

# **The Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System**

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**A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in the field of Digital Business**

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## **ABSTRACT**

This study explored the role of leadership in guiding digital transformation within South Africa's Criminal Justice System organisations. Rapid technological advancements have persuaded policing, courts, prosecution, legal aid, and corrections to modernise their systems. Effective digital transformation requires leadership capable of managing change, integrating technology, and fostering innovation within complex governance frameworks.

Semi-structured interviews with senior leaders from key criminal justice system organisations examined the digital leadership proficiencies, strategies, and approaches considered essential for navigating this transformation. Findings revealed that successful digital leadership combined strategic thinking, technical knowledge, change management, communication, innovation, data-driven decision-making, and stakeholder engagement. Leaders emphasised digital literacy, cybersecurity awareness, and agility to respond to fast-changing technologies while maintaining compliance.

Leadership strategies differed by organisational structure, priorities, and digital maturity. Some organisations employed centralised leadership for control and standardisation, while others adopted decentralised approaches to encourage collaboration and responsiveness. Resistance to change, particularly at lower management levels, emerged as a challenge, highlighting the importance of effective communication, training, and engagement.

The study confirmed that digital leadership is critical for cultivating a culture of innovation and agility. Leaders who communicated a clear digital vision, aligned strategies with organisational goals, and fostered collaboration enabled ongoing adaptation and value creation. Persistent barriers included resource constraints, rigid hierarchies, and limited digital skills.

This research contributes to understanding how digital leadership can shape digital transformation in South Africa's Criminal Justice System, providing insights to guide leaders in driving innovation, improving service delivery, and enhancing public trust.

## **KEYWORDS**

Criminal Justice System, Public Sector, Digital Leadership, Digital Leadership Proficiencies and Skills, Digital Leadership Strategies, Innovative and Agile Culture

## DECLARATION

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

Name: Lochan Singh

Signature:



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Signed at Johannesburg, on the 29<sup>th</sup> day of March 2025.

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# TABLE OF CONTENTS

<b>ABSTRACT</b> .....	<b>i</b>
<b>KEYWORDS</b> .....	<b>ii</b>
<b>DECLARATION</b> .....	<b>iii</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>iv</b>
<b>LIST OF TABLES</b> .....	<b>viii</b>
<b>LIST OF FIGURES</b> .....	<b>ix</b>
<b>LIST OF ACRONYMS</b> .....	<b>xi</b>
<b>CHAPTER 1. INTRODUCTION</b> .....	<b>1</b>
1.1 CHAPTER INTRODUCTION.....	1
1.2 STATEMENT OF PURPOSE.....	1
1.3 BACKGROUND OF THE STUDY .....	1
1.4 RESEARCH PROBLEM.....	9
1.5 RESEARCH QUESTIONS.....	11
1.6 RATIONALE.....	12
1.7 DELIMITATIONS OF THE STUDY .....	13
1.8 DEFINITION OF TERMS.....	14
1.9 ASSUMPTIONS .....	19
1.10 CHAPTER SUMMARY.....	20
<b>CHAPTER 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK</b> .....	<b>21</b>
2.1 CHAPTER INTRODUCTION.....	21
2.2 BACKGROUND DISCUSSION .....	21
2.3 EXPLORING PROFICIENCIES FOR DIGITAL LEADERSHIP.....	22
2.4 EXPLORING STRATEGIES FOR DIGITAL LEADERSHIP.....	31
2.5 EXPLORING DIGITAL LEADERSHIP’S ROLE IN ESTABLISHING AND SUSTAINING A CULTURE OF INNOVATION AND AGILITY.....	38
2.6 ANALYTICAL FRAMEWORK.....	50
2.7 SUMMARY OF LITERATURE REVIEW.....	64
2.8 CHAPTER SUMMARY.....	65

**CHAPTER 3. RESEARCH METHODOLOGY.....66**

3.1 CHAPTER INTRODUCTION ..... 66  
3.2 RESEARCH PARADIGM..... 66  
3.3 RESEARCH APPROACH..... 68  
3.4 RESEARCH DESIGN..... 71  
3.5 DATA COLLECTION METHODS..... 75  
3.6 POPULATION AND SAMPLE..... 76  
3.7 THE RESEARCH INSTRUMENT..... 79  
3.8 PROCEDURE FOR DATA COLLECTION ..... 79  
3.9 DATA ANALYSIS STRATEGIES AND INTERPRETATION ..... 80  
3.10 POSSIBLE LIMITATIONS AND CHALLENGES OF THE STUDY ..... 81  
3.11 QUALITY ASSURANCE..... 82  
3.12 ETHICAL CONSIDERATIONS..... 85  
3.13 CHAPTER SUMMARY..... 86

**CHAPTER 4. PRESENTATION OF FINDINGS .....87**

4.1 CHAPTER INTRODUCTION..... 87  
4.2 PARTICIPANTS DEMOGRAPHICS DETAILS ..... 88  
4.3 FINDINGS PERTAINING TO PROPOSITION 1 ..... 91  
4.4 FINDINGS PERTAINING TO PROPOSITION 2 .....116  
4.5 FINDINGS PERTAINING TO PROPOSITION 3 .....133  
4.6 INTERCONNECTEDNESS AND MUTUAL REINFORCEMENT OF THEMES .....150  
4.7 CHAPTER SUMMARY.....151

**CHAPTER 5. DISCUSSION OF THE FINDINGS.....152**

5.1 CHAPTER INTRODUCTION.....152  
5.2 RECAPITULATION OF THE RESEARCH.....152  
5.3 DISCUSSION OF FINDINGS PERTAINING TO PROPOSITION 1 .....156  
5.4 DISCUSSION OF FINDINGS PERTAINING TO PROPOSITION 2 .....161  
5.5 DISCUSSION PERTAINING TO PROPOSITION 3 .....165  
5.6 CHAPTER SUMMARY.....169

**CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS .....170**

6.1 CHAPTER INTRODUCTION.....170  
6.2 CONCLUSIONS REGARDING PROPOSITION 1 .....172  
6.3 CONCLUSIONS REGARDING PROPOSITION 2 .....173  
6.4 CONCLUSIONS REGARDING PROPOSITION 3 .....175

6.5	RECOMMENDATIONS.....	176
6.6	LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH.....	179
6.7	CHAPTER SUMMARY.....	183
<b>REFERENCES.....</b>		<b>184</b>
<b>APPENDIX A: PROPOSITION 1 DATA - CODES, CATEGORIES, THEMES .....</b>		<b>212</b>
<b>APPENDIX B: PROPOSITION 2 DATA - CODES, CATEGORIES, THEMES .....</b>		<b>215</b>
<b>APPENDIX C: PROPOSITION 3 DATA - CODES, CATEGORIES, THEMES .....</b>		<b>218</b>
<b>APPENDIX D: PARTICIPANT INFORMATION SHEET .....</b>		<b>220</b>
<b>APPENDIX E: CONSENT TO PARTICIPATE: AGREEMENT FORM .....</b>		<b>222</b>
<b>APPENDIX F: INSTRUMENT (INTERVIEW GUIDE).....</b>		<b>223</b>
<b>APPENDIX G: ETHICS CLEARANCE CERTIFICATE .....</b>		<b>231</b>

# LIST OF TABLES

Table 1: Overview of Participants .....89

Table 2: Research question, proposition, themes description for Proposition 1 .....93

Table 3: Research question, proposition, themes description for Proposition 2 .....118

Table 4: Research question, proposition, themes description for Proposition 3 ..... 135

Table 5: Restated research questions and associated research propositions..... 153

Table 6: Interview Probes and Prompts.....226

Table 7: Interview questions for RQ 1 .....227

Table 8: Interview questions for RQ 2 .....228

Table 9: Interview questions for RQ 3 .....229

# LIST OF FIGURES

Figure 1: South Africa’s Criminal Justice Process (ecosystem) and associated organisations.....8

Figure 2: Study Background Overview .....8

Figure 3: Capabilities for a Digitally Transformed Criminal Justice System and Required Digital Leadership Capabilities ..... 11

Figure 4: Research questions overview..... 12

Figure 5: Digital Leadership Conceptual Model .....33

Figure 6: Determinants of Digital Leadership.....34

Figure 7: The digital transformation compass .....39

Figure 8: Proposed organisational architecture .....45

Figure 9: Connected Leadership overview .....49

Figure 10: Conceptual framework.....63

Figure 11: Participants Demographic Analysis by Leadership Role .....90

Figure 12: Participants Demographic Analysis by Senior Management Level .....90

Figure 13: Overview of themes for Proposition 1 .....92

Figure 14: Participants associations to themes for Proposition 1 .....94

Figure 15: Theme frequency for Proposition 1 .....94

Figure 16: Visual illustration of key patterns and concepts for Proposition 1.....95

Figure 17: Overview of themes for Proposition 2 ..... 117

Figure 18: Participants associations to themes for Proposition 2 ..... 119

Figure 19: Theme frequency for Proposition 2..... 119

Figure 20: Visual illustration of key patterns and concepts for Proposition 2..... 120

Figure 21: Centralised vs. Decentralised Digital Leadership..... 123

Figure 22: Strategic vs. Operational Digital Leadership ..... 125

Figure 23: Technology-Driven vs. Business-Driven Digital Leadership..... 128

Figure 24: Overview of themes for Proposition 3 ..... 134

Figure 25: Participants associations to themes for Proposition 3..... 136

Figure 26: Theme frequency for Proposition 3..... 136

Figure 27: Visual illustration of key patterns and concepts for Proposition 3..... 137

Figure 28: Interconnectedness and Mutual Reinforcement of Themes ..... 151

Figure 29: Restated Conceptual framework ..... 155

Figure 30: Augmented Conceptual Framework for Digital Leadership Proficiencies  
..... 161

## LIST OF ACRONYMS

AI	Artificial Intelligence
APET	African Union High-Level Panel on Emerging Technologies
CDO	Chief Digital Officer
CIO	Chief Information Officer
CJS	Criminal Justice System
CQ	Cultural Intelligence
DCS	Department of Correctional Services
DOJ&CD	Department of Justice and Constitutional Development
GITO	Government Information Technology Officer
IOT	Internet of Things
IT	Information Technology
IJS	Integrated Justice System
JCPS	Justice Crime Prevention and Security Cluster
LASA	Legal Aid South Africa
NPA	National Prosecuting Authority
OCJ	Office of the Chief Justice
PFMA	Public Finance Management Act
SADC	Southern African Development Community
SAPS	South African Police Service
SITA	State Information Technology Agency
UN	United Nations
UNODC	United Nations Office on Drugs and Crime

# CHAPTER 1. INTRODUCTION

## 1.1 Chapter Introduction

This chapter introduces the study by outlining its purpose, background, and key research focus. It presents the research problem, research questions, and rationale, explaining the study's significance. The chapter also defines the study's scope, highlighting its boundaries and key concepts. Additionally, it clarifies assumptions made during the research process.

## 1.2 Statement of purpose

This qualitative study explored the Role of Leadership in guiding the South African Criminal Justice System organisations through their digital transformation endeavours. It sought to add to existing knowledge while generating new insights that can enhance both academic perspectives and practical approaches to understanding the role of leadership in steering organisations within South Africa's Criminal Justice System in their digital transformation journeys.

## 1.3 Background of the study

### *1.3.1 An Overview on Criminal Justice in the Age of Technology*

#### *a) The Role of a Nation's Criminal Justice System*

A country's justice system is significant due to its role in upholding the rule of law, ensuring justice, and protecting the rights of citizens (Ramos-Maqueda & Chen, 2023). It provides a framework for resolving disputes, maintaining order, and promoting fairness and equality. An effective justice system fosters public confidence, supports

social stability, and contributes to economic development by creating a predictable legal environment (Ramos-Maqueda & Chen, 2023)

Forming part of a country's overall justice system is a criminal justice system, which is an integral component of a country's broader justice framework, designed to uphold the law and ensure public safety (Zaman & Bhatti, 2023). It encompasses various institutions and processes, including law enforcement, prosecutions, courts, and corrections, which work collaboratively to prevent and control crime, deliver justice to offenders, and provide support to victims (Zaman & Bhatti, 2023).

### ***b) The Impact of Technology on Criminal Justice Systems***

The integration of technology in the criminal justice system greatly improves efficiency, accessibility, transparency, and effectiveness (D. Khan & Lucas, 2023). Predictive analytics enhance data management and crime analysis, while digital platforms improve inter-agency communication and remote consultations. E-filing, automated scheduling, and online portals expedite judicial processes and public access. Advanced forensic tools and surveillance technologies boost evidence accuracy and crime prevention (Singh, 2023). Virtual courts ensure judicial continuity and accessibility, especially in remote areas. Electronic monitoring and tech-based rehabilitation aid offender management and reintegration. Digital tools and social media enhance community engagement and trust in law enforcement, and data-driven insights support evidence-based policymaking (D. Khan & Lucas, 2023). In this regard, Gash et al. (2023) in their global research emphasised that the future criminal justice system will inevitably be significantly transformed by digital advancements, however, the pivotal issue lies in the speed at which justice agencies worldwide can evolve to deliver services that enhance the experiences of victims, witnesses, and the general public seeking safety (Gash et al., 2023). Crucially, this transformation hinges on recognising the human aspects of technology-enabled change. This involves cultivating a leadership adept at navigating change and embracing new technologies.

### ***1.3.2 Global Best Practices: Towards a Holistic Approach in Global Criminal Justice Reform***

Criminal justice systems globally encounter significant challenges, including high crime and violence rates, emerging forms of criminality, corruption, and violence against

women and children (United Nations Office on Drugs and Crime (UNODC), 2021a). The United Nations (UN) highlighted the need for an integrated approach to these challenges at its fourteenth (14) Congress on Crime Prevention and Criminal Justice (United Nations, 2020), with member countries adopting resolutions that promote the ethical use of advanced technologies (resolution 8) (United Nations, 2021), multidisciplinary efforts, and partnerships with various sectors to combat and prevent crime (resolution 10) (United Nations, 2021).

Global research conducted by the Deloitte Centre for Government Insights confirms the resolutions of the UN with their findings emphasising the necessity of a 'whole-system' approach for the future of criminal justice (Karen von Monsjou et al., 2022). The findings indicate that global criminal justice leaders are focusing on creating more integrated systems and acknowledge the importance of inter-agency and group collaboration to reduce crime and enhance safety and that success in these initiatives, requires bold leadership, a paradigm shift in leadership strategies, and innovative approaches to reform implementation (Karen von Monsjou et al., 2022).

Further global research conducted in respect of modernised justice systems by PwC's Public Safety, Justice, and Security Practices (PricewaterhouseCoopers, 2024) found that collaboration on the prudent use of technology is key in transforming a country's justice system to a more citizen-centric and modern justice system (PricewaterhouseCoopers, 2024). In this regard, strategic leadership and thinkers are needed to collaborate with diverse stakeholders, effectively address citizen needs, and achieve optimal outcomes through citizen-centric initiatives and meaningful engagement, thereby building trust.

### ***1.3.3 An African Perspective: Transforming Criminal Justice in Africa by Leveraging Digital Innovations through Collaborative Leadership***

*"Making Criminal Justice Systems more Effective and Accountable"* is a key component of the UNODC Strategic Vision for Africa 2030 (United Nations Office on Drugs and Crime (UNODC), 2021b). The enabler to this vision includes leveraging innovation-driven impacts, wherein digitally enabled services are implemented through leadership collaboration with private, academic, and civil society sectors. This collaboration will encompass investments in innovative approaches that utilise science,

technology, and digital means to bolster the effectiveness and accountability of criminal justice systems (United Nations Office on Drugs and Crime (UNODC), 2021b).

According to The African Union High-Level Panel on Emerging Technologies (APET), access to justice in sub-Saharan Africa is severely limited, affecting over a billion people, primarily due amongst others, inaccessibility, poverty, and marginalisation (APET Secretariat, 2023). The APET proposes integrating emerging technologies like artificial intelligence, machine learning and blockchain to enhance inclusivity, legal efficiency and transparency (APET Secretariat, 2023).

African nations have begun to engage on the integration of digital technologies to modernise their criminal justice systems and have recognised the significance of leadership collaboration in sharing best practices. This collaboration extends beyond individual African countries to encompass the entire continent, facilitating the extraction of valuable insights and lessons learned (United Nations Office on Drugs and Crime (UNODC), 2022) as seen in the automation of criminal cases in Kenya (Wanyonyi & Naeku, 2021).

#### ***1.3.4 A SADC Perspective: Strengthening Criminal Justice Systems in Southern Africa***

The UNODC Strategic Vision for Africa 2030 includes the Southern African Development Community (SADC) region, supporting its objective to enhance the effectiveness and accountability of criminal justice systems (United Nations Office on Drugs and Crime (UNODC), 2021b).

To bolster the criminal justice systems across various countries within the Southern African Development Community (SADC), comprehensive guidelines on crime and violence prevention have been formulated (Lemaire et al., 2020). These guidelines are underpinned by several core values and principles, which include, amongst others, strong leadership and the promotion of collaboration and mutual trust (Lemaire et al., 2020).

As part of their criminal justice systems, SADC countries have implemented e-justice solutions. According to a report on Digital Transformation of Court Processes in Southern Africa (The Africa Judges & Jurists Forum, 2021), the extent of court

digitalisation across Southern Africa varies across each nation, with certain jurisdictions demonstrating substantial progress while others are still in the early stages of embracing digital transformation within their justice systems.

All key stakeholders, including executive leadership and the judiciary, play a vital role in implementing recommendations for digitalising the justice system in Southern Africa (The Africa Judges & Jurists Forum, 2021). As highlighted in the forums report, this includes, among other priorities, fostering innovation through regulatory sandboxes and developing effective policies to govern digital technologies in the legal sector (The Africa Judges & Jurists Forum, 2021).

### ***1.3.5 A South African Public Sector Perspective: South Africa's Digital Ascendancy in Navigating Global Progress and Opportunities***

A study into Digital Leadership within the economies of the G20 nations (Cahyadi & Magda, 2021), encompassing variables such as digital readiness, global innovation, and global competitiveness 4.0, had South Africa ranked eighteenth (18) among these countries. Notably, this research indicates that South Africa has exhibited the most significant improvement in Global Competitiveness 4.0, which assesses factors including, but not limited to, a country's institutional framework, infrastructure, technology adoption, and innovation capacity (Cahyadi & Magda, 2021).

This improvement in global competitiveness may be ascribed to the digital maturity rating of South Africa's public sector, where according to a World Bank Report on GovTech Maturity (Dener et al., 2021), South Africa is positioned among the global frontrunners in government technology maturity at the national government level, reflecting significant advancements in public sector digital transformation. However, this progress is not uniformly distributed, as a digital divide is evident at the local government level (N. Nkomo & Moyane, 2021), where the majority of South Africans reside and receive their services from. A study by Aruleba & Jere (2022) corroborates this disparity, highlighting that the key to success involves enhancing ICT awareness, mitigating technophobia, addressing issues of affordability, and improving rural access to ICT services. Moreover, the study emphasises that training and skills development at a local level are pivotal to achieving successful digital transformation as supported by (Chohan & Hu, 2022).

### **1.3.6 The State of Embracing Technology in South Africa's Criminal System**

President Mbeki's 2008 State of the Nation Address unveiled measures to address shortcomings in South Africa's Criminal Justice System through a 7-point plan, which included modernisation and integration (Mbeki, 2008).

However, by 2015, little progress had been made, including on technological advancements aimed at modernising the system (Office of Criminal Justice System Review and Integrated Justice System Board, 2015). The Justice Crime Prevention and Security (JCPS) Cluster, established in 2005, aims to enhance cooperation among key ministries to address crime and national security (G Naidoo & Daniel Makananisa, 2017).

Aligned with the 7-point plan's objectives, the JCPS Cluster departments strives to ensure safety for all South Africans by reducing serious crimes through an effective Integrated Criminal Justice System (Department of Planning, Monitoring and Evaluation, 2011).

To facilitate the 7-point plan's implementation, the Integrated Justice System (IJS) was established, aiming to transform the criminal justice system into a modern and integrated entity by electronically enabling and integrating criminal justice processes and information exchanges across departments (South African Government Online, 2024).

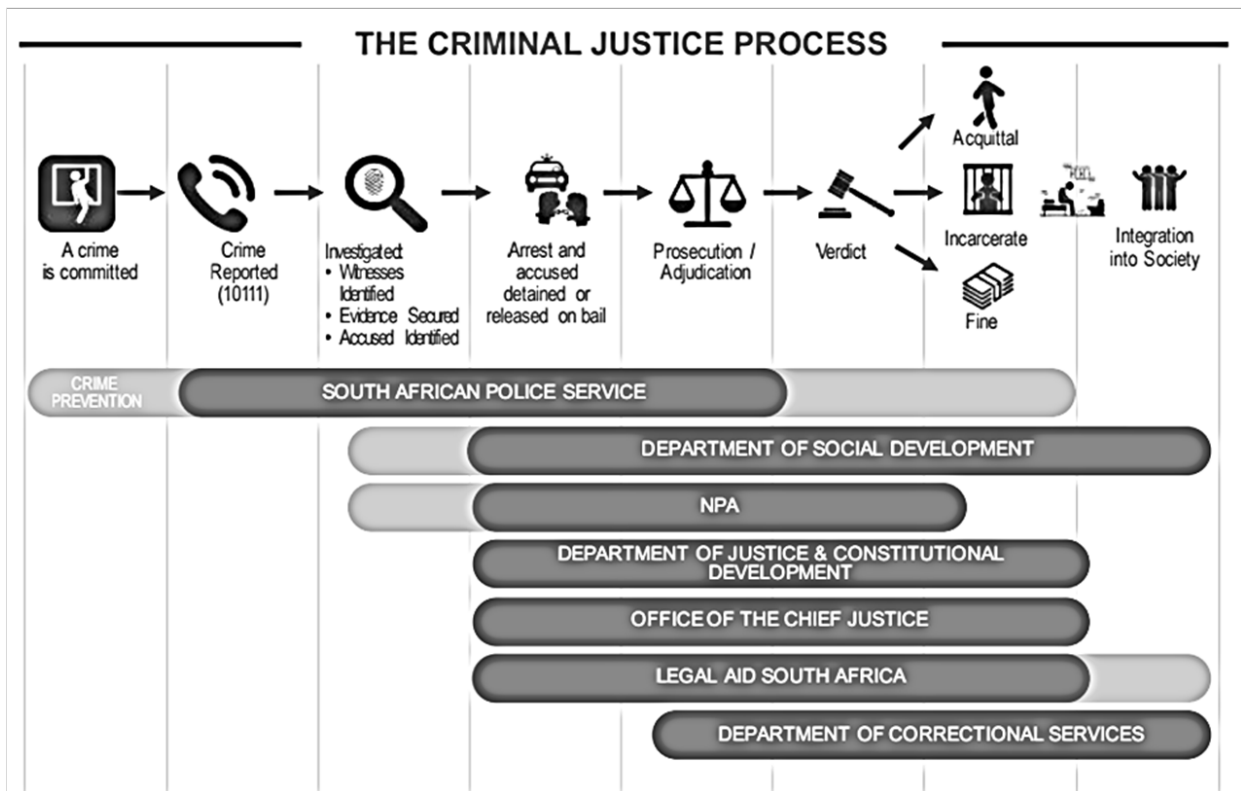
In February 2024, a conference was convened to reassess the implementation of the Justice Crime Prevention and Security (JCPS) seven-point plan, approximately sixteen (16) years after its inception, and to devise strategies to address challenges encountered during its implementation (Department of Justice and Constitutional Development, 2024b). During his opening address, the deputy president of the country acknowledged that despite the government's efforts in implementing crime intervention strategies and other initiatives, public confidence in the national criminal justice system is diminishing, necessitating the convening of such a conference to propose solutions (SANews, 2024). One of the key focus of the conference's panel discussions was the role of modernisation and digitalisation in enhancing the efficacy of the criminal justice system (Department of Justice and Constitutional Development, 2024a).

A comparative study by Dlamini et al. (2023) on South Africa's digitalised Criminal Justice System when compared to Estonia, highlights that while South Africa has made notable progress in the modernisation of its justice system, there remains an opportunity for further advancement through the adoption of emerging technologies as concurred by the United Nations (United Nations, 2023), the Minister of Justice (Lutendo Tshifura, 2024) and a research article on the influence of technology on the criminal justice system by (D. Khan & Lucas, 2023). This will however, as in the case of Estonia, require appropriate political and administrative leadership, innovative policies and legislation, adjustments to existing policies and legislation (Mokofe, 2023) and allocation of necessary resources to facilitate and accelerate these digital transformation initiatives (Dlamini et al., 2023).

In a further study conducted by Mthombothi (2021) examining the utilisation of current technologies within the criminal justice system, it was observed that there are notable challenges and deficiencies, such as underutilisation and substandard quality of these systems, which must be remedied prior to considering their integration. These identified challenges may be effectively mitigated through leadership interventions including change management, capacity building and learning from piloting of systems.

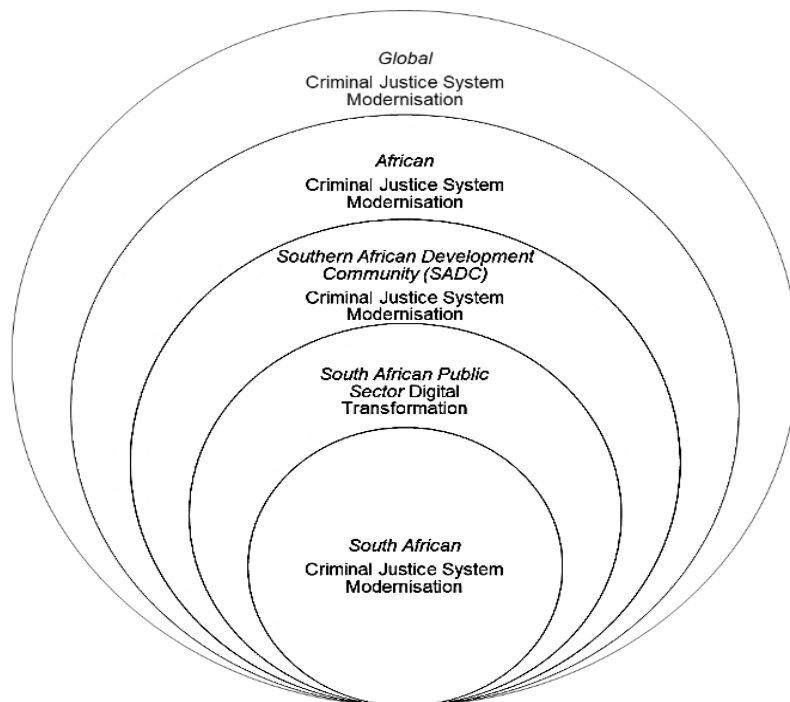
In conclusion, in 1999, President Nelson Mandela inaugurated South Africa's first Crime Prevention Campaign at the time with the call to *"Let us all join hands to break the momentum of crime"* (Mandela, 1999). More than twenty-five years later, advancements in technology offer promising avenues to realise this vision, aiming to ensure that all South Africans feel and are safe. This prompts the need to explore the Role of Leadership in guiding the South African Criminal Justice System organisations through their digital transformation endeavours, to realise this vision.

Figure 1 provides an overview of South Africa's Criminal Justice Process (ecosystem) and associated organisations (Department of Justice and Constitutional Development, 2017).



