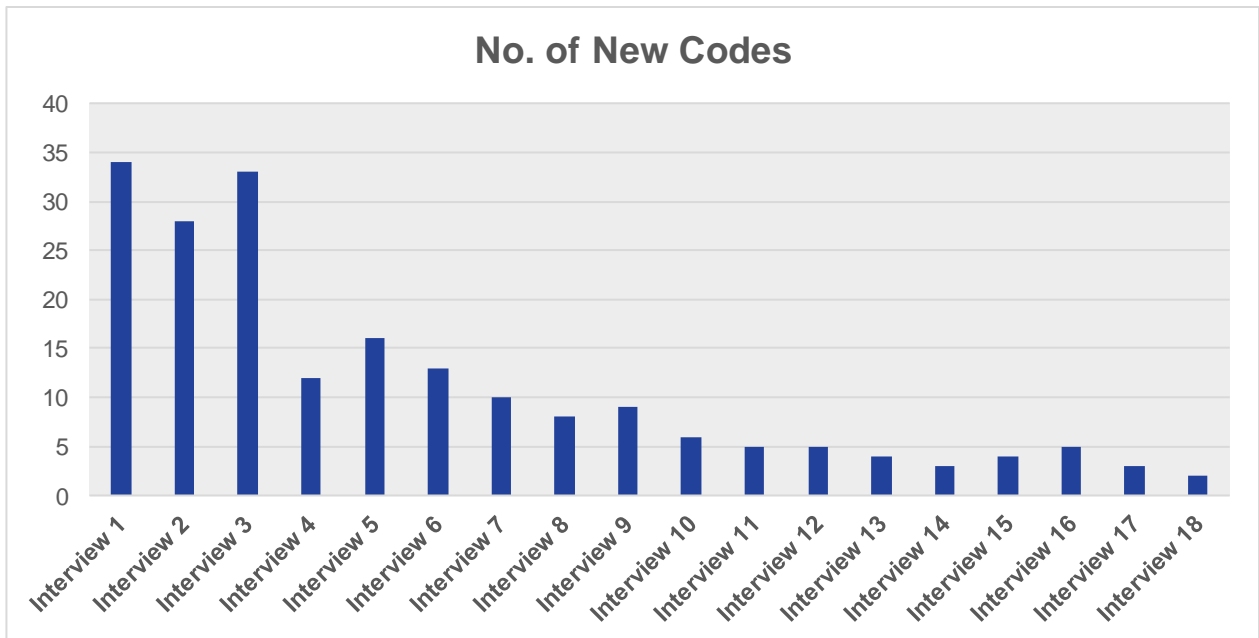
				strategy.
<b>Specialist Role</b>	P17-SDT	Operations Improvement	Specialist Digital Transformation	Former systems analyst specialising in the implementation of digital technologies for process enhancement and operational cost reduction.
	P18-VS	Operations Improvement	Visualisation Specialist	Proficient in data visualisation and analytics; facilitates digital transformation initiatives by converting data into useful insights for operational teams.

Coding System: P-Participants' Number, Alphabets are the Acronym of the Job title.

### 5.3. Data Saturation

Saturation is essential for determining the optimality of a sample size (Ajimotokan, 2023). The codes that arose were monitored as the interview progressed to evaluate whether saturation had been attained, as indicated in the table below. Figure 6 below indicates that data saturation was attained, hence data gathering stopped following the 18th interview.

**Figure 6: Evidence of Data Saturation**



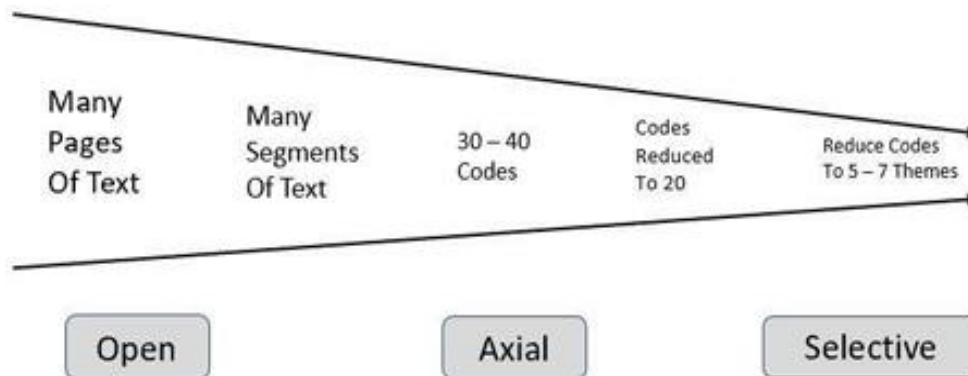
### 5.4. Data Analysis Process and Coding

This section outlines the systematic methodology employed to analyse the qualitative data obtained from the interviews, specifying the coding and thematic analysis that facilitated the identification of the principal themes relevant to the study topics.

### 5.4.1. Coding Process and Overview

Starting with a methodical coding methodology, interview transcripts were entered into ATLAS.ti software for organisation and study. This iterative and rigorous coding method allowed a thorough investigation of the complex replies from participants on the part of leadership in digital transformation.

**Figure 7: Overview of coding process: Open, Axial and Selective Coding**



Source: (Williams & Moser, 2019)

Williams & Moser (2019), progressively state that this process enables understanding the interdependent relationship among data organisation, categorisation, and theory development construction of meaning, coding is essential in enabling the researcher to progress efficiently. Figure 7 shows the three main phases which were followed in the study: selective coding, axial coding, and initial coding as highlighted by (Williams & Moser, 2019).

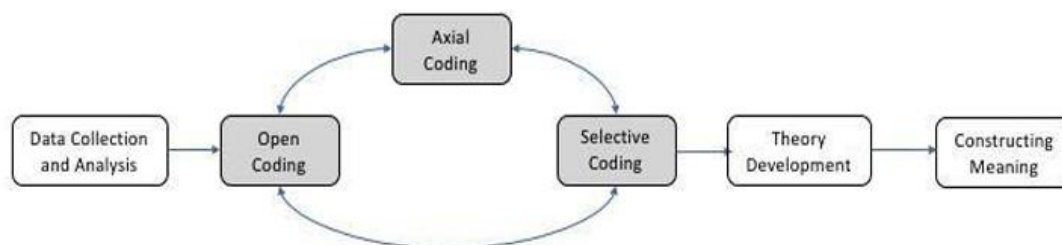
- **Initial Coding:** During the initial step, each transcript was meticulously examined, and open codes were allocated to phrases, sentences, or paragraphs that encompassed pertinent information. The preliminary coding phase sought to document extensive detail without prematurely filtering or categorising the material. Initial codes were "adaptive leadership," "stakeholder engagement," "change resistance," and "resource prioritisation."

- **Axial Coding:** After the open coding phase, axial coding was utilised to categorise related codes and initiate their organisation into overarching classifications. This phase entailed associating codes to elucidate patterns and linkages within the data, resulting in the identification of first themes that corresponded with the study questions. Terms such as "vision setting," "employee adaptability," and "budget constraints" were linked to broader categories including "leadership competencies" and "challenges in digital transformation."

**Selective Coding:** In the third phase, selective coding honed the axial codes into specific themes that precisely aligned with the study's aims. This technique facilitated the emergence of overarching themes that cohesively encapsulated the data and addressed each research inquiry. The study identified key themes including "Leadership Style Alignment," "Change Management Proficiency," and "Resistance to Change."

The open, axial, and selective coding system facilitates a cyclical and dynamic data loop wherein the researcher engages in continuous data comparison and employs procedures for data reduction and consolidation as shown in Figure 8. As the coding process advances, its dynamic function and nonlinear trajectory facilitate the identification, codification, and interpretation of significant themes pertinent to the topic of a research project, thereby contributing to the relevant literature (Williams & Moser, 2019).

**Figure 8: Non-Linear Process Qualitative Research Process**



Source: (Williams & Moser, 2019).

### **5.4.2. Emergence of Key Themes**

During the coding process, eight primary themes emerged, each essential for comprehending the impact of leadership on digital transformation. These topics encapsulate a holistic perspective on the competencies necessary for proficient digital transformation leadership and the prevalent problems encountered. The themes were meticulously examined to confirm they accurately reflected the nuanced insights provided by participants, thereby establishing a framework for connecting these themes to the study questions.

### **5.4.3. Coding Consistency and Validation**

To ensure consistency and accuracy in coding, many cross-checks were performed during the analysis process. The coherence of themes was evaluated by examining the codes in relation to their alignment with the study topics. A pilot coding session was executed with a selection of transcripts to enhance the coding technique prior to its use on the entire dataset, so ensuring the reliability and robustness of the final themes.

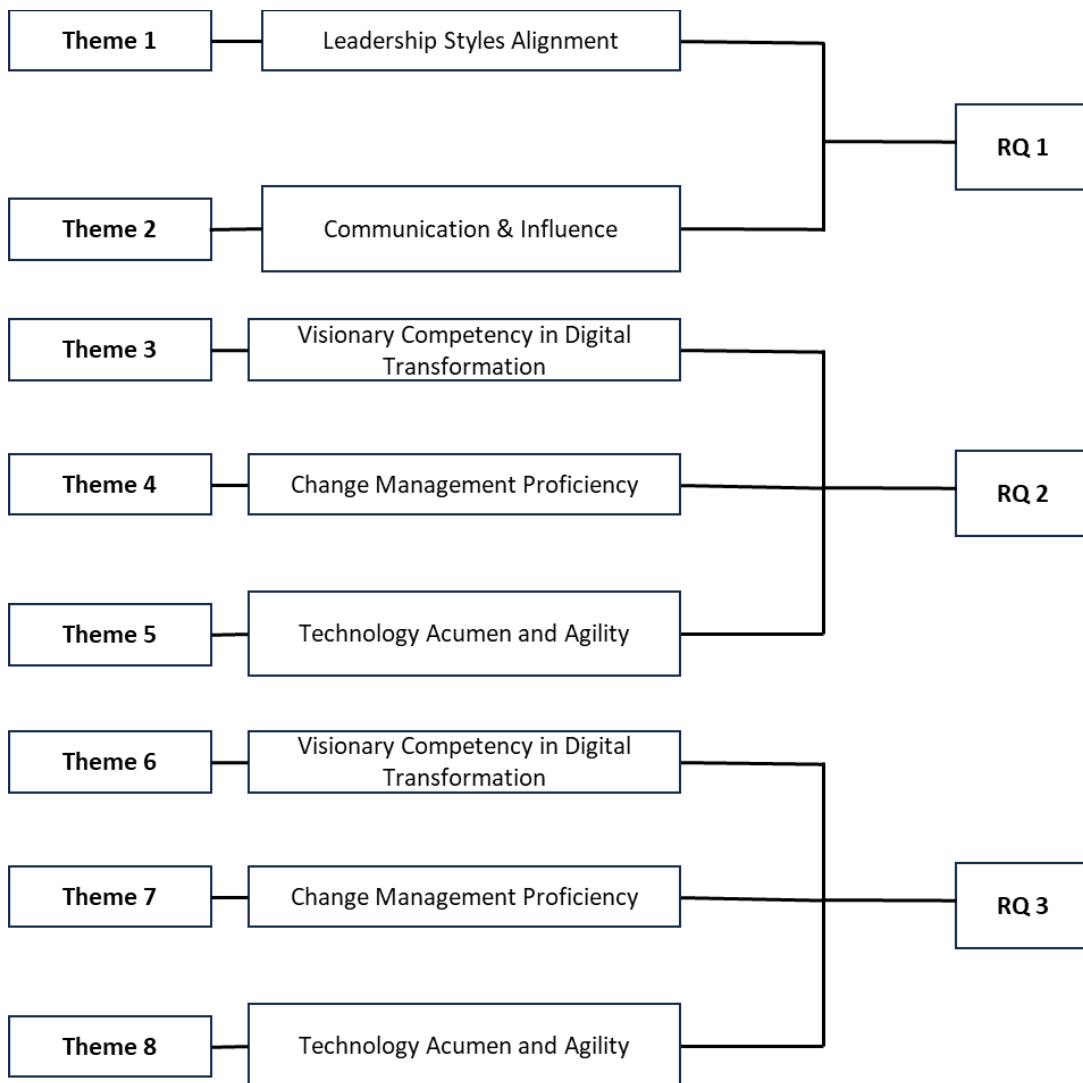
This standardised coding process enabled systematic data organisation and aided comprehensive interpretation of the findings. The discovered themes will now form the basis for the following sections, wherein each theme will be connected to the research questions, providing insights into how leadership facilitates or hinders digital change inside organisations.

## **5.5. Presentation of Results**

The findings are arranged to answer the study questions, providing vital insights into the leadership competencies, styles, and problems experienced throughout digital transformation (DT) projects. The chapter opens by outlining the themes found in the data, such as visionary thinking, adaptability, and change facilitation, which were repeatedly identified as critical leadership characteristics. These themes emphasise the intricate interplay of technical understanding, strategic foresight, and people-centered approaches that leaders use to navigate digital transition. Furthermore, hurdles to DT, such as resource restrictions and resistance to change, are investigated, offering a holistic picture of the elements influencing DT success. This structured results presentation establishes the framework for succeeding chapters' debate and analysis, helping to provide a more nuanced view of leadership's critical role in digital transformation.

Figure 9 illustrates the key themes that emerged from systematic data analysis, with each theme meticulously crafted to offer a nuanced understanding and address the research issues underpinning the study. These themes encapsulate the essential insights derived from the coding process, highlighting crucial elements of leadership's function in DT. The arrangement of these themes not only mirrors the intricacies present in the data but also correlates each theme with the specific research questions, enabling a concentrated and scholarly examination of the study's objectives.

**Figure 9: Hierarchical Process of Coding**



Source: Author's Own Compilation

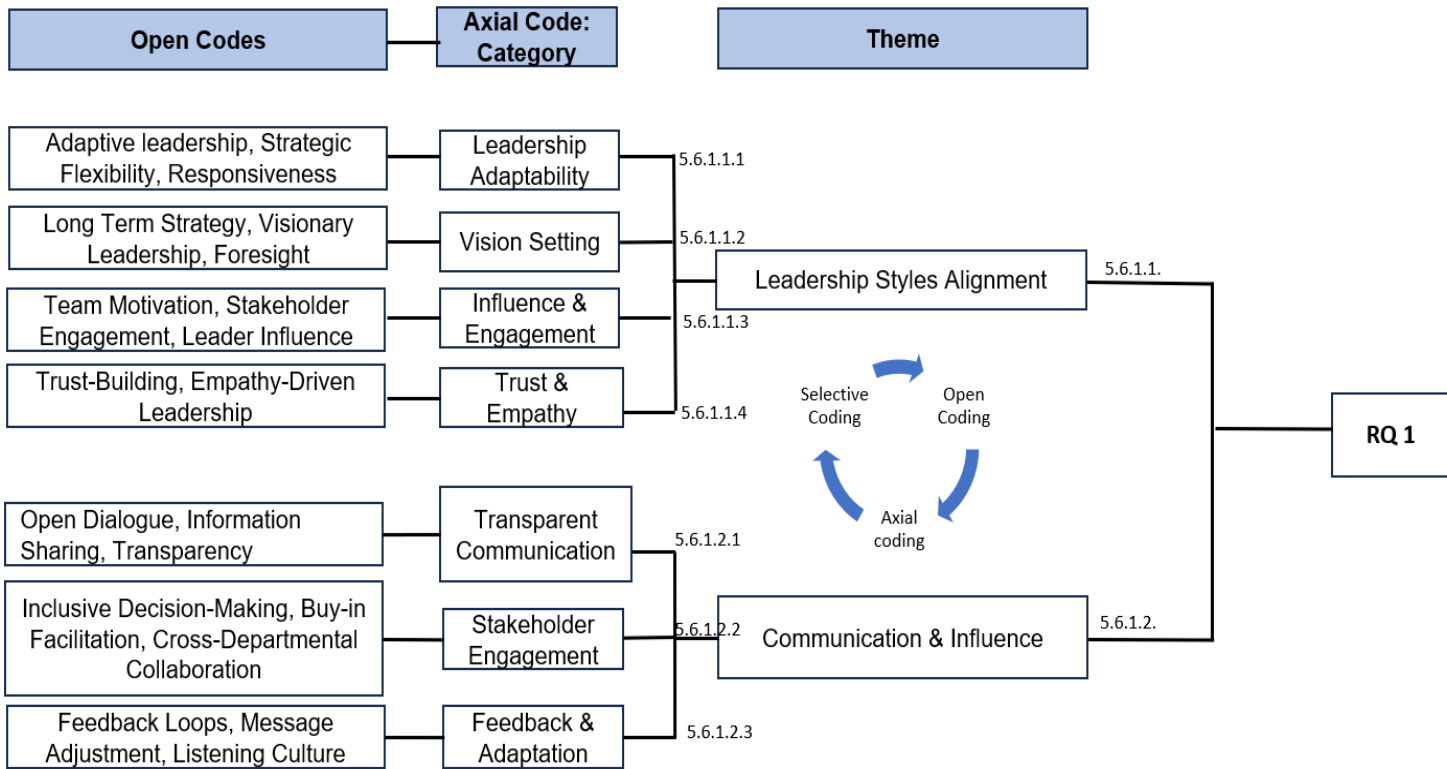
### 5.5.1. Results for Research Question One

*Research Question 1: How do leadership styles influence the success of digital transformation initiatives?*

The objective of Research Question 1 was to examine the impact of various leadership styles on the efficacy of digital transformation programs. Participants were presented with questions aimed at prompting reflection on their leadership methodologies and the influence of these styles on transformation initiatives inside their organisations. The interview guide (Appendix 1) addressed this subject through a series of open-ended questions, enabling participants to articulate their leadership philosophy, strategies for managing digital transformation, and methods for overcoming problems encountered during the process. Participants were invited to relate experiences that emphasised their distinct leadership styles and their perceived efficacy in facilitating digital transformation through an open, qualitative approach. This method allowed participants to articulate the components of their leadership they deemed most influential, yielding distinctive insights into the variety of leadership styles that affect transformation results.

The answers to this question provided significant insights into how various leadership strategies might promote or obstruct digital change. Adaptability, vision formulation, and communication have emerged as critical factors, illustrating how leaders manage both strategic and operational requirements. This study question was comprehensively examined by analysing the impact of leadership styles on team alignment, engagement, and adaptability to change. Themes were carefully derived from original codes and organised into overarching categories that encapsulate the core of leadership's influence on digital transformation. The procedure of distilling categories into themes that yield a thorough response to this inquiry is illustrated in Figure 10.

**Figure 11: Categories to Theme Mapping to Research Question One**



**5.5.1.1. Leadership Styles and Alignment**

The theme of "Leadership Styles and Alignment" emerged as a crucial factor affecting the success of digital transformation programs. The interviews indicated that congruence between leadership styles and organisational objectives is essential for cultivating an atmosphere supportive of digital transformation. Participants emphasised distinct leadership methodologies, including transformational, adaptive, and participative styles, each uniquely facilitating alignment within their teams and throughout the organisation.

Several participants underscored the need of transformational leadership in establishing a definitive strategy for digital transformation. Transformational leaders, who inspire and motivate teams by a compelling vision, effectively foster a collective sense of purpose about digital efforts. One participant articulated that by establishing a robust vision for transformation, they were able to "energise the team and foster commitment to long-term objectives," which facilitated the surmounting of opposition and cultivated a proactive mindset among employees.

**Participant 2** Stated that: *“Unquestionably, the leadership will need to undergo a transformation that is comparable to that of the technology itself. The most significant change, in my opinion, will be towards agile leadership, which refers to leaders that are more flexible, sensitive, and open to receiving input.”*

**Participant 2** – *“Underlines how crucial agile leadership is for enabling effective digital revolution. From this vantage point, good leaders have to be flexible, attentive to criticism, and open to ongoing strategy review. Particularly in the face of digital transformation, which often calls for cross-functional cooperation and breaking down silos, the CTO notes that conventional, hierarchical leadership is becoming antiquated.”*

**Participant 1** stated that: *“I have a strong emphasis on motivating the team and setting up a distinct vision for the direction in which we are heading. In my opinion, digital transformation is not simply the introduction of new technology; rather, it is the modification of mentalities and the modification of how we think about our activities...I make it a point to cultivate an atmosphere in which individuals are not scared to explore and feel encouraged to create, even if doing so means that they will experience failure along the road.”*

Using a transformational leadership approach with an eye towards inspiring the team and providing a clear vision, Participant 1 The CIO underlined that digital transformation is essentially about altering attitudes and supporting an experimental and learning culture, not only about implementing new technologies. The CIO lowers opposition to change and encourages alignment with digital goals by designing an environment where staff members feel free to make mistakes and experiment. This realisation implies that transformational leaders who concentrate on motivating their people and creating a growth-oriented culture are more suited to match their workforce with the goals of digital transformation of the company.

**Participant 15** Stated that: *“I would describe my approach to leadership as visionary while still being based in realism. I make it a point to constantly have the big picture in mind, which is what we are working towards carrying out over the long term. However, I am also very focused on the day-to-day realities of what it takes to carry out the plan.”*

Participant 15 characterises its leadership as ambitious yet grounded in realism, striving to reconcile long-term aspirations with the practicalities of daily operations. The leader's emphasis on empowerment and autonomy underscores a trust-centric method of alignment, wherein team members are motivated to assume responsibility for their roles in the transformation endeavour.

The leader's readiness to intervene and provide support when challenges occur exemplifies a proactive strategy for sustaining alignment during difficult periods. This finding indicates that visionary leaders who empower their people and offer practical support can cultivate a collective sense of accountability and alignment in intricate digital transformation endeavours.

In conclusion, our observations indicate that leadership styles defined by agility, transformational inspiration, and visionary empowerment are crucial in aligning teams with digital transformation objectives. Leaders who embrace change, stimulate growth, and promote autonomy cultivate cultures that inherently encourage alignment, thereby addressing the essential characteristics outlined in Research Question 1.

#### **5.5.1.1.1. Leadership Adaptability**

Others spoke on the need of adaptive leadership, which let leaders be adaptable to difficulties and unanticipated developments during the transition process. Open to fresh ideas and ready to change their plans to fit organisational demands and real-time comments, adaptive leaders were said to This flexibility helped to ensure alignment even in cases of required recalibration or challenges faced by digital transformation projects and smoothed out transitions. "Being adaptable kept us aligned with our goals without being rigid," one leader observed, "which helped the team navigate uncertainty and remain focused."

#### **5.5.1.1.2. Vision Setting**

In exploring the "Vision Setting" category derived from the interviews reveals a strong correlation between vision setting, long-term strategy, visionary leadership, and foresight. Participants constantly emphasised the necessity for leaders to create a clear, strategic vision to direct digital transformation initiatives. This strategic foresight unites team members with the broader transformation objectives and fosters resilience and adaptation within the organisation as it moves to a digitally driven world.

Participant 2 also offered insights into vision setting, emphasising that "leadership will require a transformation that is comparable to that of the technology." The CTO demonstrates a forward-thinking perspective that is essential for digital transformation, demonstrating an understanding that the leadership's vision must evolve in conjunction with technological advancements.

**Participant 2:** *"Unquestionably, the leadership will need to undergo a transformation that is comparable to that of the technology itself. The most significant change, in my opinion, will be towards agile leadership, which refers to leaders that are more flexible, sensitive, and open to receiving input. In the past, leadership may have consisted of establishing a vision and remaining committed to it. However, in the present day, leadership is about continuously reevaluating and altering one's approach in response to new facts. In addition to this, leaders will need to be less hierarchical and more dedicated to collaboration. Silos being broken down as a result of digital change, and leadership needs to reflect this by becoming more integrated and communicative across divisions."*

This perspective establishes a connection between visionary leadership and adaptability, implying that the process of effective vision setting in digital transformation is not a static one, but rather one that necessitates ongoing re-evaluation and adjustment to remain relevant in a constantly evolving technological environment.

Participant 15 Stated that: *"In my perspective, leadership and change management are inextricably linked, particularly during digital transformation. Leaders are the face of change; they set the vision, but it is up to us in change management to make that vision approachable and relatable to employees. I frequently collaborate with leadership to ensure that they not only effectively communicate the goals, but also address the human side of change people's anxieties, fears, and expectations. Leaders set the tone, but we work to ensure that everyone feels included in the journey."*

Emphasising the need of vision in overcoming resistance to change, the Change Management Specialist said, "A clear vision helps individuals realise the benefits of the change, even if they are initially hesitant. The entire process becomes more approachable and easier to accept when the team knows where we are headed and why. This point of view underlines how important vision setting is not just for specifying the ultimate objective but also for ensuring that staff members can relate to the reason for the transition.

Strong vision for participant 8 helps to lower resistance by framing change in terms of observable advantages, therefore matching team members with the intended results of the transformation. This is closely related to transformational leadership, in which managers try to inspire and motivate by presenting a convincing vision that connects with the values and goals of staff members.

This participant 8 realisation strengthens the link in digital transformation between vision setting and alignment with leadership style. Effective leaders who convey a relevant, benefit-oriented vision help to lower opposition and foster unity inside their teams so that every member is sure they grasp and committed to the transformation process. Vision setting acts as a link between leadership approaches like transformational and visionary leadership and organisational goals, so creating a supportive climate for digital transformation as the diagram shows.

#### **5.5.1.1.3. Influence And Engagement**

Drawing on the theme of "Influence and Engagement," the chosen passages from the interviews offer insightful analysis of how good leadership encourages involvement and uses influence to propel digital change. This area directly relates to good leadership styles since it investigates the ways leaders actively integrate team members, handle resistance, and establish a supportive atmosphere during times of transformation.

*Participant 2 Stated: "Do not, under any circumstances, undervalue the significance of communication. Although I have stated it previously, it is important to emphasise. It is of the utmost importance to maintain communication with your team, your stakeholders, and even your consumers during the entire process of transformation. Transformation brought about by digital technology can be disruptive, and people will have questions and reservations about it. The more open and upfront you are about what is going on and the reasons behind it, the greater the likelihood that you will be able to achieve buy-in."*

The Chief Transformation Officer (CTO) underscores the significance of communication to promote participation and secure buy-in. The CTO states, "Maintaining communication with your team, stakeholders, and consumers throughout the transformation process is paramount." This declaration underscores the importance of transparency and continuous discussion in transformation.

The CTO emphasises that influence is established through ongoing engagement with all pertinent stakeholders, fostering transparency and directly addressing concerns, therefore promoting a communicative leadership approach. Furthermore, the CTO's counsel to "celebrate the minor triumphs" illustrates an awareness of how incremental successes can sustain team enthusiasm and enhance morale during the protracted process. This corresponds with the transformational leadership style, wherein leaders motivate and uphold participation by acknowledging progress, hence preserving momentum.

Participant 3 Stated that: *"Absolutely. One example is our recent decision to implement a new collaboration platform for the project teams. The immediate reaction was varied, with some people expressing genuine frustration. I held individual discussions with each team member to understand their problems. It became evident that some of the frustration stemmed simply from a lack of familiarity with the new system. I collaborated with our training team to create workshops that were specifically customised to their needs. When the team members saw how technology could help them with their daily tasks, their enthusiasm increased significantly. The collaborative approach helped people understand that the shift was for them, not something imposed on them."*

The Project Manager (Participant 3) emphasises a collaborative strategy to exert influence, recounting an experience in which they interacted with team members to comprehend their frustrations concerning a new collaboration platform. They noted that "some of the frustration originated from a lack of familiarity with the new system," prompting Participant 3 to arrange training customised to the team's requirements. This method demonstrates the significance of empathy and attentive listening in impacting team members, especially during difficult transitions.

Participant 3 illustrates that by addressing particular challenges and offering customised help, involvement through tailored assistance can facilitate transitions, diminish resistance, and cultivate enthusiasm for digital technologies. This instance of proactive engagement demonstrates how leaders may directly affect team attitudes and underscores the significance of participative leadership, wherein team members perceive themselves as included and appreciated in the transformation process.

Participant 3 Stated that: *"In my experience, adaptability is at the top of the list. Digital transformation projects can take unexpected twists, so as a leader, you must be prepared to adapt swiftly. Another talent is empathy, which is the ability to comprehend how team members are experiencing throughout times of change. Digital change may be disruptive, and a leader must be empathic to ensure that the team feels supported during the transition."*

In a separate statement, participant 3 goes into more detail about how important it is for leaders to be able to change and show empathy during the digital transformation. "A leader must be empathetic to make sure that the team feels supported during the transition," they say. This sentence makes the point that leaders need to be aware of how change can affect team members' emotions and create a helpful environment as a result. Leaders can get their teams more involved by showing empathy. When people feel understood and respected, they are more likely to stay motivated and open to change. Being able to adapt to new situations is also an important part of having impact. Leaders who are able to do this can better align their teams' efforts with transformation goals. This idea fits with the style of servant leadership, in which the leader puts the team's health and happiness first in order to build a trusting and honest work environment.

These quotations taken together show that in digital change, influence and involvement are absolutely necessary leadership tools. Better equipped to promote alignment and keep momentum are leaders who involve teams through open communication, solve individual issues by means of cooperative and customised strategies, and show empathy and flexibility. As transformational, participatory, and servant leadership approaches inspire active participation, support, and open communication, so improving a leader's influence and so boosting team engagement in the face of digital change. This category emphasises the link between these styles.

By building trust, inspiring teams, and making sure staff members feel linked to the transformation process, Influence and Engagement eventually provides the basis for good leadership in digital transformation. This link to Leadership Styles Alignment shows that leaders that actively interact with their teams and influence them via empathy, communication, and adaptability produce an atmosphere that supports the effective application of digital projects.

#### **5.5.1.1.4. Trust an Empathy**

The Senior Digital Transformation Specialist emphasises that leaders must be "forward-thinking, adaptable, and willing to embrace new ways of working." This viewpoint emphasises that adaptability is essential in dynamic situations like as digital transformation. However, Participant 17 emphasises the importance for leaders to be "empathetic and ensure that their teams are supported throughout the transformation." This remark emphasises empathy as an essential component of good leadership, especially during times of major change. Leaders that display empathy can better understand and handle their team members' problems and anxieties, creating a supportive environment that fosters trust. This sort of empathy-driven leadership corresponds to the Trust & Empathy component depicted in the diagram, indicating that leaders who demonstrate care and understanding increase trust, which is critical for alignment throughout transformation.

Participant 17 Stated that: *“Leaders need to be forward-thinking, adaptable, and willing to embrace new ways of working. But they also need to be empathetic and ensure that their teams are supported throughout the transformation”*.

On the following extract the Project Manager stated that "showing that you are not afraid to admit mistakes fosters trust." This remark emphasised the need of vulnerability and transparency in leadership, in which leaders publicly admit their shortcomings and mistakes. This leadership style fostered an open atmosphere and psychological safety, hence increasing trust between leaders and their teams. By admitting mistakes, leaders not only demonstrated honesty, but also created an environment in which team members felt comfortable expressing concerns or making improvements. Such acts bolstered the trust-building part of the Trust & Empathy category, as depicted in the figure, where trust promoted team cohesion and alignment.

**Participant 4** Stated: *“Furthermore, showing that you are not scared to admit mistakes fosters trust”*

These ideas corresponded to the Leadership Styles Alignment because they showed how trust-building and empathy-driven leadership were very important for matching leadership styles with company goals during the digital change.

Leaders who were flexible, empathetic, and honest were better able to get their teams to work towards the goals of the change. People on the team felt valued and supported when they were treated with trust and empathy. This made them less resistant to change and more in line with the leader's goal.

#### **5.6.1.2.1. Transparent Communication**

Building on the previous section idea that trust and empathy are important for leaders to work together, the theme of open communication shows how good leadership can help people get involved and have an impact during the digital transformation. Leaders can deal with uncertainty more effectively when communication is open and honest. This builds trust and makes the goals of transformation efforts clear.

The Chief Information Officer showed clear communication by talking about how technology would affect workers in an open way. By making it clear that technology was meant to add to roles, not take them away, participant 1 eased concerns about job security, which led to more trust and alignment. This way of talking to people, which focused on being honest and reassuring, decreased resistance and showed how being open directly increases impact. P1's method fits with the Transparency part of the Transparent Communication category. This shows how clear communication builds trust and reduces resistance.

**Participant 1** Stated That: *“I ensured that I communicated openly and honestly about what the automation would entail, specifically how it would serve to supplement them rather than replace them”*

It was emphasised by the Head of Business Unit that open communication is a key part of setting values and earning trust. Participant 14 set up a way for internal partners to talk about the effects of changes and ask questions by holding seminars at the start of every big change project. This method showed that open communication and sharing of information not only eased worries but also encouraged participation, which fits with the category of Transparent Communication. This kind of openness was important for building trust, which in turn helped leaders' impact and involve stakeholders throughout the transformation process.

**Participant 14** Stated That: *"It all comes down to being transparent to everyone and projecting your principles. I offer seminars at the beginning of every major change initiative for internal partners to discuss the impacts and hear questions".*

The Project Manager emphasised the necessity of regular communication, stating that a lack of explanation for alterations may result in less buy-in. participant 5 underscored the importance of continual information sharing in sustaining engagement by clearly articulating the rationale for change and ensuring the team remained informed. This method emphasises that information sharing, a crucial element of transparent communication, facilitates influence by ensuring team members comprehend and align with transformation objectives.

**Participant 5** Stated That: *"Communication is also quite important. You will lose buy-in if you are not explicitly state the reason for the adjustments and keep everyone informed".*

While the Project Manager emphasised the necessity of regular communication, stating that a lack of explanation for changes may result in less buy-in. participant 5 underscored the importance of ongoing information sharing in sustaining engagement by clearly articulating the rationale for change and keeping the team informed. This method emphasises that information sharing, a fundamental element of transparent communication, facilitates influence by ensuring team members comprehend and align with transformation objectives.

**Participant 10** Stated that: *"For leaders in digital transformation, I would argue technical knowledge, problem-solving, and communication are the most important skills"*

The Digital Transformation Lead underscored that communication is among the most essential competencies for leaders in digital transformation, in addition to technical expertise and problem-solving abilities. Participant 10 illustrated how leaders may cultivate clarity, support, and alignment among the team through the prioritisation of effective communication, particularly during intricate changes. This insight underscores that open communication is essential for impact, as it allows leaders to articulate change objectives effectively.

Collectively, these observations demonstrate that transparent communication, defined by openness, information sharing, and honesty, is crucial for leaders seeking to effectively influence and engage teams throughout digital transformation. Leaders who articulate the rationale for changes, openly address concerns, and promote debate cultivate a culture of transparency that bolsters trust and inspires employees. This link between Communication & Influence and the Leadership Styles Alignment framework demonstrates how transparent communication acts as a conduit, allowing leaders to maintain engagement and adeptly navigate their teams through the intricacies of transition.

#### **5.6.1.2.2. Stakeholder Engagement**

The category, Stakeholder Engagement, reinforces the significance of inclusivity and transparent discussion in achieving alignment during digital transformation.

The Head of Business Unit asserted that "transparency and inclusiveness are critical elements of stakeholder engagement." Participant 16 established a forum for internal stakeholders to candidly address accomplishments and ongoing difficulties by conducting regular town hall meetings. This technique not only informed stakeholders but also engaged them in the transformation process, reinforcing a collective purpose. This method corresponds with Stakeholder Engagement by demonstrating that integrating stakeholders in continuous dialogues fosters trust and promotes shared dedication to addressing difficulties, hence improving the efficacy of digital transformation efforts.

**Participant 16** Stated that: *"Transparency and inclusiveness are essential components of stakeholder engagement. I make it a point to organise frequent town hall meetings for the internal stakeholders, during which we address not only the accomplishments that we have made but also the challenges that we are now trying to overcome."*

### 5.6.1.2.3. Feedback and Adaptation

**Participant 6** Mentioned That: *“The operations team objected strongly last year when we were putting in place a new supply chain management system. They were reluctant about depending on digital technologies and used to do things by hand. Instead of forward-looking the project without considering their worries, I set up seminars where we showed how the. The operations team objected strongly last year when we were putting in place a new supply chain management system. They were reluctant about depending on digital technologies and used to do things by hand. Instead of forward-looking the project without considering their worries, I set up seminars where we showed how the new system will simplify their work. By involving them in system testing and feedback collecting, I helped them to feel responsible. a new system will simplify their work. By involving them in system testing and feedback collecting, I helped them to feel responsible”.*

Turning now to the category of Feedback and Adaptation, the focus on openness and inclusion in stakeholder involvement lays a basis for responsive and flexible leadership during digital transformation. As Participant 16 points out, regular town hall meetings not only promote openness but also enable the continual input on both achievements and current difficulties. This strategy emphasises the need of feedback loops in preserving alignment and enabling required changes depending on stakeholder input, therefore promoting a flexible culture that helps the process of transformation.

## 5.6.2. Results for Research Question Two

**Research Question 2:** *What key leadership competencies are essential for driving digital transformation and achieving organizational success?*

### **Figure 11: Categories to Theme Mapping for Research Question Two**

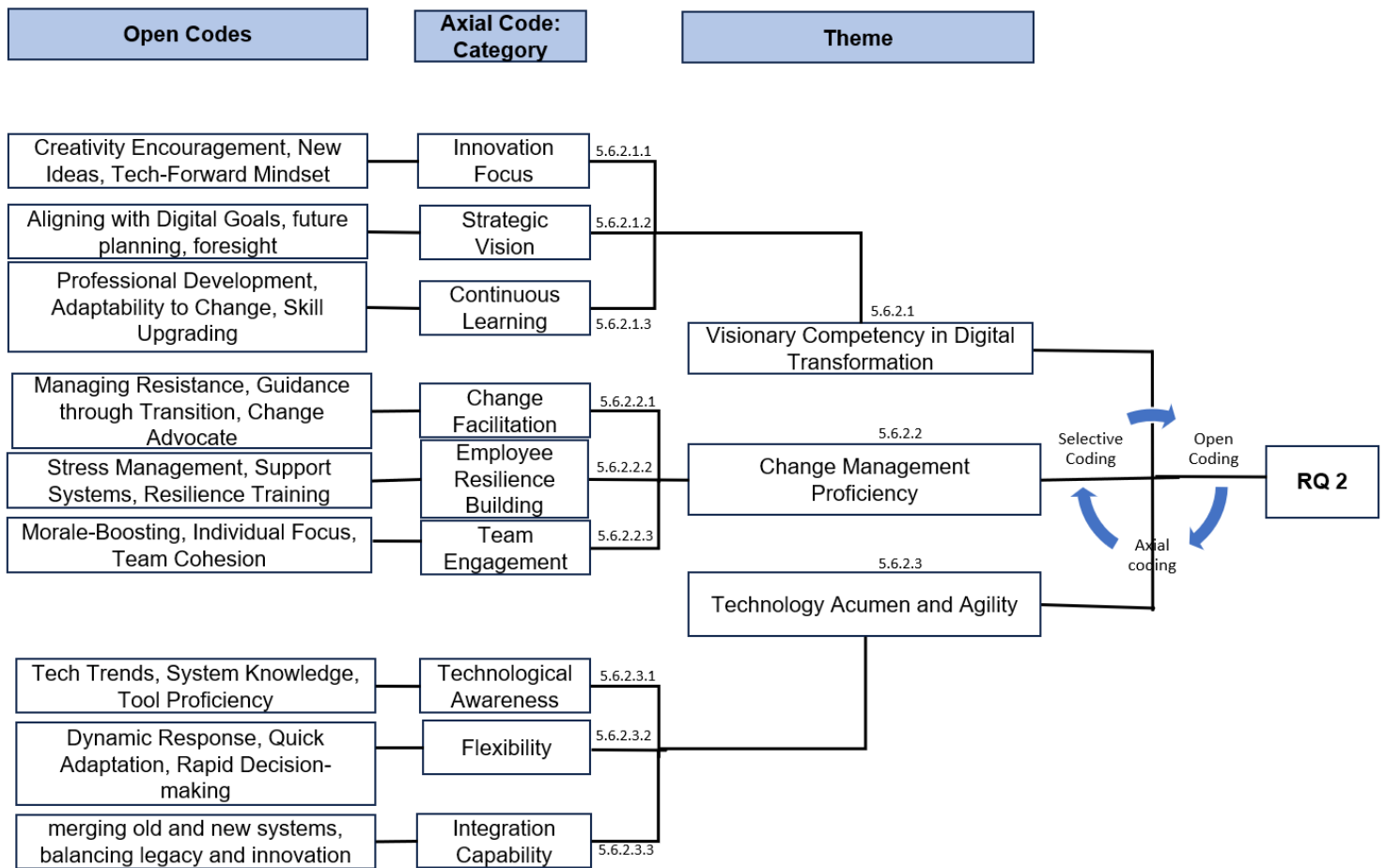
Building on the findings of Research Question 1, which emphasised the importance of leadership styles in fostering alignment and motivation during digital transformation, Research Question 2 delves deeper into the specific leadership competencies required to successfully drive these transformation initiatives.

This seamless development preserves the golden thread of investigating how many facets of leadership contribute to digital transformation success, assuring coherence and a thorough grasp of leadership's multidimensional function.

The purpose of Research Question 2 was to identify the critical competences required for managing digital transformation and attaining organisational success. Open-ended questions were designed to allow participants to evaluate the talents and abilities they valued most in their leadership roles throughout digital transformation. This narrative method enables participants to share their personal experiences and identify qualities that they found important in overcoming obstacles and navigating challenging changes.

The comments provided valuable insights into the specific qualities that leaders rely on, such as strategic vision, flexibility, communication, and change management. These competencies were analysed and organised into themes, with each reflecting a critical component of effective digital transformation leadership. Through this process, the study identified a wide spectrum of abilities required for leaders to not only manage but also thrive in transformation contexts, assuring the organization's resilience and forward thinking. Figure 11 depicts the categorisation of competencies, demonstrating how each subject connects with the objectives of digital transformation and contributes to organisational success.

**Figure 12: Categories to Theme Mapping to Research Question Two**



### 5.6.2.1. Visionary Competency

Expanding on the findings from Research Question 1, which highlighted the significance of leadership styles in aligning teams and enhancing motivation during digital transformation, Research Question 2 investigates the specific competencies that enable leaders to effectively drive transformation. A prominent theme that emerged is Visionary Competency, an essential talent that empowers leaders to convey a persuasive, long-term vision and foster organisational commitment. Visionary leaders may connect current issues with future aspirations, enabling their teams to transcend immediate impediments and focus on the broader objectives of digital transformation. This competency establishes a defined direction while fostering resilience and adaptation, since it motivates team members to remain focused and driven amid the challenges of transformation. This conversation analyses the significance of visionary competency as a fundamental element of effective digital leadership.