**Figure 1: South Africa’s Criminal Justice Process (ecosystem) and associated organisations (Department of Justice and Constitutional Development, 2017)**

Figure 2 provides an overview on the background and context to the study.



**Figure 2: Study Background Overview**

## **1.4 Research problem**

### **The Possible Capabilities for a Digitally Transformed Criminal Justice System**

In the technological era, transforming the delivery and accessibility of justice within the criminal justice system through digital innovation is essential (Dlamini et al., 2023). This will entail that through the integration of digital tools like predictive analytics, virtual courts, and advanced forensic technology, various aspects of the justice process are enhanced, from data management to evidence accuracy to predictive adjudication and sentencing and rehabilitation (D. Khan & Lucas, 2023; Singh, 2023).

In achieving this, digitally transforming the criminal justice system will require a holistic approach, emphasising partnership and ethical technology use through collaboration with all stakeholders which must include criminal justice agencies, society as well as scientific and academic communities, amongst others (Karen von Monsjou et al., 2022).

### **Digital Leadership Capabilities**

Realising the full potential of digitally transforming the criminal justice system will require adept Leadership capabilities that is capable of navigating change and prioritising the needs of all stakeholders, including victims and the public (United Nations, 2021).

Leadership will be indispensable for navigating progress and improving outcomes within the criminal justice sector (United Nations, 2020) as Leaders must spearhead initiatives promoting internal integration and accountability, while strategic collaboration with external diverse stakeholders is essential for leveraging digital innovations effectively (United Nations, 2021).

Therefore, it is Leadership, in the form and shape of Digital Leadership, that will play a pivotal role in reforming the criminal justice system through modernisation and embracing technology (APET Secretariat, 2023).

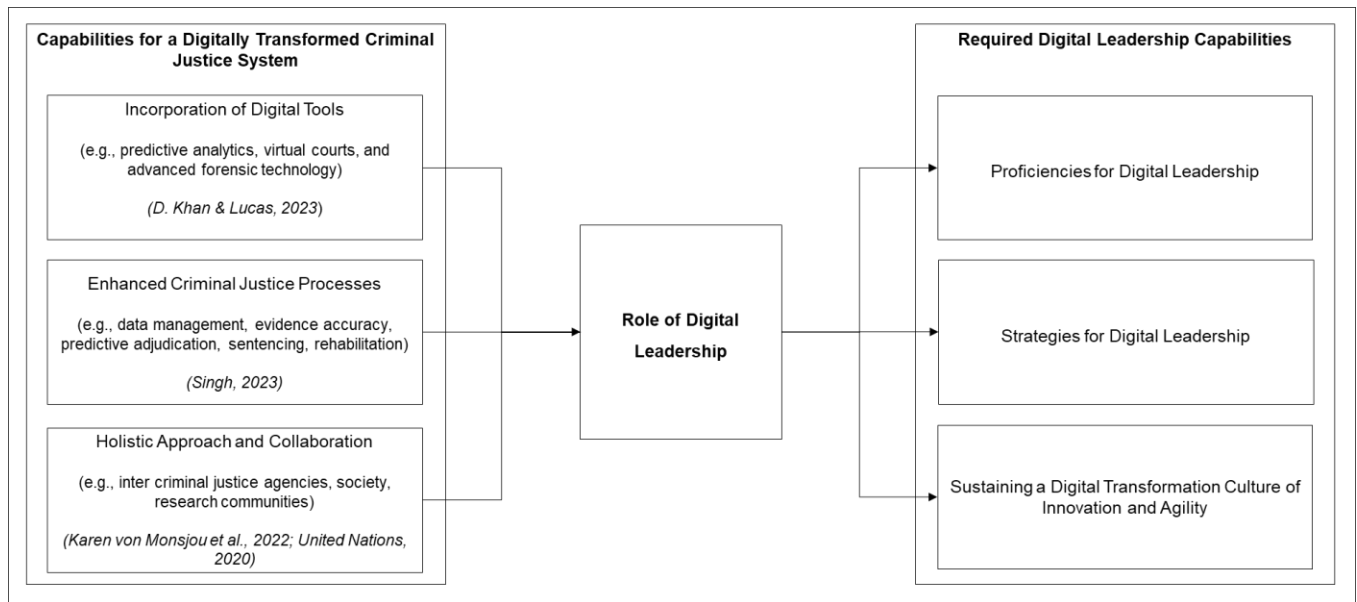
## **Problem Statement: Digital Leadership Gap in South Africa's Criminal Justice System**

The South African Criminal Justice System is under increasing pressure to modernise through digital transformation to improve efficiency, integration, and accessibility. While technological innovations such as predictive analytics, virtual courts, and advanced forensic tools offer significant potential, their effective adoption remains fragmented and inconsistent across justice organisations. Leadership is recognised as central to driving these changes, yet there is little clarity on the specific digital leadership proficiencies required to guide transformation in this sector. The problem is that, despite acknowledging the importance of leadership, there is limited understanding of the capabilities needed, how leadership strategies differ across organisational contexts, and how digital leadership can cultivate a sustained culture of innovation and agility. This gap has left the criminal justice system without a clear framework for developing leaders who can successfully navigate digital transformation.

Accordingly, the aim of this study was to explore and understand the role of digital leadership in effectively guiding South Africa's criminal justice system organisations through digital transformation, with a focus on identifying the key leadership proficiencies, contextual variations in leadership strategies, and the mechanisms through which digital leadership fosters a sustained culture of innovation and agility for value creation.

By doing so, this study not only responded to the acknowledged importance of leadership but also identifies what is missing, what remains to be done, and how digital leadership can be more effectively leveraged to enable the successful modernisation of South Africa's Criminal Justice System.

Figure 3 provides an overview of the capabilities for a digitally transformed criminal justice system and the required Digital Leadership capabilities.



**Figure 3: Capabilities for a Digitally Transformed Criminal Justice System and Required Digital Leadership Capabilities**

## 1.5 Research questions

In line with the research problem, the research questions were formulated as follows:

- RQ 1. What specific digital leadership proficiencies are regarded as crucial for successfully navigating criminal justice organisations through digital transformation?
- RQ 2. In what ways do digital leadership strategies differ within various contexts of criminal justice organisations?
- RQ 3. How does digital leadership contribute to the cultivation of a sustained digital transformation culture of innovation and agility, which is essential for value creation in criminal justice organisations?

Figure 4 further elaborates on the above research questions.

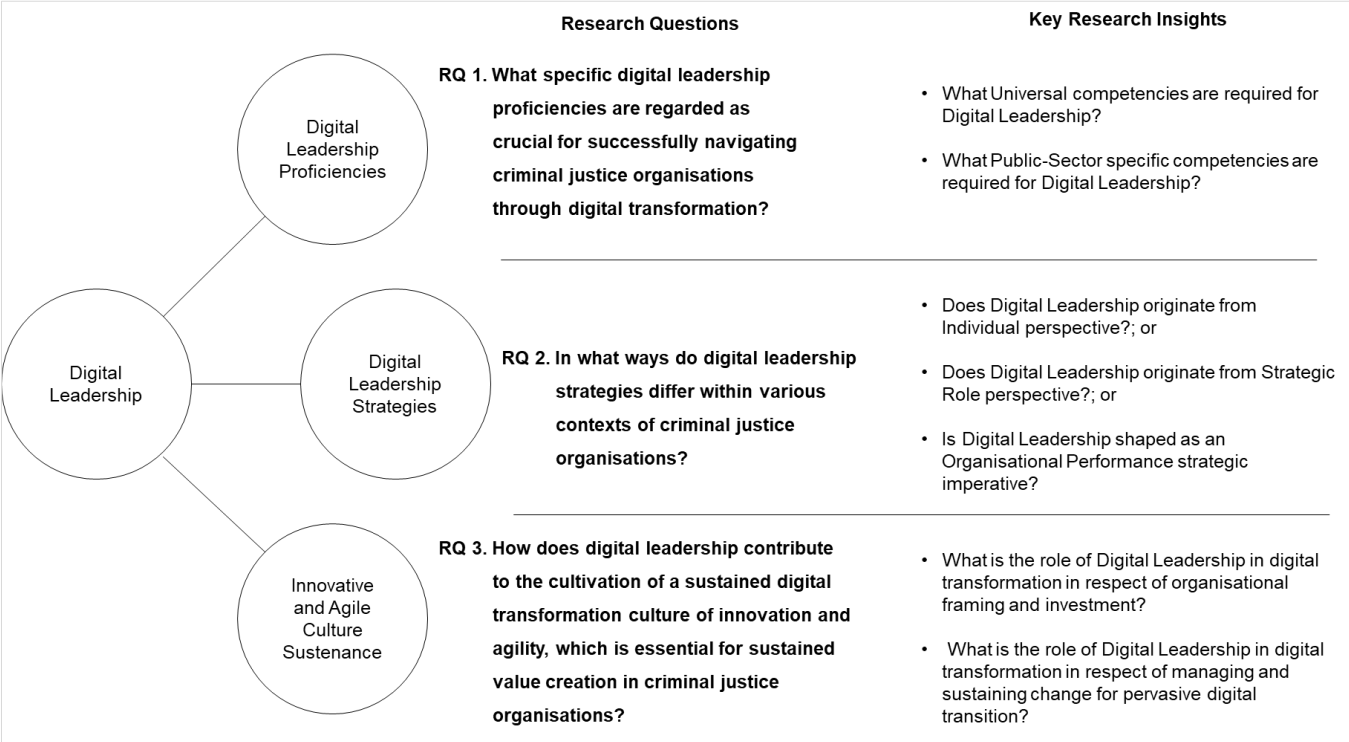


Figure 4: Research questions overview

### 1.6 Rationale

Leaders within South Africa’s criminal justice system organisations are recognised as public servants. Thomson (2023) emphasises the urgent necessity for all public sector leaders to adopt and embody digital leadership.

The public sector faces significant challenges from rapid digital changes, which can be even more daunting than those in the private sector, given the magnitude of the public sector and the citizens it services (Wilson & Mergel, 2022).

The relentless pace of technological advancements has pushed organisations to adopt technology-based solutions faster than ever before (Simmonds et al., 2021). This pressure for digital transformation has led to restructuring in public organisations, influenced by factors such as government policies and budgetary adjustments and investments to enable digital transformation (Kusanke et al., 2023).

Successfully leveraging digital initiatives is crucial for organisational survival (Lin & Shan, 2023), regardless of the sector, necessitating the strategic use of technology to achieve business objectives (Kraus et al., 2022).

Digital Leadership is pivotal in guiding these transformation and various entities, from individuals to nations, are recognised as digital leaders, with strategies often emphasising sector-specific innovation and agile cultures (Adie et al., 2022; AlNuaimi et al., 2022).

However, the digital transformation of the public sector presents unique leadership challenges, demanding adept leaders capable of navigating complex processes and innovation in digital transformation initiatives (Nuryadin et al., 2023; Wilson & Mergel, 2022).

## **1.7 Delimitations of the study**

The study was conducted within the scope defined by the following delimitations:

- (i) The study was confined to the criminal justice organisations within South Africa, focusing on key agencies such as the South African Police Service (SAPS), National Prosecuting Authority (NPA), Department of Justice and Constitutional Development (DOJ&CD), Office of the Chief Justice (OCJ), Legal Aid South Africa (LASA) and the Department of Correctional Services (DCS).
- (ii) The study specifically examined the role of digital leadership in digital transformation, excluding other forms of leadership or general organisational leadership theories unless directly relevant to digital leadership.
- (iii) The research focused on key functions of digital leadership such as strategy formulation, implementation of digital technologies, change management, and enhancement of digital literacy among employees, excluding unrelated administrative or operational aspects.
- (iv) The primary stakeholders studied were digital leaders and senior management within the criminal justice organisations, excluding mid-level managers, frontline staff, and external consultants unless they played a direct role in digital leadership.

- (v) The research focused on the adoption and impact of specific digital technologies relevant to the criminal justice system, such as case management systems, digital evidence management, and cybersecurity measures, excluding general ICT infrastructure or unrelated technologies.

## 1.8 Definition of terms

Charismatic leadership style	A leadership style where leaders are seen as having exceptional or superhuman qualities, inspire emotional responses in followers (M. Weber, 1947). This leads to unquestioned obedience, loyalty, and commitment to both the leader and their cause. Their self-confidence motivates followers to pursue organisational goals more confidently (House, 1976).
Criminal Justice System (global perspective)	A nation's justice system maintains the rule of law, guarantees justice, and safeguards citizens' rights. It establishes a structure for settling disputes, preserving order, and fostering fairness and equality .
Criminal Justice System Modernisation (global perspective)	The application of technology to evolve a nation's justice system into one that is more focused on citizens and modernised (PricewaterhouseCoopers, 2024).
Criminal Justice System Organisations (South Africa)	Organisations that include the South African Police Service (SAPS), National Prosecuting Authority (NPA), Department of Justice and Constitutional Development (DOJ&CD), Office of the Chief Justice (OCJ), Legal Aid South Africa (LASA) and

the Department of Correctional Services (DCS) (Department of Justice and Constitutional Development, 2017).

**Criminal Justice System Processes (South Africa)** Criminal justice processes value-chain and ecosystem that entails crime reporting, investigation, prosecution, adjudication, incarceration or acquittal as carried out by various organisations within South Africa's Criminal Justice System (Department of Justice and Constitutional Development, 2017).

**Criminal Justice System Reform: 7-Point Plan** A plan to modernise South Africa's criminal justice system by digitising and integrating processes and information exchanges across various departments (South African Government Online, 2024) through the Integrated Justice System (IJS) (Department of Planning, Monitoring and Evaluation, 2011).

**Digital Leader** A person selected for their expertise in leadership, digital skills, and business acumen to spearhead digital transformation initiatives, leveraging both existing and emerging technologies (Adie et al., 2022).

**Digital Leadership** As a broad concept, digital leadership involves leaders at all levels and front-line service staff, with varying degrees of responsibility and accountability depending on the role (Karippur & Balaramachandran, 2022). It aims to achieve organisational goals, deliver desired results, and enhance performance by leveraging digital tools and techniques. It encompasses offering strategic advantages, driving organisational transformation, and generating value (Adie et al., 2022).

Digital Leadership Proficiencies Encompasses a range of essential skills is needed for managing organisational transformation, including leadership, digital, business, and soft skills (Adie et al., 2022). In the public sector, this skill set also encompasses knowledge of policy, stakeholder management, and creating public value through digital initiatives. This specialised approach is vital for effective digital leadership in public service and policy execution (Adie et al., 2024; Nuryadin et al., 2023).

Digital Leadership Strategies Regarded as a crucial concept in organisational management that involves two key elements: the role of a Digital Leader and the broader concept of Digital Leadership (Adie et al., 2022). A Digital Leader is chosen for their leadership skills, digital knowledge, and business expertise to lead digital transformation using both current and new technologies. On the other hand, Digital Leadership focuses on achieving organisational goals, delivering results, and improving performance by strategically utilising digital tools and methods (Adie et al., 2024). This concept can be examined from three perspectives: the individual, the role, and the organisation (Eberl & Drews, 2021).

Digital Technology Encompasses technologies that incorporate both digital information and digital machines. Digital information refers to binary-coded data that is stored and utilised in a digital format. Digital machines are devices that operate on this digital data, utilising microelectronics-based processors and storage systems (Armstrong & Lee, 2023).

Digital Transformation Refers to how an organisation collectively navigates and adapts to the challenges and shifts brought about by technological disruptions associated with the Fourth Industrial Revolution. This adaptive process can be deliberate and

planned or may emerge organically in response to evolving strategic goals and priorities (Armstrong & Lee, 2023).

Government Information Technology Officer (GITO)	Established in 2000 by Cabinet decision, the GITO is a senior executive role within government departments, responsible for aligning the department's ICT strategic plan with its overall strategic and operational objectives. The GITO reports directly to the Head of Department (HoD) and serves on the Executive Management team (Department of Public Service and Administration (DPSA), 2001).
Innovative and Agile Culture Sustenance	Digital transformation is deemed essential for achieving a competitive edge, as it involves an organisation's capability to effectively understand and utilise digital technology to generate business value (Nuryadin et al., 2023). Governments around the world are increasingly adopting information systems to improve efficiency and effectiveness in public administration (Distel et al., 2019). Successful digital transformation goes beyond merely adopting new technologies; it demands comprehensive organisational changes to fully leverage these technologies. This transformation impacts how work is structured and performed, requiring widespread organisational adjustments (Distel et al., 2019).
Leadership	The ability to influence and guide others, and while often linked to titles or seniority, it is a skill anyone can develop. Leaders are needed across various sectors such as business, politics, and community organisations, where they make critical decisions, set clear visions, and provide the tools needed to achieve goals (Nick, 2023; Scott, 2008).
Ministerial and Organisational	A Ministerial or Departmental Imbizo is a Public Participation Programme aimed at bringing government closer to the

(Departmental) Imbizo	people. It serves as a platform to engage with communities on government projects and priority areas, aligned with government programmes, while directly addressing the needs of the community.
Public Sector	In South Africa, the public sector includes state-owned enterprises (SOEs), municipalities, national and provincial governments, universities, and other agencies. These organisations are responsible for providing better and more efficient healthcare, equal educational opportunities, infrastructure investment, housing access, and other social programs (Mlambo et al., 2022).
South African Justice Crime Prevention Cluster	Encompasses key ministries to address crime and safeguard national security through cooperation (G Naidoo & Daniel Makananisa, 2017).
Transactional leadership style	A leadership style where the relationship between leaders and employees is based on an exchange of power and benefits (Burns, 1979). This leadership style emphasises reaching organisational objectives through the use of authority, incentives, and disciplinary measures (Bass, 1985). Transactional leadership functions through an exchange mechanism in which leaders set objectives, monitor progress, and manage results (Antonakis et al., 2003). It includes three main types: contingent reward leadership, active management-by-exception, and passive management-by-exception (Bass et al., 2003; Hasija et al., 2019).
Transformational leadership style	A leadership approach where leaders energise and encourage their followers to excel while fostering their personal growth. Such leaders drive substantial change by crafting a clear

vision, conveying it effectively, and modelling positive behaviours (Bass, 1985). Transformational leaders exhibit four main behaviours: serving as role models, motivating others, fostering creativity, and offering personal support. By acting as role models, they gain the respect and trust of their team (Reza, 2019).

## **1.9 Assumptions**

In the context of this research, the following assumptions were made:

- (i) It was assumed that Digital Leadership is recognised and operational within the criminal justice organisations, with designated leaders responsible for driving digital initiatives.
- (ii) It was assumed that Digital Leadership influences the success and effectiveness of digital transformation processes within the criminal justice organisations.
- (iii) It was assumed that the identified respondents are willing to participate and provide insights into the role of Digital Leadership.
- (iv) It was assumed that there was a shared understanding of key terms such as 'Digital Leadership' and 'digital transformation' among the participants, ensuring consistency in data collection and analysis.
- (v) The respondents participating in the research were expected to voluntarily provide answers related to the research interviews. They were anticipated to demonstrate honesty and transparency in their responses.
- (vi) The respondents were assumed to possess extensive experience within their respective organisations, ensuring they have the necessary insights to objectively address the questions.
- (vii) The organisations within the criminal justice system are currently engaged in digital transformation initiatives and are at various stages of this process.

- (viii) The leadership of organisations within the criminal justice system holds a pivotal role in steering the digital transformation efforts within their respective organisations.
- (ix) Leadership across organisations within the criminal justice system collectively considers similar factors when undertaking digital transformation initiatives.
- (x) The respondents are actively involved in guiding and influencing the strategic direction of their organisations.

## **1.10 Chapter Summary**

This chapter has provided an overview of the study by introducing its purpose, background, and key focus areas. It outlined the research problem, research questions, and rationale, explaining why this study is important. The chapter also defined the study's scope, setting clear boundaries and highlighting key concepts. Finally, it clarified the assumptions that guided the research process. With this foundation in place, the next chapter reviews existing literature related to the study.

# **CHAPTER 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

## **2.1 Chapter Introduction**

This chapter aims to examine and synthesise findings from previous research in Digital Leadership, emphasising Proficiencies for Digital Leadership, Strategies employed, and the Role of Leadership in fostering a culture of sustained Digital Transformation, Innovation, and Agility. This chapter will outline key concepts, review relevant leadership theories, summarise findings from prior studies, and present initial conclusions drawn from the literature.

## **2.2 Background discussion**

In the public sector, rapid technological advancements pose unique challenges due to its scale and service obligations to citizens (Kusanke et al., 2023; Simmonds et al., 2021; Wilson & Mergel, 2022). Public organisations must swiftly adopt technology-driven solutions influenced by governmental policies and budgetary adjustments to enable digital transformation. Successful implementation of these initiatives is crucial for organisational survival, necessitating strategic use of technology to meet business objectives (Kraus et al., 2022; Lin & Shan, 2023).

Digital leadership plays a pivotal role in guiding these transformations, emphasising innovation and agile cultures tailored to sector-specific needs (Adie et al., 2022; AlNuaimi et al., 2022). However, leading digital transformation in the public sector demands adept leaders capable of navigating complexity and fostering innovation in digital initiatives (Nuryadin et al., 2023; Wilson & Mergel, 2022).

The purpose of this literature review was to explore the concepts around Digital Leadership in terms of their Proficiencies, Strategies and Role in Establishing and Sustaining a Culture of Innovation and Agility.

Digital Leadership proficiencies (skills) are essential for guiding organisations through transformation (Adie et al., 2022). These skills fall into four main categories: leadership abilities, digital expertise, business knowledge, and interpersonal (soft) skills.

Digital Leadership strategies can be seen as a construct from an Individual Level, Role Level and Organisational Level (Eberl & Drews, 2021). Digital leadership is crucial in organisational management, focusing on two key elements: Digital Leader and Digital Leadership (Adie et al., 2022). A Digital Leader is selected for their leadership, digital expertise, and business acumen to drive digital transformation while Digital Leadership aims to achieve organisational objectives and enhance performance through strategic digital utilisation.

Digital Leadership Role in Establishing and Sustaining a Culture of Innovation and Agility when transforming digitally, is essential for competitive advantage (Nuryadin et al., 2023). Governments are enhancing public administration efficiency through information systems (Distel et al., 2019). Successful digital transformation goes beyond technology adoption; it requires extensive organisational changes, reshaping work processes and strategies aligned with integrating new technologies with overall business management (Distel et al., 2019; Westerman et al., 2014)

This literature review examined these topics and explored their relevance within the context of this study.

### **2.3 Exploring Proficiencies for Digital Leadership**

Digital leadership proficiencies encompass a diverse set of skills crucial for navigating organisational transformation (Adie et al., 2022). These include universal competencies that are categorised into leadership, digital, business, and soft skills.

In the public sector context, these competencies also involve policy understanding, stakeholder management, and the creation of public value through aligned digital initiatives, reflecting a specialised approach essential for effective digital leadership in public service delivery and policy implementation (Adie et al., 2024; Nuryadin et al., 2023).

### **2.3.1 Universal Digital Leadership Competencies**

The universal competencies of Digital Leadership can be grouped into four categories a) Leadership competencies, b) Digital competencies, c) Business competencies, and d) General social or soft skills (Adie et al., 2022).

#### **a) Leadership competencies**

The Leadership competencies encompasses digital leaders having the requisite essential skills to envision a digital future for their organisation and effectively lead others in achieving results through digital transformation (Adie et al., 2024). These skills encompass transformational, transactional, and visionary experiences, including knowledge and capabilities in agile leadership, governance, adaptability, trustworthiness, and cultural inclusiveness (Mihardjo et al., 2019b).

According to Zeike et al. (2019), digital leadership competencies primarily involve the capacity to establish a coherent vision for digital transformation and effectively implement strategies to achieve this vision. This includes proficiency in digital literacy, digital skills, and robust leadership capabilities. Similarly, Mihardjo et al. (2019b) identifies creativity, critical thinking, global foresight, technological curiosity, and depth of understanding as essential digital leadership competencies. Expanding on this, Karippur and Balaramachandran (2022) emphasises a visionary approach towards digital advancements, informed risk-taking, fostering a culture of innovation, demonstrating agility, embracing uncertainty, enabling seamless collaboration, and cultivating digital expertise within the organisation.

Antonopoulou et al. (2021) highlights the skills and knowledge required to drive and manage IT-related innovation across all organisational levels. This suggests a broader scope of digital leadership that extends beyond strategic vision to operational execution. Benitez et al. (2022) suggests a blend of digital, market, business, and strategic leadership skills. This includes understanding products and customers, fostering business value, strategic thinking, and decision-making. Magesa and Jonathan (2021) describes digital leadership competencies as the ability to inspire others with a compelling vision, manage uncertainty, anticipate future trends, and

foster a culture of creativity to continuously implement innovative ideas and technologies.

### **b) Digital competencies**

Digital competencies entail the technological skills essential for digital leaders to possess awareness and literacy in digital technology (Adie et al., 2024). These competencies include technical specialisation, knowledge of emerging technologies, and include leadership roles such as data scientists and digital innovators. They empower digital leaders to effectively lead organisational digital transformations by leveraging their understanding of current and future technologies.

Zeike et al. (2019) highlights that digital competencies entail leaders' ability to formulate a clear vision for digital transformation and execute strategies effectively. This includes proficiency in digital literacy, technical skills, and strong leadership capabilities. Similarly, Amelda et al. (2021) highlights the integration of leadership skills with digital competencies, particularly in technology management, digital foresight, and effective implementation. However, Benitez et al. (2022) integrates digital, market, business, and strategic leadership skills to emphasise a broader spectrum of competencies essential for fostering innovation through digital leadership. This perspective suggests a more holistic approach that combines various leadership dimensions to drive organisational innovation.

Kane et al. (2019) argues for the necessity of foresight, transformative vision, and digital literacy in understanding technology's impact on leadership. Adaptability and innovation are crucial components of digital leadership in navigating uncertain digital environments.

### **c) Business competencies**

Business competencies encompass digital business strategies, the development of innovative digital business models, and the formulation of corresponding Information Technology (IT) strategies (Adie et al., 2024). These competencies enhance the ability

to generate value for stakeholders and customers by emphasising prioritised outcomes and strategic investments. These skills further empower digital leaders to concentrate on broader business and operational efficiency, supported by the necessary data and analytics to facilitate their organisation's digital transformation initiatives (Brett, 2019).

Mihardjo et al. (2019a) highlights business competencies such as creativity, extensive knowledge, robust networking, collaboration skills, and committed engagement driven by a clear vision. These competencies highlight the importance of strategic alignment and collaborative efforts in leveraging digital leadership for dynamic capability development.

Brett (2019) broadens the scope to include tactical abilities, strategic planning, and effective service or product delivery as critical business competencies. This emphasises the operational and strategic skills necessary for effective digital leadership in evolving business landscapes.

Claassen et al. (2021) identifies digital knowledge and literacy, visionary thinking, customer orientation, agility, risk-taking, and collaborative abilities as essential business competencies. This comprehensive view integrates technological proficiency with strategic foresight and customer-centricity, crucial for driving digital leadership initiatives.

Brunner et al. (2021) highlights competencies such as business plan development, architectural design, innovation, change management, and information systems governance. These competencies emphasise the strategic planning and implementation skills required to integrate digital capabilities into organisational operations effectively. Similarly, Benitez et al. (2022) highlights a blend of digital, market, business, and strategic leadership skills focused on understanding products, customers, and fostering business value. This holistic approach integrates market insight with business strategy to drive innovation and performance.

Shah and Patki (2020) identifies competencies including fostering innovation, navigating uncertainty, strategic foresight, motivating and mobilising others, and achieving outcomes. These competencies highlight the adaptive leadership skills necessary for digital transformation in culturally diverse organisational contexts.

#### **d) Soft competencies**

It is important for digital leaders to also possess social or 'soft' skills where these skills entail cultural competency, relationship building, innovation, communication, creativity, and agile leadership and governance (Abdul-Kareem, 2020; R uth & Netzer, 2020). These skills enable digital leaders to cultivate relationships and collaboration necessary for effectively managing digital transformation (Adie et al., 2024).

Mihardjo et al. (2019a) highlights the importance of robust networking, collaboration skills, and committed engagement by suggesting that these skills are crucial for developing dynamic capabilities and strategic alliances in line with market orientation. In contrast, Brett (2019) expands this view by incorporating organisational culture as a critical soft competency for digital leaders. It suggests that understanding and influencing organisational culture is pivotal for effective digital leadership.

R uth and Netzer (2020) introduces cultural intelligence (CQ) as a key competency for digital leaders. They argue that CQ enhances collaboration efficiency across diverse cultures, thereby improving organisational resilience and effectiveness in digital environments. Van Ee et al. (2020) suggests that the soft skills necessary for digital leadership, include critical thinking, creativity, problem-solving, and cultural awareness. It highlights the multifaceted nature of skills required to navigate digital transformation successfully.

Gfrerer et al. (2020) emphasises a range of competencies such as self-reliance, continuous learning about digital technologies, empathy, and effective team communication. It highlights the importance of fostering a positive digital culture and adapting to flexible work models.

Adie et al. (2022) suggests that successful digital leaders require a blend of technology, business, and interpersonal skills. They indicate that this comprehensive approach prevents focusing too much on one area, such as technical abilities, while neglecting others like leadership qualities or business knowledge. Eberl and Drews (2021) concurs and states that effective digital leadership depends on the synchronised integration of all these skills.

### **2.3.2 Public Sector Digital Leadership Competencies**

Unlike other industries, the public sector stands out for its dedication to maintaining public values like accountability, transparency, and fair access (Kusanke et al., 2023). This commitment ensures that services are available to everyone, including those without technical knowledge, aiming to serve all citizens equitably. The mandate includes providing public benefits, encouraging citizen participation, and promoting digital access for all. (Allen et al., 2020; Makasi et al., 2022).

In digital leadership within the public sector, essential business skills differ from those required in other industries (Adie et al., 2024). While basic elements such as finance, personnel management, IT, and organisational culture are similar across sectors, public sector leaders must also understand public administration processes, adhere to governmental regulations, and navigate the complexities of policy implementation.

Public sector organisations therefore operate within a complex framework of rules, laws, and responsibilities to the public. They are tasked with translating government strategies and action plans into specific goals and measurable outcomes for each department (Adie et al., 2024).

In the public sector, success factors often relate to creating public value, ensuring citizen satisfaction, improving service accessibility, and aligning with policies (Tate et al., 2023; Twizeyimana & Andersson, 2019). Therefore, digital leaders in the public sector are frequently tasked with leading efforts to transform digital operations, aiming to enhance public services, engage citizens more effectively, and support broader policy goals. This means that their roles go beyond typical business leadership, encompassing a broader and more intricate mandate focused on digital transformation across the sector and serving the public interest. These differences call for a wider range of skills in digital leadership than in other fields, making it essential to thoroughly examine these abilities (Nuryadin et al., 2023).

In the public sector, it's crucial to compare the fundamental skills that contribute to organisational success with the specific digital leadership skills needed in public sector roles (Nuryadin et al., 2023). These include (a) Policy competencies, (b) Social competencies, (c) Technical competencies, (d) Organisational competencies, and (e) Management competencies.

### **a) Public Sector Policy competencies**

In the public sector, digital leaders focus on driving transformative projects, emphasising that achieving tangible business benefits or delivering public value is essential for success (Brett, 2019). Their ability to effectively align technological advancements with core objectives and policy goals is critical for evaluating their performance and job effectiveness. It is thus crucial to transform policy goals into digital strategies and ensure that technology projects are aligned with creating public value (Makasi et al., 2021).

According to Kusanke et al. (2023) competencies essential for public sector digital leadership policy encompass navigating the intricate governmental and bureaucratic frameworks, emphasising structural understanding. Additionally, these competencies involve effectively managing challenges such as managing political pressures, navigating policy constraints and legal requirements, balancing competing demands, and addressing public scrutiny (Distel et al., 2019; N. A. Khan & Khan, 2019).

### **b) Public Sector Social competencies**

When it comes to interpersonal skills, digital leaders in the public sector should prioritise effective communication (Adie et al., 2024). This includes managing public expectations, explaining policy implications clearly, and addressing controversies or crises that may arise. Building relationships in this context is complex, involving internal connections within the bureaucracy, collaborations with other government agencies, interactions with elected officials, and engaging with the general public (Kitsios et al., 2023).

Clarke (2020) emphasises the importance of social competencies in public sector digital leadership. Tigre et al. (2023) concurs and indicates that these competencies encompass effective communication, networking, and collaboration to enable digital public management. Therefore, public sector digital leadership social competencies includes integrating technology effectively into the organisation's social context to enhance social outcomes (Lnenicka & Komarkova, 2019; Makasi et al., 2022).

Lnenicka and Komarkova (2019) further highlights the challenges of public sector digital leadership related to bridging the digital divide and ensuring equitable access to public services.

### **c) Public Sector Technical competencies**

In the public sector, the technical competencies of digital leaders involve essential technological skills that include awareness and literacy in digital technology (Adie et al., 2024). These competencies encompass specialised technical knowledge, familiarity with emerging technologies, and leadership roles such as data scientists and digital innovators. They enable digital leaders to effectively lead digital transformations within organisations by leveraging their grasp of both current and future technologies.

Kusanke et al. (2023) emphasises the importance of mastering digital tools and technologies to facilitate transformative change in digital, information, and technology domains. This perspective highlights the critical role of technical proficiency in driving effective digital, information, and technology transformation within the public sector.

Misuraca (2020) further broadens the definition of technical competencies in public sector digital leadership by advocating for leaders to not only embrace technological advancements but also prioritise safeguarding data privacy, ensuring security, and adhering to regulatory frameworks as concurred by Chansukree et al. (2022).

### **d) Public Sector Organisational competencies**

Public sector digital leaders' organisational competencies include efficiently organising resources, understanding organisational design, and managing processes. This includes prioritising outcomes, planning strategically, and managing change while fostering collaboration and communication (Baumann et al., 2023).

The public sector digital leadership organisational competencies encompass the ability to organise and mobilise resources effectively to achieve prioritised outcomes within a

digital context (Kusanke et al., 2023). This involves ensuring that resources are allocated and utilised efficiently to support digital transformation initiatives.

Edelmann et al. (2023) highlights that public sector digital leadership organisational competencies include possessing knowledge of organisational design, administrative processes, and workflows.

### **e) Public Sector Management competencies**

The fundamental management skills required by public sector digital leaders are different from those in other sectors (Adie et al., 2024). Although the essentials of business operations like finance, people management, culture, and IT are similar, public-sector leaders must also grasp public administration processes, government compliance, and the complexities of policy implementation.

Public sector digital leadership management competencies include the ability to envision, lead, manage, and transform the organisation in a digitally enabled public sector (N. A. Khan & Khan, 2019). Leaders must be capable of guiding their organisations through digital transformation by fostering innovation, leveraging social media, and promoting knowledge sharing. Twizeyimana & Andersson (2019) further highlight that public sector digital leadership management competencies involve creating public value and strategically achieving policy alignment as concurred by Tate et al. (2023).

#### ***2.3.3 Identified Gaps in reviewed literature pertaining to Proficiencies for Digital Leadership***

While the literature reviewed comprehensively outlines the universal competencies required for digital leadership, including leadership, digital, business, and soft skills, several critical gaps remain, particularly in the public sector context. Most of the research focuses on private sector organisations, offering limited insights into the unique challenges faced by public sector leaders in navigating policy, governance, and citizen-centric objectives.

Although studies identify technical and managerial competencies, there is insufficient understanding of how these proficiencies interact with public sector-specific roles, such as policy alignment, stakeholder engagement, and the creation of public value. Moreover, while soft skills and organisational competencies are acknowledged, research rarely investigates how cultural intelligence, collaboration, and change management function collectively to sustain innovation and digital transformation in hierarchical, bureaucratic environments like the public sector.

Additionally, the literature often emphasises discrete competencies without critically exploring how digital, business, and leadership skills must be integrated to address the complex, multi-level demands of public sector transformation. There is also limited longitudinal or empirical evidence on the effectiveness of these competencies in achieving sustained organisational performance and public value outcomes.

This study aimed to address these gaps by examining how digital leadership proficiencies, spanning individual, strategic, organisational, and public sector-specific competencies, enable leaders to successfully navigate digital transformation, foster innovation, and sustain agility in criminal justice organisations.

#### ***2.3.4 Proposition 1: Proficiencies for Digital Leadership***

Successfully navigating criminal justice organisations through digital transformation requires Digital Leadership with a diverse set of proficiencies, which includes universal and public sector specific digital leadership competencies.

## **2.4 Exploring Strategies for Digital Leadership**

Digital leadership has emerged as a pivotal concept in organisational management, encompassing two fundamental aspects: Digital Leader and Digital Leadership (Adie et al., 2022). A Digital Leader is selected based on their proficiency in leadership, digital expertise, and business acumen to spearhead the digital transformation journey, leveraging existing and emerging technologies. However, Digital Leadership focuses on achieving organisational objectives, delivering desired outcomes, and enhancing

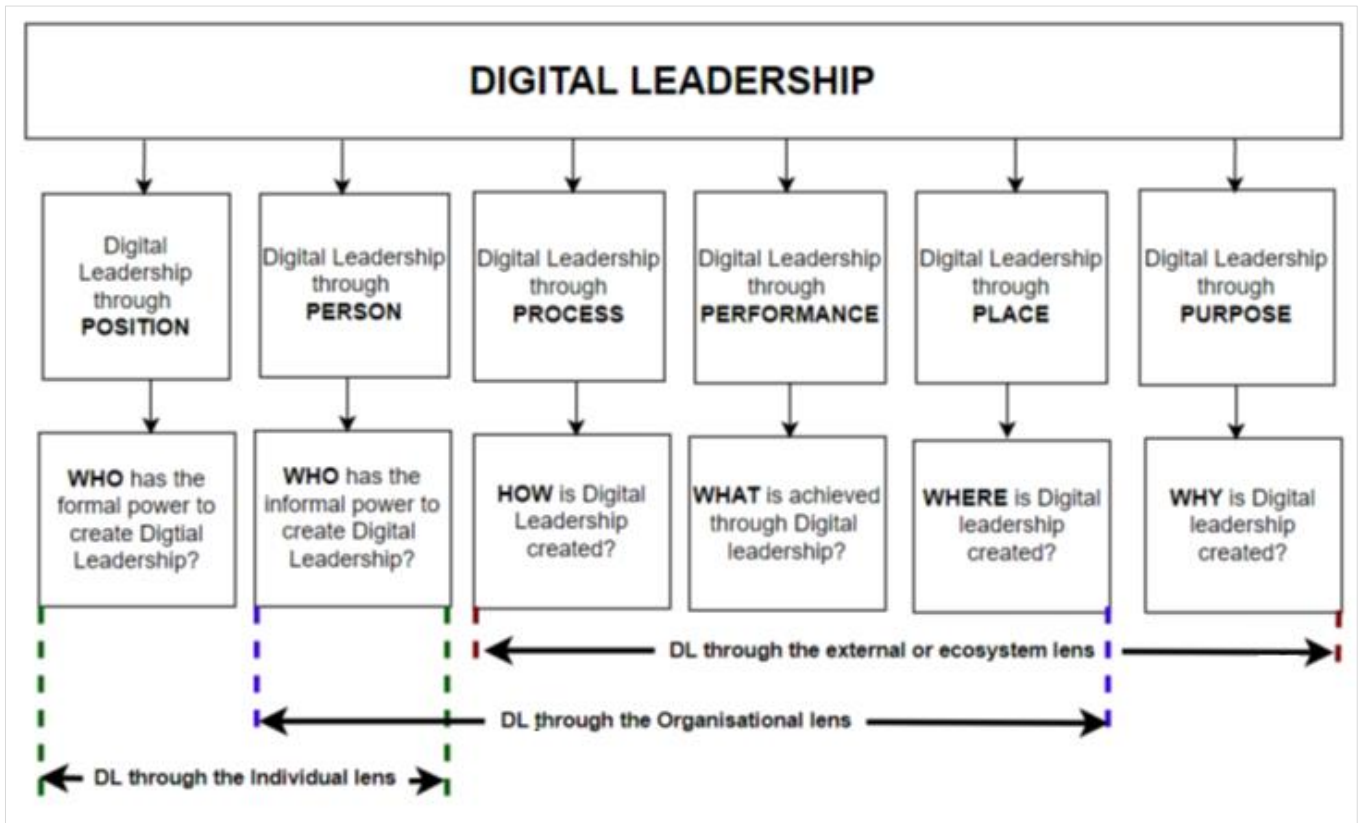
performance through the strategic application of digital tools and methodologies (Adie et al., 2024). Digital Leadership can therefore be seen as a construct from an Individual Level, Role Level and Organisational Level (Eberl & Drews, 2021).

#### ***2.4.1 Digital Leadership encompassing Individual Role, Strategic Role, and Organisational Performance perspectives***

According to Adie et al. (2022), there are two essential concepts in the field of digital leadership: Digital Leader and Digital Leadership. A Digital Leader is someone chosen for their leadership, digital, and business skills to lead digital transformation efforts, utilising both current and new technologies (Adie et al., 2022). On the other hand, Digital Leadership focuses on reaching organisational goals, achieving desired outcomes, and improving performance through digital tools and methods. It includes providing strategic benefits, transforming the organisation, and creating value (Adie et al., 2022). Digital leadership is therefore comprehensive, involving all levels of leadership and front-line service staff, although the degree of responsibility and accountability differs across roles (Karippur & Balaramachandran, 2022).

Jackson and Parry (2018) proposes a leadership framework that views leadership through six perspectives: position, person, process, performance, place, and purpose. Leadership through position and person focuses on the leader's role, responsibilities, skills, and personal attributes. Leadership through process examines the practices, relationships, and methods that leaders use to achieve organisational results. Leadership through performance evaluates the outcomes, performance measures, and criteria for assessing leaders. Leadership through place considers the context, organisational structure, cultural setting, and power dynamics. Finally, leadership through purpose is concerned with the goals or aspirations of leadership.

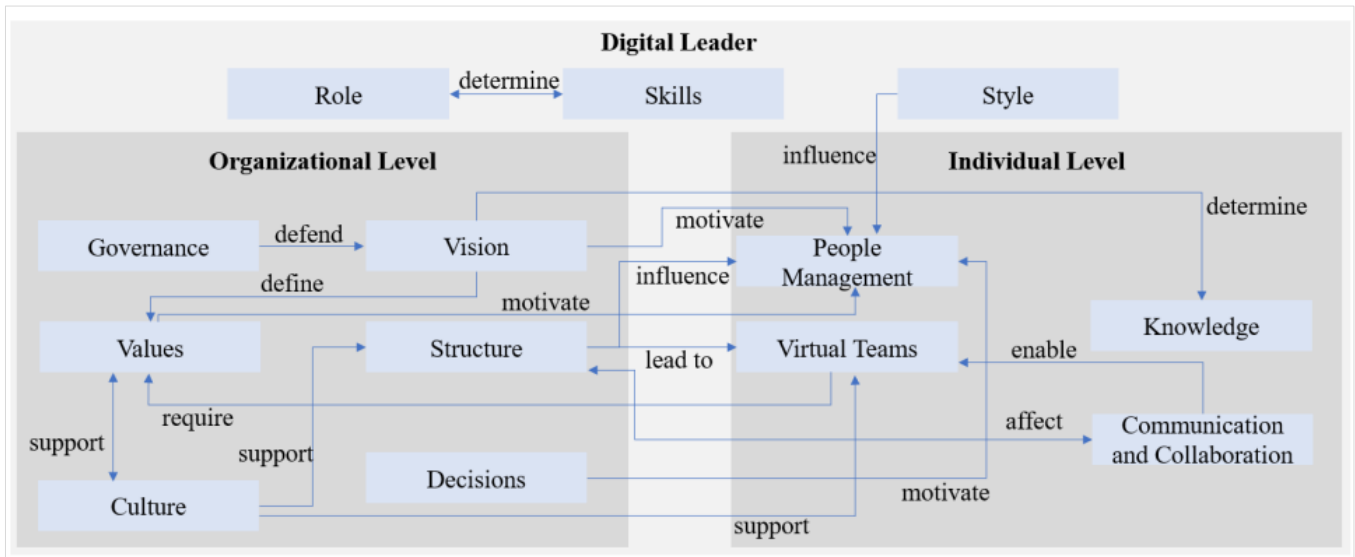
Figure 5 provides an overview of a Digital Leadership Conceptual Model as proposed by Adie et al. (2022), using Jackson and Parry (2018) leadership framework.



**Figure 5: Digital Leadership Conceptual Model (Adie et al., 2022)**

Jackson and Parry (2018) proposes a basic framework for understanding traditional leadership. This framework can serve as a foundation for studying digital leadership. However, digital leadership differs from traditional leadership (Adie et al., 2022).

According to research conducted by Eberl & Drews (2021), digital leadership is seen as a complex construct aiming for a customer-centered, digitally enabled, leading-edge business model by (i) transforming the role, skills, and style of the digital leader, (ii) realising a digital organisation, including governance, vision, values, structure, culture, and decision processes, and (iii) adjusting people management, virtual teams, knowledge, and communication and collaboration on the individual level as depicted in Figure 6.



**Figure 6: Determinants of Digital Leadership (Eberl & Drews, 2021)**

Digital Leadership can therefore be seen as a construct from an Individual Level, Role Level and Organisational Level (Eberl & Drews, 2021).

Given the need to holistically modernise the criminal justice system, as discussed in Chapter 1, which involves agencies within the system achieving specific goals through digital advancements, this study explores relevant literature concerning Digital Leadership encompassing (i) Individual Role, (ii) Strategic Role, and (iii) Organisational Performance perspectives.

#### **2.4.1.1 Digital Leadership through an Individual Role**

Digital leadership often depends on the person rather than the position (Adie et al., 2022). This means that the individual leading the digital transformation of an organisation might not always be the person with the official title. In many cases, the manager responsible for the digital transformation is the one accountable, regardless of their position in the hierarchy.

Eberl and Drews (2021) suggests that the determinants of digital leadership through an individual level include people management, knowledge management, virtual teams, as well as collaboration and communication.

Digital leadership through a person also incorporates the leader's personal qualities, such as being transformational, transactional, visionary, ethical, or charismatic as it

relates to a leader's style (Eberl & Drews, 2021). According to Karippur and Balaramachandran (2022) a digital leader as a c-suite executive (e.g., CEO) can drive digital transformation by improving processes, engaging talent, and developing new business models.

Saputra and Aisyah (2021) indicates that a business leader, as a digital leader, creates a clear and meaningful vision and implement strategies for the digitalisation process through digital leadership. Benitez et al. (2022) agrees in that a digital leader encompass individuals who possess both strong business acumen (business-savvy) and practical, hands-on digital skills. Therefore, digital leadership involves a combination of digital, market, business, strategic, and interpersonal leadership skills crucial for steering the firm through digital transformation.

#### ***2.4.1.2 Digital Leadership through a Strategic Role***

The authority to establish leadership is critical as this strategic issue involves determining who holds the power to lead digital and/or business transformation (Jackson & Parry, 2018). In traditional IT leadership, the head of the IT department typically assumes this role by default, however, in digital leadership, it may be necessary to involve individuals at all organisational levels, including the board of directors, senior management, middle management, and lower levels (Adie et al., 2022). This decision affects whether traditional IT leadership suffices or if a broader, more inclusive digital leadership role is required to achieve extensive and rapid transformation (Westerman et al., 2014).

Eberl and Drews (2021) suggests that the factors influencing digital leadership as a strategic role encompass the specific responsibilities, approach, and skill set involved. They point out that 70% of companies achieving success in digital transformation have a designated role and an individual responsible (e.g., the Chief Digital Officer (CDO)). However, relying solely on the CDO role poses risks of a disconnected digital unit. Therefore, El Sawy et al. (2020) emphasises the significance of appointing modern day digital leaders (e.g., CDO) within multiple business units, but operating as a strategic collective role within the overall organisation.

Kokot et al. (2021) further suggests that digital transformation strategies should be done in collaboration with the board of directors, as boards can enhance company performance beyond the contributions of management alone. The strategic involvement and strong support of the board of directors are thus essential in amplifying digital leadership as a strategic role.

According to Klus & Müller (2021), executive leaders (e.g., c-suite) are responsible for reassessing corporate strategy and business models in line with digital transformation agendas. Thus, they play a crucial strategic role in establishing efficient frameworks and procedures, promoting favourable attitudes toward digitalisation within the workforce, and establishing the foundations for digital transformation.

#### ***2.4.1.3 Digital Leadership through Organisational Performance***

Digital leadership is a strategic approach that organisations adopt to enhance their overall performance. It addresses the fundamental inquiry as what achievements and value does an organisation reap from digital leadership. These achievements can be evaluated quantitatively, by examining organisational outputs and key performance indicators, as well as qualitatively, by assessing how stakeholders perceive the organisation and the value it provides to customers and citizens (Adie et al., 2022). These outcomes are pivotal because they serve as the foundation for evaluating the effectiveness of leadership and establishing its credibility.

Eberl and Drews (2021) suggest that the determinants of digital leadership and their impact on organisational performance encompass essential aspects such as the organisation's vision, core values, cultural norms, governance frameworks, decision-making mechanisms, and organisational structure. These components collectively shape the organisation's ability to leverage digital leadership effectively and achieve sustainable performance improvements.

According to Saddique et al. (2023), digital leadership has a beneficial impact on the long-term performance of organisations committed to sustainability by embracing digital leadership practices that enhances the resilience of sustainable organisational performance. This is echoed by Husban et al. (2022), in that digital leadership

enhances an organisation's performance where the combination of leadership and technological capabilities drives the organisation toward continuous success.

In the case of specific organisational achievements resulting from digital leadership, taking financial performance as an example, according to Senadjki et al. (2024), digital leadership positively impacts a company's digital transformation and financial performance. Khaw et al. (2022) agrees that digital leadership leads to sustainable performance for the organisation, its employees, and stakeholders.

#### ***2.4.1.4 Identified Gaps in reviewed literature pertaining to Strategies for Digital Leadership***

The reviewed literature on digital leadership provides valuable frameworks but reveals several gaps. Most studies focus on descriptive models and private-sector contexts, leaving limited insight into practical challenges in public-sector organisations like criminal justice organisations. The interaction between individual Digital Leaders and organisational Digital Leadership seems underexplored, and strategic roles beyond Chief Digital Officers seems rarely examined. Additionally, performance outcomes are often narrowly defined, focusing on financial or market metrics, with little attention to public-sector measures such as service efficiency and accountability. This study sought to address these gaps by exploring digital leadership practices in the South African criminal justice system organisations, examining distributed leadership, and considering broader, context-specific performance outcomes.

#### ***2.4.2 Proposition 2: Strategies for Digital Leadership***

Different Digital Leadership strategies (through an individual role, through a strategic role, through organisational performance) are employed to digitally transform criminal justice organisations, given their contexts.

## **2.5 Exploring Digital Leadership's Role in Establishing and Sustaining a Culture of Innovation and Agility**

### ***2.5.1 Digital Leadership's Role in Organisational Framing, Investment, and Managing Sustained Change for Digital Transformation***

Nuryadin et al. (2023) emphasised that digital transformation is crucial for gaining a business advantage by defining digital capability as an organisation's ability to understand and leverage digital technology to create business value.

Governments worldwide are increasingly using information systems to enhance efficiency and effectiveness in public administrations (Distel et al., 2019). However, successful digital transformation involves more than just adopting modern technologies; it requires organisations to prepare and implement thorough changes to leverage these technologies fully. This transformation significantly affects how work is organised and executed, necessitating organisational adjustments (Distel et al., 2019). This is aligned to Westerman et al. (2014) approach in that digital transformation involves not only implementing new technologies but also changing the overall approach to business management and strategy.

### ***2.5.2 A Holistic and Strategic Approach to Digital Transformation***

According to Westerman et al. (2014) there are four key elements to a digital transformation journey in an organisation as illustrated in Figure 7: (a) Framing the digital challenge, (b) Focusing investment, (c) Mobilising the organisation, and (d) Sustaining the transition.



**Figure 7: The digital transformation compass (Westerman et al., 2014)**

**a) Framing the digital challenge**

To effectively lead an organisation through digital transformation, leaders need to address several critical areas. First, it is essential to build awareness among top leaders about the potential threats and opportunities presented by digital technologies and the necessity of transformation (Westerman et al., 2014). Second, leaders must define their starting point by assessing the maturity of their digital competencies and identifying current strategic assets that can drive success (Westerman et al., 2014). This includes evaluating and challenging the existing business model from a digital perspective. Finally, creating a shared vision is crucial, where leaders need to align the

top leadership team around a unified vision for an organisations digital future (Westerman et al., 2014).

Effective digital leadership involves inspiring trust and commitment, advocating for digital initiatives, leading with clear vision and purpose, motivating others towards transformation, and persevering through challenges like resource constraints and evolving technologies (Magesa & Jonathan, 2020). These qualities enable leaders to drive successful digital innovation and transformation within their organisations.

According to Magesa & Jonathan (2020), digital leadership is tasked with initiating, overseeing, and securing funding for the digital transformation process. In initiating digital transformation, the assessment of digital maturity enables organisations to gauge the extent of transformation achieved (Haryanti et al., 2023). Simultaneously, it aids in devising strategies to enhance future transformation efforts to achieve higher levels of digital maturity, including implementing digital technologies that creates new business models (García-Morales et al., 2021).

The success of digital transformation relies on a strong synergy between the strategy for digital change and the innovation of business models, ensuring they are well-aligned (Mahboub & Sadok, 2023; van Tonder et al., 2020). van Tonder et al. (2020) agrees that it is therefore an imperative for business leaders to create a bold strategy and culture that would foster innovation in employees and encourage them to experiment with modern technologies within their business models.

Westerman et al. (2014) emphasises that in digital transformation, one of the most important leadership capability is that of creating a digital vision and fulfilling this vision through inspiring and motivating people. Schiuma et al. (2021) further expands on this by highlighting that since technological revolution reshapes all aspects of an organisation including organisational structure, management practices, product development, processes, decision-making and skills development, successful transformation starts with top leadership playing a crucial role in guiding organisations through digital transformation.