### 5.6.2.1.1. Innovation Focus

Innovation Focus emerged as a fundamental component of the Visionary Competency theme. The Senior Digital Transformation Specialist highlighted a "balancing act" between adopting innovation and preserving stability, asserting, "Innovation is crucial for being competitive and addressing the changing demands of our clients." Nevertheless, it is imperative to avoid destabilising the organisation by implementing excessive changes in a short timeframe. This insight emphasises that visionary leaders should foster a creativity-oriented, technology-centric mindset while exercising caution to avoid inundating the organisation with swift transformations. Leaders that effectively reconcile innovation with organisational stability cultivate an environment conducive to lasting transformation, integrating innovation with digital objectives and strategic vision. The figure illustrates how visionary leaders promote innovative ideas while ensuring congruence with overarching organisational objectives, thereby preserving both creativity and coherence.

Participant 17 Stated that: *"It's a balancing act. On one hand, innovation is essential if we want to stay competitive and meet the evolving needs of our customers. On the other hand, you don't want to destabilize the organization by changing too much too quickly"*.

### 5.6.2.1.2. Strategic Vision

Strategic Vision is a fundamental element of Visionary Competency, emphasising the necessity for leaders to possess a comprehensive awareness of the integration of digital transformation efforts within the broader organisational framework. The Chief Transformation Officer stated that "strategic thinking is paramount," highlighting the necessity of aligning digital solutions with overarching company goals.

**Participant 2** Stated that: *"Digital transformation necessitates a variety of competencies. In my view, strategic thinking is at the top of the list understanding how digital solutions match with broader corporate objectives"?*

**Participant 3** Stated that: *“I’d also include strategic vision. Implementing a new system isn’t enough; you also need to understand how it will fit into the larger organisational goals”.*

The Project Manager emphasised the necessity of integrating new systems in alignment with overarching organisational goals, stating,

“Implementing a new system isn’t sufficient; it is essential to comprehend how it will align with the broader organisational goals.” These comments emphasise the imperative for executives to exhibit foresight, connecting digital transformation with the organization's strategic planning. Visionary leaders guarantee that each digital effort fulfils a strategic objective, steering the organisation towards sustained success. This emphasis on alignment links Strategic Vision to the overarching competency of foresight, as evidenced in the coding process, when visionary leaders actively amalgamate digital and organisational objectives.

#### **5.6.2.1.3. Continuous Learning**

**Participant 17** Mentioned that: *“One thing I emphasize is the idea of continuous learning we’re always trying to refine our processes, and data is the key to figuring out what’s working and what isn’t.”*

Ultimately, Continuous Learning is a crucial element of Visionary Competency, enabling leaders to be adaptable and proactive in enhancing processes over the transformation path. P17 - SDT underscored the need of perpetual learning by asserting, “One aspect I highlight is the concept of continuous learning; we consistently strive to enhance our processes, and data is essential for determining what is effective and what is not.” This statement emphasises that visionary leaders acknowledge the importance of continuous professional growth and skill enhancement. Ongoing education allows leaders to adjust to evolving technical environments and new problems. Leaders that cultivate a learning culture promote their teams' acceptance of change, hence augmenting the organization's adaptability and resilience. This category, associated with Visionary Competency in the graphic, illustrates how professional development and adaptability support a progressive strategy, enabling leaders to maintain digital momentum.

The categories of Innovation Focus, Strategic Vision, and Continuous Learning constitute the essence of Visionary Competency, an essential leadership quality in digital transformation. Leaders possessing a vision for innovation, a definitive alignment with strategic objectives, and a dedication to perpetual learning are more adept at spearheading transformative initiatives. This capability empowers leaders to cultivate a technologically advanced yet stable environment, synchronise digital activities with organisational strategy, and sustain adaptability through continuous learning.

The Visionary Competency framework serves as a guiding concept, connecting each subcategory to the overarching competency of visionary leadership in digital transformation.

#### **5.6.2.2. Change Management Proficiency**

Building on the initial examination of visionary competency, which highlighted the significance of foresight, strategic vision, and adaptability in digital transformation, Change Management Proficiency arises as another essential competency for leaders managing intricate transformation initiatives. This subject highlights the leader's capacity to enable seamless transitions, cultivate resilience among employees, and successfully involve teams during the change process. Leaders' adept in change management excel at addressing resistance, fostering a supportive atmosphere, and enhancing team cohesion, all of which are crucial for maintaining momentum in digital transformation. This debate explores the elements of change management expertise, analysing how leaders assist their teams, cultivate resilience, and motivate individuals to achieve successful transformation results.

##### **5.6.2.1.1. Change Facilitation**

Peer-Led change the initial quotation from participant 15 emphasises the efficacy of a "Change Champion Network," wherein early adopters from various departments acted as peer advocates. This peer-led methodology cultivated acceptance and enthusiasm for change, as employees were more ready to embrace transformation when they observed their peers actively endorsing it.

**Participant 17** Stated that: *“One of the things that we did was set up a Change Champion Network, which is simply a collection of individuals from various departments who were early adopters of the new technologies. These people became ambassadors for the reforms, aided in the training of their peers, and served as the initial line of support for the organisation. This strategy, which was led by peers, was extremely successful because individuals are more willing to embrace changes when they see someone who is on the same level as them embracing them”*

The second quotation from Project Manager underscores the need of transparency and engagement in mitigating opposition. By enabling team members to perceive themselves as integral to the change process, rather than as passive recipients, leaders may cultivate a sense of ownership and readiness to participate in new initiatives.

**Participant 5** Mentioned that: *“Open and involvement have shown out to be the finest approaches I have discovered to manage resistance. People are far more likely to be open to change when they believe they are part of the process instead of having something imposed upon them.”*

Together, these insights underscore the importance of inclusive and peer-driven strategies in facilitating change, which align with effective change management practices.

#### **5.6.2.1.2. Employee Resilience Building**

Employee Resilience Building appears as a vital component of change management proficiency, with participant insights emphasising the importance of fostering resilience, communication, and morale in order to traverse the challenging process of digital transformation.

In the first remark, PM 05 recognises resilience, communication, and problem-solving as critical qualities for digital transformation, recognising that challenges are unavoidable. This viewpoint emphasises the importance for leaders to instill resilience in their teams, allowing them to remain calm and focused throughout difficult circumstances.

The emphasis on inspiring the team highlights the leader's duty in maintaining a consistent influence and leading personnel through times of uncertainty. Such resilience-building not only benefits individual individuals, but also strengthens the team as a cohesive unit capable of dealing with complicated transitions.

**Participant 5** Stated That: *"The fundamental skills for digital transformation, in my opinion, are resilience, communication, and problem-solving. Resilience is crucial since obstacles will always arise; therefore, it is imperative to be able to remain cool and inspire the team through those demanding times."*

Meanwhile, participant 1 continues resiliency by discussing the need of ongoing communication and appreciating little achievements. This technique is critical for maintaining morale and reinforcing the goal of change activities. Leaders promote a sense of direction and commitment among employees by reminding them of the reasons for the change on a frequent basis. Furthermore, recognising even little accomplishments serves as a motivator, making employees feel valued and acknowledged for their contributions. This method fosters a resilient mindset since employees see actual progress and are reassured that their contributions are valuable.

**Participant 1** Stated that: *"I have realised that there is no such thing as excessive communication. People need frequent reminders of the reasons behind the change, even though it is tempting to believe that sending a few emails or organising a meeting will have the desired effect. One last thing to learn is that even the smallest victories are significant. Keeping people's morale up and giving them the impression that their efforts are producing concrete benefits can be carried out by celebrating even the smallest of accomplishments along the road."*

Together, these findings suggest a multifaceted approach to resilience building in change management. Leaders who prioritise open communication and encourage little victories establish the framework for a resilient staff. This resilience is essential for enduring the iterative and often unpredictable nature of digital transformation, making it an important component of change management expertise. Leaders who effectively encourage employee resilience ensure that their teams stay adaptable, motivated, and prepared to meet the changing needs of transition.

#### **5.6.2.1.3. Team Engagement**

Team Engagement emerges as a critical component of change management competency, emphasising the necessity of building an environment in which employees are actively interested, informed, and motivated to participate in digital transformation activities.

The first quotation from Participant 5 describes team engagement as a collaborative process centred on openness and teamwork. Participant 5 emphasises the importance of transparency by allowing team members to understand why changes are being made and what they may mean. This method includes regular meetings, Q&A sessions, and ongoing updates to keep employees informed and involved. Frequent communication makes team members feel more included in the change journey, increasing their likelihood of supporting and contributing to its success. This insight emphasises leaders' role as facilitators of open communication, which improves team alignment with transformation goals.

**Participant 5** Stated that: *“Involvement is about openness and teamwork. I make sure staff members see why we are making the adjustments and how they would help them down the road. To make them active in the process, I schedule frequent meetings, and Q&A sessions, and offer updates on development”.*

Participant 10 offers a different viewpoint on engagement by focussing on overcoming early hesitation among team members. Participant 10 addressed concerns about potential workflow disruptions by organising seminars and providing explicit demonstrations of how automation may reduce workloads. Witnessing the benefits directly assisted team members in overcoming their reservations, demonstrating that knowing the practical benefits of digital transformation can be a powerful motivation. This example demonstrates that effective involvement needs not only open communication, but also a willingness to demonstrate the practical impact of change activities.

**Participant 10** Mentioned that: *“Fearing that the new system would complicate their workflow, the operations staff was quite reluctant during one automation project. After personally witnessing the advantages, they become far more receptive to the idea. We conducted multiple seminars to show how the automation would truly lighten their responsibilities.”*

Finally, Participant 14 emphasises the role of peer support in promoting involvement. Employees actively participated in training and supported one another under a peer-led method, resulting in a more accepting and collaborative environment. Open meetings were also scheduled, allowing team members to express their concerns and ask questions without fear of repercussions. This type of engagement through peer involvement guarantees that employees feel supported and connected, increasing their resilience to change and maintaining team cohesion.

**Participant 14** Stated that: *“These folks supported the reforms, helped in peer training, and were first there for one another. Peer-led was a fantastic concept since seeing someone on the same level as one supports helps individuals to embrace changes. Open meetings were also organised where people could share their difficulties and ask questions free from concern about judgement”*

These observations demonstrate the multidimensional nature of team engagement in change management. Leaders that encourage open communication, handle team concerns immediately, and promote peer support establish a solid foundation for participation. This collaborative atmosphere not only boosts the likelihood of effective digital transformation, but also allows employees to make significant contributions, making engagement a vital component of change management proficiency.

### **5.6.2.3. Technology Acumen and Agility**

Building on the themes of Visionary Competency and Change Management Proficiency, from the interviews Technology Acumen and Agility emerges as another essential dimension in effectively driving digital transformation initiatives. While visionary competency sets the strategic framework and change management ensures the seamless integration of these transformations within the workforce, technology acumen and agility represent the operational backbone that empowers leaders to navigate and respond to evolving technological demands.

### 5.6.2.3.1. Technological Awareness

The interview findings highlight the importance of Technological Awareness within the larger competency of Technology Acumen and Agility.

Participants emphasised the importance of leaders being current on technology changes, as seen by participant 12 emphasis on organising regular training sessions and offering opportunities for staff to explore new tools and platforms. This proactive strategy guarantees that team members not only have technical capabilities but also remain nimble in an ever-changing digital ecosystem, which improves the organization's adaptability and responsiveness to technological developments.

**Participant 12** Mentioned That: *“In addition to providing our workers with regular training sessions, we also urge them to remain current with the most recent technological developments and trends. In addition to this, we provide them with the time and resources necessary to explore other tools and platforms.”*

**Participant 11** Stated that: *“One of the most critical skills is technical ability, you must have a solid awareness of the technologies we are using; you must be detailed to make wise selections”*

Furthermore, Participant 11 emphasised the need of deep technical awareness, stating that having a thorough understanding of available technologies allows leaders to make educated judgements when picking tools and systems. This emphasis on precise, strategic decision-making is consistent with the necessity for technological knowledge in achieving successful digital transformation outcomes. Leaders can cultivate a workforce that is both technically skilled and resilient by fostering a culture of continuous learning and technological curiosity, connecting this capability to Research Question 2, which focusses on identifying key leadership competencies required for effective digital transformation. As a result, technological awareness serves as a basis for developing technology acumen and agility, allowing leaders to navigate their organisations through dynamic digital transformations.

### 5.6.2.3.2. Flexibility

The interviews suggest that Flexibility is a critical component of Technology Acumen and Agility, particularly in the context of digital transformation. Participants emphasised that adaptation and swift decision-making are critical abilities for leaders leading dynamic initiatives. For example, P3-PM prioritised flexibility, indicating that leaders must be prepared to respond quickly to unexpected obstacles that arise during digital transformation. This is consistent with the inherent uncertainty in deploying new technologies and adapting workflows accordingly.

Participant 3 Stated that: *“I believe adaptability is at the top of the list. Digital transformation projects can take unexpected twists, so as a leader, you must be prepared to adapt swiftly.”*

Participant 8 demonstrated practical flexibility by outlining situations in which the team had to pivot during implementation owing to compatibility concerns with existing systems. This necessitated quick decision-making to keep the project on track, demonstrating how IT leaders must be adaptable and responsive to operational challenges. Similarly, P16-HOD OI emphasised the importance of continuous assessment and the willingness to evaluate and adjust methods as needed. This iterative strategy, which adjusts and recalibrates as new difficulties arise, underscores the importance of flexibility in managing a successful digital transition.

**Participant 8** Stated that: *“There were moments when we needed to pivot our approach midway through implementation, especially when we realized that certain tools were not compatible with our existing systems. We had to make quick decisions to keep the project on track.”*

**Participant 16** Stated that: *“In a transformation environment, there’s no one-size-fits-all solution. You need to continuously assess, adapt, and sometimes go back to the drawing board if something isn’t working as expected”*

In connecting these insights to Research Question 2, which focusses on critical competencies for digital transformation, flexibility emerges as a critical skill that allows leaders to respond effectively to changing project demands and technical constraints, emphasising the strategic importance of Technology Acumen and Agility in driving transformation initiatives.

#### **5.6.2.3.3. Integration Capability**

Interview findings highlighted Integration Capability as a vital factor of Technology Acumen and Agility in digital transformation. Participants emphasised the significance of seamlessly integrating new technologies with current systems, which is fraught with technical hurdles but necessary for digital project continuity and stability. For example, one participant recalled a big compatibility issue that arose during the transition to a cloud-based infrastructure. The team faced potential delays, but they maintained their composure and adapted to the circumstances, keeping the project on track. This exhibited the ability to respond promptly to integration problems, which is critical for maintaining momentum in digital transformation initiatives.

**Participant 4** stated that: *We met a major compatibility problem during our transfer to a cloud-based infrastructure that might have caused several weeks of delay for the project... we stayed calm and situationally adjusted to stay on track”*

Similarly, Participant 4 emphasised the importance of closing the gap between legacy systems and new technological implementations. Rather than pushing for a comprehensive overhaul, they emphasised that digital transformation frequently necessitates a balanced approach in which old frameworks are combined with new technologies to construct a cohesive architecture. This viewpoint demonstrates a pragmatic understanding of technology integration, embracing both the limitations and opportunities within current systems while adjusting to future needs.

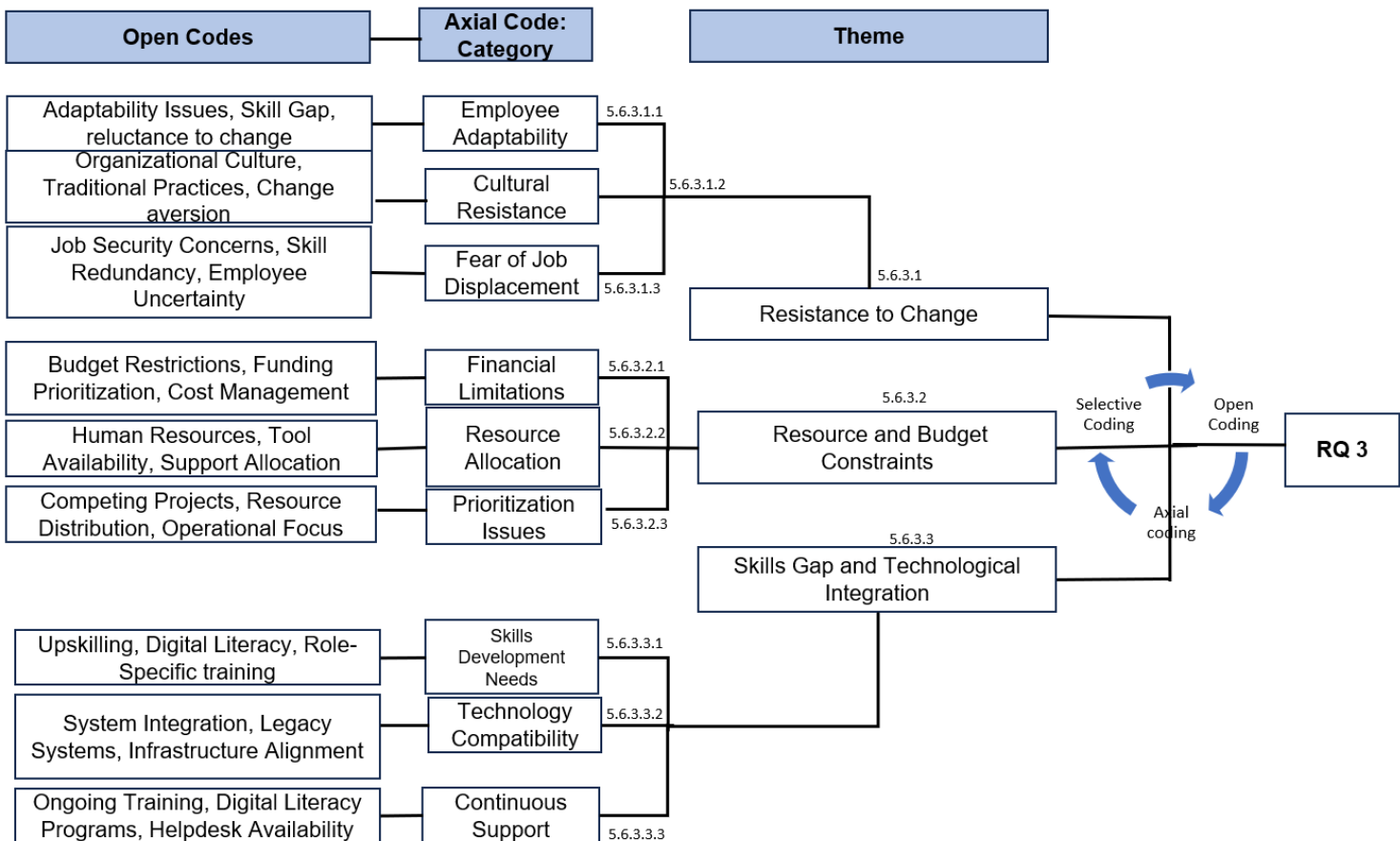
Participant 4 Noted : *“Another key problem is integrating new technology into our existing legacy systems. In digital transformation, it is not always necessary to start from scratch, but rather to bridge the gap between the old and new.”*

These findings are consistent with Research Question 2, which explores competences critical for digital transformation. As stated in the responses, integration capacity is critical for efficiently managing and using current technical assets, ensuring that transformation programs are both forward-thinking and operationally feasible. This ability to combine old and new demonstrates the adaptability and strategic forethought that are key to Technology Acumen and Agility.

### 5.6.3. Results for Research Question Three

**Research Question 3:** *What are the main challenges leaders face during digital transformation, and how can they overcome these challenges?*

**Figure 13: Categories to Theme Mapping to Research Question Three**



### 5.6.3.1. Resistance to Change

We shift our attention from competencies in digital transformation leadership, which were highlighted in RQ2, to the inherent problems, particularly "Resistance to Change," which is directly addressed in RQ3. While the development of visionary competency and technological acumen, as previously said, provides leaders with the required tools and abilities, their effectiveness is frequently hampered by organisational opposition. Change, particularly digital transformation, causes disruptions in familiar patterns, routines, and positions. This transition can cause anxiety and hesitation among employees, as evidenced by one participant's remark: "At first, there was resistance; it's a big shift for anyone to suddenly move from what they know well to a completely different way of working." This viewpoint emphasises the underlying emotional and psychological difficulties that precede such transitions.

**Participant 8** Stated That: *"At first, there was resistance it's a big shift for anyone to suddenly move from what they know well to a completely different way of working"*.

#### 5.6.3.1.1. Employee Adaptability

"Employee Adaptability" emerged as a significant subcategory within the theme of "Resistance to Change," providing insight into one of the primary issues encountered throughout digital transformation, as addressed by the previous question (RQ3). Participant P8-CMS made an important comment, emphasising that "the most typical causes for resistance are fear of the unknown, anxiety about job stability, and a sense of loss of control." This view reflects a general phenomenon in which employees are concerned about how considerable digital transformation may affect their positions and professional security. This resistance, which is frequently rooted in uncertainty, emphasises the adaption difficulty, in which employees struggle to adjust to new expectations and working practices.