## **b) Focusing investment**

To successfully lead an organisation through digital transformation, leaders must translate their vision into actionable steps (Westerman et al., 2014). This involves converting the digital vision into strategic goals and creating a detailed roadmap of initial activities. Additionally, leaders need to establish effective governance mechanisms to ensure the transformation stays on the right track (Westerman et al., 2014). Funding the transformation is also crucial; this requires developing a balanced portfolio of digital investments and determining appropriate funding mechanisms to support the transformation process (Westerman et al., 2014).

Zaoui & Souissi (2020) argues that digital transformation goes beyond simply adopting innovative technologies or improving processes. It involves rethinking and adopting new business models and paradigms. As a corporate strategy, successful digital transformation can only be effectively implemented with the support of a digital roadmap with short and long-term goals. In this regard, digital leadership is crucial for initiating, managing, and securing funding for the digital transformation process within an organisation (Magesa & Jonathan, 2020).

According to Jewer & Van Der Meulen (2022), governance is crucial for successful digital transformation, ensuring coordination of digital initiatives aligned with the company's structure, culture, and priorities. Leadership is key, using structural, process, and relational mechanisms. Mulyana et al. (2021), however, argues that traditional IT governance mechanisms may no longer be effective in the digital era. Their research suggests that the mechanisms influencing digital transformation include dimensions such as strategic vision, strategic alignment, technology assets, know-how and intellectual property, digital capability, and a culture of innovation.

Philippart (2022) identifies governance and culture as crucial factors for successful digital transformation. Governance involves formalising rules and guiding stakeholders to shift from managing digital initiatives based on budget constraints to viewing them as transformative agendas. Meanwhile, cultural evolution is essential to ensure acceptance of digital transformation recommendations. Integrating human elements effectively, both externally with customers and internally with infrastructure and personnel, is vital for achieving comprehensive organisational transformation.

### **c) Mobilising the organisation**

Leaders of an organisation need to take several important steps to ensure successful digital transformation. First, they must clearly communicate the goals and benefits of digital transformation to the entire organisation, effectively signalling the ambitions of the initiative (Westerman et al., 2014). Additionally, leaders should build momentum with employees by co-creating solutions and involving those who will be responsible for implementing the changes, thus earning the right to engage the workforce (Westerman et al., 2014). Finally, it is essential to foster a culture shift by actively encouraging the use of digital technologies to change how people work and collaborate, setting new behaviours that align with the organisation's digital transformation objectives (Westerman et al., 2014).

According to Schiuma et al. (2021) digital transformation involves changing organisational culture to co-create new business models based on future goals. Leadership plays a vital role by encouraging this cultural shift, supporting ongoing innovation, and guiding the organisation through digital challenges. Leaders need skills to handle uncertainty, lead digital projects effectively, and manage changes within the organisation to ensure long-term success.

According to Elia et al. (2024) digital transformation enablers include a clear and widely communicated vision emphasising digital technology's crucial role, top management commitment with dedicated roles and investment, fostering a culture of creativity and risk-taking, promoting agile experimentation, coaching employees for autonomy, shared responsibility among teams, involving customers in service design, and fostering collaborative partnerships for knowledge sharing and expertise development.

### **d) Sustaining the transition**

Leaders within an organisation play a critical role in steering digital transformation by focusing on several key areas. First, they need to build foundational capabilities by strategically ramping up digital competencies and ensuring a robust digital infrastructure is in place. This involves cultivating strong relationships between IT and business units to facilitate smooth operational integration (Westerman et al., 2014).

Second, leaders must align reward structures to support transformation objectives effectively by ensuring incentives, rewards, and recognition systems are synchronised with digital goals encourages commitment and motivation among employees (Westerman et al., 2014). Lastly, leaders should establish a robust management process for measuring, monitoring, and iterating on digital initiatives (Westerman et al., 2014). This enables them to track progress comprehensively and adjust strategies as needed, ensuring adaptability in a rapidly changing digital landscape.

In sustaining the digital transition, specific leadership behaviours are required to manage any challenges associated with pervasive digital transformation. Weber et al. (2022) identified six key leadership roles for digital transformation. The Digital Pioneer understands trends and creates strategies. The Innovator drives change with creative ideas. Enablers promote flexible, collaborative environments. Mentors build relationships and support employee development. Networkers facilitate information sharing. Managers ensure task completion and efficient coordination. Together, these roles help organisations adapt and thrive in digital environments.

According to L. Nkomo and Kalisz (2023), the effective implementation of an organisation's digital transformation heavily depends on human factors such as organisational culture, workforce skills, training, and employee well-being. They emphasise that after addressing these people-centric elements, it becomes crucial for organisations to invest in technological infrastructure, as these elements play a pivotal role in driving the successful adoption of technology within the organisation.

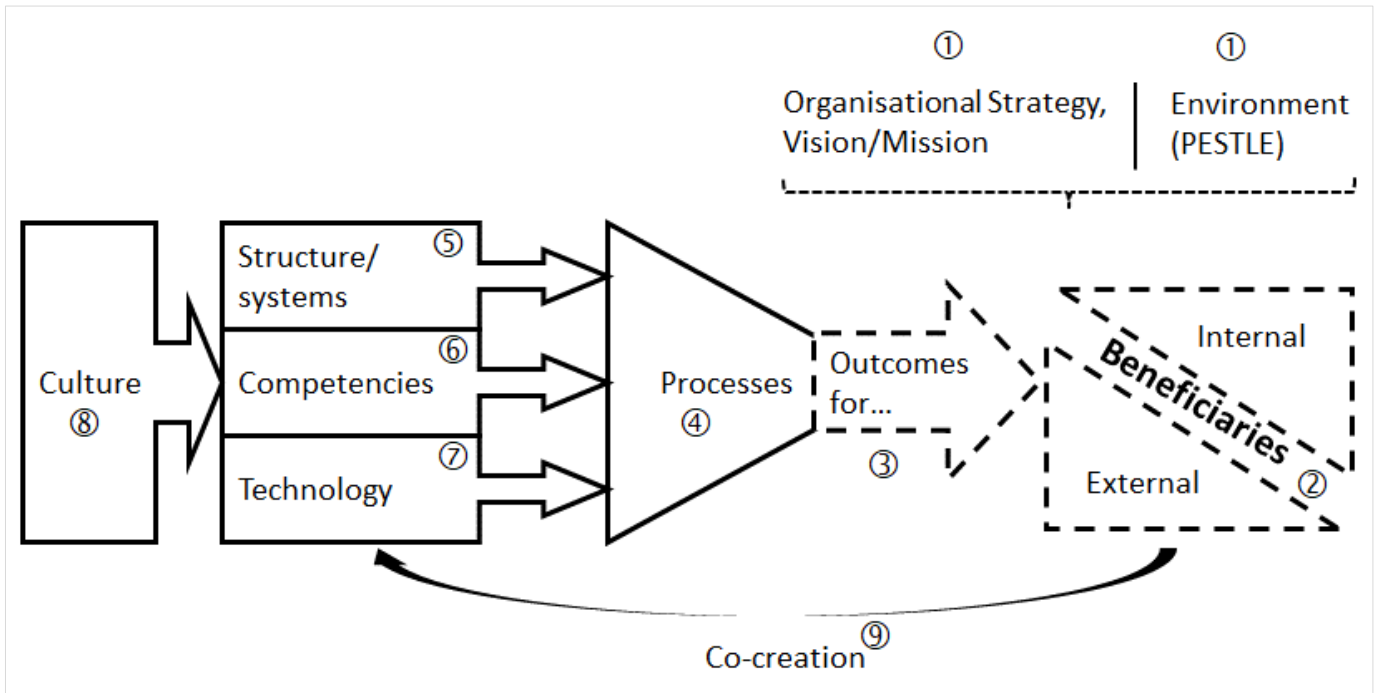
As stated by Kawiana (2023), in today's era of complex and dynamic digital transformation, strong digital leadership is essential for building a continually adaptive organisation. Digital leaders play a key role in creating a vision that aligns technology with the organisation's strategic goals, fostering a culture of ongoing innovation that promotes continuous experimentation and learning from failure, and enhancing employees' digital skills (Warner & Wäger, 2019).

### **2.5.3 Organisational Architecture Approach to Digital Transformation**

According to Adie et al. (2024) effective digital leaders promote business and organisational transformation and go beyond just digital goals, to create value and deliver positive results for their stakeholders. In achieving this, Eberl and Drews (2021), indicates that organisations are now considering and planning to adopt digital leadership as a strategy. This approach supports the development of digital business models by not only changing the behaviours of leaders and employees but by also revising organisational designs.

In the public sector, Kusanke et al. (2023) indicates that leaders in public administration find cultural and organisational changes in digital transformation particularly difficult to manage due to their hierarchical and rigid nature. This is confirmed by Nuryadin et al. (2023) in that traditional rigid and hierarchical organisational structures often clash with the flexible and collaborative nature of digital technologies, hindering governments' adoption of technological changes and their integration into existing work processes.

Brocke et al. (2020) contends that achieving successful transformation necessitates a comprehensive revolution of process transformation, structural transformation, cultural transformation, and strategic transformation. This aligns with Lee (2019) who suggests that applying organisational architecture in systematic design will assist digital leadership throughout an organisation in adapting their structures to support continuous digital transformation. Figure 8 outlines a proposed organisational architecture by Lee (2019).



**Figure 8: Proposed organisational architecture by Lee (2019)**

The organisational architecture by Lee (2019) can be summarised as follows:

- **Inputs into the Architecture:** two main inputs shape the architecture. The first is the organisational strategy, mission, and vision, outlining what the organisation aims to achieve in the short, medium, and long term and how it plans to do so (Lee, 2019). The second is the external environment, which also influences the architecture's design.
- **Beneficiaries:** these are the groups whose needs are served by the organisation, strategy, or project. Understanding and defining these beneficiaries are crucial, as they guide the architecture's purpose and organisational design (Lee, 2019).
- **Desired Outcomes:** the organisation must deliver specific outcomes to the beneficiaries, which are the realistic and aspirational deliverables or capabilities. These outcomes define why the organisation and its architecture exist and provide direction (Lee, 2019).
- **Delivery Processes:** processes are the combination of tasks, people, and resources needed to deliver outcomes to beneficiaries (Lee, 2019).

To support these processes, four organisational elements are essential:

- **Organisational Systems and Structures:** these must be in place to enable processes (Lee, 2019).
- **Competencies:** the people involved need the right knowledge, skills, and abilities to support the processes (Lee, 2019).
- **Technologies:** appropriate technologies must be available to support the processes (Lee, 2019).
- **Organisational culture:** this underlies and influences how everything is done within the organisation (Lee, 2019).

According to Lee (2019), organisational architectures help digital leadership with effective planning by aligning all necessary elements for success and ensuring no crucial part is missing. They also serve as communication tools for strategy, ensuring everyone in an organisation understands the overall goals. Additionally, they are useful for diagnosing failures, as issues often stem from an overlooked aspect of the organisational architecture.

#### ***2.5.4 A Connected Leadership Approach for Agile Digital Transformation***

Leadership approaches are changing significantly in the digital era. Traditional top-down structures are giving way to decentralised and collaborative models, enabling employees to provide valuable insights and data (Chauhan & Thangavelu, 2024). Digital leadership emphasises collaboration, transparency, and shared decision-making, where leaders play a role as facilitators of collective intelligence.

Ly (2024) suggests that there's a link between digital transformation leadership, organisational agility, and digital transformation. They propose that effective digital transformation leadership influences organisational agility and digital transformation through changes in organisational practices and employee behaviours.

According to Pandey et al. (2023), recognising the importance of coordinating between teams, businesses should create clear and open communication channels among their employees. This encourages collaboration across different functions, enhances the

sharing of knowledge and ideas, and helps build a supportive company culture that empowers employees and promotes innovation.

As stated by Bitzer et al. (2021), new technological opportunities cause constant changes in organisations, requiring ongoing adaptation. Digital transformation alone is not enough to manage these challenges. Organisations must also adopt flexible structures, processes, and a culture that supports adaptability. Therefore, digital transformation should be paired with agile and cultural transformations to enable necessary adjustments.

Connected Leadership is a departure from traditional hierarchical methods of command and control, emphasising influence as a means of leading (Hayward, 2016). Effective communication and connection across the organisation, rooted in shared assumptions and beliefs, are central to this approach. Understanding connected leadership is crucial in today's dynamic and uncertain environment (Hayward, 2016).

According to Hayward (2016), Connected Leadership proves effective when it integrates five interconnected factors: (a) clear purpose and direction, (b) authenticity, (c) decentralised decision-making, (d) collaborative success, and (e) agility.

**a) Clear purpose and direction**

Organisational unity flourishes when everyone pursues common goals and follows a clear direction set by leadership (Hayward, 2016). Millennials, in particular, seek purpose in work that aligns with their values and contributes to overall organisational objectives. Leadership plays a crucial role in this by articulating the vision and helping individuals grasp its significance.

**b) Authenticity**

Leaders who uphold ethical standards and build trust inspire dedication (Hayward, 2016). Fair judgment and unbiased decision-making encourage collaboration and strengthen relationships within the organisation. This approach sets clear guidelines for achieving goals with integrity, guiding the organisation's mission. Adapting these principles to fit the organisation's market and objectives enhances

understanding and support for its unique qualities. Leadership's role is crucial in behaving with honesty and fairness to foster trustworthy relationships.

**c) Decentralised decision-making**

Empowering teams involves letting frontline staff make customer-centric decisions that benefit both customers and the organisation (Hayward, 2016). Clearly defined decision-making roles are key. Strategic decisions remain centralised, while operational choices affecting services are best delegated to those closest to customers. Creating a supportive environment is crucial, where individuals feel safe to take risks, confident in their decisions, and supported regardless of outcomes. Leadership's role is to empower and guide others in making informed decisions.

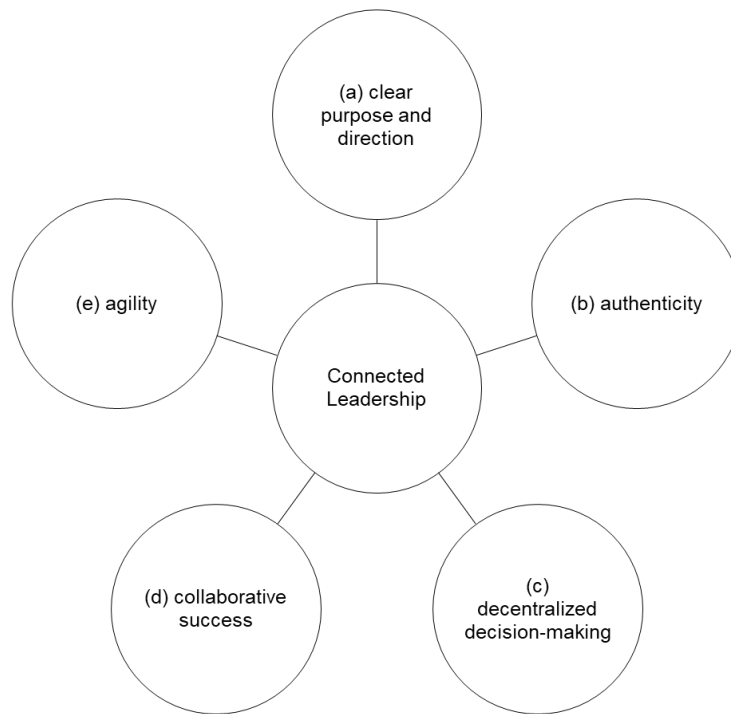
**d) Collaborative success**

Teamwork has gained prominence as a superior method for achieving high performance compared to traditional top-down management (Hayward, 2016). It emphasises strong cooperation within and between teams, facilitated by open communication and mutual influence among members. Reward systems prioritise team achievements over individual success. Leadership's crucial role lies in supporting efficient team operations and fostering effective collaboration throughout processes.

**e) Agility**

In today's dynamic environment, organisations benefit from flexibility over rigid solutions. Employees thrive in a culture that encourages knowledge sharing, experimentation, and learning from mistakes to drive rapid innovation. Leadership plays a vital role in promoting this culture of continuous improvement and adaptation within a strategic framework (Hayward, 2016).

Figure 9 provides an overview of Connected Leadership (Hayward, 2016).



**Figure 9: Connected Leadership overview (Hayward, 2016)**

### ***2.5.5 Identified Gaps in reviewed literature pertaining to Digital Leadership’s Role in Establishing and Sustaining a Culture of Innovation and Agility***

Despite extensive research on digital leadership, several gaps remain. Most studies of the reviewed literature seem to focus on private sector contexts, leaving limited insights into public sector organisations, like criminal justice system organisations. Leadership roles are often examined in isolation, with little understanding of how individual, strategic, and organisational roles interact to sustain innovation and agility. Connected leadership and decentralised decision-making seem underexplored, as are human and cultural factors such as workforce engagement, motivation, and risk-taking. Few studies of the reviewed literature seem to address the long-term sustainability of digital transformation initiatives. This study seeks to address these gaps by investigating how digital leadership fosters and maintains a culture of innovation and agility in complex, hierarchical public sector settings, like South Africa’s criminal justice system organisations.

### **2.5.6 Proposition 3: Digital Leadership's Role in Establishing and Sustaining a Culture of Innovation and Agility**

Digital Leadership employs organisational-wide integration approaches (holistic and strategic approach, organisational architecture approach, connected leadership approach) to cultivate and sustain a digital transformation culture of innovation and agility in criminal justice organisations, given their contexts.

## **2.6 Analytical Framework**

The following section provides an overview of the study's theoretical and empirical concepts, discussing the theoretical frameworks and empirical concepts that are utilised to support the study.

### **2.6.1 Theoretical Framework**

According to Abbu et al. (2022) the main difference between digitally mature and digitally developing organisations lies in the human qualities of their digital leaders. However, there is no standard method to evaluate the human traits of successful digital leaders. Leadership style is made up of the traits, skills, and behaviours that leaders use when they interact with their followers (Karippur & Balaramachandran, 2022; Oberer & Erkollar, 2018).

Adie et al. (2024) indicates that that digital leadership should be understood within the broader context of leadership theories and practices. It is important to recognise how digital leadership differs from traditional leadership. For example, digital leadership might be more collaborative and decentralised, or more focused on business and technology compared to other types of leadership (Sağbaşı & Erdoğan, 2022).

Digital leadership fits within a broader framework of leadership theories, including Transformational, Transactional, and Charismatic leadership (Adie et al., 2022). These theories describe not only the traits and behaviours of leaders but also the outcomes they are expected to achieve (Alsarrani et al., 2021).

### **2.6.1.1 Transformational Leadership**

#### **(i) Grasping Transformational Leadership**

Transformational leadership is a style where leaders inspire and motivate their followers to achieve outstanding results while supporting their personal development. These leaders can create significant change by forming a clear vision, communicating it effectively, and setting a positive example (Bass, 1985). Transformational leaders aim to transform both their organisations and the people within them by questioning the status quo and promoting innovation.

Transformational leaders demonstrate four key behaviours: being role models, inspiring others, encouraging creativity, and providing personal support. Being role models, they earn the respect and trust of their team (Reza, 2019). By inspiring others, they communicate a clear and compelling vision that motivates everyone. They encourage creativity by promoting critical thinking and new ideas (Chitiga, 2018). They offer personalised support and coaching to help each team member grow.

Studies have found that transformational leadership can result in several positive effects, such as higher employee satisfaction, stronger organisational commitment, and better performance (Hamilton et al., 2012). Transformational leaders are recognised for creating a positive workplace culture and achieving long-term success by empowering their team members.

In their research, Asif and Rathore (2021) found that leadership styles in the public sector are changing from being authoritative, passive, and submissive to becoming more inclusive, transformative, ethical, and empowering.

In the public sector, transformational leadership has been associated with better organisational results and higher employee engagement (Donkor, 2021). Leaders in this field encounter unique obstacles, like bureaucratic restrictions and limited resources, which make the transformational style especially useful. By creating a shared vision and encouraging a culture of ongoing improvement, transformational leaders can overcome these challenges and bring about significant positive changes in public organisations (Kryvoi, 2010).

## **(ii) Elements of Transformational Leadership Traits within Digital Leadership**

According to Schiuma et al. (2021) transformational leadership in the digital realm is an ethics-driven approach that integrates values and long-term stakeholder interests. It emphasises challenging the status quo and fostering innovative solutions, supporting organisational decision-making and transformation efforts through problem-solving and alternative opportunity identification.

Ly (2024) argues that the effective adoption of digital transformation is likely to occur when leaders demonstrate transformational leadership qualities, such as building trust among team members and prioritising their professional growth alongside digital initiatives. Mihardjo & Furinto (2018) suggests that digital leadership capability merges visionary and transformational leadership skills with digital attitude capabilities, including knowledge and experience in digital technologies.

According to Bunjak et al. (2022) transformational leaders serve as catalysts for change, inspiring their followers to develop into leaders themselves. Followers require a leader who can clearly communicate a shared vision and actively involve them in driving digital change and innovation at work (Jun & Lee, 2023; Magesa & Jonathan, 2020).

In the realm of digital environments, İşcan et al (2014) and Trenerry et al. (2021) contends that transformational leadership proves more effective as it correlates with improved employee performance, job satisfaction, and greater commitment in a digital environment. This is supported by Carreiro and Oliveira (2019), and Narbona (2016) in that this leadership style also promotes the adoption of technological innovations within organisations.

Schiuma et al. (2024) suggests that a transformative digital leader should be pragmatic, applying digital knowledge effectively. They should aim for ethical digital wealth, foster environments for digital growth, and communicate ideas clearly. Additionally, they should motivate others to embrace digital transformation and stay updated on the latest technologies.

### **(iii) Analysing the discrepancies between Digital Leadership and Transformational Leadership**

Traditional transformational leadership, although successful in inspiring and motivating followers toward a common goal, does not fully meet the requirements of digital leadership (Sow & Aborbie, 2018). Digital leadership requires distinct competencies due to rapid technological advancements, quick decision-making, and the use of digital tools and strategies as part of organisational architectures (Tagscherer & Carbon, 2023).

In their research on digital transformation projects, Huang et al. (2023) argued that while transformational leadership boosts team capability and commitment, digital transformation projects need flexible leadership to adapt to changes. The self-centred focus of transformational leadership and its emphasis on radical changes can result in high-risk decisions and neglect the small, incremental improvements necessary for long-term strategy and continuous adaptation.

Digital leadership therefore requires leaders who can empower teams to experiment, adapt quickly to change, and leverage digital technologies to drive organisational success (Tagscherer & Carbon, 2023).

In today's digital era, being transparent, open, and collaborating across an organisation is crucial (Chauhan & Thangavelu, 2024). However, traditional transformational leaders might find it challenging to fully adopt this approach because they usually prefer a central control and hierarchical ways of communicating. On the other hand, digital leadership excels in fostering open communication, and sharing knowledge leveraging digital tools (Chauhan & Thangavelu, 2024; Djati et al., 2020).

Although traditional transformational leadership has worked well in various settings, its emphasis on hierarchy and long-term goals may not completely match the need for agility, decentralisation, and digital integration that is essential for effective digital leadership in the digital realm of today (Büyükebeşe et al., 2022).

### **2.6.1.2 Transactional Leadership**

#### **(i) Grasping Transactional Leadership**

The concept of "transactional leadership" was first introduced by Burns (1979), who suggested that the relationship between leaders and employees is based on an exchange of power and benefits. It is a leadership style that focuses on achieving organisational goals by using power, rewards, and punishment mechanisms (Bass, 1985).

Transactional leadership operates through an exchange process where leaders establish goals, oversee progress, and regulate outcomes (Antonakis et al., 2003). It comprises three primary types: contingent reward leadership, management-by-exception active, and management-by-exception passive (Bass et al., 2003; Hasija et al., 2019). Contingent reward leadership involves clarifying roles and tasks for followers and offering rewards, whether material or psychological, contingent upon meeting agreed-upon obligations (Bass et al., 2003; Frangieh & Rusu, 2021). In contrast, management-by-exception *active* entails leaders actively monitoring performance to ensure standards are upheld, intervening promptly to address deviations (Bass et al., 2003; Willis et al., 2017). On the other hand, management-by-exception passive leaders intervene reactively, stepping in after issues arise or mistakes have been made to rectify situations (Bass & Avolio, 1994; Rowold & Schlotz, 2008).

Transactional leaders emphasise performance management to drive organisational growth by setting goals, monitoring progress through key performance indicators (KPIs), and making adjustments as needed to achieve objectives (Garengo & Betto, 2024). However, Talajic et al. (2022) suggests that Transactional leadership prioritises results over interpersonal relationships, leading to low trust and minimal focus on educating or developing individuals.

Transactional leadership promotes teamwork through motivation, collaboration and employee engagement, fostering trust and knowledge sharing among team members to enhance organisational performance and commitment (Ramli et al., 2019; Suhendra, 2021; Udin et al., 2022). However, it is challenging to balance teamwork

with individual autonomy, as too much focus on collaboration can hinder independent thinking, decision-making and individual empowerment (Young et al., 2021).

As in the case of Transformational Leaders, Transactional leaders also recognise the importance of organisational change, excel in leading transformation and improvements, and adeptly respond to opportunities and challenges by taking decisive action (Moosa et al., 2023). However, while adapting, transactional leaders must also make sure they stay focused on the organisation's core values and long-term vision (Jaqua, 2021).

Transactional leaders prioritise employee development through training and growth opportunities, recognising employees as crucial assets for sustainable organisational progress (Aljumah, 2023). However, Qiang et al. (2023) argues that this approach might foster dependency on the leader, potentially restricting employees' ability to autonomously grow, innovate and develop.

Transactional leaders prioritise customer service and satisfaction, recognising customers as essential stakeholders, aiming to meet their needs and expectations to build trust and loyalty (Vieira et al., 2018). However, while focusing on pleasing customers, these leaders must also ensure they prioritise the well-being and satisfaction of their employees (Chandila et al., 2023).

According to Van Wart (2013), leaders in the public sector often show greater proficiency in transactional skills. Public sector employees lead traditionally by transactional style leadership tend to also show greater motivation for public service (Hameduddin & Engbers, 2022).

Nguyen et al. (2022) in their research further suggests a public-values focused transactional leadership. This conceptualised type of transactional leadership in the public sector focuses on enhancing organisational commitment, communication, and motivation by emphasising public values.

## **(ii) Elements of Transactional Leadership Traits within Digital Leadership**

Braf and Melin (2020) research suggests that while there is a trend towards transformational leadership, it might actually become more transactional due to the extensive data collection in the digital age, which increases control. This is supported

by Faraz et al. (2018), Hussain et al. (2017) and Udin et al. (2022) in that transactional leadership positively influences knowledge sharing through data, which helps promote innovative work behaviour in today's digital age.

Wang et al. (2021) argues that the transactional leadership style plays a greater role in creating a competitive advantage, especially when it comes to reliability and speed to market. In the digital context, transactional leadership supports IT-business alignment, enabling firms to seize market opportunities and understand consumer behaviour for competitive advantage (Wang et al., 2021).

### **(iii) Analysing the discrepancies between Digital Leadership and Transactional Leadership**

Transactional leadership tends to focus on routine tasks and adherence to established procedures. This can stifle creativity and innovation, which are crucial for navigating the fast-paced digital landscape due to their risk averse style (Duan et al., 2022; Imran et al., 2021). Leaders who prioritise transactional approaches may struggle to foster the innovative culture needed for digital transformation (Alheet et al., 2021).

Transactional leadership often emphasises maintaining existing processes and systems, which can lead to resistance to change. In the digital world, where rapid adaptation and change are essential, transactional leaders may find it difficult to lead successful digital transformation efforts (Araujo et al., 2021; Chua et al., 2022; Musaigwa & Kalitanyi, 2024).

Transactional leadership often focuses on short-term goals and immediate results, which can undermine long-term strategic vision. In digital leadership, a forward-thinking approach is necessary to anticipate future trends and opportunities (Schiuma, Schettini, & Santarsiero, 2021; Warner & Wäger, 2019).

Employees may feel less motivated under a transactional leader because this style emphasises rewards and penalties based on performance. High engagement, including cross functional engagement and commitment are crucial for driving digital initiatives, and transactional approaches may not fully support these needs (Guzmán et al., 2020; Philip, 2021; Sony et al., 2020).

Transactional leaders typically focus on managing current tasks and achieving specific targets rather than inspiring a shared vision. Digital leadership often requires the ability to motivate and align teams around a compelling digital vision, which transactional leaders may struggle with (Guzmán et al., 2020; Kwiotkowska et al., 2021).

### **2.6.1.3 Charismatic Leadership**

#### **(i) Grasping Charismatic Leadership**

Charismatic leaders are perceived to have extraordinary or superhuman traits, which evoke strong emotional responses from their followers (Weber, 1947). This results in unwavering obedience, loyalty, and dedication to the leader and their mission. The leaders' self-assurance encourages followers to pursue organisational goals with greater confidence (House, 1976).

Weber (1947) charismatic model has two key points. First, followers have unmet goals and needs and secondly, due to these unmet needs, followers are attracted to charismatic leaders who they believe can help them achieve their goals (Ramasundaram & Aiswarya, 2022). This creates shared interests and objectives between leaders and followers, making it essential for followers to connect with the charismatic leader.

Therefore, Charismatic leadership often appears in uncertain and difficult situations where leaders need to boost their team's confidence and foster a sense of unity and shared goals (Dehghanan et al., 2021). A charismatic leader benefits from having high expertise because it helps build trust and respect.

People who are considered charismatic are often politicians, movement leaders, CEOs, celebrities, and other well-known individuals, such as Donald Trump, Barack Obama, Steve Jobs, Mahatma Gandhi, Oprah Winfrey, and Nelson Mandela (Silan, 2022).

According to Antonakis et al. (2016), a leader's "charisma" is their skill in communicating information in a way that is symbolic, value-driven, and emotional. This can be a key method for leaders to influence others (Antonakis et al., 2021). Cohen

and Yoon (2021) argue that “charisma” can be a key determinant in leadership emergence and that this trait can be developed.

In their research, Javidan and Waldman (2003) found that charismatic leadership in the public sector consists of four dimensions: (1) energy and determination, (2) vision, (3) challenge and encouragement, and (4) risk-taking. However, they argue that while charismatic leadership is similarly understood in the public sector, it may not produce the same performance or motivational results as in the private sector due to the public sector's bureaucratic nature. However, Luu and Thao (2018) argues that addressing public service failures effectively to improve citizen satisfaction, is positively related to the role of charismatic leadership styles in the recovery process. This is backed by Tavares et al. (2021), who argue that when leaders are committed to public value, it is positively linked to how charismatic they are perceived. In turn, this perception of charisma is connected to lower employee turnover in high-stress and demanding work environments, such as the public sector.

## **(ii) Elements of Charismatic Leadership within Digital Leadership**

Research by Loney-Burnett and Geraldine (2022) on competencies and character traits for public-sector IT leaders found that charismatic leadership helped employees adjust to a digital, hybrid work environment and adapt to changes in the organisational structure. This is supported by (Nieken, 2023), who argue that the rise of remote and gig work in today's labour market requires skilled digital leaders to use charismatic leadership tactics to boost follower performance in virtual communication.

According to Zhao et al. (2021), charismatic leadership had a strong positive impact on the innovation performance of employees. This effect was partly influenced by how employees identified with their leadership, their profession, and their organisation. This is supported by Alblooshi et al. (2021) and Figueiredo et al. (2022), in that charismatic leadership boosts innovation by encouraging new ideas and creating a strong team sense of belonging, which enhances cooperation and collaboration through unity, commitment, trust, and teamwork.

### **(iii) Analysing the discrepancies between Digital Leadership and Charismatic Leadership**

Charismatic leadership is highly effective in traditional and challenging environments but may face limitations in highly structured, bureaucratic settings like the public sector (Javidan & Waldman, 2003). Digital leadership, on the other hand, is specifically tailored to managing digital transformation and remote work, which requires different competencies compared to traditional charismatic leadership (Loney-Burnett & Geraldine, 2022).

While charismatic leadership emphasises emotional influence and personal traits to inspire and unite followers, digital leadership needs a blend of charisma with technological and managerial skills to address digital challenges (Loney-Burnett & Geraldine, 2022).

The role of charisma in digital leadership is beneficial but must be integrated with technical expertise and adaptability to be fully effective in digital contexts (Nieken, 2023).

Charismatic leadership boosts innovation by fostering a sense of belonging and collaboration. However, digital leadership must also address technological and structural challenges to enhance performance in digital environments (Figueiredo et al., 2022; Tavares et al., 2021).

#### ***2.6.1.4 Connecting the Theoretical Framework to the context of South African criminal justice system organisations***

The theoretical perspectives of transformational, transactional, and charismatic leadership provide a valuable lens through which to examine digital leadership within South African criminal justice organisations. Each framework highlights particular leadership traits, behaviours, and outcomes that are directly relevant to the criminal justice organisations complex realities of bureaucracy, resource constraints, and high public accountability.

In the South African criminal justice organisations, transformational leadership is particularly significant as leaders are expected to inspire trust, build shared vision, and

foster innovation despite bureaucratic restrictions and limited resources. This aligns with the sector's need to move beyond rigid processes and cultivate a culture of collaboration and continuous improvement to enable digital transformation. For example, transformational elements such as motivating staff, fostering innovation, and promoting ethical leadership directly support the introduction of integrated digital case management systems and the shift towards data-driven decision-making.

Transactional leadership is also highly relevant in the criminal justice organisations, where hierarchical structures and strict procedural compliance remain dominant. Digital initiatives often rely on measurable outcomes, adherence to legal frameworks, and accountability mechanisms, which transactional leadership supports through performance monitoring and clear role expectations. This style may help ensure that digital reforms, such as the rollout of biometric systems or digitised court processes, are implemented consistently and in line with statutory requirements. However, without integration with transformational practices, transactional leadership may risk entrenching a compliance-driven culture that resists innovation.

Charismatic leadership, meanwhile, resonates in a South African context where criminal justice organisations often operate in environments of public scrutiny and limited trust. Leaders with charisma can inspire confidence among employees, foster citizen trust, and build momentum for change during times of uncertainty. In digital transformation, charismatic traits such as articulating a compelling vision and uniting stakeholders can help overcome scepticism about new technologies and promote acceptance across diverse justice organisations.

Taken together, these leadership theories illustrate that while transformational, transactional, and charismatic styles each bring value, none alone fully captures the competencies required for successful digital transformation. Digital leadership emerges as an integrative approach that builds on these theories but goes further by embedding technological fluency, agility, collaboration, and ethical considerations. For South Africa's criminal justice organisations, digital leadership thus represents a necessary evolution of leadership practice, one that balances accountability and compliance (transactional), vision and innovation (transformational), and trust-building (charismatic) with the digital skills and strategies needed to navigate systemic change.

### **2.6.1.5 Conclusion on Theoretical Frameworks**

The analysis of leadership theoretical frameworks reveals both significant overlaps and notable discrepancies between traditional leadership styles and their digital counterparts.

Transformational leadership, while effective in fostering motivation, innovation, and organisational change, faces challenges in the digital realm where rapid technological advancements and the need for agile decision-making are paramount. Although transformational leaders excel in inspiring and guiding teams, their tendency to emphasise long-term visions and hierarchical structures may hinder their adaptability in fast-evolving digital environments.

On the other hand, transactional leadership, with its focus on performance management and rewards, provides a structured approach that supports organisational goals but may lack the flexibility required for digital transformation. Its emphasis on maintaining existing processes can stifle innovation and slow adaptation to innovative technologies.

Charismatic leadership, known for its emotional influence and ability to unite followers, is beneficial in traditional settings but needs to be complemented by technical skills and adaptability to address the complexities of digital leadership effectively. The integration of charismatic traits with digital competencies emerges as crucial for addressing both the technological and structural challenges in modern organisations.

Overall, while each leadership style contributes valuable elements to the discourse on effective leadership, their application in digital contexts necessitates a nuanced understanding and adaptation to meet the demands of today's dynamic and technology-driven landscape.

With the rise of digital technologies, leadership now involves social influence that is strengthened by advanced information technology, managerial innovation, and changes in leadership practices. However, the new skills required for digital leadership do not replace traditional leadership traits. Instead, future leadership will need to blend traditional leadership skills with new ones to effectively guide organisations through the digital age (Habsi et al., 2020).

### **2.6.2 Conceptual Framework**

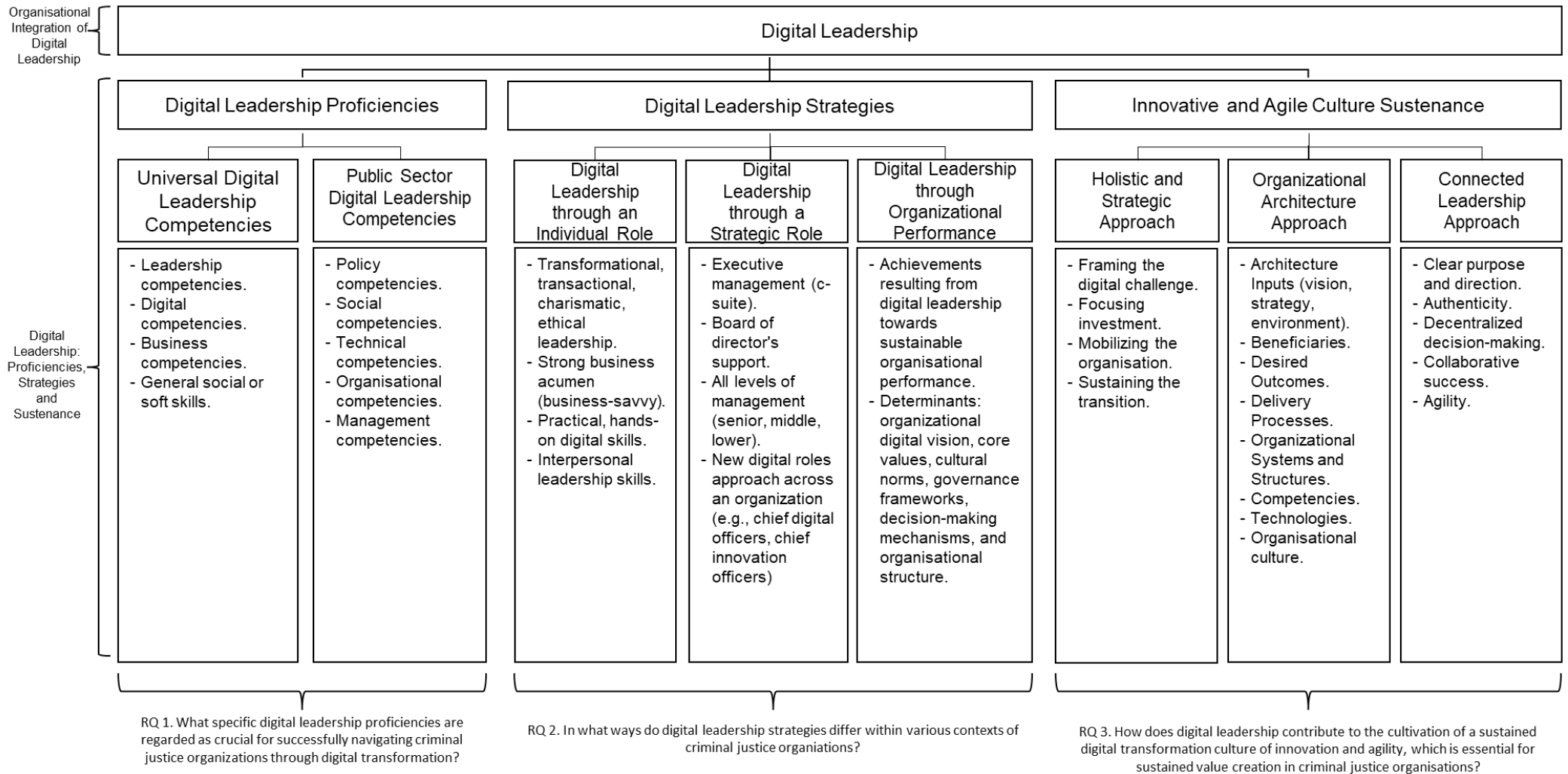
In exploring the digital transformation of South Africa's Criminal Justice System, this research has investigated how digital leadership plays a crucial role. The conceptual framework (Figure 10) centres on how effectively integrating digital leadership within criminal justice organisations can drive successful digital transformation.

It has examined key aspects such as the essential digital leadership proficiencies needed for guiding these organisations through technological changes. The framework also considers how will digital leadership strategies vary across different criminal justice contexts and how these strategies influence the development of an innovative and agile culture, for sustaining long-term value creation in these organisations.

The research aimed to address three key questions:

- Firstly, what digital leadership proficiencies are crucial for navigating digital transformation in criminal justice?
- Secondly, how do digital leadership strategies differ across various criminal justice contexts?
- Thirdly, how does digital leadership foster a culture of innovation and agility essential for ongoing success in these organisations?

# Digital Transformation of the Criminal Justice System in South Africa



**Figure 10: Conceptual framework**

## **2.7 Summary of Literature Review**

This literature review highlights the complex nature of Digital Leadership and its crucial role in guiding organisations through digital transformation.

Effective digital leaders need a broad range of skills, including leadership, digital expertise, business acumen, and soft skills, tailored to both general and public sector needs.

The literature review also emphasises that digital leadership involves three key aspects: the leader's personal attributes, their strategic role, and the impact on organisational performance. Although digital leadership incorporates elements of charismatic, transformational, and transactional leadership, it also requires a mix of technical skills and strategic vision. Current literature shows that while digital leadership builds on traditional frameworks, it must adapt to the rapid pace of technological change and remote work.

Furthermore, to support successful digital transformation, organisations must align their strategies, resources, and governance with innovative technologies. Embracing a connected leadership approach that fosters collaboration, and decentralisation can enhance agility and innovation. As South Africa's criminal justice system organisations face unique challenges, adopting these leadership strategies will be crucial for creating a sustainable culture of innovation and adaptability.

### ***2.7.1 Proposition 1***

Successfully navigating criminal justice organisations through digital transformation requires Digital Leadership with a diverse set of proficiencies, which includes universal and public sector specific digital leadership competencies.

### **2.7.2 Proposition 2**

Different Digital Leadership strategies (through an individual role, through a strategic role, through organisational performance) are employed to digitally transform criminal justice organisations, given their contexts.

### **2.7.1 Proposition 3**

Digital Leadership employs organisational-wide integration approaches (holistic and strategic approach, organisational architecture approach, connected leadership approach) to cultivate and sustain a digital transformation culture of innovation and agility in criminal justice organisations, given their contexts.

## **2.8 Chapter Summary**

This chapter reviewed key literature and theories on digital leadership, focusing on essential proficiencies, strategies, and its role in fostering innovation and agility. It also outlined the analytical framework and a conceptual framework that guided this study. The next chapter focuses on the research methodology that was applied for the study.

## **CHAPTER 3. RESEARCH METHODOLOGY**

### **3.1 Chapter Introduction**

This chapter outlines the research methodology that was used in the study. It begins by discussing the research paradigm, approach, and design, which guided the study's qualitative nature. The chapter then details the data collection methods, including the target population, sampling, and research instruments. It further explains data analysis strategies and addresses possible challenges. Finally, it covers quality assurance and ethical considerations to ensure the study's credibility and integrity.

### **3.2 Research Paradigm**

The research paradigms (interpretivism, constructivism, subjectivism, and value-laden inquiry) each contribute uniquely to studying digital leadership in the criminal justice organisations in South Africa (Patton, 2002). Interpretivism explores subjective experiences and meanings in digital leadership. Constructivism recognises that perceptions of digital transformation are socially constructed within the criminal justice sector. Subjectivism highlights the importance of personal experiences in shaping leaders' insights on transformation strategies (Lim, 2023). Value-laden inquiry examines ethical and personal values influencing decision-making among digital leaders. Together, these perspectives create a comprehensive framework for understanding digital leadership's role in driving digital transformation in the criminal justice organisations in South Africa as outlined further below.

#### ***3.2.1 Chosen Research Paradigm: Interpretivism***

Interpretivism was suitable for this study as it emphasises understanding the subjective experiences and meanings that individuals attach to their actions and social contexts (Junjie & Yingxin, 2022; Patton, 2002). Digital leadership and transformation in the criminal justice system organisations are complex phenomena influenced by leaders' interpretations and interactions within their specific environments. This paradigm

allowed for a deep exploration of how digital leaders perceive and enact their roles, which was critical for addressing this studies research questions.

### **3.2.2 *Ontology: Constructivism***

Constructivism suggests that reality is socially constructed through human interaction and interpretation (Baur, 2010; Creswell & Creswell, 2018; Patton, 2002). In the context of digital leadership, this perspective acknowledges that leaders' understandings of digital transformation are shaped by their experiences, organisational culture, and interactions with others. This ontological stance was appropriate because it recognises the complex and dynamic nature of digital leadership within the criminal justice organisations. By adopting a constructivist ontology, the study has captured the multiple realities and perspectives of leaders, which is essential for a comprehensive analysis (Pignot & Thompson, 2024). This approach ensured that the diverse and subjective experiences of leaders are considered, providing a deeper understanding of how digital leadership operates and evolves within specific organisational contexts of South Africa's criminal justice system (Hay, 2016).

### **3.2.3 *Epistemology: Subjectivism***

Subjectivism asserts that knowledge is generated through subjective experiences and interpretations (Drapeau, 2015; Patton, 2002). In the context of this study, it meant that the insights into digital leadership and transformation were derived from the firsthand experiences and viewpoints of the leaders themselves. This epistemological stance was appropriate because it allowed for a rich, in-depth understanding of the unique experiences of leaders in navigating digital transformation, which aligns with the research questions. By focusing on the subjective experiences of the leaders, the study uncovered detailed and nuanced insights into the specific digital leadership proficiencies, strategies, and cultural contributions necessary for effective digital transformation within the criminal justice system in South Africa.

### **3.2.4 Axiology: Value-Laden Inquiry**

Axiology in this study acknowledges that the researcher's values and the values of the participants influence the research process and outcomes (Patton, 2002). Digital transformation within the criminal justice system is inherently influenced by ethical, cultural, and personal values held by leaders. These values shape their strategic decisions, organisational priorities, and approaches to innovation and agility. Recognising the value-laden nature of the inquiry was important as it allowed for a comprehensive understanding of how these ethical and cultural values influence digital leadership practices. By exploring these values, the study aimed to provide insights into the nuanced factors that drive or hinder successful digital transformation initiatives within the criminal justice context in South Africa.

## **3.3 Research approach**

### **3.3.1 Employing a Qualitative Research Approach**

A qualitative research approach was used in exploring the Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System, given the nature of the research context and the assumptions underlying a qualitative research approach (Cooper & Schindler, 2011; Hennink et al., 2019).

### **3.3.2 Justification for a Qualitative Research Approach**

Complexity and Contextual Understanding: Qualitative research allows for an in-depth exploration of complex phenomena within their natural settings (Creswell & Creswell, 2018; Hennink et al., 2019; Ugwu & Eze, 2023). The digital transformation of the organisations within South Africa's criminal justice system involves multifaceted interactions between technology, organisational processes, stakeholder engagement, and government policy frameworks. A qualitative approach has enabled this research to delve deeply into these contextual nuances, providing a rich understanding of how digital leadership influences and is influenced by these factors (Ugwu & Eze, 2023).

Exploration of Perspectives and Experiences: Qualitative methods are well-suited for capturing diverse perspectives and experiences of stakeholders (Hennink et al., 2019; Ugwu & Eze, 2023). In the context of the organisations within South Africa's criminal justice system, this could include perspectives from government officials, law enforcement agencies, legal professionals, technology providers, and citizens. Through interview techniques, qualitative research has uncovered the subjective interpretations, beliefs, and behaviours that shape digital leadership practices and outcomes (Hennink et al., 2019; Ugwu & Eze, 2023).

Data Collection Insights: Qualitative research allows flexibility in data collection, which is advantageous when studying dynamic and evolving contexts such as digital transformation (Hennink et al., 2019; Ugwu & Eze, 2023). The research had adapted approaches based on emerging data collection feedback to refine the understanding, over the research period. This adaptive nature was crucial in capturing digital transformation journey developments and insights within the organisations of South Africa's criminal justice system.

Capture Diversity: South Africa's diversity in legal frameworks, socio-economic conditions, and governance structures necessitates a method that can accommodate varied perspectives and experiences, which qualitative research was well suited for (Hennink et al., 2019; Ugwu & Eze, 2023).

Navigate Complexity: The interplay of historical legacies, political dynamics, and technological advancements requires a nuanced understanding that qualitative methods can provide through in-depth exploration (Hennink et al., 2019; Ugwu & Eze, 2023).

Inform Policy and Practice: Qualitative insights can inform policy makers and practitioners about effective digital leadership strategies that align with local contexts and address specific challenges within the organisations within South Africa's criminal justice system, which was an outcome that this research provided as part of its recommendations (Ugwu & Eze, 2023).

### **3.3.3 Assumptions of Using a Qualitative Research Approach**

**Richness of Data:** Qualitative research assumes that rich, detailed data is essential for understanding complex social phenomena (Hennink et al., 2019; Krauss, 2005; Ugwu & Eze, 2023). In the case of digital leadership in the organisations within South Africa's criminal justice system, this approach assumed that insights gained from in-depth interviews provided a comprehensive view of how digital strategies are conceived, implemented, and experienced by different stakeholders.

**Contextual Sensitivity:** Qualitative methods assume that context plays a critical role in shaping behaviours and outcomes (Hennink et al., 2019; Ugwu & Eze, 2023). For the organisations within South Africa's criminal justice system, this means acknowledging the unique socio-political, economic, and technological context of South Africa, which influences how digital leadership strategies are formulated and executed. Qualitative research allowed for contextual sensitivity by capturing the nuances and intricacies that quantitative methods may overlook.

**Interpretive Understanding:** Qualitative research assumes an interpretive stance, emphasising the subjective meanings individuals attach to their experiences (Hennink et al., 2019; Ugwu & Eze, 2023). In exploring digital leadership, this approach has enabled this research to uncover not only what digital strategies are being implemented but also why certain decisions are made, how they are perceived by stakeholders, and what implications they have for organisational practices and public service delivery.

Employing a qualitative research approach to study the Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System, has been justified by its ability to offer depth, contextual sensitivity, and interpretive understanding, aligning well with the complex and evolving nature of the research to be undertaken.

## **3.4 Research design**

### ***3.4.1 Adopting a Phenomenological Study Design***

The study design that has been adopted for this research was a Phenomenological study design (Cypress, 2018; Manen, 1997). A phenomenological study was an appropriate qualitative research approach for exploring the Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System. This approach aimed to understand and interpret the lived experiences of individuals regarding a particular phenomenon, in this case, being Digital Leadership in criminal justice organisations.

### ***3.4.2 Phenomenological Study Design: Aptness for Research Questions***

The following section evaluated the suitability of a phenomenological study design for each research question.

#### ***3.4.2.1 Research Question 1 (RQ 1): Digital Leadership Proficiencies***

To identify specific digital leadership proficiencies, it was essential to delve into the experiences and perceptions of leaders within the organisations within South Africa's criminal justice system. A phenomenological study allowed for in-depth interviews and discussions that uncovered the nuances of what these leaders consider crucial for navigating digital transformation (Ugwu & Eze, 2023). This approach provided a rich, detailed understanding of the subjective experiences of leaders, highlighting the competencies they find most important.

#### ***3.4.2.2 Research Question 2 (RQ 2): Contextual Differences in Digital Leadership Strategies***

Different contexts within criminal justice organisations (e.g., police, judiciary, correctional services) require varied digital leadership strategies. Through phenomenology, this research has explored these contextual differences by engaging with leaders across different sectors, allowing for a comparative analysis of their lived experiences (Barsoum, 2022). This method helped to capture the contextual subtleties

and variances in strategies, offering a comprehensive view of how digital leadership adapts to different settings, within criminal justice organisations.

### **3.4.2.3      *Research Question 3 (RQ 3): Cultivating and Sustaining a Digital Transformation Culture***

Understanding how digital leadership fostered a culture of innovation and agility involved exploring the experiences of leaders who have successfully implemented and sustained digital transformation. Phenomenology facilitated an in-depth exploration of these experiences, revealing the processes and practices that contribute to a lasting digital transformation culture (Barsoum, 2022). This approach allowed this research to gather detailed, first-hand accounts of how leaders perceive their role in cultivating a transformative culture, providing insights into the mechanisms behind successful digital transformation.

### **3.4.3      *Advantages and Disadvantages of Leveraging a Phenomenological Study Design***

While the phenomenological study approach offers significant advantages in terms of depth, context-specific insights, and understanding the lived experiences of digital leaders, it also presented challenges related to subjectivity, time, resources, and interpretative complexities (Easterby-Smith et al., 2008; Ugwu & Eze, 2023).

#### **3.4.3.1      *Advantages of Leveraging a Phenomenological Study Design***

In-depth Understanding: Phenomenology provides an in depth, rich understanding of the personal experiences and perspectives of digital leaders (Easterby-Smith et al., 2008; Ugwu & Eze, 2023). This has uncovered the specific proficiencies and strategies deemed crucial for digital transformation for organisations within South Africa's criminal justice system. Given the complexity and variability of digital leadership, this approach captured the detailed nuances and contextual differences that were essential for comprehensive insights.

**Captures Lived Experiences:** Phenomenology focuses on the lived experiences of individuals that offered a holistic view of how digital leadership was experienced and enacted in various contexts within the organisations of South Africa's criminal justice system (Easterby-Smith et al., 2008; Ugwu & Eze, 2023). This was particularly useful for understanding the diverse strategies and practices across different sectors such as policing, judiciary, and corrections.

**Context-Specific Insights:** Phenomenology emphasises the importance of context enabling this research to explore how digital leadership was influenced by and adapts to specific organisational environments and challenges (Easterby-Smith et al., 2008; Ugwu & Eze, 2023). It has assisted in identifying context-specific strategies and practices that contribute to successful digital transformation.

**Explores Meaning and Essence:** A phenomenological approach aims to understand the essence of experiences, revealing the underlying meanings and motivations behind digital leadership practices (Easterby-Smith et al., 2008; Ugwu & Eze, 2023). It provided a deeper understanding of how digital leadership contributes to fostering a culture of innovation and agility within the organisations of South Africa's criminal justice system.

**Flexibility in Data Collection:** Phenomenological research allows for flexible and open-ended data collection methods, such as in-depth interviews and focus groups (Easterby-Smith et al., 2008; Ugwu & Eze, 2023). This flexibility was crucial for exploring the complex and dynamic nature of digital leadership and transformation processes.