**Participant 8** Stated that: *"The most typical causes for resistance are fear of the unknown, anxiety about job stability, and a sense of loss of control. People can be intimidated by digital transformation because they are unsure how it will affect their day-to-day roles."*

These findings emphasise the necessity of addressing adaptation by recognising employee concerns and creating a climate that reduces anxiety through clear communication and support mechanisms. Understanding the underlying worries about job stability and control allows leadership to develop a more sensitive approach to change management, one that matches with the competences needed to maintain a supportive culture throughout transformation. This approach emphasises the importance of leaders not only championing technology progress, but also fostering an adaptable workforce that feels comfortable and empowered in rapidly changing digital landscapes.

#### **5.6.3.1.2. Cultural Resistance**

The issue of "Cultural Resistance" is critical for comprehending "Resistance to Change," as addressed in Research Question 3 (RQ3). According to P16-HBU, cultural resistance is frequently motivated by expectations and pressures for speedy transformation. The participant stated, "Managing expectations, both from leaders and employees, is typically the most difficult element. Leaders frequently fail to provide people with adequate time to change. They want things to be resolved quickly and may not always comprehend their employees' emotional journeys." This observation reveals a gap between leadership's strategy timeframe and the workforce's readiness for change, which is frequently anchored in established cultural norms and the organization's collective rate of adaption.

**Participant 16** Stated that: *"Managing expectations, both from leaders and workers, is often the hardest part. A lot of the time, leaders don't give people enough time to change. They want things to work out quickly and don't always understand the emotional journey their workers are on."*

Resistance originates not only from dread of the unknown, but also from a culture barrier in which employees feel compelled to change deeply ingrained practices and mindsets without appropriate assistance or time to adjust. This emphasises the importance of empathic leadership that recognises the "emotional journey" that employees go through while maintaining the present culture and facilitating a gradual transformation.

The insight emphasises the importance of cultural sensitivity in managing digital transformation, in which leaders must not only implement new procedures but also respect the natural pace of cultural adaption. This technique relates to RQ3 by demonstrating how an organization's fundamental cultural dynamics influence employee preparedness for change, requiring a balanced and understanding leadership style.

#### **5.6.3.1.3. Fear of Job Displacement**

The fear of job displacement surfaced as a prominent component in the theme of "Resistance to Change," as mentioned in Research Question 3. P8-CMS emphasised this concern by stating, "People are always fearful of the unknown and worried about how changes will affect their duties. People are worried about losing control or perhaps their jobs, especially when it comes to automation or new tools. This insight illustrates the anxiety linked with digital transformation, in which the use of automation and new technologies can raise concerns about job security.

**Participant 8** Stated that: *"People are always afraid of the unknown and worry about how the changes would impact responsibilities. People are concerned about losing control or even their careers, particularly when it comes to automation or new tools."*

The fear of job displacement surfaced as a prominent component in the theme of "Resistance to Change," as mentioned in Research Question 3. P8-CMS emphasised this concern by stating, "People are always fearful of the unknown and worried about how changes will affect their duties. People are worried about losing control or perhaps their jobs, especially when it comes to automation or new tools. This insight illustrates the anxiety linked with digital transformation, in which the use of automation and new technologies can raise concerns about job security.

### **5.6.3.2. Resource and budget Constraints**

In the context of digital transformation, "Resource and Budget Constraints" emerge as an important issue that offers insight on the constraints that organisations confront while implementing change efforts, particularly in resource-intensive areas such as technology development and integration. This theme is directly related to Research Question 3, as it investigates the practical challenges that can impede successful digital transition. Resistance to change shows the personal and cultural components of digital adoption, while resource and financial constraints highlight structural and logistical issues. As participants pointed out, even well-intentioned efforts might hit stumbling blocks when financial and material resources are scarce, limiting the ability to effectively deliver on intended improvements.

For example, as reported by participant 3, a project that was originally intended to establish an in-house data analytics platform was redirected due to concerns about resource allocation and budgetary constraints. The leadership team suggested evaluating third-party solutions as a strategic strategy to maximise resource utilisation while aiming to meet project objectives. This situation demonstrates the careful balance that organisations must maintain between lofty technological aspirations and the realities of limited resources. This issue focusses on how budgetary restrictions, if not managed effectively, can limit innovation and force compromises, eventually defining the trajectory and success of digital transformation initiatives.

#### **5.6.3.2.1. Financial Limitations**

The category of "Financial Limitations" is closely related to the broader category of "Resource and Budget Constraints," providing insight into the economic constraints that influence decision-making in digital transformation projects. As P3-PM demonstrated, early plans for an in-house data analytics platform were altered after conversations with senior leadership, who highlighted concerns about budget allocation and overall cost implications. This shift towards third-party solutions emphasises the financial pragmatism that is frequently necessary in digital endeavours, as budgetary constraints might limit objectives, forcing more cost-effective options.

**Participant 3** Stated that: *“In one of our projects, we initially planned to create an in-house data analytics platform. However, after presenting to the senior leadership team, they urged us to consider third-party choices instead, citing concerns about resource allocation and cost.”*

In answering Research Question 3, financial constraints highlight a critical structural obstacle in digital transformation initiatives. Such limits influence not just technology choices, but also the depth and scalability of implementation tactics. Financial factors, as seen in the participant's experience, frequently result in compromises that prioritise feasibility over creativity. This example highlights the reality that, despite the revolutionary potential of digital projects, organisations must operate within budget constraints, emphasising the importance of adaptable strategies that balance ambition with existing resources.

#### **5.6.3.2.2. Resource Allocation**

The "Resource Allocation" category within the "Resource and Budget Constraints" theme directly addresses the organisational challenges of prioritising resources during digital transformation, which is consistent with Research Question 3. P1-CIO's statement emphasises the difficulty in balancing ongoing operational demands with the needs of transformative initiatives. The interview reveals that staff are still required to satisfy their key performance indicators (KPIs) despite adjusting to new technologies and processes. This simultaneous constraint of maintaining consistent performance standards while embracing new digital tools puts tremendous strain on resource allocation.

**Participant 3** Stated that: *“Finding a balance between the day-to-day tasks and the transformation projects is a significant challenge. People still have their key performance indicators and getting them to adjust to new systems on top of that can be exceedingly difficult.”*

Resource allocation issues are particularly relevant in digital transformation, as human resources, time, and attention must be allocated between traditional activities and new initiatives. The balancing act highlighted by the participant demonstrates how, without appropriate preparation and support, staff may feel overwhelmed, impeding the overall development of transformation programs. This insight emphasises that, in addition to financial constraints, resource allocation necessitates strategic prioritisation in order to efficiently manage both day-to-day operations and transformation goals, thereby facilitating a long-term transition towards digital integration.

#### **5.6.3.2.3. Prioritization Issues**

The "Prioritisation" area under the broader "Resource and Budget Constraints" topic emphasises the importance of strategic decision-making in digital transformation programs, which aligns with Research Question 3. As mentioned by P16-HBU, proper prioritisation is critical to combating "change fatigue" inside organisations, as not all changes can or should be implemented simultaneously. This sentiment emphasises the significance of distinguishing between critical and non-essential projects in order to prevent overwhelming staff and resources.

**Participant 16** Noted that: *"Making sure we're properly prioritizing projects is one of the most important things we can do to fix change fatigue. We can't make all the changes at once, and not all of them are equally important"*.

Prioritisation is determining the urgency and impact of each project, allowing executives to allocate resources in a way that maximises output while without depleting the staff. P16-HBU's perspective highlights the importance of a paced approach, realising that not all initiatives are equally important. This careful project sequencing not only saves money and resources, but it also reduces staff burnout while increasing engagement and buy-in. In the context of digital transformation, proper prioritisation directly helps long-term success by ensuring that changes are implemented methodically, and resources are allocated to projects with the highest strategic value.

### 5.6.3.3. Skills Gap and Technological Integration

The issue of "Skills Gap and Technological Integration" is strongly related to Research Question 3, as it addresses a major impediment to successful digital transformation: a lack of necessary skills and the problems of integrating new technologies with old systems. Data analytics, machine learning, and cloud computing are all common specialised skills required for digital transformation initiatives. However, as evidenced by the interviews, many organisations experience a gap between their workforce's present competencies and the advanced skills required to manage new technologies successfully. This mismatch can result in operational inefficiencies, longer project delays, and a possible lack of employee confidence.

One of the frequent themes among participants was the challenge of acquiring or developing the necessary skill sets to meet the demands of new technology. To bridge this gap, several organisations have to invest in employee training or contemplate outsourcing key technology-dependent functions. This difficulty is exacerbated by the quick rate of technology progress, which necessitates ongoing learning and adaptation, frequently taxing both time and financial resources.

#### 5.6.3.3.1. Skills Development Needs

In the context of "Skills Development Needs," interviews revealed that successful digital transformation necessitates more than simply technology it necessitates a workforce that is resilient, communicative, and problem-solving orientated. Participant P4-PM emphasised the need of resilience and effective communication, especially given the unavoidable challenges that come with transformation. P4-PM stated, "The fundamental skills for digital transformation, in my opinion, are resilience, communication, and problem-solving." Because challenges will always come, it is critical to remain calm and inspire the team throughout these difficult moments."

**Participant 4** Stated that: *"The fundamental skills for digital transformation, in my opinion, are resilience, communication, and problem-solving. Since obstacles will always arise, it is imperative to remain cool and inspire the team through those demanding times."*

This observation highlighted the significance of focused skill development initiatives as a critical response to the skills gap in digital transformation efforts. Organisations that encourage these qualities can ensure that team members remain adaptive and more prepared to deal with unplanned interruptions and difficult problem-solving scenarios. Returning to the overarching theme of "Skills Gap and Technological Integration," it became clear that closing this gap necessitates a focus not only on technical skills but also on establishing a resilient and communicative workforce. These characteristics facilitate the seamless integration of new technologies into current systems, aligning human resource capabilities with technology demands and increasing the organization's agility in digital transformation.

#### **5.6.3.3.2. Technology Compatibility**

The topic of "Technology Compatibility" surfaced as a major concern under the theme of "Skills Gap and Technological Integration." During the interviews, Participant P3-PM described the issue of integrating new technologies with old systems as "trying to fit a square peg into a round hole." They emphasised that one of the most difficult elements is integrating new technology with legacy systems. Legacy systems are well-established, and attempting to incorporate new technologies into these older systems can be like trying to fit a square peg into a round hole."

**Participant 3** Stated that: *"Integration of new technology with legacy systems is one of the most difficult aspects. Legacy systems are firmly established, and attempting to integrate new technology with these older systems can be like trying to fit a square peg into a round hole."*

This insight emphasises the technological challenges and skill sets required to integrate current digital solutions into existing, often out-of-date infrastructures. Legacy systems are strongly established in organisational operations, thus integrating new technology requires significant technical expertise and agility. A talent gap in technical compatibility can slow down transformation initiatives or possibly render certain efforts futile. Addressing this gap is critical for organisations seeking to fully benefit digital transformation efforts. As a result, this aspect of compatibility is closely related to Research Question 3, which emphasises the skills and abilities required to overcome integration issues and promote seamless technology changes inside organisations.

#### **5.6.3.3.3. Continuous Support**

In discussing "Continuous Support," Participant P15-HBU emphasised the significance of maintaining an ongoing commitment to skill development and technological proficiency within the workforce. They stated, "In addition to providing our employees with regular training sessions, we also encourage them to keep up with the most latest technology breakthroughs and trends. We provide them the time and resources they need to try out different tools and platforms." This strategy demonstrates the organization's understanding that digital transformation is a continuous journey involving ongoing learning and adaptation.

**Participant 15** Mentioned that: *"In addition to providing our workers with regular training sessions, we also urge them to remain current with the most recent technological developments and trends. We provide them with the time and resources necessary to explore other tools and platforms."*

This insight is directly related to the issue of "Skills Gap and Technological Integration," since it emphasises the need for organisations to actively overcome skill deficiencies. Employees can keep up with changing digital landscapes thanks to regular training and resource allocation, which reduces resistance and skill mismatches as new technologies are implemented. Organisations that cultivate an environment that encourages continuous development not only facilitate smoother technological integration, but also build a workforce capable of adapting to future digital changes. This continuous support approach directly answers Research Question 3, focussing on the organisational methods needed to close skill gaps in the context of digital transformation activities.

## 5.7. Summary of Outcomes

Finally, the interview data analysis yielded significant insights that addressed each of the three research questions (RQs), revealing the complex dynamics of leadership, change management, and technical integration within digital transformation DT programs. The findings emphasised the critical significance of leadership styles and abilities in driving DT activities, as outlined in Research Question 1. Leaders that displayed flexibility, visionary thinking, and open communication were better able to navigate their organisations through the uncertainties of digital transition. Participants emphasised the importance of leaders balancing a long-term strategic goal with an adaptable approach to unforeseen obstacles. Such leadership not only connects organisational objectives with DT goals, but it also promotes the collaborative culture required for successful implementation.

Research Question 2 looked at the specific competencies needed to drive digital transformation, revealing the importance of "visionary competency" and "change management proficiency." Participants repeatedly stated that characteristics such as resilience, constant learning, and effective change facilitation are critical for maintaining momentum in DT activities. For example, leaders with a forward-thinking mindset were

able to excite their people, eliminate opposition, and promote adaptability to changing technological needs. The respondents emphasised the importance of change management competencies, such as team involvement and resilience building, in navigating the human aspects of DT. Leaders that could deal with opposition, establish team cohesion, and help employees through the emotional path of change were shown to be effective in aligning workforce attitudes with DT goals.

Finally, Research Question 3 looked at the problems and barriers that leaders experienced during DT, with an emphasis on "Resource and Budget Constraints" and "Skills Gap and Technological Integration." The findings emphasised the reality of financial constraints, prioritisation issues, and the complexity of integrating new technology with legacy systems. Participants acknowledged the ongoing need for skill development and the crucial role of support networks in closing the skills gap. Technology integration was viewed as a substantial challenge, particularly in situations confined by existing infrastructure, requiring incremental modifications and resource reallocation to ensure operational continuity. Resistance to change, frequently motivated by job insecurity and fear of new technology,

emphasised the importance of effective change facilitation. Leaders can reduce barriers to DT adoption by providing organised support and continual skill development.

Overall, the findings emphasise the multifaceted character of digital transformation, emphasising how strong leadership, strategic competences, and a proactive attitude to obstacles are critical to successful implementation. The findings show that digital transformation is as much about managing change in people and processes as it is about incorporating new technology, emphasising the importance of leadership styles, skill readiness, and resource allocation. This thorough method to data analysis provides a complete knowledge of what is required for DT success, answering each research topic in full and clearly.

## **5.8. Conclusion**

In conclusion, Chapter 5 offered a comprehensive study of the qualitative findings obtained from interviews, elucidating the characteristics that facilitate efficient digital transformation (DT). Prominent themes emerged that underscored the essential significance of leadership styles, competencies, and strategic methodologies, especially transformational and adaptive leadership, in navigating the intricacies of digital change. The results indicated that visionary thinking, change facilitation, technology awareness, and effective communication were crucial leadership qualities that bolstered organisational readiness and resilience throughout digital transformation.

The findings identified multiple obstacles to change, such as employee resistance, skills deficiencies, and resource limitations, highlighting the necessity for a strategic leadership strategy that harmonises technical integration with consideration of human factors. The chapter emphasised the significance of leadership adaptability in aligning teams with transformation objectives, hence increasing commitment and diminishing resistance. These insights significantly enhance the current literature, correlating with theoretical themes from the literature assessment in Chapter 2, while also highlighting gaps where practical difficulties, such as financial restrictions and operational priorities, are insufficiently examined in academic environments.

The findings of this chapter reinforce the notion that effective digital transformation relies on a synthesis of technical expertise, strategic foresight, and compassionate leadership. This foundation establishes the context for the ensuing debate, wherein these findings are analysed in conjunction with current research and theoretical frameworks, finally addressing the research questions through a comprehensive perspective on leadership's role in digital transformation.

## 6. DISCUSSION OF RESULTS

### 6.1. Introduction

The purpose of this chapter is to understand and analyse the data reported in earlier chapters, particularly considering the existing literature on leadership in digital transformation. Here, we go into the study's key findings, exploring how they answer each of the research questions and contribute to our knowledge of leadership's role in steering organisations through digital transformation.

This chapter not only analyses the empirical data, but also contextualises it within the larger theoretical frameworks and preceding studies examined in the literature chapter. This comparison approach allows for a more detailed study of the findings, emphasising areas of agreement, divergence, or silence in current research. By comparing the findings to well-established theories of transformational leadership, change management, and digital competency, the discussion gives a thorough picture of the competencies, styles, and strategies required by leaders to successfully traverse digital transformation.

The chapter is organised to address each research topic in turn, with sections devoted to an in-depth examination of the significant themes that emerged. By connecting these findings to existing literature, we create a unified narrative that emphasises the importance of leadership in addressing the complex, multifaceted difficulties of digital transformation. This chapter also looks at any emerging themes that came up during the study, which adds depth to our understanding of the dynamic interaction between leadership and digital transformation.

Finally, this chapter attempts to provide a full discussion that not only addresses the research questions but also improves our understanding of effective leadership in digital transformation by drawing practical and theoretical implications that may be used to guide future study and practice in this area.

## 6.1. Summary of Key Results

The previous section provided a thorough analysis of data obtained from interviews with leaders in digital transformation, structured to respond to each of the three primary research questions. This section consolidates the main findings, emphasising the key themes and ideas that arose in relation to each research question.

The major results reveal the essential aspects affecting effective DT through the perspective of each study topic. This includes adaptable leadership styles that promote alignment, critical abilities for managing change and facilitating technological integration, and solutions to address prevalent challenges such as resource constraints, opposition to change, and skill deficiencies. These findings provide a thorough understanding of the intricate relationship between leadership and digital transformation, establishing a foundation for a more in-depth exploration of the implications and implementations of these insights.

The research highlighted the crucial influence of leadership styles in managing digital change. Adaptive, transformational, and communicative leadership styles were essential in harmonising team activities and fostering a culture amenable to change. Leaders exhibiting adaptability and effective communication facilitated acceptance and engagement among employees

- **Essential Competencies in Digital Leadership:** Key competencies identified for digital transformation include strategic vision, change management expertise, and technological ability. Leaders possessing these skills could more accurately foresee obstacles, enable seamless transitions, and adeptly navigate their teams through intricate digital transformations.
- **Obstacles & Difficulties:** Resistance to change, resource limitations, and skill deficiencies were significant impediments noted. Resistance arose from apprehension regarding job displacement and cultural conservatism, while constrained finances and insufficient technology skills further hindered reform initiatives.

- **Technological Integration and Agility:** The incorporation of new technologies into legacy systems and the promotion of organisational agility were essential for maintaining transformation initiatives. Proficient executives created training initiatives and advocated for ongoing education to enable teams to adjust to swiftly changing technological environments.
- **Facilitating a Collaborative Framework:** Leaders dedicated to promoting cooperation and enabling self-organising teams to improve agility and efficiency. By fostering a collaborative framework, organisations may more successfully address the needs of digital transformation and sustain alignment across departments.

## **6.3. Discussion of Research Questions**

### **6.3.1. Discussion of Research Question 1**

#### ***Research Question 1: How do leadership styles influence the success of digital transformation initiatives?***

The findings of investigating RQ1 indicate that particular leadership styles are essential in facilitating successful transformation by connecting organisational objectives with technical and procedural modifications. The two main topics identified, Leadership Styles Alignment and Communication & Influence, provide a detailed comprehension of how leadership attributes like adaptability, vision-setting, influence, and transparent communication are essential in managing the intricacies of digital transition.

#### **6.3.1.1. Theme 1: Leadership Styles and Alignment**

The interview results showed that having aligned leadership styles is crucial for handling the complexities of digital transformation. Key sub-themes like Leadership Adaptability, Vision Setting, Influence & Engagement, and Trust & Empathy highlight how leaders' actions influence the organization's readiness and commitment to digital initiatives.

##### **Leadership Adaptability**

The interviewees revealed that adaptation in leadership is essential for addressing the unforeseen aspects of digital transformation. Participants often noted that flexible leaders might swiftly modify plans, reallocating efforts in response to unforeseen problems. Leaders who accepted change and exhibited adaptability in their methods were perceived as more capable of leading teams through uncertain times. This agility in leadership is crucial in digital contexts where swift changes in technology and market dynamics necessitate prompt answers (Bughin et al., 2019). By adapting their strategies to suit the context, these leaders fostered an environment in which teams felt equipped to confront the difficulties of digital transformation.

This corresponds with transformational and adaptive leadership theories, which propose that leaders exhibiting flexibility and responsiveness are more adept at navigating the rapid changes characteristic of digital efforts (Yusuf et al., 2024). Such leaders exhibit resilience and resourcefulness, vital attributes that diminish resistance and foster an organisational culture of continual progress (Chaturvedi, 2023).

This conclusion is consistent with the foundations given out in Chapter 1, the introduction to the research problem, which defined the fundamental research challenge by emphasising the critical necessity for effective leadership in digital transformation. The problem of digital transformation was described as a complicated human and organisational process, necessitating leaders' adaptability and resilience in the face of frequent, unexpected changes. The emphasis on flexibility is consistent with the transformative nature of the digital landscape discussed in the first chapter, which identified adaptive leadership as a vital competence for directing organisations through digital upheaval.

The literature review provided additional context for these findings by delving into transformational and adaptive leadership theories. Both theories imply that leaders who demonstrate flexibility and responsiveness are better able to deal with the rapid changes that come with digital transformation activities (Yusuf et al., 2024). The research emphasised that leaders who demonstrate resilience and resourcefulness not only manage change more effectively, but also lower employee resistance, fostering an environment of continuous progress (Schiuma et al., 2024; Chen et al., 2024). This theoretical foundation lays the groundwork for understanding how adaptive leadership improves organisational adaptability in digital initiatives, connecting the concepts to what participants reported in interviews.