#### ***3.4.3.2 Disadvantages of Leveraging a Phenomenological Study Design***

**Time-Consuming:** Conducting a phenomenological study requires significant time for data collection and analysis due to the depth and detail involved (Easterby-Smith et al., 2008; Ugwu & Eze, 2023). This was somewhat challenging, given the fast-paced nature of digital transformation efforts and the need for timely insights.

**Subjectivity:** The subjective nature of phenomenological research can lead to biases and difficulties in ensuring objectivity and generalisability of findings (Easterby-Smith et al., 2008; Ugwu & Eze, 2023). It could be challenging to generalise the results across all criminal justice organisations or broader contexts outside South Africa.

**Interpretative Challenges:** Analysing and interpreting phenomenological data requires a high level of skill and experience to accurately capture and convey the essence of participants' experiences (Easterby-Smith et al., 2008; Ugwu & Eze, 2023). Misinterpretation of data could lead to inaccurate or incomplete understanding of digital leadership practices and their impact on transformation.

**Small Sample Sizes:** Phenomenological studies typically involve smaller purposive, sample sizes, which may limit the breadth of perspectives and experiences captured (Easterby-Smith et al., 2008; Ugwu & Eze, 2023). This could be a limitation in exploring the diverse and multifaceted nature of digital leadership across different organisations within the criminal justice system.

**Resource Intensive:** The intensive nature of phenomenological research requires substantial time (Easterby-Smith et al., 2008; Ugwu & Eze, 2023). Limited time may hinder the ability to conduct a comprehensive study, affecting the depth and quality of insights obtained.

A phenomenological study has been well-suited for exploring the Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System. It allowed for an in-depth understanding of the lived experiences of leaders, capturing the complexity and context-specific nuances essential for addressing the research questions comprehensively.

## **3.5 Data collection methods**

### ***3.5.1 Gathering Data through Semi-structured Interviews***

One-to-one semi-structured interviews with senior and executive leadership in identified organisations forming part of the criminal justice system were conducted to gather qualitative data. According to Gill et al. (2008), semi-structured interviews allows for flexibility while ensuring key topics related to digital leadership in line with the research questions are covered comprehensively. They indicate that flexibility of this method enables the discovery or creation of knowledge valuable to participants, which the researcher might not have anticipated. Accordingly, participants were thoughtfully and deliberately selected through purposive and iterative approaches to ensure rich, relevant insights for the study (Polkinghorne, 2005).

### ***3.5.2 Gathering Data through Semi-structured Interviews: Aptness for Research Questions***

The following section evaluated the suitability of gathering data through semi-structured interviews for each research question.

#### ***3.5.2.1 Research Question 1 (RQ 1): Digital Leadership Proficiencies***

One-to-one semi-structured interviews were ideal for exploring the nuanced perspectives of individual leaders regarding the proficiencies they deem crucial for navigating digital transformation in criminal justice organisations (Gill et al., 2008; Ugwu & Eze, 2023). This method allowed for probing questions and in-depth discussions to uncover detailed insights into specific leadership competencies (Creswell & Creswell, 2018; Jiménez & Orozco, 2021). A leaders' direct experiences and perceptions provided a rich source of data on the skills, knowledge, and behaviours that contribute to effective digital leadership in this unique context.

### ***3.5.2.2 Research Question 2 (RQ 2): Contextual Differences in Digital Leadership Strategies***

By conducting semi-structured interviews across different organisations and contexts within the criminal justice system (e.g., police, judiciary, corrections), one-to-one interviews facilitated a detailed exploration of how digital leadership strategies vary. Leaders articulated the specific challenges, priorities, and adaptations they made based on their organisational roles and contexts (Gill et al., 2008). This method enabled a comparative analysis, helping to identify patterns of variation and commonalities in digital leadership strategies across the diverse organisations of the criminal justice system (Ugwu & Eze, 2023).

### ***3.5.2.3 Research Question 3 (RQ 3): Cultivating and Sustaining a Digital Transformation Culture***

Understanding how digital leadership contributes to fostering a culture of innovation and agility required capturing leaders' perspectives on organisational culture, change management, and strategic leadership practices. One-to-one semi-structured interviews allowed for nuanced discussions on the leadership behaviours and initiatives that promoted innovation, agility, and sustained transformation efforts within criminal justice organisations (Ugwu & Eze, 2023). One-to-one semi-structured interviews with leadership in the organisations within South Africa's criminal justice system provided a robust method for gathering qualitative data that was essential for addressing the research questions on digital leadership in digital transformation. This approach ensured depth, specificity, and contextual relevance, enabling a comprehensive understanding of the role and impact of digital leadership within this complex organisational environment.

## **3.6 Population and sample**

This section elaborates on the population and sample for this study.

### **3.6.1 Population**

The population for the research were senior and executive leaders identified in organisations forming part of the criminal justice system in South Africa. These Departments and entities included the South African Police Service (SAPS), National Prosecuting Authority (NPA), Department of Justice and Constitutional Development (DOJ&CD), Office of the Chief Justice (OCJ), Legal Aid South Africa (LASA) and Department of Correctional Services (DCS). Including senior and executive leaders in this study was highly appropriate for several reasons as follows.

- Strategic decision-making influence: Senior and executive leaders held significant influence over strategic decisions regarding digital transformation initiatives within their organisations. Their perspectives and decisions shape the direction and implementation of digital strategies. Therefore, understanding their viewpoints on digital leadership has assisted in identifying key priorities, challenges, and opportunities that impact the transformation efforts in the organisations of criminal justice system.
- Cross-functional collaboration: In digital transformation projects, collaboration between business and IT is crucial. Senior leaders from both sectors brought diverse perspectives on how digital technologies can be integrated with business processes to achieve organisational goals. Therefore, exploring their interactions and collaborations provided insights into how digital leadership bridges the gap between business objectives and technological capabilities within South Africa's criminal justice organisations.
- Comprehensive understanding of challenges and opportunities: Senior leaders were well-positioned to provide insights into the specific challenges and opportunities associated with digital transformation in the criminal justice organisations. Their experience encompasses operational, strategic, and technological aspects. Thus, this knowledge was essential for identifying and addressing barriers to digital adoption and for leveraging opportunities to enhance operational efficiency and service delivery.
- Leadership and change management perspectives: Senior and executive leaders are responsible for driving organisational change and fostering a culture of innovation. Their leadership styles, change management approaches, and

initiatives influence the organisation's readiness and ability to adapt to digital transformation. Therefore, studying their perspectives on digital leadership has shed light on effective leadership practices, transformational strategies, and organisational culture, which are critical for sustaining digital initiatives in the long term.

- **Representation of organisational strategy:** Senior leaders represent the organisational strategy and vision, aligning digital initiatives with broader goals and objectives. Their insights into strategic planning and resource allocation provide context for understanding the strategic impact of digital leadership. Therefore, examining their roles in shaping and executing digital strategies assisted in assessing the alignment of digital initiatives with organisational priorities and in evaluating their effectiveness in achieving desired outcomes.

### **3.6.2 Sample and sampling method**

#### **3.6.2.1 Employing Purposive sampling**

The sampling method for this study was purposive sampling (Polkinghorne, 2005). The purposive sampling method allowed for the deliberate selection of senior and executive leaders from the business and IT sections within the criminal justice system organisations who possess the specific knowledge and experience relevant to digital leadership and transformation. These senior and executive leaders also included those that represent their organisations in South Africa's Integrated Justice System board and implementation committees (South African Government Online, 2024).

#### **3.6.2.2 Justifying Purposive sampling**

By employing purposive sampling (Polkinghorne, 2005), the study gathered comprehensive and contextually rich data from senior and executive leaders who are pivotal in shaping digital strategies and leading transformative initiatives within the Criminal Justice System in South Africa, as outlined further below.

**Expertise and knowledge:** Purposive sampling ensured that participants selected have direct involvement and expertise in digital transformation initiatives within their

respective organisations (business and IT). This targeted approach ensured that insights gathered are from individuals who provided informed perspectives on digital leadership proficiencies and strategies.

**Representativeness:** While not aiming for statistical representativeness, purposive sampling allowed for a diverse representation across different organisations of the criminal justice system (e.g., police, courts, corrections). This diversity has helped in capturing a range of perspectives on how digital leadership varies across various contexts within the same overarching criminal justice system.

**Efficiency and focus:** Given the specific focus on digital leadership and transformation in a complex organisational setting, purposive sampling has optimised the use of resources by concentrating on individuals who have contributed meaningful insights. This methodological choice ensured depth and relevance in addressing the research questions effectively (Sharma, 2017).

### **3.7 The research instrument**

To guide the virtual semi-structured interviews, an interview guide was utilised as a data collection instrument to explore the Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System. This interview guide is provided in Appendix F.

### **3.8 Procedure for data collection**

Virtual semi-structured interviews was chosen as the data collection procedure for exploring the Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System, as outlined further below:

- **Depth of exploration:** These interview formats allowed for in-depth exploration of participants' experiences, perspectives, and insights related to digital leadership

and transformation. They provided a platform for nuanced discussions that uncovered subtle aspects of leadership practices and strategies.

- **Flexibility:** Semi-structured interviews offered flexibility in questioning, allowing researchers to follow-up on interesting responses, probe deeper into specific topics, and adapt the interview flow based on emerging themes or participant insights. This flexibility ensured comprehensive coverage of the research questions.
- **Rich data collection:** By engaging directly with senior and executive leaders from the business and IT sections of the Criminal Justice System, virtual interviews facilitated the collection of rich, detailed data. This included first-hand accounts of challenges, successes, and strategic decisions related to digital transformation.
- **Participant comfort and engagement:** Virtual interviews enhanced participants comfort and engagement, thereby encouraging open and honest responses. This was particularly important when discussing sensitive topics or organisational challenges related to digital transformation.
- **Practical considerations:** In the context of a geographically dispersed or diverse participant pool, virtual interviews offered logistical advantages, reducing time and costs associated with travel while maintaining the benefits of real-time interaction.

### **3.9 Data analysis strategies and interpretation**

The study adopted a thematic analysis for interpreting data from semi-structured interviews as it enabled a systematic exploration of key themes relevant to the research questions (Braun & Clarke, 2012), as outlined further below.

- **Flexible and systematic approach:** Thematic analysis allows for flexibility in exploring patterns and themes within qualitative data (Naeem et al., 2023). This was crucial given the diverse perspectives and experiences of digital leaders in the criminal justice sector.
- **Depth and richness of data:** Thematic analysis facilitated a deep dive into the qualitative data, enabling the researcher to uncover nuanced insights and

understandings related to digital leadership proficiencies, strategies, and cultural impacts on transformation (Naeem et al., 2023).

- Relevance to research questions: Thematic analysis was well-suited for addressing the research questions focused on identifying digital leadership proficiencies, understanding strategy differences across contexts, and exploring the cultivation of a transformational culture. It allowed for the identification and exploration of key themes that emerged from the data (Naeem et al., 2023).

Furthermore, using software programs for data analysis and interpretation was crucial as they improved efficiency in managing large qualitative datasets, facilitated systematic coding, sorting, and retrieval of data, and enabled visualisation of patterns and relationships using coding maps and matrices, thereby enhancing the credibility of qualitative findings (Ibrahim, 2012).

### **3.10 Possible limitations and challenges of the study**

The limitations and challenges of the study, included the following:

- Methodological challenges:
  - Ensuring validity and reliability of qualitative data gathered through interviews.
  - Potential bias in participant responses due to their position or organisational affiliations.
- Sampling limitations:
  - Possible underrepresentation of certain perspectives or organisations within the criminal justice system.
- Analytical considerations:
  - Complexity in analysing qualitative data to extract meaningful themes and patterns.
  - Subjectivity in interpretation of data, potentially impacting the objectivity of findings.

- Managing potential conflicts of interest or biases among researchers and participants.
- Contextual challenges:
  - The lack of existing research and subsequent literature in the context and environment of this research study.
  - Variability in digital transformation stages and strategies across different sectors of the criminal justice system.
  - External factors (political, economic) influencing digital initiatives, which may not be fully captured within the study's scope.

### **3.11 Quality Assurance**

In qualitative research, the reliability of data collected through semi-structured interviews is essential (Stahl & King, 2020). Assessing the trustworthiness of this data is important to ensure that the findings are as accurate and credible as possible.

According to (Elo et al., 2014), the reliability of content analysis depends on having rich and comprehensive data, requiring thorough preparation and advanced skills in data collection, analysis, and reporting.

The most widely accepted framework for assessing qualitative data trustworthiness, developed by (Lincoln & Guba, 1986) includes four main components: transferability, credibility, dependability, and confirmability (Enworo, 2023).

#### ***3.11.1 Transferability***

Transferability is the ability to apply research findings to other contexts. Qualitative researchers enhance transferability by giving detailed descriptions of the study's environment, participants, and procedures, allowing readers to judge the relevance of the findings to similar situations (Kakar et al., 2023). This study has met transferability as per the following:

- Contextual detail: the specific context of the Criminal Justice System in the World, Africa, Southern Africa, and South Africa is provided in Chapter 1. This context-setting will help readers understand the relevance of findings to similar settings.
- Methodological Transparency: A clear explanation of the research methods employed, such as phenomenological interviews with senior leaders as well as the interview protocols, sampling strategy, and data analysis techniques that was used to ensure transparency and replicability is provided.
- Leadership description of participants: Comprehensive profiles of interview participants, in line with their roles and perspectives on digital leadership was presented. This allowed readers to assess the applicability of the findings to other organisations with similar leadership structures.
- Thematic analysis and findings: A thematic analysis to identify key themes and patterns emerging from the data was conducted. These findings were presented with rich qualitative evidence, quotes, and contextual explanations to illustrate how digital leadership influences transformation outcomes.
- Dissemination strategy: Given the necessity to digitally transform South Africa's criminal justice system and the substantial financial investments made over the years with minimal returns, this study will be shared with key stakeholders and policymakers focused on digital leadership and criminal justice reform. This dissemination aims to foster broader discussions and applications of the research findings. This will only be undertaken following due processes.

### **3.11.2 Credibility**

Credibility is a key aspect of qualitative research, and it refers to how well the findings represent the actual experiences of the participants (Adler, 2022; Dodgson, 2019). This study has met credibility as per the following:

- Triangulation: Multiple semi-structured interviews were used to corroborate findings. This helped to validate the data and ensures a more comprehensive understanding of digital leadership practices.

- Thick description & contextualisation: A detailed and rich description of the research context is provided in Chapter 1, including the organisational setting, participants, and specific circumstances of the criminal justice system in the World, Africa, Southern Africa, and South Africa. This will enable other researchers or practitioners to determine the applicability of the findings to their own contexts.
- Purposeful sampling: Participants provided diverse perspectives on digital leadership within the criminal justice system were selected. A varied sample helped to ensure that the findings captured a wide range of experiences and insights, enhancing the potential applicability to other settings.
- Comparison with existing literature: Findings with existing literature on digital leadership and transformation in similar sectors or contexts was compared for credibility. This helped to position the research within the broader body of knowledge and highlighted similarities and differences that also inform transferability.

### ***3.11.3 Dependability***

Dependability refers to the consistency and stability of research findings over time. To ensure reliability, researchers meticulously document their methods, data collection techniques, and analysis procedures (Kakar et al., 2023). This study met dependability as per the following:

- Triangulation: Multiple semi-structured interviews was used to corroborate findings. This helped to validate the data and ensures a more comprehensive understanding of digital leadership practices.
- Consistency in data collection: Uniformity in the way data was collected across all participants was ensured. In this regard a semi-structured interview guide was used to ensure that all interviews covered the same key topics while allowing flexibility for participants to express their unique perspectives. This assisted to maintain consistency in data collection.
- Audit trail: The interview findings, with all personally identifiable details and raw data carefully removed, is presented. This allows for transparent examination of

the research process, enabling inquiry auditors to evaluate how the data was gathered, analyzed, and how the conclusions were reached.

- Supervised research: The study was subject to continuous oversight and periodic review throughout the research process, which contributed to reinforcing the overall trustworthiness and dependability of the findings.

### **3.12 Ethical considerations**

The research study addressed the following ethical considerations:

- Informed consent: Consent from all participants, ensuring they are fully aware of the research purpose, procedures, potential risks was obtained.
- Voluntary participation: It was emphasised that participation was entirely voluntary and that participants can opt out of the study at any point without any negative repercussions.
- Confidentiality: The confidentiality of participants' identities and the information they provide was strived for at all times. This included using pseudonyms to remove any identifying details from transcripts and reports to protect privacy.
- Anonymity: The data collected was anonymised so that individual participants cannot be identified in any publications or presentations resulting from the research.
- Data security: Robust data security measures was implemented, such as encrypted storage and secure backups, to protect the data from unauthorised access, loss, or breaches.
- Transparency: Transparency of the collected data was shared with participants about the research process, including how the data was to be used, who would have access to it, and how the findings would be disseminated.
- Ethical approval: Ethical approval from the University of the Witwatersrand was obtained prior to commencing the research to ensure that the study met all ethical guidelines and standards of the university.

- Respect and sensitivity: Interviews were conducted with respect and cultural sensitivity, being mindful of the participants' backgrounds, positions, and any potential power dynamics.
- Minimising harm: All possible steps were taken to minimise any potential psychological, emotional, or professional harm to participants during and after the research process.
- Participants received a briefing on the research study's context, purpose, and procedures through a participant information sheet (refer to Appendix D: Participant Information Sheet). They were informed of their rights, and their consent to participate in the interview was requested (see Appendix E: Consent to Participate: Agreement Form).

### **3.13 Chapter Summary**

This chapter outlined the research methodology used to explore digital leadership in South Africa's Criminal Justice System. It discussed the chosen research paradigm, approach, and design, ensuring alignment with the study's objectives. Data collection methods, sampling, and analysis strategies were detailed, highlighting efforts to ensure accuracy and reliability. Ethical considerations, potential limitations, and quality assurance measures were addressed to uphold research integrity. These methodological choices provided a solid foundation for credible and meaningful findings. The next chapter presents the study's findings based on the data collected from participants.

# CHAPTER 4. PRESENTATION OF FINDINGS

## 4.1 Chapter Introduction

This chapter presents the findings from thirteen (n=13) in-depth interviews that was conducted for the study. It is organised into several sections that firstly provides background information about the participants, including their demographic details. Next, an outline of the key findings related to each research proposition is provided. Lastly, it concludes the chapter with a summary of the main insights from the findings.

A total of thirteen (n=13) participants, selected based on their senior roles, expertise, experience, and active engagement in digital transformation within South African criminal justice organisations, contributed to the study. Interviews took place between 01 November 2024 and 20 December 2024, with each interview averaging 1 hour and 40 minutes in duration. Interviews were conducted virtually via Microsoft Teams (Microsoft, 2025) and subsequently transcribed using Microsoft Teams (Microsoft, 2025) and Whisper Transcription (WhisperTranscribe B.V, 2025). The analysis was conducted using an inductive thematic approach, where emergent themes were identified from the transcribed data, capturing participants' perspectives and insights related to the research focus. This method enabled the study to establish patterns of recurring themes within the dataset and situate them within the broader research context. To guide the exploration of the research inquiry, the interviews were structured around three key research questions:

- RQ 1. What specific digital leadership proficiencies are regarded as crucial for successfully navigating criminal justice organisations through digital transformation?
- RQ 2. In what ways do digital leadership strategies differ within various contexts of criminal justice organisations?

RQ 3. How does digital leadership contribute to the cultivation of a sustained digital transformation culture of innovation and agility, which is essential for value creation in criminal justice organisations?

## 4.2 Participants Demographics Details

The participants for the research were senior and executive leaders from each organisation forming part of the criminal justice system in South Africa. These Departments and entities included the South African Police Service (SAPS), National Prosecuting Authority (NPA), Department of Justice and Constitutional Development (DOJ&CD), Office of the Chief Justice (OCJ), Legal Aid South Africa (LASA), and Department of Correctional Services (DCS).

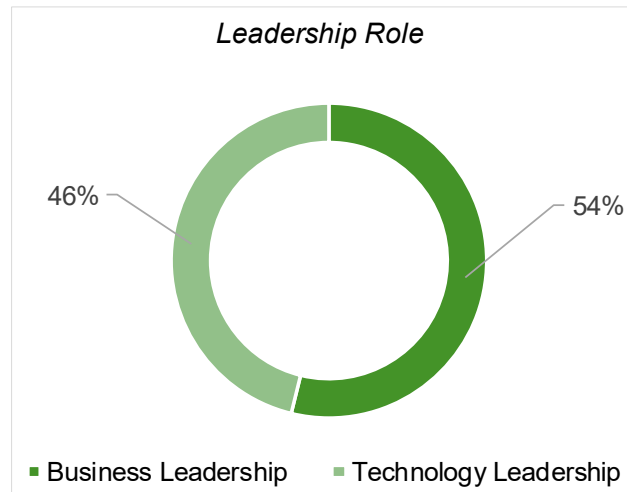
Demographic information was gathered during the interview process and is summarised in **Table 1**, offering contextual insights into the research participants. This includes their senior management levels, job roles, leadership focus in either business or technology, and the core processes their respective organisations oversee within the broader criminal justice system value chain and ecosystem. To ensure confidentiality and protect participant identities, all participant names and organisations were anonymised and assigned coded identifiers (e.g., Participant A, Participant B, Organisation X, etc.).

As reflected in Table 1, the participants occupy executive (n=2), senior general management (n=7), and senior management (n=4) positions, with responsibilities situated within specialised IT and digital business roles. Their professional functions involve direct engagement with digital transformation initiatives within South African criminal justice organisations, providing them with relevant experiential insights into the study's focus.

<b>Participant Code</b>	<b>Senior Management Level</b>	<b>Job Level</b>	<b>CJS Organisation Core Process</b>	<b>Leadership Role</b>
Participant A	Senior General Management	Chief Director	Pre-adjudication: Arrest & Investigation	Business Leadership
Participant B	Senior Management	Director	Pre-adjudication: Prosecution	Business Leadership
Participant C	Senior General Management	Chief Director	Adjudication	Business Leadership
Participant D	Senior General Management	Chief Director	Adjudication	Business Leadership
Participant E	Senior Management	Director	Adjudication	Business Leadership
Participant F	Senior Management	Director	Adjudication	Business Leadership
Participant G	Executive Management	Deputy Director-General	Post-adjudication: Incarceration & Rehabilitation	Business Leadership
Participant H	Senior General Management	Chief Director	Pre-adjudication: Prosecution	Technology Leadership
Participant I	Senior General Management	Chief Director	Adjudication	Technology Leadership
Participant J	Senior Management	Director	Adjudication	Technology Leadership
Participant K	Senior General Management	Chief Director	Adjudication	Technology Leadership
Participant L	Executive Management	Deputy Director-General	Post-adjudication: Incarceration & Rehabilitation	Technology Leadership
Participant M	Senior General Management	Chief Director	Adjudication	Technology Leadership

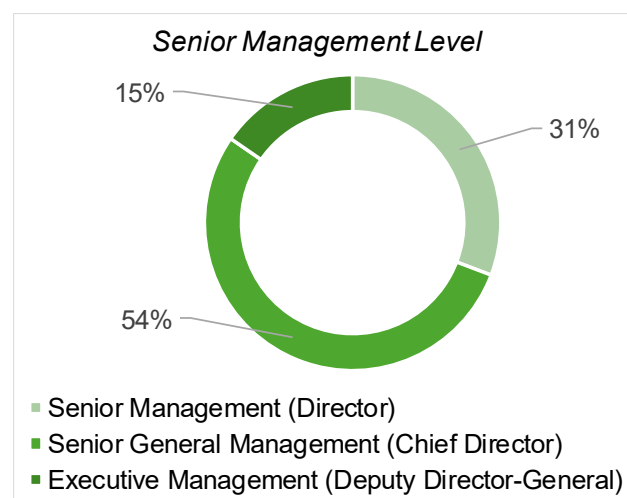
**Table 1: Overview of Participants**

As illustrated in **Figure 11**, the demographic data indicates a relatively equally balanced representation of targeted senior leadership across both Technology Leadership (46%) and Business Leadership (54%) domains within the criminal justice system organisations.



**Figure 11: Participants Demographic Analysis by Leadership Role**

Additionally, Figure 12 highlights the distribution of participants across various leadership levels, with 31% occupying Senior Management positions (Director level), 54% at Senior General Management level (Chief Director), and 15% in Executive Management roles (Deputy Director-General), demonstrating the seniority of their positions.



**Figure 12: Participants Demographic Analysis by Senior Management Level**

Participants are positioned across all organisations within the criminal justice system, with each organisation, featuring representations from both technology and business leadership. To maintain data anonymisation and ensure confidentiality, the organisational information of participants have not been disclosed, aligning with the desensitisation measures applied in Table 1.

## **4.3 Findings pertaining to Proposition 1**

### ***4.3.1 Identification of Codes, Categories and Themes for Proposition 1***

The initial open coding process produced sixty (60) primary codes related to Proposition 1. During this process, several similarities and overlaps were found between the two inquiries in the research instrument linked to RQ1. To refine the analysis, similar codes were grouped together, and duplicates were removed. The next step involved organising the primary codes into thirty-seven (37) categories. From these categories, ten (10) key themes emerged, representing the main findings from the coding process.

#### ***4.3.1.1 Identified Themes and Descriptions***

Figure 13 provides an overview of all emergent themes, whilst Table 2 restates the research question and proposition, while presenting the emergent themes' descriptions.



**Figure 13: Overview of themes for Proposition 1**

<b>Research Question 1</b>	<b>Proposition 1</b>	<b>Theme</b>	<b>Theme Description</b>
RQ 1. What specific digital leadership proficiencies are regarded as crucial for successfully navigating criminal justice organisations through digital transformation?	Successfully navigating criminal justice organisations through digital transformation requires Digital Leadership with a diverse set of proficiencies, which includes universal and public sector specific digital leadership competencies.	<b>Change Management Proficiency</b>	The ability to help organisations and people smoothly transition through digital transformation. This includes gaining their support, addressing concerns, and ensuring that new technologies are adopted without major disruptions.
		<b>Technology Awareness Proficiency</b>	Having knowledge of both current and new digital technologies, understanding what they can do, and recognising how they can help improve justice system operations and services.
		<b>Communication and Collaboration Proficiency</b>	Clearly explaining digital transformation plans, working effectively with different stakeholders, and making sure that all teams within the criminal justice system are aligned and working towards the same goals.
		<b>Innovation Leadership Proficiency</b>	Encouraging creative thinking and new ideas in digital projects, promoting a culture where trying new approaches is welcomed, and using technology to improve how justice process's function.
		<b>Digital Literacy Proficiency</b>	Being skilled in using and understanding digital tools, platforms, and data to make justice system operations more efficient and effective.
		<b>Data-Driven Decision-Making Proficiency</b>	Using data and factual insights to make informed leadership decisions, improve justice system processes, and make digital transformation efforts more effective.
		<b>Stakeholder Engagement Proficiency</b>	Building positive relationships and working closely with both internal and external stakeholders to gain their support and ensure that digital transformation efforts in the justice system are successful.
		<b>Agility and Adaptability Proficiency</b>	Being able to quickly adjust to new technologies, changing priorities, and unexpected challenges by modifying strategies and leadership approaches to keep digital transformation on track.
		<b>Governance and Policy Compliance Proficiency</b>	Making sure that digital transformation efforts follow all legal, regulatory, and policy requirements while effectively handling bureaucratic processes to drive digital change in justice organisations.
		<b>Cybersecurity Awareness Proficiency</b>	Knowing how to protect sensitive digital information, prevent cyber risks, and follow privacy and security rules in digital justice environments.