Finally, Chapter 5's conclusions emphasised the significance of adaptable leadership as a key aspect in effective digital transformation. The reoccurring themes of flexibility, resilience, and responsiveness were not just academic concepts, they were lived experiences for participants who had navigated digital transition. According to the interviews, these leaders created an environment of trust and empowerment, allowing their people to confidently embrace digital transformation. This practical validation of the theoretical framework, as well as its congruence with real-world experiences, emphasises the critical role of adaptive leadership in managing the difficulties of digital transformation.

It shows how the study objectives outlined in Chapter 1 and further highlighted in the literature review section, were realised through a thorough investigation, culminating in a nuanced knowledge of the function of flexible leadership in the digital era.

### **Vision Setting**

Vision setting has been identified as a crucial element of effective leadership in digital transformation, based on various interview replies. Leaders who articulated a long-term vision and linked daily duties to the overarching strategic objectives of digital transformation were seen more effective. Participants saw that a distinct vision offered direction and purpose, alleviating anxiety among team members unclear about the results of digital transformation.

This discovery underscores the significance of visionary leadership in transformation processes, as evidenced in the literature. Leaders who articulate a persuasive vision enable people to recognise the advantages of digital transformation beyond short-term operational interruptions, fostering alignment and motivation to attain these objectives. By establishing a clear vision, these leaders enable their people to concentrate on long-term advantages, so increasing engagement and commitment.

The literature in Chapter 2 reinforces the relevance of vision setting as a basic component of transformational and strategic leadership, particularly in situations undergoing fast technological and structural change. According to Görçün et al. (2024) and Nguyen et al. (2023), transformational leaders are distinguished by their capacity to develop a compelling vision that inspires and encourages their people to work towards long-term organisational goals. This viewpoint is consistent with the findings from the interviews, which revealed that a well-articulated vision allowed team members to see the benefits of digital transformation beyond immediate operational interruptions. Leaders helped individuals within their teams focus on larger goals by encouraging alignment with the organization's strategic direction, which enhanced their commitment and drive.

Additionally, studies shows that visionary leadership is critical in overcoming resistance to change, which is a typical hurdle in digital transformation efforts (Yusuf et al., 2024; Rialti & Filieri, 2024). Leaders who communicate a compelling future state help to alleviate the worries and uncertainties that frequently accompany digital transformation by providing a roadmap that outlines the organization's path. This was reflected in the study's findings, where interviewees stated that leaders who communicated a clear vision effectively

lowered team members' concerns and fostered a sense of trust. By establishing a sense of continuity and stability through a common vision, these leaders created an environment receptive to change (Bughin et al., 2019).

This aligns with findings from the literature section by Bonnet and Westerman (2020), who emphasises that vision setting in digital transformation entails not just articulating the final goals, but also connecting these goals to particular responsibilities inside the organisation. Leaders who integrate daily work with long-term digital transformation goals encourage team members to perceive their efforts as part of a broader mission. This was also reflected in the interview results, where participants recognised that leaders who successfully linked everyday tasks to the larger strategic vision helped their teams stay focused and motivated. This approach is consistent with the concept of strategic leadership competences outlined in Chapter 2, which requires leaders to anticipate, plan, and effectively coordinate resources in order to traverse the quickly expanding digital ecosystem (Kaur Bagga et al., 2023).

Building on this idea, literature review indicated that visionary leadership significantly influences motivation, as a well-articulated vision can improve employee engagement by fostering a feeling of purpose and alignment with organisational objectives (Onesi-Ozigagun et al., 2024; Madi Odeh et al., 2021). This motivation is essential in the realm of digital transformation, as it encompasses both intrinsic and external elements that influence employee engagement. The research findings corroborate these theoretical ideas, as interviewees repeatedly said that visionary leaders can reconcile short-term responsibilities with long-term digital transformation advantages, cultivating a feeling of purpose and motivation within the workforce. This not only improves individual performance but also fosters collective alignment, which is crucial for the success of digital initiatives.

In conclusion, the consensus across the research and interview results highlights the importance of leadership vision setting in digital transformation. Chapter 2's literature review lays a solid foundation for comprehending the ways in which visionary leadership can help lower resistance, boost engagement, and encourage alignment with strategic goals. Leaders who link daily tasks with long-term digital transformation objectives foster a more united and inspired team, according to the interview results, which deepen our comprehension of the concept and show how vision setting works in reality. The study highlights the need of visionary leadership in steering organisations through the complexity of digital transformation through this convergence of theory and practice.

## **Influence and Participation**

The interview results highlighted the importance of influence and participation in leadership. Leaders who dedicated time to cultivating connections with their teams and involving them in decision-making processes were regarded as possessing greater influence and credibility. This participation fostered a sense of ownership among team members, enhancing their commitment to the transformation journey. Respondents said that when leaders actively interacted with their teams and acknowledged their contributions, employees were more inclined to endorse and significantly participate in digital transformation initiatives.

This corroborates the notion from transformational leadership theory that influence is crucial in motivating employees to accept change. Through team engagement, these leaders cultivated collaboration and a shared dedication to transformation objectives, thus reducing opposition and improving project success. This finding is consistent with the transformational leadership theory presented in Chapter 2, which holds that influence is critical in encouraging people to embrace change (Nguyen et al., 2023; Görçün et al., 2024). According to the research, transformational leaders engage team members not only by establishing a compelling vision, but also by creating a collaborative environment in which all team members feel valued and participating in the process (Rialti & Filieri, 2024). This is consistent with interview findings, as participants stated that leaders that involve employees in crucial decisions foster a more engaged and cohesive team. Leaders strengthened a climate in which employees were more likely to embrace digital transformation efforts by cultivating a feeling of inclusivity.

Building on the previous paragraph, according to transformational leadership literature, cultivating a shared sense of purpose aids in aligning team objectives with the organization's transformation goals (Yusuf et al., 2024). This sense of shared purpose was also a common theme in the interviews, with respondents reporting that leaders who engaged their staff in the change process fostered a collaborative and goal-oriented environment. The literature implies that this collaborative environment minimises resistance by empowering employees to actively participate in the change process. In practice, as seen by the interviews, leaders who used participatory approaches were able to increase commitment and lower barriers to transformation.

In summary, the interviews' emphasis on impact and involvement validates essential features of transformational leadership theory, which was explored in Chapter Two. According to the research, executives that involve their teams and build a collaborative environment are more likely to succeed in their digital transformation efforts. When these insights are compared, it is clear that active engagement and influence not only increase leader credibility, but also foster a sense of shared purpose and passion among team members, resulting in less pushback and higher transformation success. This strong match between literature and interview results emphasises the critical role that participative leadership plays in navigating the challenges of digital transformation.

### **6.3.1.2. Theme 2: Communication and Influence**

Effective communication was a consistent theme throughout the interviews, with Transparent Communication, Stakeholder Engagement, and Feedback & Adaptation identified as crucial factors impacting the success of digital transformation. The participants emphasised that communication beyond simply information exchange; it entails cultivating an inclusive, feedback-oriented environment that facilitates adaptation.

#### **Transparent Communication**

The interview results underscored that honest communication fosters trust and alignment among teams. Leaders who engaged in open communication and kept staff apprised of the progress, difficulties, and goals of digital transformation were perceived as more effective. Numerous participants indicated that transparency alleviated dread and uncertainty, as employees had greater security when comprehending the ongoing alterations.

Transparent communication is essential in digital transformation scenarios, as it enables leaders to dispel rumours, mitigate misinformation, and regulate expectations. By transparently articulating the reasons and objectives of digital initiatives, leaders cultivate a conducive climate in which employees are more inclined to embrace and adjust to novel working methods. This discovery corresponds with the research that underscores transparency as a mechanism for fostering trust and cohesion in teams experiencing transformation.

The literature discussion on change management competences emphasises transparency as a critical component of effective leadership in dynamic and uncertain situations (Belli et al., 2024; Bonnet & Westerman, 2020). By maintaining open lines of communication, leaders give people with clarity and purpose, lowering anxieties and fostering a more adaptable mindset. The relationship between transparency and trust is well-documented in transformational leadership literature, which emphasises the importance of honest, frequent communication in minimising resistance to change and strengthening cohesion throughout transformative stages (Rialti & Filieri, 2024). Interview responses reflected this, with participants stating that transparent leaders fostered an environment in which employees felt more comfortable, involved, and aligned with the transformation goals.

In the context of DT, the literature argues that open communication reduces uncertainty and develops a sense of inclusion. When leaders are open about both accomplishments and failures, people feel appreciated and trusted, creating an environment conducive to continual growth and adaptation (Wang & Zhao, 2024). In line with these findings, interviewees commonly stated that open communication by their leaders built trust, which boosted their willingness to embrace change. This is consistent with Yusuf et al. (2024), who suggest that transparency in leadership promotes team cohesion, increasing the likelihood of effective implementation in dynamic and developing projects.

Finally, the finding that transparency reduces fear and increases team confidence is consistent with transformational leadership theories, as discussed in Chapter 2, which emphasise the importance of leaders providing psychological safety during times of significant change (Chen et al., 2024). Leaders who communicate honestly help employees understand and trust the process, reducing opposition and increasing collective commitment to digital transformation goals. The interview results support this, as respondents frequently cited the relaxing and uplifting impacts of having leaders who kept them informed and aligned.

In conclusion, the literature and interview data show that transparent communication is not just a method, but a necessary leadership ability for digital transformation. This theme from the interview results reinforces the theoretical foundation discussed in Chapter two, particularly in the areas of transformational and change management leadership, by demonstrating that open communication fosters a unified and resilient workforce capable of navigating the complexities of digital transformation.

## Stakeholder Engagement

The significance of stakeholder engagement was emphasised in the interviews, with numerous participants asserting that effective digital transformation relied on leaders who actively involved stakeholders at every level. Leaders who solicited feedback from many departments and promoted cross-functional collaboration saw greater success in aligning various segments of the organisation with transformation goals. Participants observed that inclusive participation facilitated the dismantling of silos and promoted shared ownership of the digital efforts.

Literature extensively endorses stakeholder participation in digital transformation, emphasising the necessity for interdepartmental collaboration and inclusive decision-making. By engaging stakeholders in the process, leaders guarantee that digital initiatives meet the requirements and goals of the entire organisation, thereby increasing buy-in and mitigating possible sources of opposition.

This emphasis on stakeholder engagement is directly related to the research foundation in Chapter 1, which emphasises the importance of a comprehensive approach to addressing the complexities of digital transformation, with leadership serving as a catalyst for alignment across organisational levels. Chapter 2 strengthens this knowledge by linking stakeholder participation to transformational and collaborative leadership philosophies. Transformational leadership, in particular, is linked to promoting inclusivity and cross-functional collaboration, both of which are essential for minimising resistance and increasing buy-in during transformative projects (Wang & Zhao, 2024; Madi Odeh et al., 2021).

Finally, the findings in Chapter 5 illustrate the practical outcomes of stakeholder engagement, as participants consistently noted that inclusive approaches led to smoother transitions and stronger alignment with digital transformation goals. This link between theory and practical insights underscores that engaging stakeholders not only enhances collaboration but also mitigates resistance by fostering a sense of collective ownership (Rialti & Filieri, 2024; Onesi-Ozigagun et al., 2024). In summary, these connections reinforce that stakeholder engagement is not merely supportive but foundational to successful digital transformation, reflecting both the theoretical and empirical dimensions explored throughout the study.

## Feedback and Adaptation

Participants underscored the necessity of continuous feedback and adaptability for effectively addressing the dynamic challenges of digital transformation. Interviewees said that leaders who promoted feedback mechanisms and were amenable to modifications based on team insights achieved greater success. This feedback-oriented strategy enabled leaders to be adaptable and responsive to developing challenges, ensuring that transformation initiatives fit with organisational objectives and staff competencies.

This conclusion is corroborated by adaptive leadership literature, which asserts that feedback mechanisms allow leaders to recognise and address impediments in real-time. In digital transformation, where change is swift and perpetual, adaptation informed by feedback guarantees that transformation programs remain efficient and aligned with the organization's goals. Feedback cultivates a culture of ongoing enhancement, enabling teams to actively participate in the progression of the transformation process.

This finding is directly related to the literature study in Chapter 2, notably adaptive leadership theory, which argues that feedback channels are essential for recognising and overcoming real-time barriers (Wang & Zhao, 2024). In digital transformation situations where technical and market shifts happen quickly, such techniques allow leaders to adjust strategies, making transformation efforts more relevant and aligned with organisational goals (Belli et al., 2024). Furthermore, Görçün et al. (2024) found that fostering a culture of continuous improvement through feedback increases employee engagement and reinforces the common goal of digital transformation. This finding is consistent with the research aims of analysing transformational competencies and connecting theoretical understanding to actual implementations inside the organisation.

## Conclusion for RQ1 Discussion

The interview data indicate that leadership styles characterised by adaptability, imaginative thinking, influence, and transparent communication substantially impact the success of digital transformation programs. Leaders that employ these techniques not only enable seamless transitions but also cultivate an atmosphere of trust, inclusion, and adaptability essential for attaining change objectives. The correlation between these findings and the literature on transformational and adaptive leadership highlights the significance of these attributes in managing intricate change processes. This aligns with the literature in Chapter two, where transformational and adaptive leadership theories emphasise the significance of visionary and adaptable leadership in managing complex change processes. Transformational leaders who engage employees through a clear vision and open communication effectively generate team resilience, which is recognised in the literature as critical to maintaining motivation and commitment (Görçün et al., 2024; Onesi-Ozigagun et al., 2024).

By comprehending and implementing these leadership attributes, organisations are more adept at navigating the problems linked to digital transformation. Leaders who establish a clear vision, engage and influence stakeholders, and uphold open communication foster a more resilient and dedicated team. Effective leadership in digital transformation is characterised by the capacity to motivate and direct teams through unavoidable challenges, fostering a culture that values innovation and ongoing enhancement. This discourse underscores the pivotal function of leadership in influencing the course and efficacy of digital transformation, validating the fundamental theories examined in the literature and offering empirical evidence for their relevance in contemporary organisational settings.

Thus, these findings emphasise the importance of leadership in defining the trajectory and efficacy of digital transformation, supporting the theoretical viewpoints discussed in Chapter 2. This empirical support reinforces the relevance of transformational and adaptive leadership theories, offering practical insights into their application in modern organisational settings and validating the literature's emphasis on leadership as a primary driver of successful digital transformation.

### **6.3.2. Discussion of Research Question 2**

#### ***Research Question 2: How do leadership styles influence the success of digital transformation initiatives?***

The interview results indicated that congruence in leadership styles is essential for managing the intricacies of digital transformation. The highlighted sub-themes Leadership Adaptability, Vision Setting, Influence & Engagement, and Trust & Empathy underscore the impact of leaders' behaviours on organisational preparedness and dedication to digital efforts.

#### **Theme 1: Visionary Competency**

The interviews suggested that visionary competency was a significant driver in the successful implementation of digital transformation. The interview results indicated that congruence in leadership styles is essential for managing the intricacies of digital transformation. The highlighted sub-themes Leadership Adaptability, Vision Setting, Influence & Engagement, and Trust & Empathy underscore the impact of leaders' behaviours on organisational preparedness and dedication to digital efforts.

#### **Innovation Focus**

Leaders that prioritise innovation create a climate that encourages creative problem-solving, which is critical for responding to fast changing digital environments. The interviews revealed that leaders maintained an innovation-focused strategy by not just encouraging experimentation but also incorporating new technical solutions that reduced procedures and increased productivity. This is consistent with the literature, which emphasises the need of leaders fostering an innovative attitude in order to achieve continual progress (Bonnet & Westerman, 2020; Fan et al., 2024). Leaders that embrace an innovation focus may be better able to respond to unforeseen obstacles, a constant theme across the interviews.

## **Strategic Vision**

The capacity to express a clear, long-term vision has emerged as a critical characteristic of successful digital transformation executives. The interview replies demonstrated how leaders with a strategic vision could mobilise their staff around a common goal, giving a road map that connected digital activities to the organization's overall aims. This approach reflects the theoretical viewpoints covered in Chapter two, where transformational leadership theories emphasise the relevance of vision in connecting teams with organisational goals. Leaders' ability to articulate and link their vision with digital goals aided teams in understanding the reason of the transformation, resulting in increased commitment and alignment with organisational values.

According to the research, transformational leadership theory says that vision is critical for giving employees with a sense of purpose, especially during times of major change (Chau et al., 2022). Leaders' ability to articulate a compelling vision clarifies the basis for the transformation, reinforcing the idea that employees are more inclined to engage with and support initiatives when they see a clear link to organisational goals (Belli et al., 2024). This study supports the literature's notion that a well-communicated vision fosters an organisational culture of resilience and adaptation, both of which are essential for navigating the challenges of digital change.

Furthermore, this finding supports transformational leadership models, such as those explored in the literature review section, which emphasise the importance of vision-setting in creating team alignment and cohesiveness. Leaders effectively bridge the gap between long-term organisational aspirations and urgent digital goals by linking strategic vision and digital objectives, increasing both individual and group commitment to the transformation path.

## Continuous Learning

Another important component identified in the interview findings was leaders' commitment to building an environment of continuous learning and development, preparing teams to adapt to new digital tools and systems. This emphasis on continual learning is consistent with scholarly perspectives described in Chapter 2, which highlight the importance of agility and adaptation in current digital landscapes (Görçün et al., 2024; Nguyen et al., 2023). Continuous learning is regarded as a cornerstone of digital transformation efforts in the literature because it allows organisations to quickly adapt to digital demands, reducing disruptions caused by skill shortages and increasing organisational resilience (Kaur Bagga et al., 2023).

Leaders who promoted continuous learning helped their people close the skills gap, boosting the organization's ability to respond to the rapid technical advances that are key to digital transformation. This strategy not only improves individual competencies, but it also promotes a culture in which adaptation is built into the organization's principles, which aligns with the adaptive leadership theories discussed in Chapter 2. According to Grivas et al., (2024), leaders that prioritise learning foster a climate conducive to innovation and proactive change, preparing people to face digital problems boldly.

This study reflects the theoretical foundations explored in the literature review section, which link strategic learning to digital adaptability, particularly in transformation-focused leadership frameworks. Leaders guarantee that their teams are engaged and equipped for continual technological innovation by connecting human development with organisational goals, which supports transformational and adaptive leadership theories. This commitment to learning boosts both human and organisational resilience, validating the literature's claim that a learning-oriented culture is essential for accomplishing long-term digital transformation.

## **Theme 2: Change Management Proficiency**

The theme of change management expertise was divided into three categories: change facilitation, employee resilience building, and team engagement. This theme focused on how leaders managed the human component of digital transformation.

### **Change Facilitation**

The ability to facilitate change has emerged as a critical skill, allowing leaders to effectively guide their teams through the uncertainties and disruptions of digital transformation. According to the interview findings, executives who worked as change advocates played an important role in assisting employees in adopting new ways of working while also fostering open dialogue about the transformation. This finding is consistent with Kotter's (2020) change management principles outlined in literature review, which emphasise the need of generating a sense of urgency and building coalitions to achieve successful change. Kotter's concept encourages executives to engage employees proactively and ensure they understand the reason and urgency of change efforts, thereby minimising opposition by building a common vision for the future.

This facilitative function reinforces the idea that great leaders actively engage with employees to ease transitions and align teams with organisational goals, as outlined in the literature review, particularly in transformational and adaptive leadership theories (Ivančić et al., 2019). Transformational leadership theory emphasises leaders' roles in inspiring and motivating teams through change, whereas adaptive leadership theory proposes that leaders foster team flexibility and resilience, preparing them to meet the demands of digital evolution (Nguyen et al., 2023; Trzeciak, 2023). In the interviews, executives used open communication and support structures to foster employee buy-in and reduce opposition to new digital procedures.

Furthermore, the literature review emphasised the need of open dialogue and feedback, with transparent communication viewed as critical to establishing trust during transition. This transparency fosters an environment in which employees feel supported, resulting in better alignment with digital transformation goals (Belli et al., 2024; Gangl et al., 2024). Leaders support the literature's assertion that effective change facilitation is fundamental to digital transformation success by facilitating change through clear communication and

supporting structures, bridging the theoretical insights from Chapter 2 with the practical applications observed in the study's findings.

### **Employee Resilience Building**

Resilience has emerged as a key component in overcoming the challenges of digital transformation. Leaders supposedly implemented resilience-building initiatives among their staff, such as support structures and resilience training programs. The interview data revealed that these resilience-building activities effectively reduced burnout and change fatigue among employees, who were frequently overwhelmed by the rapid pace and complexity of digital transformations. This approach emphasises the critical role of leadership in ensuring employee well-being, as described in Chapter Two's change management literature, where resilience is portrayed as a valuable asset for long-term transformation efforts (Kotter, 2020; Gangl et al., 2024).

This emphasis on resilience is consistent with the transformational and adaptive leadership theory outlined in Chapter 2, which argue that leaders who prioritise employee assistance during times of change create a more flexible workforce. According to transformational leadership theory, leaders who create supportive and motivating environments improve their employees' ability to cope with and adapt to organisational change, generating a resilient culture (Nguyen et al., 2023). Similarly, adaptive leadership theory views resilience as a response to the uncertainties inherent in digital transformation, arguing that leaders should actively cultivate employee resilience to ensure sustained commitment and performance in dynamic environments (Belli et al., 2024; Trzeciak, 2023).

Furthermore, the literature on change management focusses on the relationship between resilience and employee engagement throughout transformation processes. According to research, resilience development minimises the psychological strain associated with constant adaptation, resulting in increased engagement and commitment to organisational goals (Görçün et al., 2024).

By incorporating resilience techniques into their leadership style, leaders agree with theoretical ideas that advocate for developing a supportive culture to protect employees from the possible negative effects of transformation. This link between resilience, leadership support, and employee well-being exemplifies the relationship between theoretical insights in Chapter 2 and empirical findings in this study, demonstrating how resilience-building is critical to the success and sustainability of digital transformation initiatives.

### **Team Engagement**

Another commonly mentioned aspect was including teams in the digital transformation process, with leaders that used inclusive decision-making and kept open feedback loops obtaining considerably more team support. According to the interview findings, engaged teams demonstrated higher motivation and dedication to the transformation goals, resulting in less opposition and a more collaborative atmosphere. This conclusion is consistent with the transformational leadership paradigms mentioned in Chapter 2, particularly those that emphasise team participation as a vital aspect in successful change (Nguyen et al., 2023; Belli et al., 2024).

According to transformational leadership theory, when leaders actively engage their teams in decision-making and appreciate their feedback, employees develop a feeling of shared purpose and dedication. This collaborative approach aids in the creation of a coherent and supportive work environment, which is critical for successful digital transitions (Görçün et al., 2024). By emphasising inclusivity and involvement, leaders can tap into the transformative leadership skills that is highlighted in Chapter 2, are required for effective change management. This method also aligns with adaptive leadership approaches, which advocate for a feedback-driven approach to change, allowing leaders to be sensitive and adaptive to their teams' changing requirements (Kotter, 2020).

Furthermore, these findings are consistent with previous research on the psychological underpinnings of team dynamics during organisational transition, which indicates that inclusive involvement might reduce change resistance by creating trust and psychological safety (Wang & Zhao, 2024). When leaders prioritise team involvement, they foster an empowerment culture that not only boosts motivation but also strengthens employees' resilience in the face of digital transformation challenges.

This empirical connection to the literature in Chapter 2 emphasises the importance of team participation in achieving transformation goals, demonstrating that effective leadership in digital transformation is based on group commitment and mutual support.

### **Theme 3: Technology Acumen and Agility**

The third theme investigated during RQ2 was Technology Acumen and Agility, which encompassed Technological Awareness, Flexibility, and Integration Capability. This theme focused on the technical and adaptive components of leadership in digital transformation.

#### **Technological Awareness:**

Leaders with high degrees of technological awareness identified as critical to making informed digital transformation decisions. According to interview findings, leaders who stayed up to date on emerging digital trends and tools were more effective in directing their teams through technology adoption procedures, picking tools that matched organisational needs and strategic objectives. This finding is consistent with the limited but rising body of literature described in Chapter 2, which recognises digital literacy as critical for strategic leadership in digital contexts (Görçün et al., 2024; Nguyen et al., 2023). However, the findings highlight a significant gap in the literature about the level of technological proficiency required for effective leadership in digital transformation, indicating a need for additional research in this area.

As noted in Chapter 2, digital literacy among leaders is critical for bridging knowledge gaps across teams, smoothing technology transitions, and inspiring employee confidence all of which interview participants related directly to successful digital efforts. Despite these recognised relationships, previous research has only partially addressed how digital literacy at various organisational levels contributes to effective change management, emphasising the importance of this study's findings. This observation further supports the transformative function of technologically competent leaders, as highlighted in the restricted literature, by allowing them to build a culture of constant learning and flexibility (Khan & Sarkar, 2024). By filling up some of these information gaps, this study emphasises the relevance of leaders who prioritise continual technology engagement, highlighting the need for additional research to gain a more thorough understanding of how such competencies influence digital transformation outcomes.

**Flexibility:**

Flexibility has emerged as an important characteristic in executives who can modify their strategy in response to unexpected digital difficulties. Interviews revealed that leaders who displayed flexibility were better able to pivot during implementation phases, particularly when initial plans were ineffective or needed to be modified. This adaptability is compatible with adaptive leadership paradigms, which state that leaders in dynamic situations must be willing to change their approach to suit changing needs. The interview findings highlighted the importance of flexibility in allowing executives to manage disruptions and keep organisations on track despite unforeseen hurdles.

**Integration Capability:**

The ability to interface new digital systems with existing legacy infrastructure was a reoccurring issue raised during the interviews. Leaders with good integration skills were able to overcome these problems by encouraging collaboration between IT and other departments, resulting in seamless deployment across all organisational functions. The findings revealed that effective integration necessitated not only technical knowledge but also cross-departmental collaboration. This is consistent with the literature on digital transformation, which emphasises successful integration as a critical leadership capability for avoiding interruptions and ensuring operational continuity (Torbacki, 2024). Leaders who could bridge the gap between old and new systems promoted more seamless digital adoption, reducing resistance and ensuring functionality.

**Conclusion for RQ2 Discussion**

Finally, the interview results highlighted the need of unique leadership abilities, including visionary competency, change management proficiency, and technological savvy, in successfully leading digital transformation. These competencies are consistent with previous research, which highlights the critical role of leadership in navigating difficult digital transformations (Yusuf et al., 2023; Khan & Sarkar, 2024). For example, Chapter 2 of the literature study shows how visionary leadership allows leaders to define a compelling future state, creating alignment and motivation among team members (Wang & Zhao, 2024). The interview data confirmed that leaders with visionary competency gave clear direction and purpose, allowing organisations to achieve digital transformation goals while remaining focused on long-term results.

Furthermore, the findings on change management proficiency are consistent with the transformational leadership theories presented in Chapter 2, which emphasise leaders' roles in managing organisational resistance and increasing flexibility (Kotter, 2020). Interviewees stated that leaders who excelled at change management might reduce resistance by promoting open communication, support mechanisms, and collaborative participation. These approaches were critical in relieving human worries about digital transformation because they enabled a more inclusive and participatory transformation process, resulting in a resilient organisational culture that could withstand change. Notably, while much literature emphasises the theoretical importance of change management (Nguyen et al., 2023), there is little empirical focus on how leaders actually implement change management in digital contexts, highlighting a gap that this study fills by providing actionable insights into these leadership dynamics.

The interviews also revealed a strong emphasis on technological acumen, which has been widely explored in recent research as a vital capacity. Leaders with high technology awareness are more likely to make informed decisions about digital tools and systems, overcoming skill gaps within their teams. This finding supports the limited research provided in Chapter 2 on digital literacy as a component of strategic leadership in digital transformation, while the literature frequently lacks precision about the level of technical understanding necessary at various leadership levels. As a result, this study adds nuance to our knowledge of technological competency by demonstrating how leaders' active engagement with technology can boost team confidence and make transitions easier (Nguyen et al., 2023; Görçün et al., 2024).

Furthermore, these findings shed insight on areas that have received little attention in existing literature, such as the balance between visionary and technological competencies in dynamic digital contexts. While studies frequently emphasise transformational leadership as a theoretical ideal, the practical findings from this study show that effective digital leadership frequently necessitates a combination of adaptability, transparency, and strategic foresight to address both technical and human aspects of change. Leaders use these competencies not just to promote the use of digital tools, but also to develop a flexible and resilient organisational culture, thereby driving the long-term success of RQ2-related digital transformation activities. This validates the literature's findings about the critical role of leadership while also expanding our understanding of how these qualities are used realistically in digital transformations.

### 6.3.3. Discussion of Research Question 3

#### ***Research Question 3: What key leadership competencies are essential for driving digital transformation and achieving organizational success?***

For Research Question 3, which examines the challenges leaders face during digital transformation and the strategies they employ to navigate these, the interview findings highlight three primary themes: Visionary Competency in Digital Transformation, Change Management Proficiency, and Technology Acumen and Agility. These themes collectively underscore the complex role that leadership plays in addressing both human and technical barriers to successful digital transformation. Below is a structured discussion of these themes as they relate to Research Question 3.

#### **Theme 1: Resistance to change.**

Resistance to Change appeared as a significant obstacle, reflecting the usual challenges encountered in digital transformation initiatives. This theme is divided into three axial codes: Employee Adaptability, Cultural Resistance, and Fear of Job Displacement.

#### **Employee Adaptability**

The interview results revealed major challenges with employee adaptability, including skill gaps and resistance to change when transformation programs implemented new technology and processes. The literature study emphasises flexibility as crucial for successful digital transformation, which supports Aras and Büyüközkan's (2023) findings that adaptation within an organization's workforce is critical to overcoming transformation obstacles. This study contributes to that knowledge by revealing how skill gaps in personnel, along with a reluctance to forsake familiar techniques, impede transformation attempts. According to Banks et al. (2022), employees frequently oppose changes that necessitate the acquisition of new competencies, which is supported by the interview results in this study.

This study supports the literature's emphasis on proactive change preparedness strategies to lessen resistance, implying that executives who prioritise adaptation activities like as upskilling programs and open communication encounter fewer challenges during transformation. A noteworthy gap in the research, as described in Chapter 2, is the lack of emphasis on organised, empirical ways for building employee flexibility in real-time digital transformation settings. While theory emphasises the need of flexibility, there is still a dearth of precise, concrete insights for applying adaptation training and support systems at the organisational level, particularly in industries where digital shifts are quick and complicated.

Furthermore, the literature frequently portrays adaptability as a simple trait, although the interviews in this study demonstrated it to be a multifaceted problem requiring emotional, cognitive, and technical preparation. This study thus gives a more nuanced understanding of adaptability, demonstrating how it may be promoted not only through technical training, but also by cultivating an open mindset to learning and change. In summary, these findings add to existing scholarship by demonstrating that, while adaptability is important, developing it within teams necessitates an intentional approach to change readiness that supports employees holistically, aligning with transformational change theories while expanding them with practical recommendations for effective application.

### **Cultural Resistance**

The interviews revealed cultural resistance as a key barrier to digital transformation, originating from deeply ingrained organisational traditions and practices that resisted change. This is consistent with the literature covered in Chapter 2, where Guerra (2023) emphasises how long-held organisational beliefs can impede the adoption of new technologies, especially when these beliefs contradict the fundamental concepts of digital transition. Chapter 2 also discusses how digital transformation necessitates a culture that values openness and innovation; nevertheless, the study's findings show that traditional cultures frequently contradict with transformation goals, encouraging opposition rather than adaptation.

Furthermore, the interviews reveal a significant gap between current cultural norms and the goals of digital transformation, echoing Correani et al. (2020), who argue that successful digital change is dependent not only on technological adoption but also on a shift in organisational culture. The literature review in Chapter 2 emphasises the dual requirement of technology and culture, but it provides scant empirical recommendations on specific ways for effectively bridging the cultural gap in organisations. This study fills that gap by demonstrating that executives must prioritise cultural alignment activities alongside technology advancements, a viewpoint that has been frequently overlooked in earlier research.

Furthermore, whereas previous research has usually treated culture as a passive aspect influenced by digital strategy, this study emphasises culture as an active, shaping force in the transformation path, influencing employee attitudes and overall organisational readiness for change. These findings, which frame culture as an enabler rather than a passive barrier, build on current theories, emphasising the necessity of culturally adapted approaches that account for organisational history and context in digital transformation efforts. This emphasises the need for a more complete approach to change management, one that balances technology and cultural evolution to support long-term transformation, a nuance that is often overlooked in existing research.

### **Fear of Job Displacement**

The fear of job displacement or redundancy was identified as a significant psychological barrier, creating employee hesitancy and opposition. Automation is frequently used in digital transformation, which can result in perceived or actual reductions in employment demand (Nguyen et al., 2023). The interviews highlighted employees' concerns about job security, matching the literature's findings on transformation-induced uncertainty and job insecurity as major barriers to adoption (Wessel et al., 2021).

## **Theme 2: Resources and Budget Constraints**

The second significant subject influencing digital transformation is Resource and Budget Constraints, which include financial limitations, resource allocation, and prioritisation issues.

### **Financial Limitations**

The interview results highlighted budget constraints and cost management concerns as significant barriers to digital transformation programs. These constraints frequently limit the extent and pace of digital activities, supporting the findings in Chapter 2, where Li et al. (2024) state that digital transformation necessitates considerable financial investments in technology adoption, workforce training, and process reform. The research in Chapter 2 describes how these financial investments are critical for organisations seeking to remain competitive, but it also considers the strain they put on traditional budgeting processes, which may not be well-suited to the flexible and expanding character of digital transformation.

Interviewees reported that budget constraints not only hampered their organization's capacity to pursue a comprehensive digital strategy, but also required them to prioritise certain initiatives above others, resulting in a phased or selective approach to adoption. This selective approach, while often feasible, might prevent organisations from reaching the full integration required for meaningful transformation, as observed by Correani et al. (2020) in Chapter 2. The literature shows that a lack of thorough budgetary allocation affects the efficiency and alignment of transformation activities with organisational goals, potentially delaying benefits or reducing overall effectiveness.

While past research has addressed fiscal constraints, it frequently fails to provide comprehensive insight into the sequential or selective implementation techniques reported by respondents. This study contributes to the literature by demonstrating how budget constraints necessitate a staged approach to digital adoption, a technique that, while limited in scope, can provide manageable and sustainable development. This sequential strategy was viewed as an adaptive response rather than an ideal answer, highlighting a gap in the literature on best practices for fiscally restricted digital ventures. This report bridges a practical gap by emphasising the techniques organisations use to traverse these financial obstacles, providing insights into how budget management may influence and, at times, constrain digital transformation initiatives.

## **Resource deployment**

Effective deployment of human resources and tools has emerged as a critical aspect in the success of transformation initiatives. Interviewees discussed how restricted support infrastructure or insufficient tool availability caused slowdowns, an issue also identified by Ravi et al. (2022). Strategic resource allocation is critical to achieving transformation goals, with enough staff and tools deployed to manage the scope of change.

## **Prioritisation Issues**

Competing projects and operational needs were prominent among the prioritisation problems identified in the interview results, as digital transformation initiatives competed for limited organisational resources and attention. This obstacle is consistent with the research reviewed in Chapter 2, where Tsvetkova (2020) highlights resource rivalry as a prevalent concern, emphasising the difficulties of connecting long-term digital transformation goals with urgent business needs. Because digital initiatives demand significant time, financial commitment, and worker participation, organisations frequently confront resource allocation conflicts when other important projects and operational needs compete for attention (Kraus et al., 2022).

Interviewees repeatedly highlighted the challenge Leadership has in reconciling transformational goals with current business imperatives. For example, they observed that, while digital transformation is seen as vital for future competitiveness, it is frequently viewed as less urgent than projects connected to present revenue sources or short-term goals. This prioritisation challenge was exacerbated by resource allocation mechanisms that lacked flexibility, limiting executives' ability to pivot or reallocate resources efficiently when transformational efforts necessitated immediate scale. The literature on adaptive leadership, which suggests that effective leaders prioritise adaptability and strategic resource management, has limited application here, as traditional resource allocation models frequently lack mechanisms for dynamic reprioritisation in response to transformational needs (Chapter 2).

This study contributes to the literature by describing the complexity of managing multiple demands and limited resources, particularly within the rigid structures of legacy business models that prioritise short-term operational goals over long-term transformational benefits. While the literature recognises resource competition as a general barrier, it frequently lacks specific insights into the tactics and decision-making processes that executives use to effectively manage prioritisation concerns within digital transformation frameworks. The findings highlight the need for more adaptable resource management approaches that enable organisations to dynamically allocate attention and resources as digital transformation projects progress, as well as practical insights into how organisations can better integrate transformational objectives with ongoing operational requirements.

### **Theme 3: Skill Gaps and Technological Integration**

The Skills Gap and Technological Integration theme addresses organisational capability concerns using axial codes such as Skills Development Needs, Technology Compatibility, and Continuous Support.

#### **Skills Development Needs**

One common topic from interviews was the crucial need for upskilling, particularly in digital literacy and role-specific technical abilities. Employees' lack of experience with new digital tools leads to an unsustainable reliance on external consultants. This finding is consistent with the research, which emphasises ongoing skill development as critical to preserving competitiveness during transition (Bonnet & Westerman, 2020).

#### **Technology Compatibility**

The integration of new systems with legacy infrastructure was identified as a complicated challenge. As organisations implement new digital technologies, compatibility difficulties with old systems can interrupt operations and result in inefficiencies. The research emphasises the importance of system interoperability, as older systems frequently provide impediments to seamless integration (Madi Odeh et al., 2021). Interviews revealed that these integration issues necessitate strategic strategy and technical assistance.

## **Continuous Support**

Interviews revealed that ongoing support, like as training programs and dedicated helpdesk services, is critical for maintaining the momentum of digital transformation. This finding is similar with the discussion in Chapter 2, in which Kaur Bagga et al. (2023) emphasise that constant training and help allow employees to effortlessly adapt to new technology demands, minimising resistance and increasing skill acquisition. Participants in the study stated that structured support mechanisms not only reduced employee anxiety, but also fostered a problem-solving culture in which employees felt empowered to confront the problems offered by new digital tools. This is especially important in organisations experiencing rapid technological integration, since continuing support mitigates possible productivity drops and ensures employees can stay up with digital growth.

This approach is supported by the literature study in Chapter 2, which emphasises the importance of an iterative, supportive learning environment for digital transformation. Adaptive training, combined with accessible support resources, is critical to long-term performance because it fosters resilience and adaptation in the workforce. This study builds on previous findings by emphasising the need of a support system beyond the first training phases, reaffirming the idea that support should be an intrinsic, long-term component of transformation efforts. Furthermore, while the literature frequently emphasises training as a one-time intervention, our findings suggest that transformation is best sustained when organisations implement continuous learning frameworks, allowing employees to gradually deepen their digital competencies and thus improve overall organisational agility.

Furthermore, while literature frequently emphasises the importance of leadership in fostering change, it frequently lacks detail regarding the practical implementation of sustained support systems throughout the transformation lifecycle. These findings fill a significant gap by emphasising the importance of ongoing support, demonstrating how practical, structured help methods may alleviate transformation weariness and guarantee that the digital adoption journey is aligned with both individual and organisational objectives.

## **Conclusion for RQ3 Discussion**

In conclusion, the findings on Resistance to Change, Resource and Budget Constraints, Skills Gap, and Technological Integration highlight the various constraints of successful digital transformation. These challenges are consistent with research findings, which identify organisational culture, resource allocation, and capability-building as critical but complicated aspects of transition (Verhoef et al., 2021). The themes emphasise that in order for organisations to overcome these challenges, they must prioritise adaptation, resource optimisation, and continual skill development, laying the groundwork for efficiently handling RQ3.

### **6.4. Overall Chapter Conclusion**

The chapter finished with a detailed analysis of the study's findings, which were systematically correlated with the theoretical and empirical frameworks provided in Chapter 2. This chapter presented a solid grasp of the characteristics required for effective digital transformation (DT) by focussing on basic elements such as leadership alignment, change management proficiency, and technology adaptability. In Chapter 2, the literature underlined the importance of visionary and adaptive leadership, framing these skills as essential for negotiating the unexpected terrain of digital transformation (Nguyen et al., 2023; Aras & Büyüközkan, 2023). The findings supported this perspective by demonstrating that leadership attributes like as vision, foresight, and resilience in dealing with change significantly boost DT efforts, which are consistent with the transformational and adaptive leadership frameworks mentioned in the literature.

Furthermore, as discussed in Chapter 2, transformational leadership theory emphasises that leaders who display adaptability and foresight create an organisational environment favourable to successful transformation (Yusuf et al., 2024). This study's findings support this, demonstrating that leaders who take a strategic approach to change management and effectively adapt are more suited to leading DT efforts, adding to the body of data on transformational leadership's efficacy in dynamic situations. Furthermore, while the literature emphasises visionary leadership as a theoretical advantage in DT, this study gives practical insights, confirming that leaders must have both vision and operational agility to adjust as the transformation advances.

The study also indicated significant differences between theoretical frameworks and practical findings, notably in terms of resistance to change and resource constraints. While previous research suggests that effective communication and strong leadership can reduce resistance (Guerra, 2023), this study found that inadequate resources and budgetary constraints greatly worsen resistance, independent of leadership efforts. This conclusion suggests that for DT to be truly successful, it must be supported by a well-resourced framework that combines visionary leadership with a realistic grasp of organisational limitations. This approach, supported by interview data, proposes a more comprehensive model than many previous theories, highlighting a gap in the research that implies leadership alone can drive DT in the absence of proper resource support.

Furthermore, the findings on technological integration offered a practical alternative to theoretical assumptions. While previous studies may have assumed seamless technology adoption, participants in this study highlighted the difficulties of integrating new digital systems with existing legacy infrastructure (Correani et al., 2020). This misalignment implies that the literature frequently overlooks the real issues that businesses experience with legacy systems, highlighting an area where more grounded, practical approaches may be developed to assist organisations during DT.

By investigating these dynamics, this study provides useful insights into the specific criteria for successful DT, such as leadership style alignment, change preparedness, and technological adaptability, thereby improving current literature with actual, actionable viewpoints. These findings highlight the importance of a unified, resource-supported strategy to DT that includes the important elements of leadership alignment, change management, and technology agility. This holistic viewpoint connects theoretical concepts to real-world discoveries, expanding academic debate and laying the groundwork for future research and practical applications.