**Table 2: Research question, proposition, themes description for Proposition 1**

Figure 14 presents a summary of how many participants are associated with each theme.

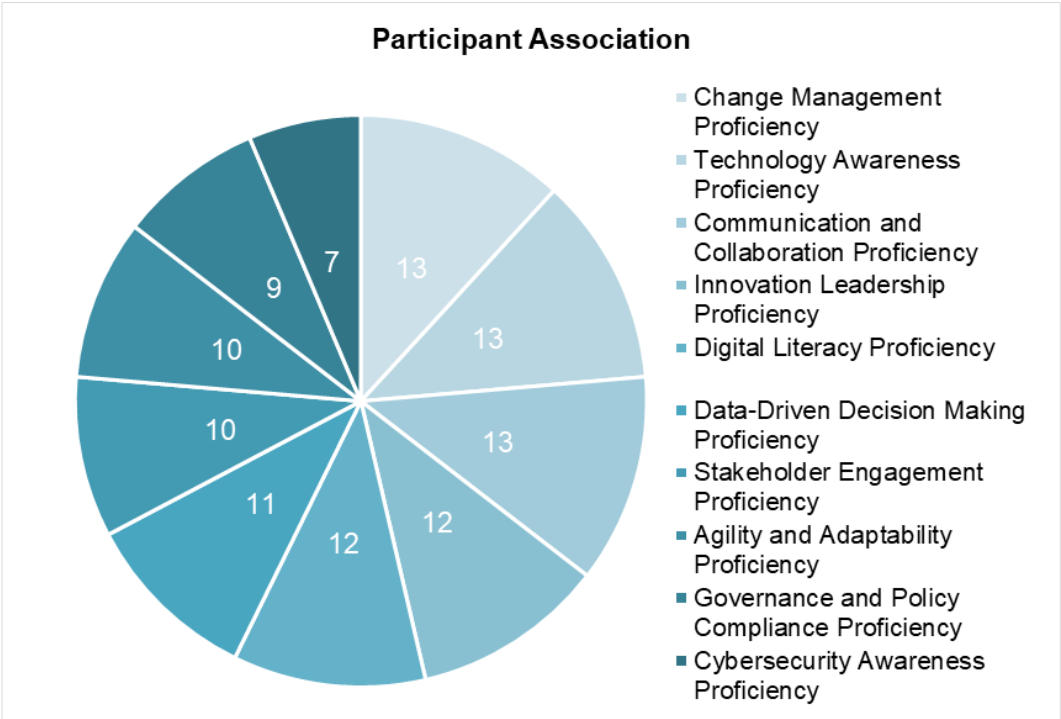


Figure 14: Participants associations to themes for Proposition 1

Figure 15 presents a summary of how often each theme appears in the data.

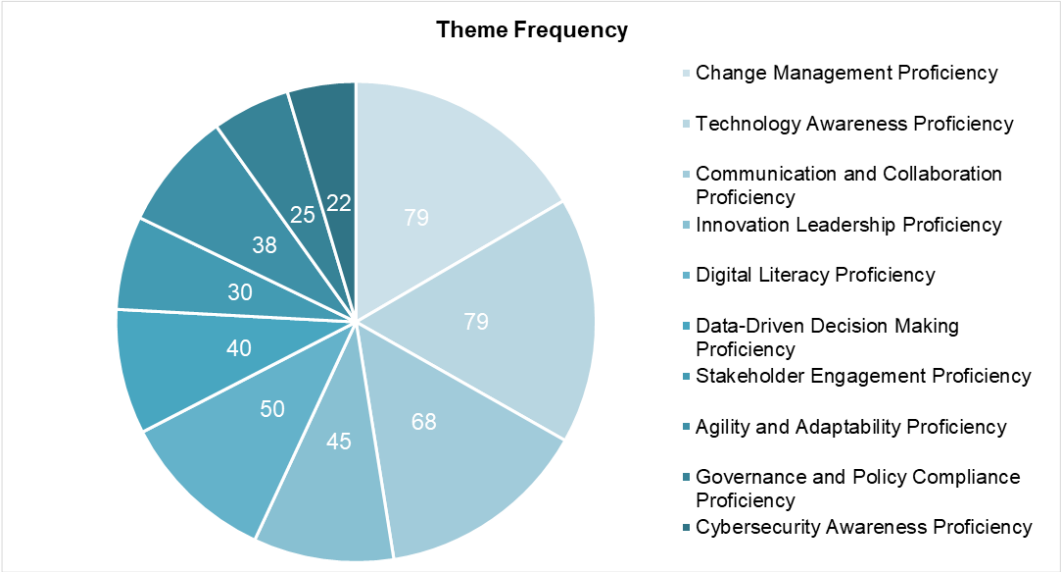


Figure 15: Theme frequency for Proposition 1



Participants highlighted the importance of preparing employees for the transition, helping them understand the shift from traditional to digital processes, and guiding them through the changes. If employees are not adequately prepared, digital transformation efforts are at risk of failing.

*"So, I think change management is very important for me. You cannot bring any form of business processes change or the way in which you want to do business differently without putting change management processes in place."* - Participant D

*"Okay, I think the most important thing is that you bring your team in, right at the very beginning. So, it becomes a process for everybody."* - Participant C

One of the main challenges leaders face during digital transformation is resistance to change. This is particularly true in organisations where manual processes have been used for many years. To successfully implement digital solutions, leaders need to shape a workplace culture that encourages employees to embrace digital tools rather than resist them. This requires shifting mindsets, promoting adaptability, and positioning technology as an enabler rather than a disruption. Moving away from outdated practices and creating an innovation-friendly environment is critical for success.

*"Culture is very important because digital transformation in itself is a culture itself. So, it is going to be very important for you then as a leader, to create an environment where there's a common understanding of having a common culture of transforming the digital space that you operate in."* - Participant D

*"It's important that we need to start unlearning certain things that have traditionally been part and parcel of our culture at our workplace to start forming (new) cultures that speak to the requirement of this critical transformation."* - Participant D

*"I think it's quite important that the leader, first of all, shows willingness to adapt to new situations."* - Participant H

For employees to accept and actively participate in digital transformation, leaders must communicate clearly and consistently. When employees do not understand the reasons behind digital changes or how these changes will affect their roles, they are less likely to support the transformation. Leaders need to explain the benefits of digitalisation and create opportunities for employees to ask questions, express concerns, and engage in discussions. By ensuring an open and inclusive process, employees feel valued and are more willing to embrace new ways of working.

*"Change management becomes very, very crucial to the process. People are not going to buy into your vision if they don't understand what that vision involves and how it impacts them in the work and the role that they play within an organisation."*

- Participant B

*"The most important thing is that you bring your team in, right at the very beginning. So, it becomes a process for everybody. So, transparency, consultation, making sure that everybody has an opportunity to raise whatever questions they have, whatever challenges they are facing in terms of the information being given to them."* - Participant C

Since criminal justice organisations operate within a broader system that includes multiple agencies and stakeholders, change management must go beyond individual organisations. A successful digital transformation requires strong collaboration between different criminal justice sector entities. By working together, these agencies can ensure a shared understanding of technological changes and align their efforts. Effective communication and cooperation across organisations contribute to a smooth and seamless digital transition that benefits the entire justice system.

*"If you look at this JCPS cluster, it's a collaboration of different departments that are in a justice cluster. So, collaboration is important. Information sharing is important, communication is important, and asking questions and having our engagements... That is where collaboration is."* - Participant A

Overall, the findings point that digital transformation in criminal justice organisations cannot succeed without strong change management. Leaders must actively address employee resistance, build a culture that supports digital adoption, and engage staff through transparent communication. Furthermore, collaboration across criminal justice sector organisations is necessary to ensure that digital initiatives are effectively integrated. Without these efforts, even the best-designed digital solutions may fail due to a lack of adoption and misalignment across the criminal justice system.

#### **4.3.2.2 Technology Awareness Proficiency**

All thirteen participants (n=13) emphasised that technology awareness is a crucial leadership skill for driving digital transformation in criminal justice organisations. While leaders do not need to be technology experts, they must have enough knowledge to make informed decisions, communicate with IT teams, and understand how digital tools impact their organisations. Without this awareness, leaders may struggle to align their organisation's strategic goals with its technological capabilities.

Participants highlighted that leaders should have at least a basic understanding of technology. This allows them to navigate digital tools and actively participate in discussions about IT systems. While technical expertise is not always a formal requirement, having some level of knowledge is beneficial.

*"OK, remember when it comes to the leaders, we must understand the importance of understanding how to use digital tools, right? And we need to use that for a broader comprehension so that we are able to see the landscape of digital platforms at an organisational level." - Participant A*

*"You require technological skills... which is not a requirement, but I mean you need to have the skill... it will be beneficial... if you have technical skills. Some level of it, yeah." - Participant H*

Beyond basic proficiency, participants stressed that leaders should stay updated on new technological developments. Awareness of innovations like artificial

intelligence helps leaders make informed decisions and guide their organisations effectively. They do not need to be specialists, but they should understand how technology can be applied in their work.

*"So, if you, as a manager, you are not able to start thinking or aligning your processes towards just how the AI is influencing the world, you will obviously be left way behind."* - Participant B

*"They will need to know what are the capabilities of technology... the latest trends... even if it's awareness that's fine... being aware of what the technology can do for the business... I think that is enough for a leader to be able to lead."* - Participant J

Participants also pointed out that leaders should be able to communicate with IT specialists. Understanding basic technology concepts helps leaders engage in technical discussions and make informed decisions about digital strategies.

*"...because as a leader, I'm also able to make a contribution and not just leave it at the doorsteps of ICT and say now go and get us the system and you tell us, and you guide us..."* - Participant F

*"If they're saying a server, as a leader, you should be able to know what the server is and what the server does. It doesn't mean that we can fix the server, but at least then you know what that is all about."* - Participant H

Leaders should also understand how technology can benefit their organisations. Participants noted that being aware of digital tools, such as cloud computing and remote work platforms, helps leaders make better decisions on IT investments and modernisation strategies.

*"The leadership must be aware of what technology can offer us. Things like MS Teams... remote working... should we do on-prem hosting or should we move to the cloud? What are the benefits of moving to the cloud?"* - Participant E

*"...if we had a system like a biometric system, whereby from arrest, as soon as they take fingerprints, then when that person comes to correctional services, we just go to the system." - Participant G*

A lack of technological awareness can create problems. Participants warned that leaders who do not understand technology may struggle to manage digital projects effectively. This could slow down or even derail transformation efforts.

*"If you are not aligned to what is happening in the market of technology, you might find yourself behind with some of the things that you want to achieve." - Participant I*

*"If you're not in the IT space, you have to have a broad understanding of technological skills as well." - Participant M*

Essentially, the participants agreed that technology awareness is an essential skill for digital leaders in criminal justice organisations. Leaders should develop a basic understanding of technology, stay informed about latest trends, communicate effectively with IT teams, and recognise how digital tools can improve organisational performance. Without these skills, digital transformation efforts may face significant challenges, leading to inefficiencies and missed opportunities in South African criminal justice system organisations.

#### **4.3.2.3 Communication and Collaboration Proficiency**

All thirteen participants (n=13) indicated that effective communication and collaboration skills are crucial for digital leadership in criminal justice organisations. They explained that leaders must engage effectively with internal teams, external stakeholders, and the public to create a shared understanding of digital transformation efforts. Communication was described as a key tool for aligning teams, gaining support, and ensuring that digital changes are successfully put into practice.

A key finding was that leaders must communicate clearly to prevent misunderstandings about digital strategies. This includes being able to speak multiple languages when necessary and adjusting communication styles based on the audience. Participants highlighted that poor communication could cause confusion about digital transformation, leading to resistance.

*"So, transparency, consultation, making sure that everybody has an opportunity to raise whatever questions they have, whatever challenges they are facing in terms of the information being given to them." - Participant C*

*"You should be able then to, you know, interact easily. I mean with people from outside the organisation as well as internal. You know, communication is quite important. Communication skills are required...you know, whatever language, whatever official language that's...you should be proficient, I mean, in those type of language, but being able to articulate yourself, because that's quite important...so the strategy is not misconstrued, but then you know, ensure that, I mean, everybody understands and try to pull everybody together." - Participant H*

Participants also noted that leaders who adjust their communication styles for different audiences are more likely to gain support for digital initiatives. They explained that people are more receptive when information is presented in a way that makes sense to them. Using overly technical language may discourage non-technical staff, so digital leaders must simplify complex ideas when needed.

*"...for a leader to be able to drive change, especially from a transformation point of view, you need to be able to be on the same page with the people that you are leading." - Participant D*

*"People tend to sort of listen to you more if you can speak their language. I mean, you don't have to be, you know, eloquent in the language, but then you speak their language." - Participant H*

Collaboration was another key theme, with participants agreeing that teamwork is essential for digital transformation. Leaders must actively promote a culture of collaboration, as effective teamwork depends on effective communication. They

pointed out that digital transformation cannot happen in isolation and that leaders must ensure that teams work together towards a common goal.

*"So, it becomes a process for everybody. So, transparency, consultation, making sure that everybody has an opportunity to raise whatever questions they have..."*

- Participant C

*"I think one will look at teamwork. It's more collaboration. I won't say communication per se. I know communication is a social and soft skill, but it's more on collaboration on my side because if you collaborate, you work together as a team and you work towards [a] common goal. Communication really will come as a default for you to collaborate and to work together."* - Participant I

Beyond internal teamwork, participants stressed the importance of engaging with external stakeholders and the public. Leaders must ensure that digital transformation efforts align with community needs, rather than operating in isolation from the people they serve.

*"We cannot be in isolation of the community."* - Participant B

*"Because we in public sector, we exist to serve the citizens, right, members of the public. That's really what our role is."* - Participant F

Participants also emphasised the importance of presenting digital transformation as a clear and motivating journey. A well-communicated digital roadmap helps teams and stakeholders understand the direction of change and encourages their support. A clear vision brings unity and alignment to digital transformation efforts.

*"You need to have a good story to tell. You must have an eye to say, okay, this is the problem, this is the roadmap in terms of where we want to go, and this is where we want to end. And that, that digital roadmap needs to be well communicated in a way that everyone that looks at it will have a buy-in to say, this is where we want to be."* - Participant K

*"I think from my perspective, there's a single word, but if you can have an inspiring vision. That you'll be able to assist your team members or your organisation to transform digitally." - Participant L*

Overall, participants agreed that communication and collaboration are essential for digital leadership. Leaders must be clear in their messaging, adjust their communication for different audiences, encourage teamwork, engage with stakeholders, and ensure that everyone shares the same vision for digital transformation. Without these skills, digital initiatives risk being misunderstood, resisted, or failing to align with criminal justice system organisation's broader goals.

#### **4.3.2.4 Innovation Leadership Proficiency**

Twelve participants (n=12) highlighted that Innovation Leadership is a key skill that digital leaders in criminal justice organisations need. They explained that being innovative helps leaders drive digital transformation by solving problems creatively and using modern technologies. Participants emphasised the importance of being forward-thinking and open to innovation to improve justice processes. Leaders must be willing to challenge old ways of doing things and introduce technology-driven solutions. Without innovation, they believed, digital transformation efforts would not be successful.

Participants also discussed the need for leaders to create a work environment that supports innovative ideas and experimentation. They indicated that leaders who resist change or rely too much on traditional methods prevent their organisations from moving forward. They emphasised that digital leaders should be open to change and willing to learn. Creating an innovative environment means removing fear of failure, encouraging risk-taking, and providing teams with the right resources to test new ideas.

*"...one is that it you must be able to be innovative, especially in this era of digital transformation. So, innovation is critical as part of leadership skills in the digital transformation arena." - Participant M*

*“...how innovative you want to be to guide your team. Because you obviously are not going to be able to change the system without influencing some aspects of being innovative in terms of what you have to be.” - Participant B*

A key point raised by participants was that digital leadership requires a different skill set than traditional leadership. They pointed out that digital leaders must not only lead their teams but also understand how technology impacts their strategic goals. This does not mean they have to be technical experts, but they should be aware of digital tools and trends.

*“You need governance leadership skills. You need to have a human aspect of leadership or human management skill. But most importantly, you need to understand your business processes as well.” - Participant D*

*“The moment you put technology to it, it sort of now separates a leader that is technologically up (clued-up) and a leader that just can just lead any sort of organisation.” - Participant J*

To keep innovation going, participants said leaders need to build a workplace where employees feel encouraged to be creative. They explained that leaders should provide the necessary support, resources, and an overall culture that values innovative ideas. Without this support, digital transformation efforts can fail, while leaders who actively promote innovation help their organisations succeed.

*“The ability to sit down and create an environment where your team will be able to be creative and give them the necessary space, the necessary resources to be innovative.” - Participant D*

*“...the leader must then be able to encourage or train others. So that the leader must then be able to facilitate the training in order to increase the talent development...” - Participant M*

Another key insight from participants was that leaders need to stay adaptable to rapidly changing technology. They indicated that digital transformation requires leaders to constantly monitor and understand new technological trends. If leaders

do not keep up with these changes, they risk falling behind, which could slow their organisation's progress.

*"...you got to show interest in them and learn and research about technology."* - Participant H

*"Technology evolves quickly. If you are not aligned to what is happening in the market of technology, you might find yourself behind with some of the things that you want to achieve."* - Participant I

Overall, participants agreed that Innovation Leadership is essential for successful digital transformation in criminal justice organisations. They emphasised that leaders must be open to change, foster a culture of innovation, and stay informed about modern technologies to ensure their organisations remain efficient and forward-thinking in the digital era.

#### **4.3.2.5 Digital Literacy Proficiency**

A total of twelve (n=12) participants emphasised that digital literacy is an essential skill for digital leaders in criminal justice organisations. While leaders do not need to be IT specialists, they must have a basic understanding of digital tools, platforms, and innovative technologies. This knowledge helps them effectively lead digital transformation efforts. Participants explained that without fundamental technological awareness, leaders may struggle to communicate with IT teams, make informed decisions, and align digital strategies with organisational goals. Digital literacy allows leaders to actively engage in discussions about technology and its impact on justice operations.

Participants also emphasised the importance of staying updated on technological advancements and developing fundamental digital skills. Leaders need to observe, research, and stay informed about global technology trends to remain relevant in an ever-changing digital environment. According to participants, digital leaders must take personal responsibility for building their awareness and competencies in technology.

*"I would start off by saying that it's important for you to understand the possibilities of using technology and using the digital frameworks and what it can do for the organisation."* - Participant E

*"Look, because it's a different role, I mean, when you're a leader, I mean, you're not a technician. I mean, one first has to be observant of the technological trends that are happening not only in the country, but around the world. So, you need to familiarise yourself with these technological advances that are happening. You got to show interest in them and learn and research about technology."* - Participant H

While deep technical expertise is not necessary, participants stressed that leaders must at least have a general awareness of what technology can do for their organisations. This understanding allows them to drive innovation, make strategic decisions, and effectively communicate with both business and technology teams. Without this foundational knowledge, leaders may struggle to implement digital initiatives successfully.

*"I would start off by saying that it's important for you to understand the possibilities of using technology and using the digital frameworks and what it can do for the organisation."* - Participant E

*"They will need to know what are the capabilities of technology. Uh, you know, the latest trends. [...] And, you know, and even if it's awareness that's fine. Yeah. It's more awareness. It's more on being, you know, being aware of what the technology can do for the business. I think that is enough for a leader to be able to lead."* - Participant J

Beyond basic awareness, participants pointed out that leaders should also develop a broad understanding of key technological areas. This includes knowledge of business analysis, digital tools, network systems, and information management. Having this broader perspective enables leaders to align digital transformation initiatives with both the operational and strategic needs of criminal justice organisations.

*"...the businesses are quite informed by the digital literacy as well...definitely have the ability to actually innovate." - Participant K*

*"So, on the technological skills, well, there's an involvement of technology across. [...] Skills around the application developments, skills around business analysis, skills around testing, skills around network environment, skills around knowledge and information management. Those are key technological skills [...] as a normal leader, if you're not in the IT space, you have to have a broad understanding of technological skills as well." - Participant M*

Fundamentally, participants agreed that digital literacy is a critical competency for digital leaders in the criminal justice sector. Leaders who lack this knowledge may struggle to keep up with technological advancements, limiting their ability to make informed strategic decisions and successfully drive digital transformation. Continuous learning and engagement with technology were identified as key to leading justice organisations into a digital future.

#### **4.3.2.6 Data-driven Decision-making Proficiency**

A key leadership skill identified by eleven (n=11) participants is the ability to make decisions based on data rather than intuition. Participants highlighted that leaders in criminal justice organisations must rely on accurate and reliable data when making strategic and operational choices.

They explained that knowing how to collect, analyse, and use data effectively helps organisations work more efficiently, allocate resources wisely, and improve service delivery. Without this focus on data, leaders may make poor decisions that could slow down digital progress.

*"I think the most important thing is understanding what it can do for us and understanding what we can get from the data that we're going to have in the system. So, you know, that data-driven aspect of digital transformation. How do we use the data that comes out of the system to assist us in our decision-making?" - Participant E*

*"I would say data analysis or data analytics, if you were to call it that. It's quite critical."* - Participant L

Participants also emphasised the importance of strong data management skills. They noted that leaders must not only be aware of what data exists but also understand how it is collected and organised. Before moving processes online, organisations must set up clear strategies for gathering and managing data. This ensures that digital tools help rather than create more problems. A well-structured approach to data management is essential for leaders driving digital transformation.

*"In terms of the business skills that you need to have, is to have that data management skill, because for you to ensure that you lead you need to understand your data. What is it that you have in terms of the baseline information that you have and how is this information captured? How is this information captured and how are you going to use this information?"* - Participant G

*"I would say data analysis or data analytics, if you were to call it that. It's quite critical."* - Participant L

Participants further indicated the need for long-term planning in data management. They explained that organisations must create clear plans to ensure data remains protected, accessible, and useful for future decisions. Without proper data governance, organisations may face inefficiencies and miss opportunities to improve services through digital tools. Leaders must understand that data is becoming a critical asset in digital transformation.

*"Be mindful of the data... map it out. You have your own roadmap in terms of how you're going to manage your data going into the future... data... becomes the new gold... everyone else is looking for [it]."* - Participant K

Overall, participants agreed that using data to guide decisions is a crucial skill for digital leaders in criminal justice organisations. Without data-driven strategies, digital transformation efforts may not be successful. Leaders who focus on data will be in a stronger position to make informed policy decisions, improve efficiency, and track the impact of digital initiatives.

#### **4.3.2.7 Stakeholder Engagement Proficiency**

Ten participants (n=10) indicated Stakeholder Engagement as a crucial skill for digital leaders in criminal justice organisations. They explained that involving internal teams, external partners, and the public helps ensure collaboration and alignment. When stakeholders are actively engaged, digital changes happen more smoothly, trust is strengthened, and digital initiatives are more likely to meet the needs of everyone involved.

Participants highlighted the importance of public involvement in digital transformation efforts. Leaders must make sure that digital initiatives reflect the expectations and needs of the communities they serve. This means maintaining ongoing consultation with external stakeholders to maximise the effectiveness of digital changes.

*"We cannot be in isolation of the expectation of the community from where we want to go." - Participant B*

*"So that's important and you're right because we literally exist, the public sector literally exists for the citizens, right, members of the public. That's really what our role is." - Participant F*

Another key point was that stakeholder engagement should be transparent and inclusive. Digital transformation should not be dictated from the top but should involve all relevant groups from the very beginning. Participants emphasised that bringing stakeholders into the process early allows leaders to address concerns, set clear expectations, and create shared ownership of digital transformation efforts.

*"Bring your team in, right at the very beginning. So, it becomes a process for everybody. So, transparency, consultation, making sure that everybody has an opportunity to raise whatever questions they have, whatever challenges they are facing in terms of the information being given to them." - Participant C*

*"So, when you start on social skills, you must then be able to communicate. It's issues of stakeholder engagements. So, communication is important. Stakeholder engagement is important." - Participant M*

Clear and effective communication was another critical factor identified. Participants explained that leaders need to communicate digital transformation plans in a way that different stakeholders can easily understand. Using overly technical language or complex terms can cause confusion and disengagement. Leaders who adjust their communication style to fit their audience are more likely to gain support and cooperation.

*"People tend to sort of listen to you more if you can speak their language." - Participant H*

*"You must be able to, sort of, be able to communicate. Be able to communicate whether it's a vision or it's an idea that you want to get across." - Participant J*

Largely, participants emphasised that strong stakeholder engagement reduces resistance, encourages acceptance, and helps align digital initiatives with the broader goals of the criminal justice system. When stakeholders feel involved and heard, digital transformation efforts are more likely to succeed, and implementation becomes much smoother.

#### **4.3.2.8 Agility and Adaptability Proficiency**

A total of ten participants (n=10) emphasised that digital leaders in criminal justice organisations must be agile and adaptable. They explained that leaders need to be flexible when dealing with unexpected challenges, adjusting their strategies quickly to stay effective. Digital transformation often brings surprises, and leaders must adapt without losing sight of their goals.

Participants pointed out that those who struggle to adjust may find it difficult to achieve their objectives.

*"Remember at our level you need to be flexible...you said you have those set objectives and you plan that day to say this is what I'm going to do, but the next*

*thing...so hence I'm saying you also need to be flexible to ensure that you will be able to achieve your objectives because if you are not flexible then you won't be able to achieve."* - Participant G

*"I think it's quite important that the leader, first of all, shows willingness to adapt to new situations."* - Participant H

Participants also noted that technology is advancing rapidly, and digital leaders must stay informed about new developments to remain effective. Keeping up with emerging trends helps leaders make well-informed decisions that support digital transformation. They cautioned that failing to stay updated can lead to outdated strategies that no longer meet the needs of their organisations.

*"One first has to be observant of the technological trends that are happening not only in the country, but around the world."* - Participant H

*"...it evolves quickly. If you are not aligned to what is happening in the market of technology, you might find yourself behind with some of the things that you want to achieve."* - Participant I

Another key point raised was the importance of continuous learning and skill development. Participants stressed that leaders must consistently update their knowledge to remain relevant in a fast-changing digital world. Without ongoing learning, leaders risk falling behind and missing opportunities to improve their organisation's digital capabilities.

*"...you got to show interest in them and learn and research about technology."* - Participant H

*"One just has to make sure that they have a better understanding of the latest technological advancement and the trends, because with technology, you cannot sit a year without really knowing what is happening out there."* - Participant I

Overall, participants emphasised that digital leaders in criminal justice organisations must embrace flexibility, stay informed about technological advancements, and commit to lifelong learning. These qualities enable leaders

to handle uncertainty, drive digital transformation, and keep their organisations resilient in a fast-changing technological landscape.

#### **4.3.2.9 Governance and Policy compliance Proficiency**

Governance and policy compliance are crucial skills for digital leaders in criminal justice organisations. These competencies help ensure that digital transformation efforts follow legal, regulatory, and policy guidelines while also managing bureaucratic processes effectively. Nine participants (n=9) emphasised the importance of having strong knowledge of policies, understanding strategic compliance, and being able to advocate for necessary policy changes while maintaining policy integrity.