## **7. CONCLUSION AND RECOMMENDATIONS**

### **7.1. Introduction**

This concluding chapter consolidates the study's observations and contributions by summarising and synthesising the previous chapters. Chapter 1 laid the groundwork by recognising the difficulties of digital transformation (DT) and its reliance on effective leadership, revealing a large research vacuum in understanding how individual leadership characteristics affect DT success. Chapter 2 included an in-depth literature assessment, which revealed gaps in existing theoretical frameworks, particularly on the roles of leadership style, change management, and technical flexibility in overcoming DT problems. Based on these shortcomings, Chapter 3 established research questions to investigate these leadership aspects in order to address present knowledge gaps.

Chapter 4 described the study's methodology, which was a qualitative technique aimed to collect rich, nuanced data from industry experts across multiple sectors. This strategy aided the collection of real-world insights, laying the groundwork for Chapter 5, which highlighted empirical results and significant topics linked to visionary leadership, flexibility, and DT problems. Chapter 6 elaborated on these findings, comparing them to current literature and emphasising how leadership abilities influence DT outcomes.

This final chapter not only summarises the study's contributions to theory and practice, but also identifies areas for further investigation. The study delivers actionable insights useful to both academics and industry by analysing the critical roles of leadership flexibility, change management, and technological aptitude, emphasising the importance of continual innovation and leadership evolution in effective digital transformation.

### **7.2. The Outcomes of the Study and Its Significance**

This study focused on examining the influence of leadership on the effective execution of digital transformation in organisations. The principal impetus for this research originated from the increasing significance of digital transformation in sustaining organisational competitiveness in a swiftly digitising environment. Digital transformation, encompassing the integration of digital technology across all facets of a business, profoundly alters organisational operations and value delivery to customers. Nonetheless, despite its strategic significance, numerous organisations encounter difficulties in attaining successful digital transformation outcomes due to several obstacles, including resistance to change, resource limitations, and issues in aligning technology with organisational objectives.

This study aimed to comprehend how particular leadership competencies namely vision-setting, adaptability, change facilitation, and technological acumen are helpful in addressing the problems of digital transformation (DT). The purpose was to determine how leaders may successfully align their teams with the strategic goals of DT, cultivate a robust organisational culture, and oversee the integration of new technology with current systems. This investigation was directed by a series of research enquiries aimed at comprehending the impact of leadership styles, change management expertise, and technology-related skills on the efficacy of digital transformation initiatives.

This work is significant for its ability to provide insights that connect theory and practice. Although digital transformation is a frequently examined idea, the influence of leadership on its effectiveness is generally inadequately investigated. This study addresses the existing gap by offering theoretical insights that enhance the academic discourse on leadership and digital transformation, as well as practical recommendations to assist leaders in navigating the challenges of the digital age. The study highlights the significance of adaptive, imaginative, and resilient leadership as both a theoretical concept and a practical skill set crucial for digital transformation in an age of swift technological advancement.

### **7.3. Principal Findings**

In this Conclusion on Research Questions section, we consolidate the findings and insights obtained from addressing each research question that structured this study. These findings were formulated to investigate the complex role of leadership in effective digital transformation (DT) programs. Each question focused on a distinct area of investigation, including the impact of leadership styles, the skills necessary for managing digital transformation, and the obstacles and methods related to adapting to digital contexts. Through a thorough examination of these domains, we aimed to elucidate the essential leadership dynamics that support effective digital transformation and their alignment or divergence from the current literature. The insights derived from these study topics enhance academic understanding of digital transformation and provide practical implications for organisations undertaking their digital journeys. The subsequent sections offer a comprehensive analysis of each study issue, including the conclusions reached and their ramifications for both theory and practice.

### **7.3.1. Conclusion on Research Question One**

#### ***Research Question One: How do leadership styles influence the success of digital transformation initiatives?***

This study demonstrated that successful leadership styles are crucial to the success of digital transformation programs, especially addressing Research Question 1. The results of both the literature review in Chapter 2 and the findings in Chapter 6 demonstrate that transformational leadership, defined by a clear vision, adaptability, and motivational power, significantly improves an organization's ability to carry out and sustain digital transformation initiatives. According to both literature and interview findings, transformational leaders lay the groundwork for trust and alignment, supporting a culture of innovation and resilience that is consistent with the aims of digital transformation. This alignment has been found to empower employees, creating a culture that is adaptive and ready to meet the needs of ongoing digital innovations.

The findings also show that transactional leadership, which focusses on structure, control, and performance-based incentives, can supplement transformational techniques by providing stability during the implementation phase of digital transformation. However, an overreliance on transactional components without a transformative focus may exacerbate resistance and impede the agility required for success in changing digital settings. This emphasises the significance of a balanced or situational leadership strategy, in which leaders effectively combine both transformational and transactional features while tailoring their leadership style to the phase and unique demands of the transformation process.

Concrete examples from the interview data demonstrate how situational and transformational leadership methods facilitated the adoption of new technology, reduced resistance, and fostered a common vision for the future. This is consistent with prior research, which emphasises the role of visionary and flexible leadership in managing change. However, in more hierarchical organisations, a rigorous top-down approach may impede the agility required for digital transformation, emphasising the importance of flexibility and inclusive leadership techniques.

In conclusion, Research Question 1 underscores the notion that successful digital transformation necessitates leaders who can strategically manage organised processes while also inspiring and mentoring their staff towards a cohesive goal. This conclusion adds to current research by demonstrating that effective digital transformation is dependent not only on technical competencies, but also on leadership styles that promote adaptation, active participation, and a proactive approach to change.

***Research Question 2: What key leadership competencies are essential for driving digital transformation and achieving organizational?***

The study found that effective digital transformation (DT) is significantly dependent on a distinctive amalgamation of leadership competencies. Visionary competency proved to be crucial, necessitating leaders to establish a distinct, strategic vision that links digital transformation initiatives with organisational objectives. Leaders possessing a robust vision effectively established a trajectory for digital efforts that not only directed teams but also reaffirmed the organization's dedication to innovation and adaptability, identified in the literature as essential factors for successful digital transformation. This finding aligns with research highlighting the significance of leaders who can transcend immediate operational obstacles to acknowledge the wider strategic advantages of digital transformation.

Moreover, expertise in change management was identified as essential, given that digital transformation frequently induces significant alterations affecting personnel responsibilities, organisational culture, and workflow processes. Leaders who successfully implemented change shown a profound comprehension of both human and operational dimensions of transformation, allowing them to mitigate opposition and foster resilience within their teams. Literature endorses this ability as a facilitator for navigating the complexity and opposition frequently linked to transition, emphasising the imperative for leaders capable of cultivating a culture receptive to change, ongoing learning, and development.

Finally, technological proficiency and adaptability were highlighted as essential qualities, particularly when leaders manoeuvred through the changing environment of digital tools and systems. Leaders exhibiting technical expertise and the ability to adapt to swift technological advancements allowed their organisations to sustain a competitive advantage. They were also more adept at making informed judgements about technology investments and integration strategies, crucial for connecting new digital capabilities with

current systems. This perspective corresponds with academic opinions regarding the significance of technology understanding and adaptability for executives seeking to utilise digital transformation as a strategic asset.

In conclusion, the findings for Research Question 2 emphasise that visionary leadership, together with change management proficiency and technical agility, constitute a triangle of competencies vital for facilitating digital transformation. These qualities enable leaders to navigate organisations through the technological transitions of digital transformation while fostering a culture and workforce adept at flourishing in a digitally altered landscape. This amalgamation of skills underscores that successful digital transformation hinges more on the talents of its leaders than on the technology itself.

### **7.3.2. Conclusion on Research Question Three**

***Research Question 3: What are the main challenges leaders face during digital transformation, and how can they overcome these challenges?***

In addressing Research Question 3, the study identified key challenges that leaders encounter in digital transformation (DT), including resistance to change, resource and budget constraints, and the skills gap in technological integration. These barriers illustrate the multifaceted nature of DT, emphasizing the need for leaders who can navigate both technical and human complexities.

Resistance to Change emerged as a significant obstacle, underscoring that digital transformation often disrupts established processes and roles, creating apprehension and pushback among employees. The findings highlight the critical role of transparent communication and active engagement in reducing resistance, aligning with literature that stresses the importance of addressing human factors in DT. Leaders who facilitated open discussions and involved employees early in the change process were more effective at fostering acceptance and reducing resistance.

Resource and Budget Constraints were also found to hinder DT efforts, with leaders facing challenges in securing adequate funding for new technologies, training, and infrastructure upgrades. The study reinforces that leaders who strategically prioritize initiatives and demonstrate clear return on investment (ROI) are better positioned to secure resources.

This aligns with prior research that recommends leaders use data-driven arguments to justify investment, particularly in resource-constrained environments.

Lastly, the skills gap and technological integration pose considerable challenges, as the rapid pace of digital change often outstrips existing workforce capabilities. Leaders who invested in continuous learning and skills development programs, and who fostered a culture of adaptability, were more successful in bridging this gap. Literature on DT echoes this finding, emphasizing the need for ongoing skill-building and the integration of advanced technology competencies across organizational roles.

In conclusion, Research Question 3 underscores that successful digital transformation depends on leaders who not only recognize and proactively address these challenges but also cultivate a resilient and agile workforce. This approach enhances the organization's ability to overcome barriers and sustain DT initiatives. This conclusion contributes to the broader understanding of DT challenges, suggesting that leadership strategies must address both organizational constraints and employee concerns to facilitate enduring transformation.

#### **7.4. Contributions of the Study**

This section explores the unique contributions to the domains of theory, methodology, and practice, based on the insights and conclusions drawn from the study's findings. This study explores the pivotal role of leadership in digital transformation, addressing essential research topics and contributing to academic discussions on how specific leadership styles and competences enable effective digital change. The contributions outlined below offer a thorough perspective on the study's significance within the current literature and enhance its relevance to practical organisational contexts, providing actionable insights for both academics and industry. This comprehensive review highlights the study's theoretical progress, methodological precision, and significance for actual digital transformation efforts, while preserving a coherent link to the prior examination of research concerns.

##### **7.4.1. Theoretical Contributions**

This study makes numerous important theoretical advances that advance our understanding of leadership's role in digital transformation (DT). First, by studying specific leadership styles (transformational, transactional, situational, and collaborative), the study contributes to the discussion of which styles best promote DT initiatives. Previous research has widely acknowledged the importance of transformational leadership in driving change

(Nguyen et al., 2023); nevertheless, this study delves into how different types, both individually and collectively, promote digital transformation. The findings imply that effective DT necessitates a combination of adaptive and structured approaches, broadening the theoretical scope of leadership styles in change-driven situations.

Second, this study presents a framework of competencies, emphasising the importance of visionary competency, change management proficiency, and technological savvy and agility. The study adds to the theoretical knowledge of leadership in DT by mapping how each skill directly affects multiple DT stages such as strategy creation, execution, and continual adaptation. This mapping fills a gap in the literature by offering a systematic understanding of how particular talents influence successful digital projects and adding a nuanced layer to current competence frameworks (Khan & Sarkar, 2024).

Finally, the study contributes to theories on resistance to change and organisational adaptability in DT contexts. While previous research has identified employee resistance as a difficulty in organisational change, this study demonstrates how various leadership approaches to resistance such as transparency, support, and inclusion can transform it into engagement and flexibility. This insight supports and expands on change management theories by indicating that resistance management in DT is a proactive leadership strategy for building resilience, rather than a reactive one.

In conclusion, the theoretical contributions of this study expand our understanding of effective leadership in DT, furthering theoretical frameworks that combine both leadership styles and abilities. These contributions provide a framework for future research, emphasising that digital transformation success is dependent on an integrative approach that includes leadership vision, strategic competences, and an adaptive reaction to change.

#### **7.4.2. Practical Contributions**

This work makes significant practical contributions that can be used directly to organisational digital transformation (DT) plans. One of the most useful discoveries is the identification of critical leadership competencies such as visionary thinking, change management expertise, and technology agility that leaders must build in order to drive successful DT efforts. These competencies give a practical roadmap for organisations, emphasising the necessity of leaders who can establish clear digital visions, successfully

handle resistance, and respond swiftly to technology changes. The report provides organisations with this roadmap, giving leaders specific methods to link digital projects with long-term company goals, ultimately improving operational efficiency and agility.

Another notable practical contribution is the study's focus on strategic resource allocation and employee engagement as key drivers of DT performance. The findings highlight that resource restrictions, such as restricted finances and talent deficits, are among the most significant difficulties in digital transformation initiatives. Leaders can use these insights to allocate resources to crucial areas, such as staff upskilling and technological expenditures, thereby reducing these obstacles. Furthermore, by emphasising the need of open communication and active employee participation, the study advises leaders to cultivate an inclusive DT culture that decreases resistance and strengthens staff resilience. This method provides organisations with practical recommendations on how to foster a supportive digital transformation culture, which is critical for long-term change.

Finally, the study's practical contributions include a framework for integrating various leadership styles (transformational, transactional, situational, and collaborative) based on the DT stage. This adaptable method provides leaders with a flexible paradigm that encourages them to use different styles depending on the scenario. Such advice is especially beneficial for leaders navigating the complicated, multi-phase nature of DT, as it promotes the notion that leadership flexibility may lead to increased employee engagement, efficiency, and alignment with strategic goals.

Overall, this study's practical contributions provide a valuable toolkit for leaders and organisations seeking DT. The study provides insights into important leadership abilities, strategic resource allocation, and adaptive leadership styles, presenting a set of practical recommendations for solving typical DT difficulties and increasing the likelihood of success.

### **7.4.3. Methodological Contribution**

This study contributes methodologically by employing a rigorous, qualitative approach to explore leadership's role in digital transformation (DT) in depth, which has often been studied through quantitative lenses. By utilizing semi-structured interviews with a diverse set of industry leaders across multiple sectors, the study provides a nuanced understanding of the competencies, challenges, and leadership styles critical to DT. This approach allows for rich, context-specific insights, revealing complexities that structured quantitative methods might overlook, thereby reinforcing the value of qualitative inquiry in leadership and DT research.

The study also advances methodological frameworks by applying a thematic coding and axial coding process to analyze interview data, categorizing responses into themes closely tied to specific research questions. This coding strategy not only allows for an in-depth exploration of themes like visionary leadership, change management proficiency, and technological agility but also establishes a replicable analytical structure that future researchers can use in similar studies. The detailed categorization and mapping process is a methodological asset, providing a clear pathway for analyzing qualitative data in complex, multi-variable environments like DT.

Furthermore, this research highlights the application of saturation as a guiding principle in determining sample size. By choosing to interview 18 leaders until data saturation was achieved, the study demonstrates how qualitative methods can achieve reliable and comprehensive insights without predefined large samples. This approach underscores the efficacy of saturation-driven sampling in studies exploring complex, context-dependent phenomena, serving as a methodological example for similar qualitative research.

In sum, the study's methodological contributions lay a foundation for future qualitative research in digital transformation and leadership, demonstrating the strengths of thematic coding, saturation-based sampling, and in-depth interviews for uncovering insights that are both detailed and transferable across industries. This robust methodological approach enriches the research field, encouraging deeper and more adaptable explorations of leadership within the digital transformation landscape.

## 7.5. Implications for Managers and other Stakeholders

The findings of this study have significant significance for managers and other stakeholders participating in digital transformation (DT) projects. This study provides actionable insights for establishing and maintaining effective DT strategies by identifying critical competencies and leadership styles required for success, as well as the usual hurdles encountered. The next sections discuss the consequences for a variety of stakeholders, including senior executives, project managers, change management specialists, and human resources (HR) teams.

### 7.5.1. Senior Executives

**Implications:** For top leaders like CTOs and CIOs, this study emphasises the need of having a strong, clear vision for digital transformation projects. According to the report, executives must not only fight for digital change, but also set a good example by cultivating a culture of innovation, transparency, and resilience. This entails actively confronting opposition and selectively devoting resources to areas with the greatest potential influence on DT results.

**Application:** Senior leaders may use these findings to prioritise competencies like visionary thinking and change management skills within their leadership teams, ensuring that the organization's digital vision is regularly articulated and pursued.

### 7.5.2. Middle and Project Managers

**Implications:** Project managers are crucial in carrying out digital transformation programs. This study emphasises the necessity for these managers to be flexible in their leadership styles, adopting a combination of transactional, transformational, and situational techniques depending on the DT phase. Given the study's findings on resource and budget limits, project managers should practise strategic resource allocation to ensure that resources are employed optimally throughout the project's phases.

**Application:** By integrating the study's findings, project managers may better connect their project objectives with the organization's overall DT strategy, manage team resistance, and develop team resilience through ongoing communication and participation in DT activities.

### 7.5.3. Change Management Specialists

**Implications:** For change management professionals, the study emphasises the significance of supporting employee flexibility and resilience, as they are critical components for overcoming change resistance. The findings highlight the importance for change managers to develop supportive cultures that promote transparency, provide clear communication, and establish avenues for employee input in order to build trust and lessen resistance.

**Application:** Change management specialists may put these implications into action by creating focused communication plans and resilience-building programs, as well as actively incorporating employees in the DT process to ensure smoother transitions and greater acceptance rates.

### 7.5.4. HR Function

**Implications:** The HR department is critical to creating and acquiring the skills required for effective digital transformation. This study indicates a skills gap as a prevalent obstacle in DT efforts, implying that HR should take an active part in personnel planning and development, including upskilling and reskilling projects. Furthermore, HR's role in building a learning-oriented culture is critical to retaining a trained and adaptive staff.

**Application:** HR may handle these issues by developing focused recruitment, training, and continuous learning programs that are connected with DT goals, ensuring that the organisation remains nimble and competitive.

### 7.5.5. IT and Technical Team

**Implications:** The findings indicate that technical teams must collaborate with leadership to bridge technology gaps, particularly in areas such as system integration and technological compatibility. Technical teams must be adaptable, responding fast to new technology demands while assisting other departments in understanding and utilising these technologies.

**Application:** IT staff can expand on these implications by conducting structured training sessions to improve digital literacy across departments and promoting collaborative approaches to technology adoption, assuring alignment with DT objectives.

### 7.5.6. Employees Across the Organisation

**Implications:** For the larger workforce population, the study's findings highlight the necessity of adaptability, a talent required for effective digital transformation. Employees must be prepared for the changes that DT will bring, including modifications in their roles and ways of working. The study reveals that employees who participate in the DT process, particularly through regular updates and decision-making, are more likely to support and actively contribute to DT activities.

**Application:** Organisations may increase employee engagement by fostering an open culture in which employees feel informed and empowered, addressing their concerns, and giving resources to help them move to digital processes.

In conclusion, the findings of this study serve as a strategic roadmap for all stakeholders, outlining concrete steps that may be taken jointly to improve digital transformation success. These ideas, which emphasise skills, collaborative approaches, and focused skill development, create a solid foundation for achieving long-term transformation throughout the organisation.

### 7.6. Limitations of the study

While this study provides vital insights on the role of leadership in digital transformation, it is important to acknowledge some limitations that may restrict the generalisability and scope of the results.

- First, while the qualitative aspect of this research is useful for investigating in-depth perspectives, it has limited relevance in broader contexts. Qualitative data is based on subjective experiences and insights; hence it may not capture all essential variables and nuances found in various sectors or cultural settings. As a result, the conclusions are limited to the circumstances and individuals studied and may not accurately reflect the experiences of leaders across all organisations.
- Secondly, the sample size and industry focus have limits. Although the study reached data saturation with 18 participants, a bigger, more diverse sample from various businesses could have provided additional views, particularly from sectors with varying digital maturity levels. Furthermore, due to time limits, this study only engaged participants once, thus limiting the depth and diversity of insights acquired, as well as the possibility to examine shifts in perspectives over time.

- Thirdly, relying on self-reported data presents potential biases. Participants' comments may be influenced by social desirability bias, with leaders portraying their leadership abilities or digital transformation achievement more positively than reality. Furthermore, participants' recollection accuracy may vary when reflecting on previous DT projects, potentially resulting in discrepancies or incomplete data.
- Finally, the research's temporal limits prevented the incorporation of additional longitudinal findings, which could have provided insights into the evolution of DT projects and the changing role of leadership over time. Similarly, additional skills and viewpoints may have enriched the analysis, particularly with the participation of stakeholders who are directly accountable for implementing technical changes alongside leadership.

Despite these limitations, the findings give a core understanding of leadership's involvement in digital transformation and open new options for future research into these topics in broader and more diverse organisational contexts.

### **7.7. Recommendations for future research**

Building on the study's findings and limitations, future research could broaden and deepen understanding of leadership's role in digital transformation in many critical routes.

- **Quantitative Studies to Improve Generalisability:** Future study might use quantitative methods to evaluate the impact of certain leadership styles, competencies, and strategies on digital transformation outcomes in a bigger, more diverse sample. This approach would yield more generalisable insights and statistical comparisons, allowing for further validation and expansion of the qualitative findings presented here.
- **Longitudinal Research for Temporal Insights:** A longitudinal study design could provide useful information on how leadership roles and strategies change as digital transformation programs proceed. Tracking leaders' activities and employee responses over time allows academics to observe trends in leadership practices and uncover characteristics that contribute to long-term digital transformation success.

- **Cross-Industry Comparative Studies:** Because industries differ in terms of digital maturity and regulatory constraints, comparative studies across sectors may indicate industry-specific leadership requirements and obstacles in digital transformation. This study technique would be especially useful for identifying the unique DT restrictions and potential in industries like healthcare, finance, and education, where regulatory compliance and security requirements vary greatly.

**Exploration of Employee Perspectives:** While this study focused mostly on leadership perspectives, investigating employee experiences may provide further insights into how leadership influences organisational culture and staff adaptability during digital transformation. Future research should look into the link between leadership practices and employee engagement, flexibility, and productivity in digital transformation programs.

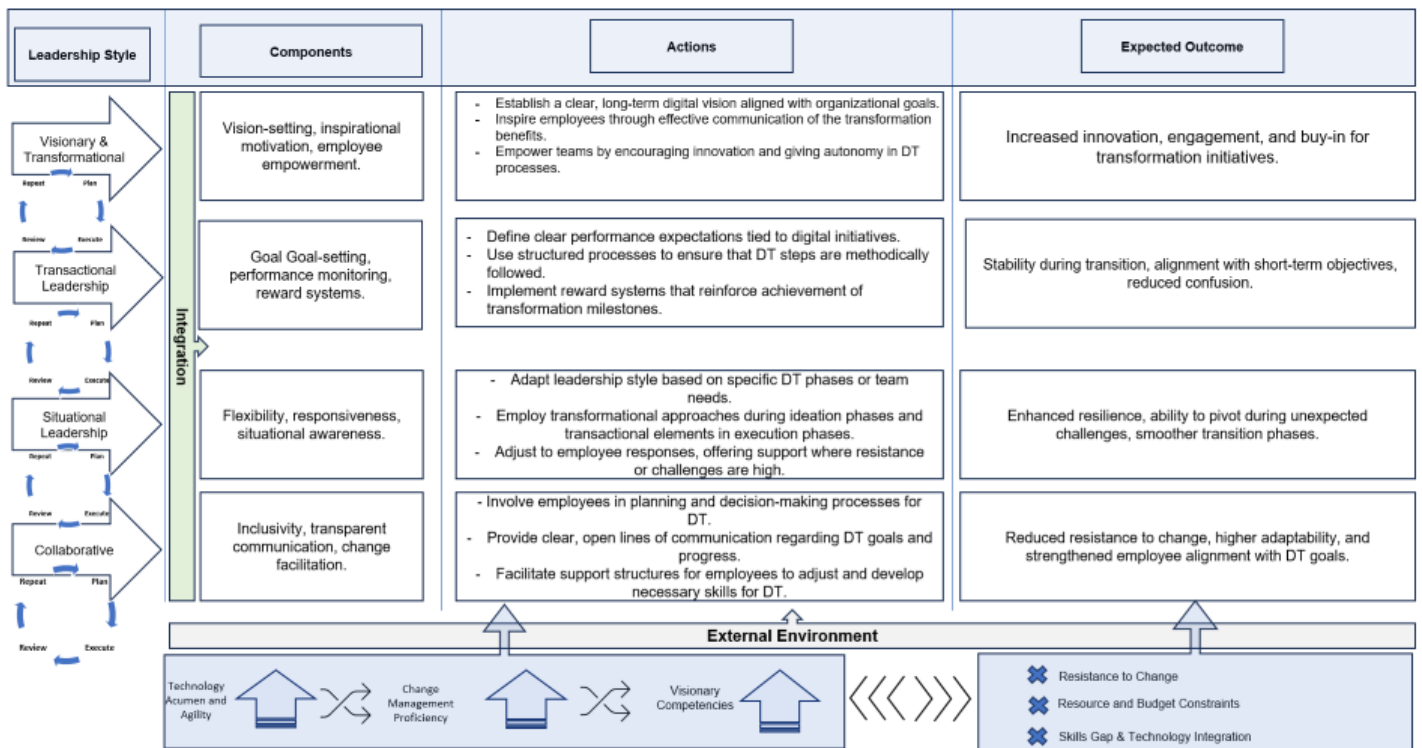
- **Technology-particular Leadership Competencies:** Given the rapid speed of technology innovation, future research should focus on leadership competencies particular to emerging technologies like artificial intelligence, machine learning, and blockchain. By identifying competencies that are compatible with these technologies, academics may give leaders with targeted assistance for efficiently managing and implementing digital breakthroughs.
- **The Role of Cultural Context in Digital Transformation:** Conducting research in various cultural settings may help us better understand how cultural values influence leadership styles and acceptance of digital transformation. Exploring these interactions across countries or regions may reveal cultural influences on leadership and employee engagement with digital change, resulting in a more global understanding of digital leadership.
- **Developing Interdisciplinary Approaches to Leadership in Digital transition:** Bringing perspectives from psychology, sociology, and technology studies together could improve research on leadership in digital transition. Interdisciplinary approaches could provide a more comprehensive perspective, taking into account not only technical competencies but also emotional intelligence, change management, and social dynamics as critical components of effective digital leadership.
- These recommendations highlight the need for broader and more nuanced investigations of leadership in digital transformation, addressing the study's identified gaps and contributing to a more comprehensive understanding of the

competencies, challenges, and outcomes associated with successful digital transformation initiative

## 7.8. Conclusion on conceptual Framework

This model depicts an integrated leadership framework intended to assist successful digital transformation (DT) initiatives by connecting diverse leadership styles, competencies, and strategic activities with the expected objectives of DT projects. Based on the study's findings, the model emphasises the significance of adaptable leadership styles and specific abilities that handle frequent DT obstacles such as resistance to change, resource limits, and skill shortages in technology integration. The framework provides personalised measures for leaders to effectively support DT efforts across various organisational contexts by leveraging visionary, transactional, situational, and collaborative leadership approaches. on technical competencies, but also on leadership styles that promote adaptation, active participation, and a proactive attitude towards change.

**Figure 13: Integrated Leadership Framework for Digital Transformation**



By combining visionary, transactional, situational, and collaborative approaches, the model enables leaders to:

- **Inspire and Engage Teams:** Visionary items (such as clear goal setting and motivation) generate a shared commitment to DT objectives, assisting employees in understanding and accepting change.
- **Ensure Stability and Structure:** Transactional aspects give stability via organised processes, which is critical during the early stages of DT.
- **Adapt to Dynamic Needs:** Situational flexibility enables leaders to pivot as obstacles arise, ensuring that DT efforts are consistent with both organisational and employee needs.
- **Encourage Collaboration:** Engaging employees in decision-making through a collaborative approach eliminates resistance and fosters a sense of ownership.
- Finally, this model aligns leadership styles with specific activities, creating a conducive climate for DT. Leaders may achieve DT success by constantly adjusting to technological changes, assisting people with the move, and ensuring that all resources are used best to satisfy transformation objectives.

The framework emphasizes an iterative and continuous consultation process, recognizing that business environments are in a state of constant evolution. In this adaptive approach, leaders are encouraged to revisit and reassess the right combination of skillsets and attributes required for a particular initiative/project, ensuring alignment with emerging needs and challenges. This process fosters a responsive leadership approach, enabling leaders to pivot and reallocate resources and strategies in real-time as conditions change.

A unique feature of this model is its capacity for cross-utilization of leadership styles, competencies, and skills. Rather than confining leaders to a single approach, the framework allows for the blending of transformational, transactional, situational, and collaborative leadership styles, depending on the specific phase of the digital transformation process and organizational needs. This flexibility ensures that leaders can apply the most suitable combination of strategies to foster innovation, ensure operational stability, enhance resilience, and ultimately achieve the objectives of their DT initiatives.

In summary, this model is designed to empower leaders with a structured yet flexible tool for navigating digital transformation. By offering a tailored approach to leadership that aligns with evolving business demands, it supports the cultivation of an organizational culture that is resilient, adaptive, and positioned for continuous digital advancement.

## **7.9. Conclusion**

This study investigated the critical role of leadership in driving successful digital transformation (DT) initiatives, stressing the specific competencies, styles, and strategies required to overcome the hurdles inherent in these initiatives. By investigating how leadership influences DT, the study provides an in-depth look at how leaders' methods, from visionary thinking to change management competency and technological savvy, significantly influence the success of digital transformations within organisations. This study provides useful insights on the particular competencies required for DT as well as the challenges that leaders must overcome in order to secure long-term change.

The study begins with an introduction to the subject and a thorough evaluation of the existing literature, which reveals a gap in understanding how various leadership styles and skills improve DT achievement. To address this gap, three study topics were devised, with a focus on the impact of leadership styles, critical abilities, and the problems encountered in DT projects. This study used qualitative techniques, including semi-structured interviews with industry executives, to acquire rich, context-specific insights that expand our understanding of effective digital transformation leadership. The findings show that leadership in DT is not a one-dimensional endeavour; rather, it necessitates an adaptive strategy that balances visionary guidance, operational execution, and a sympathetic response to employee concerns and resistance.

The findings presented in this work make significant theoretical, methodological, and practical advances. The study contributes to the literature on digital leadership by identifying certain competencies that enable DT. Methodologically, it highlights the importance of qualitative, saturation-driven sampling in gaining thorough insights into complicated phenomena such as DT. Practically, the findings give concrete counsel for leaders and organisations starting on DT initiatives, as well as a road map for developing a supportive DT culture and navigating hurdles.

Finally, while this work establishes a solid foundation, it also highlights areas for further investigation. The recommendations include widening the scope with quantitative studies, doing longitudinal research, and investigating employee viewpoints. These prospective study paths will contribute to a better understanding of digital transformation and the critical role that leadership plays in it, assisting organisations in adapting to and thriving in an increasingly digital world.

In conclusion, this study demonstrates that successful digital transformation necessitates leaders who are not just strategic but also adaptive, compassionate, and resilient in guiding their teams through change. As organisations continue to face the demands of digital growth, the findings of this study highlight the necessity of leadership that encourages innovation, manages resistance, and aligns technology with organisational goals.

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## 9. APPENDIXES

### Appendix 1: Interview Guide

Name: Start Time:  
Organisation: End Time:  
Job Title:  
Gender:  
Age:  
Race:

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Thank you for agreeing to this interview. Your time and input into this research is greatly appreciated.

This study is focused on understanding the role of leadership in driving successful digital transformation within organizations. We aim to explore how different leadership styles, competencies, and strategies influence the outcomes of digital transformation initiatives, as well as the challenges leaders face during these processes. Your insights and experiences are invaluable to this research, as they will contribute to a deeper understanding of these critical issues and help inform both academic theory and practical leadership development.

The purpose of this research is to examine how leadership can effectively guide organizations through digital transformation. Specifically, we are looking at the influence of various leadership styles, the competencies required to lead digital initiatives, and the strategies leaders use to overcome challenges associated with digital transformation. By gaining insights from leaders like yourself, who are actively involved in these processes, we hope to identify key factors that contribute to the success of digital transformation effort

Before we start, I would like to take you through the interview consent process. This interview is voluntary, and you have the right to withdraw at any time without any consequences. The information you provide will be kept confidential and will be used solely for the purposes of this research. Your responses will be anonymized in any reports or publications resulting from this study

We will record this interview to ensure accuracy in capturing your insights, but the recordings will be securely stored and will not be shared with anyone outside the research team. Do you have any questions about this process, or is there anything you would like to clarify before we proceed?

-----[Wait for confirmation and any questions from the participant.]-----

With your consent, we will now begin the interview. Please feel free to share your thoughts openly there are no right or wrong answers, and your candid insights are crucial to the success of this study.

### Section 1: Introduction and Background

**Purpose:** To establish the participant's role and context within the organization, ensuring that their experiences are relevant to the study.

1. Can you briefly describe your role within the organization and your involvement in digital transformation initiatives?

**Purpose:** To understand the participant's experience level and the scope of their involvement in digital transformation.

2. How long have you been involved in digital transformation projects, and what specific projects have you led or been a part of?

### Section 2: Leadership Styles and Digital Transformation

*Related to Research Question 1: How do leadership styles influence the success of digital transformation initiatives?*

**Purpose:** To explore the participant's self-perceived leadership style and its impact on digital transformation efforts.

3. How would you describe your leadership style? Can you give examples of how this style has influenced your approach to digital transformation?

**Purpose:** To identify specific leadership behaviors and styles that have positively or negatively impacted digital transformation outcomes.

4. Can you discuss a time when your leadership style directly contributed to the success (or failure) of a digital transformation initiative? What specific leadership behaviors were most effective?

**Purpose:** To gather insights on how various leadership styles influence the success and sustainability of digital transformation.

5. In your opinion, how do different leadership styles affect the ability to implement and sustain digital transformation within your organization?

### Section 3: Leadership Competencies Required for Digital Transformation

*Related to Research Question 2: What key leadership competencies are essential for driving digital transformation and achieving organizational success?*

**Purpose:** To identify the key competencies that participants believe are essential for effective leadership in digital transformation.

6. What specific competencies or skills do you believe are critical for leaders to successfully drive digital transformation?

**Purpose:** To explore how specific competencies have been applied in practice to navigate challenges in digital transformation.

7. Can you describe a situation where a particular competency (e.g., strategic thinking, digital literacy, change management) was crucial in overcoming a challenge during digital transformation?

**Purpose:** To understand the strategies used by leaders to develop and maintain essential competencies for digital transformation.

8. How do you ensure that you and your team are continuously developing the competencies needed to lead in a rapidly changing digital environment?

### Section 4: Challenges and Solutions in Leadership During Digital Transformation

*Related to Research Question 3: What are the main challenges leaders face during digital transformation, and how can they overcome these challenges?*

**Purpose:** To identify the key challenges faced by leaders in digital transformation and

gather personal accounts of these challenges.

9. What have been the most significant challenges you've encountered as a leader during digital transformation projects?

**Purpose:** To explore the issue of resistance to change, a common barrier in digital transformation, and how leaders have managed this challenge.

10. Can you discuss a specific challenge related to resistance to change within your organization? How did you address it, and what was the outcome?

**Purpose:** To understand the strategies used by leaders to secure stakeholder buy-in and support, which is critical for the success of digital transformation.

11. How do you engage stakeholders (e.g., employees, management, external partners) to ensure their support and alignment with digital transformation goals?

**Purpose:** To capture reflections on the experience of leading digital transformation and how these insights can inform future leadership practices.

12. What lessons have you learned from leading digital transformation initiatives, and how have these lessons informed your approach to future projects?

## Section 5: Conclusion

13. Is there anything else you would like to share about your experiences with leadership and digital transformation that we haven't covered?

**Purpose:** To provide an opportunity for participants to share additional insights or experiences that may be relevant to the study.

**Purpose:** To gather practical advice and recommendations that could be valuable for other leaders and organizations.

14. What advice would you give to other leaders who are about to embark on a digital transformation journey?

## Closing Remarks

**Thank you for participating in this interview. Your insights are invaluable to our research. We will ensure that all information shared remains confidential, and we will follow up with a summary of our findings once the study is complete.**

## Appendix 2: Informed Consent Form

Hi, my name is Jabulani Mtsweni and I am visiting you today to learn more about savings groups for a research project. As you know, savings groups are very popular and help many people to save for a variety of different purposes. For this reason, I want to ask you questions to better understand why your savings group is saving successfully and how your savings group makes it's saving decisions. If you agree, I will lead this interview based on a question I have prepared. You don't have to answer all the questions, but it would be appreciated if you can, since it would be lead to better results for the study. **Your participation is voluntary and you can withdraw at any time without penalty.**

Your answers will be treated confidentially, and you will not be asked for any information that will identify yourself or the group. The interview will last for more or less 90 minutes, depending on how fast we go through the questions. To analyse your answers later, will you allow me to record our conversation (YES / NO)?

Researcher: Jabulani Mtsweni

Supervisor: Ngwako Sefoko

Email: Jabulani.Mtsweni@gmail.com

Email: nsefoko@gmail.com

Phone: 072 539 8406

Phone: 072368 4415

Signature of participant: \_\_\_\_\_

Date: \_\_\_\_\_ 2024

Signature of researcher: \_\_\_\_\_

Date: \_\_\_\_\_ 2024

### Appendix 3: Consistency Matrix

Research Questions	Section in Literature Review	Data Collection Tools	Analysis Technique
<p>1. How do leadership styles influence the success of digital transformation initiatives?</p>	<p>2.2. Theoretical Foundation of Leadership in Digital Transformation</p> <p>2.2.1. Digital Transformation vs Leadership</p> <p>2.3. Digital Leadership</p> <p>2.3.1. Transformational Leadership</p>	<p>Interview Guide (Section 2) Question (3- 5)</p>	<p>Thematic Content Analysis</p>
<p>2. What key leadership competencies are essential for driving digital transformation and achieving organizational</p>	<p>2.4. Strategic Leadership Competencies</p> <p>2.4.1 Digital Literacy</p> <p>2.4.2. Innovation Management Competency</p>	<p>Interview Guide (Section 3) Questions (6-8)</p>	<p>Thematic Content Analysis</p>
<p>3. What are the main challenges leaders face during digital transformation, and how can they overcome these challenges?</p>	<p>2.6. Common Challenges in Digital Transformation</p> <p>2.6.1. Security Concerns and Cyber Threats</p>	<p>Interview Guide (Section 4) Questions (9-12)</p>	<p>Thematic Content Analysis</p>

## Appendix 4: Code Book from Atlas ti

Ability to Ownership  
Acknowledgement  
Business transformation  
Challenges with technology integration  
Clear Internal Processes  
Complexity  
Complexity vs simplicity  
Corporate results  
Customer involvement  
Data quality management  
Data-driven decision making  
Deadline-oriented  
Defined Job role  
Efficiency  
Employee responses  
Ethical guidelines  
Perspectives  
Future endeavors  
Gradual Testing  
Hands-on  
Human skills  
Investment in staff  
Industry  
Job Responsibilities  
Job responsibility  
Listening to others  
Managing expectations  
Operations management  
Organization success  
Peer support  
People-focused

Personal reflection  
Planning  
Positive attitude  
Process improvement  
Process Productivity  
Product development  
Professional development  
Quality assurance  
Regular Check-ins  
Regular updates  
Reinforcement  
Small wins  
Team motivation  
Vulnerability  
Willingness to participate  
Work-life balance  
Always being Accessible  
Balancing innovation and stability  
Collaborative Approach  
Collaborative leadership  
Conflicts management  
Empathy Leadership  
Good Work Ethic  
Inclusive Leadership  
Inspiration  
Leadership vision vs employee scepticism  
Participatory leadership  
Transformational leadership  
Visionary leadership  
Willingness to Develop Employees  
Ability Innovation adoption  
Ability to overcome challenges  
Accommodating Differences  
Active involvement  
Active listening

Agility  
Approachability  
Acquaintance with Change Management  
Authenticity  
Change management  
Clarity  
Clear communication  
Clear View on Organizational goals  
Collaboration for communication strategy  
Conflict management  
Conflict resolution  
Consistency in communication  
Consultation Attitude  
Creativity  
Critical thinking  
Data-driven decision-making  
Decision-making  
Detail-oriented  
Effective communication  
Effective Supply Chain Management  
Elimination of Ambiguity  
Emotional intelligence  
Employee empowerment  
Employee support  
Empowerment  
Expectation management  
Failure is a learning opportunity  
Feedback  
Flexibility  
Forward-thinking  
Future-oriented  
Growth mindset  
Hands-on leadership  
Honesty  
Humility

Impact of leadership  
Inclusiveness  
Inclusivity  
Integration complexity  
Involvement  
Leader visibility  
Leadership adaptability and listening  
Leadership effectiveness  
Leadership Vision Setting  
Learning mindset  
Listening Skills  
Long-term perspective  
Machine learning  
Multi-channel communication  
Navigating challenges  
Normalization of mistakes  
Open communication  
Open-minded  
Organizational communication  
Organizational culture  
Participation  
Participative Leadership  
Passion for Self-improvement  
Personal connection  
Personal development  
Persuasion Skills  
Positive mindset  
Prioritise Goal-setting  
Problem-solving  
Psychological safety  
Relationship building  
Relevant Work Experience  
Shared purpose  
Simplified Approach  
Speed

Stakeholder management

Storytelling

Strategic planning

Strategic thinking

Strategic vision

Supportiveness

Team building

Team management

Trust

Understanding of Best industry practices

Understanding of the Corporate culture

Value-driven

Visibility

RQ 3: Challenges Leader Face During DT & Overcoming

Avoiding organizational disruption

Benefit realization

Budget management

Continuous improvement

Cross-department collaboration

Cross-functional collaboration

Cybersecurity

Data analytics

Delays

Education & Training

Emotional impact

Employee concerns on transformation

Employee involvement

Employee resistance

Employees Resilience

Example-based

Fear of Job Security

fear of the unknown

Inactive User feedback

Introduction of new Technology

Investment Challenges

Issues with Alignment  
Job insecurity  
Knowledge sharing  
Learning culture  
Listening & Understanding  
Loss of Control by employees  
Managing Stakeholder expectations  
Milestones Prioritisation  
Opposition  
Opposition to change  
Patience  
Practical ways  
Project integration  
Proper Feasibility studies  
Proper Resource management  
Provide Recognition (2)  
Quality over speed  
Recognition of achievements  
Recognition of small victories  
Resistance to change  
Risk-management  
Scalability  
Self-awareness  
Stakeholder collaboration  
Providing Employees Resources  
System integration  
Team dynamics  
Team support  
Technical skills  
Technology adoption  
Technology integration  
Time-consuming  
Town halls and workshops  
Training on the change  
Transition fatigue

Transparency Transparency in Communication

Value Definition & Clarity

Workload management