*"Develop a policy through respected methods (research, etc.) and then stand firm. Do not bend your policy to fit what those in leadership above you want for the day."* - Participant C

*"Public sector policy competencies...the fact that you need to understand legislation, the rules within which you operate."* - Participant F

Participants also highlighted the need for policies to include processes for regular evaluation and improvement.

*"I think you need to have the policy development skills so that you can be in a position to develop the policies that will be implementable. So, for you to be in a position to develop those policies that are implementable you also need to monitor and evaluate."* - Participant G

*"I touched on understanding of regulatory frameworks, the laws and policies and all of this, because the public sector is quite highly regulated."* - Participant L

Public sector leaders must also work within existing regulatory frameworks while finding ways to be flexible where necessary. Participants shared their experiences with policy challenges and strategies for compliance.

*"We have a SITA Act that says, this is what you need to do, these are your mandatory services that you must get (from us only)... the policy is very clear out there to say that I shall do it through SITA...to get an exemption in SITA, as you know, it will be a challenge, so policy dictates this. So, we have a very good example of a SITA because it's a legislated function." - Participant K*

By making governance and policy compliance a core part of digital leadership, criminal justice organisations can ensure that digital transformation is legal, ethical, and efficient. Effective leaders know how to follow regulations while also pushing for necessary policy updates to support innovation and modernisation.

#### **4.3.2.10 Cybersecurity Awareness Proficiency**

Nine participants (n=9) emphasised that cybersecurity awareness is a crucial skill for digital leaders in criminal justice organisations. They emphasised the need to protect sensitive data, follow privacy laws, and prevent cyber threats. According to the participants, strong cybersecurity policies, strict data protection measures, and continuous security monitoring are essential for ensuring digital safety.

Participants explained that digital leaders must ensure that cybersecurity policies and procedures are properly implemented. They stressed that leaders should actively monitor security compliance and make sure that governance structures support cybersecurity. Without these protections, digital transformation efforts could put organisations at serious risk.

*" I must say that our IT department is doing a great job in training all our users on cyber security and promoting awareness of that, so I think that is something that is very important." - Participant E*

*"It's important for me as a leader to ensure that these policies and these procedures are in place to ensure that the data which we have is secure. And that there is compliance with those policies as well." - Participant F*

Beyond enforcing policies, leaders must also take active steps to prevent security breaches. Participants mentioned that following legal requirements, such as the

Protection of Personal Information Act (POPIA), is necessary to keep personal data secure. If organisations fail to comply, they risk unauthorised access to sensitive information, which could damage public trust.

*“Implement the relevant security solutions so that the data is protected, ensure that you also apply the data-related policies like POPIA, so that at least you don't have to expose personal data to people that shouldn't be accessing that data.”* - Participant I

Participants also pointed out that continuous monitoring is critical for keeping digital systems secure. Criminal justice organisations handle highly sensitive information, and any security failure could have serious consequences for national security and the justice system.

*“So how you protect your data in a preventative way and your continuous monitoring of making sure that your data is actually secured is very important.”* - Participant K

*“Any compromise that happens in our department has a serious impact in the security of the state.”* - Participant M

By making cybersecurity a priority, digital leaders in criminal justice system organisations can protect data, maintain public trust, and ensure the justice system remains secure and reliable.

#### **4.3.3 Further insight on Digital Leadership Proficiencies: Comparing Perspectives of Technology Leaders and Business Leaders**

When looking at how Technology Leaders and Business Leaders view Digital Leadership Proficiencies, clear differences emerge in their focus areas.

Business Leaders mainly emphasised Change Management, Stakeholder Engagement, Governance, and Data-Driven Decision-Making. They highlighted their role in leading teams through digital transformation, ensuring compliance with regulations, and making decisions based on data. Their perspective centred

on helping the organisation adapt to change and aligning different stakeholders, with less attention given to technical aspects.

On the other hand, Technology Leaders placed greater importance on Cybersecurity Awareness, Digital Literacy, and Agility. They stressed the need for strong security measures, technical knowledge, and the ability to adapt to new technologies. While they recognised the importance of governance and change management, their focus was more on technical enablement, data security, and fostering innovation.

Overall, Business Leaders prioritised strategic and organisational skills, while Technology Leaders focused more on technical resilience and digital preparedness. This difference highlights the need for a balanced leadership approach, one that combines strategic direction and technical expertise to drive successful digital transformation in criminal justice organisations.

#### ***4.3.4 Summary of Findings for Proposition 1***

Digital leadership in criminal justice organisations involves a blend of strategic thinking and technical knowledge to guide successful digital transformation. Participants highlighted key competencies and skills that help manage digital change effectively.

Change Management is essential for addressing employee resistance, requiring clear communication and ongoing support. Technology Awareness allows leaders to make informed decisions by understanding and staying current with digital tools and aligning them to organisational needs.

Effective Communication and Collaboration help leaders engage stakeholders, encourage teamwork, and minimise misunderstandings or resistance. Innovation Leadership fosters a culture of creativity, experimentation, and openness to new technology, enabling organisations to modernise operations.

Digital Literacy ensures leaders understand digital tools to actively guide transformation efforts. Data-Driven Decision Making relies on analytics to improve operations and resource allocation, emphasising structured data governance for accuracy.

Leaders also emphasised Stakeholder Engagement for aligning digital initiatives with organisational and public needs, building trust through transparency and consultation. Agility and Adaptability enable quick responses to evolving technology, promoting continuous learning and flexibility. Governance and Policy Compliance ensures alignment with legal regulations and policy changes supporting innovation.

Cybersecurity Awareness was highlighted as critical for protecting data and complying with security regulations, integrated into all digital initiatives.

## **4.4 Findings pertaining to Proposition 2**

### ***4.4.1 Identification of Codes, Categories and Themes for Proposition 2***

The initial open coding process produced sixty-five (65) primary codes related to Proposition 2. During this process, several similarities and overlaps were found between the two inquiries in the research instrument linked to RQ2. To refine the analysis, similar codes were grouped together, and duplicates were removed. The next step involved organising the primary codes into twenty-four (24) categories. From these categories, five (5) key themes emerged, representing the main findings from the coding process.

#### ***4.4.1.1 Identified Themes and Descriptions***

**Figure 17** provides an overview of all emergent themes, whilst Table 3 restates the research question and proposition while presenting the identified themes descriptions.

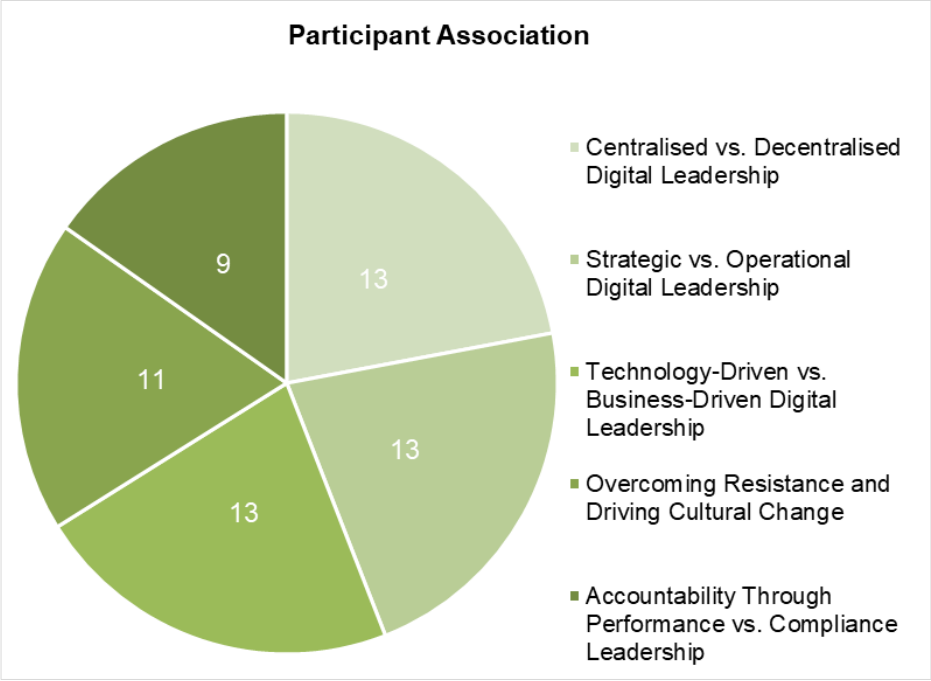


**Figure 17: Overview of themes for Proposition 2**

<b>Research Question 2</b>	<b>Proposition 2</b>	<b>Theme</b>	<b>Theme Description</b>
RQ 2. In what ways do digital leadership strategies differ within various contexts of criminal justice organisations?	Different Digital Leadership strategies (through an individual role, through a strategic role, through organisational performance) are employed to digitally transform criminal justice organisations, given their contexts.	<b>Centralised vs. Decentralised Digital Leadership</b>	Organisations take different approaches to leading digital transformation. Some keep decision-making and leadership within a central IT team, while others spread digital leadership responsibilities across different business units.
		<b>Strategic vs. Operational Digital Leadership</b>	Some organisations focus on long-term digital transformation, planning for the future and making big changes over time. Others concentrate on short-term improvements, using digital tools to solve immediate operational challenges.
		<b>Technology-Driven vs. Business-Driven Digital Leadership</b>	In some organisations, technology itself is the main force behind digital change. Others take a business-first approach, ensuring that digital initiatives support business goals and everyday operations.
		<b>Overcoming Resistance and Driving Cultural Change</b>	People often resist digital transformation at different levels within an organisation. To succeed, leaders must actively manage this change by engaging with employees and fostering open communication.
		<b>Accountability Through Performance vs. Compliance Leadership</b>	Organisations measure the success of digital initiatives in diverse ways. Some focus on achieving strategic goals and outcomes, while others emphasise meeting compliance requirements and following performance reporting standards.

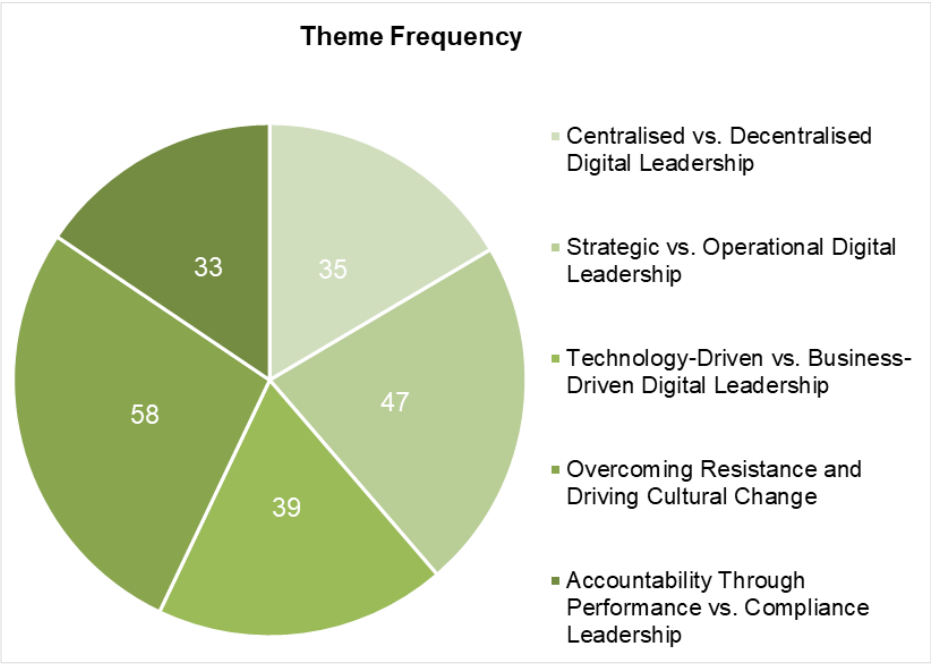
**Table 3: Research question, proposition, themes description for Proposition 2**

Figure 18 presents a summary of how many participants are associated with each theme.



**Figure 18: Participants associations to themes for Proposition 2**

Figure 19 presents a summary of how often each theme appears in the data.



**Figure 19: Theme frequency for Proposition 2**



Their responses highlight key differences between leadership models where decision-making is either controlled by top executives or shared more broadly across various levels.

In some organisations, digital leadership follows a centralised approach, where IT leaders play a key role in decision-making while still considering input from other stakeholders. Participants explained that digital transformation is often led by Chief Information Officers (CIOs) or similar IT executives, who ensure that digital strategies align with the organisation's goals. However, even in this model, collaboration is essential to ensure that technology choices meet the practical needs of various departments.

*"And from that strategic point, then the accounting officer is the one who then assigned it to the Head of Technology. But it is also a collaborative effort. Remember the Head of Technology cannot sit there in the corner and decide what technology is required. Then it becomes where they get input suggestions and assign specific individuals to say we need technology." - Participant A*

*"Lead by CIO. Look at the end of the day it's supposed to be your head of IT right, but remember you've got the other from a governance point of view which is providing the necessary support, it is the (IT) steering committee here, right?" - Participant D*

In other cases, IT leaders are expected to lead digital transformation, but business units provide direction on what needs to be prioritised. This means that while IT is responsible for implementing digital initiatives, business leaders guide the adoption of digital tools based on operational needs. Participants noted that IT teams have the authority to roll out digital solutions, but they must work closely with business units to ensure technology supports service delivery effectively.

*"Lead by CIO. It's not something that of course seems to be quite imperative at an executive level, but it's an expectation that as the head of IT, you should be able to work together with the stakeholders and internally to drive some of the digital transformation that we are having." - Participant B*

*"I think ICT, our CIO has, you know, the ICT branch has been told that you must lead, you're the technical experts, and as the business, we are told to support or to come up with where we need things to change." - Participant C*

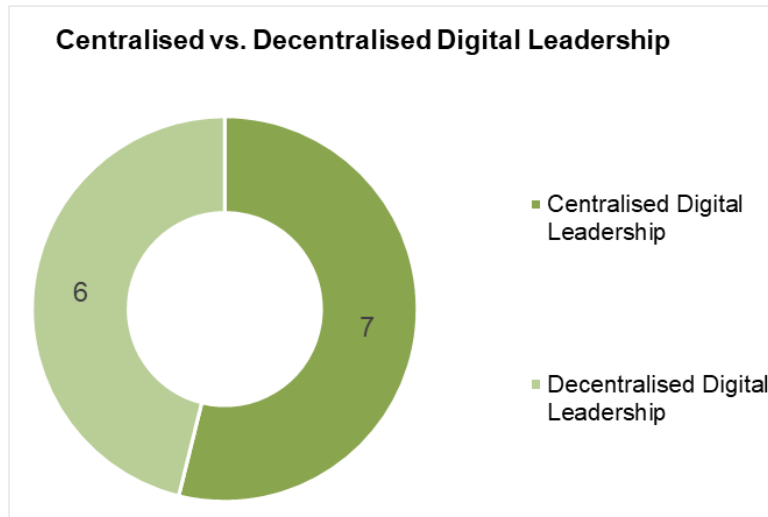
On the other hand, a few organisations follow a decentralised approach, where digital transformation responsibilities are shared across different management levels. Participants explained that although IT remains essential for implementation, business leaders play a direct role in shaping digital priorities. This ensures that digital investments are aligned with operational challenges. In these cases, IT acts as a facilitator rather than the sole decision-maker, allowing both technical and business perspectives to guide digital strategies.

*"I think in my view; it's been driven by the GITO. It's just that the GITO will have to come up with those things. But then as business, as core business, we need to inform the GITO as to what is it that we need. So GITO will be in a position to come up with those, whatever system that they come up with." - Participant G*

*"Lead by CIO. ... but if you look at it from the organisational point of view, yes the entire department is running (pursuing) digital transformation." - Participant I*

These findings point that the structure of digital leadership in criminal justice organisations greatly affects how digital strategies are planned, executed, and managed. Centralised models provide strong executive oversight and strategic alignment, while decentralised models allow for more flexibility, responsiveness, and collaborative decision-making.

According to participants, criminal justice organisations appear to use a combination of centralised and decentralised digital leadership models, as per the participants views illustrated in Figure 21.



**Figure 21: Centralised vs. Decentralised Digital Leadership**

#### ***4.4.2.2 Strategic vs. Operational Digital Leadership Priorities***

Participants shared their perspectives on how digital leadership priorities differ across various criminal justice organisations, particularly in Strategic vs. Operational Digital Leadership Priorities. The findings reveal that some organisations take a strategic approach, ensuring that digital transformation aligns with long-term national policies and ministerial priorities. In contrast, others focus on operational improvements, addressing immediate challenges. These different priorities shape how digital projects are planned, funded, and implemented, ultimately affecting the success of digital transformation efforts.

Participants emphasised that embedding digital transformation at a strategic level ensures a long-term vision and alignment with broader justice policies:

*"...because when you start you will have a vision. You will have a strategy, and the strategy is a long term. What is the long term goal that you want to achieve?"*  
 - Participant I

*"It's from a strategic level. Because if you then look at your five-year strategy and you are reviewing it, you know, toward aligning with the market trends. I think it*

*is shaping it because in the review process, people aren't adjusting reviewing where you were not able to meet in a certain aspect."* - Participant J

For many organisations, long-term planning is seen as crucial for achieving sustainable digital transformation. Structured initiatives are designed to evolve over multiple years:

*"It seems like those discussions are shaping the long term vision of [Organisation X] and how it's going to be enabled by technology."* - Participant L

*"We have started with a digital transformation strategy, which is looking at where do we want to be in business, where do you want to be five years down the line."* - Participant K

Some participants noted that executive priorities and national development plans also play a key role in shaping digital transformation efforts. This ensures that projects align with national criminal justice sector mandates and broader government objectives:

*"...in our contribution as the [Organisation X] now in contributing to the national development plan you know, that's it's one of the aspects in us trying to contribute. I think it's that chapter 4, 14 of the NDP* - Participant F.

*"Some of the things, you know, they find expression in the minister's priorities."* - Participant L

Additionally, participants highlighted that a structured strategic approach encourages collaboration among different justice agencies, ensuring that digital transformation involves various stakeholders:

*"It follows the organisational performance strategic imperative because it's also involvement of various sectors."* - Participant M

From an operational perspective, some organisations have adopted multi-phase digital transformation roadmaps. These structured plans help ensure proper implementation and accountability:

"We have review processes, annual reviews where we check at an individual (team) perspective if this is being met and halfway through the strategy where we check if we are meeting the objectives." - Participant J

"We are mapping... what we have said we're going to do is to map all the departments' requirements for the next financial year against what we call the digital transformation strategy..." - Participant M

Overall, the findings point that while some criminal justice organisations focus on digital leadership at a strategic level, others prioritise short-term operational improvements due to resource limitations. These differences impact the pace and effectiveness of digital transformation, influencing how technology is integrated into criminal justice processes.

Most participants indicated that their organisations emphasise strategic digital leadership, prioritising long-term transformation as per the participants views illustrated in Figure 22. Some highlighted the importance of operational leadership, which focuses on improving efficiency and solving immediate problems through technology.



**Figure 22: Strategic vs. Operational Digital Leadership**

#### **4.4.2.3 Technology-Driven vs. Business-Driven Digital Leadership**

The findings from participants show that digital leadership in criminal justice organisations varies between two main approaches: Technology-Driven Leadership and Business-Driven Leadership.

In some organisations, digital transformation is mainly led by the IT department or the Chief Information Officer (CIO), with limited involvement from other business units. This centralised approach makes IT leadership the primary force behind digital initiatives. As a result, transformation efforts may appear dependent on a single leader rather than being a shared responsibility across the organisation. While participants acknowledged that this model provides structure, they also pointed out that it can limit the involvement of operational and strategic decision-makers.

*"Lead by CIO. Look at the end of the day it's supposed to be your head of IT right, but remember you've got the other from a governance point of view which is providing the necessary support, it is the (IT) steering committee here, right?" - Participant D*

*"Digital transformation can be seen that now is driven by a let's say by one person." - Participant H*

Other organisations follow a business-driven approach, where digital transformation is guided by core business needs rather than being led solely by IT. In this model, business units define key priorities, and IT leadership responds by developing suitable digital solutions. Participants emphasised that this approach ensures stronger alignment between digital initiatives and overall organisational goals, making technology a support tool rather than the driving force.

*"I think ICT, our CIO has, you know, the ICT branch has been told that you must lead, you're the technical experts, and as the business, we are told to support or to come up with where we need things to change." - Participant C*

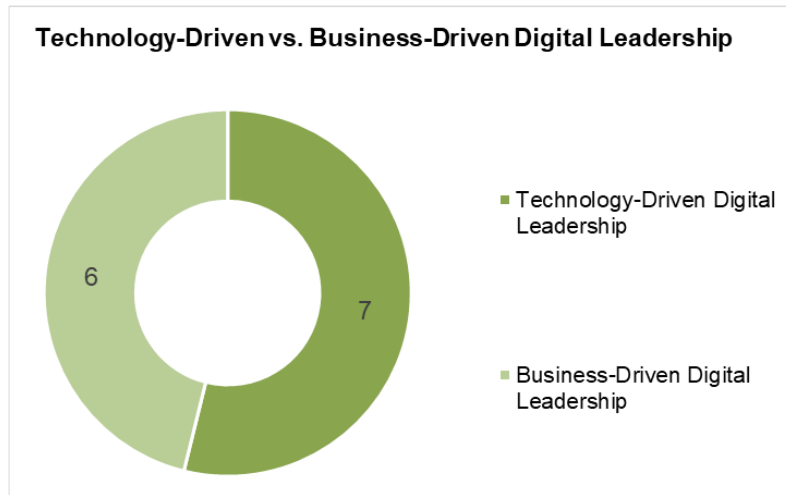
*"But then as business, as core business, we need to inform the GITO as to what is it that we need. So GITO will be in a position to come up with those, whatever system that they come up with."* - Participant G

A few organisations try to balance both approaches. Here, IT leadership plays an advisory role, while business leaders actively participate in shaping digital transformation. This approach helps ensure that technology-driven initiatives align with broader organisational goals and practical needs. Participants highlighted that in such organisations, IT teams are seen as technical experts responsible for implementation, while business leaders provide input on digital strategies. However, some noted that despite strategic plans emphasising digital modernisation, real implementation does not always reflect a coordinated, organisation-wide effort.

*"I think ICT, our CIO has, you know, the ICT branch has been told that you must lead, you're the technical experts, and as the business, we are told to support or to come up with where we need things to change."* - Participant C

*"They actually are trying to make sure that even myself as the CIO, I move from being an IT manager to be part of the team that is leading the digital transformation."* - Participant K

As depicted in Figure 23, participants indicated that certain organisations prioritise Technology-Driven Leadership, where IT spearheads the transformation, whereas others focus on Business-Driven Leadership, aligning digital initiatives closely with operational requirements.



**Figure 23: Technology-Driven vs. Business-Driven Digital Leadership**

The findings point that digital leadership in criminal justice system organisations is not uniform. Some prioritise Technology-Driven Leadership, where IT leads the transformation, while others emphasise Business-Driven Leadership, aligning digital initiatives with operational needs as per the participants views illustrated in Figure 23. This variation indicates that an organisation’s priorities influence its leadership model, whether focusing on system modernisation or business-driven outcomes. The findings highlight the need for a balanced approach that integrates both technology and business goals to ensure successful digital transformation.

#### ***4.4.2.4 Overcoming Resistance and Driving Cultural Change***

A total of eleven participants (n=11) shared their experiences on the challenges of Overcoming Resistance and Driving Cultural Change in digital transformation within criminal justice organisations. They explained that resistance to change happens at various levels, affecting both leadership and staff, which makes digital transformation difficult to implement.

Participants noted that resistance is expected, as some individuals refuse to adopt new digital processes or feel hesitant about changing long-standing policies and procedures.

*"But obviously, there will be pockets there and there of resistance."* - Participant H

*"Now these people, when you introduce new things, some of them have got this tendency to say, I'm leaving in a year, why should I bother?"* - Participant L

Many participants pointed out that employees often prefer to stick with familiar ways of working rather than adopting digital tools. This hesitation is mostly due to fear of change and uncertainty about how digital processes will impact their daily tasks.

*"Now these people, when you introduce new things, some of them have got this tendency to say, I'm leaving in a year, why should I bother?"* - Participant L

*"People are comfortable to remain where they are and where things are. People are scared of change and that would have been the difficulty that we encounter the most."* - Participant M

To overcome these challenges, participants emphasised the importance of strong leadership support and a clear shared vision for digital transformation. Gaining commitment from executives and ensuring that leadership is aligned were identified as key strategies to reduce resistance and build confidence in digital initiatives.

*"But once the majority pull together and say, ok, this is the vision that we're supporting... then you get the support."* - Participant H

*"Lead by executive management. In the way the strategy is done, it's a combination of a top-down and a bottom-up."* - Participant J

Overall, participants also stressed that structured change management strategies play a critical role in overcoming resistance. They highlighted that digital transformation efforts should be well-communicated, closely aligned with leadership goals, and actively supported by executives to encourage organisation-wide adoption in criminal justice system organisations.

#### **4.4.2.5 Accountability Through Performance vs. Compliance**

The findings from nine participants (n=9) show that criminal justice organisations use different approaches to accountability in digital leadership. Some organisations focus on Performance-Based Accountability, where digital projects are measured using key performance indicators (KPIs) and other clear outcomes. Others take a Compliance-Based Approach, where the focus is on following structured reporting processes to ensure digital initiatives align with strategic plans.

Participants explained that reporting structures help track progress and ensure digital projects contribute to overall goals. In performance-driven organisations, progress is continuously monitored at various levels to assess how digital transformation is improving efficiency and effectiveness.

*"Reporting takes place from two aspects. So, there is one, an organisational report of how we are doing against our indicators and KPIs. But also, there's a different aspect which we use at our extended management, which is just a more evaluation-based report on the initiatives. So how are we doing with the initiatives?" - Participant B*

*"...I really find these structures to be quite effective in monitoring the progress right...I must say I find that having these structures and all of these things in place it really does help us to be able to track..." - Participant F*

Organisations using performance-based models rely on formal tracking tools, such as IT project indicators included in Annual Performance Plans (APPs). These indicators help evaluate whether digital initiatives are meeting expectations and contributing to broader strategic objectives.

*"There are indicators... related to IT projects in the APP and that is how you assess whether this is achieved or not because they form part of your goals and objectives that's included in the strategic plan and the APP." - Participant D*

*"We have review processes, annual reviews where we check at an individual (team) perspective if this is being met and halfway through the strategy where we check if we are meeting the objectives." - Participant J*

For organisations that follow a compliance-driven model, accountability is structured through formal reporting sessions where leadership reviews progress, identifies challenges, and discusses solutions. These sessions provide an opportunity for digital leaders to present updates and highlight areas that need improvement.

*"We've got... accountability sessions... the head of [Technology] is able to say, this is what we have done, this is how far we are. So, during the accountability session, the head of [Technology] is able to say, this is where we are struggling, this is what can be done, this is how we can improve." - Participant A*

*"Remember we do have these review sessions on a quarterly basis. We have a Manco on a monthly basis." - Participant G*

Overall, the findings highlight that accountability in digital leadership varies between criminal justice system organisations. Some prioritise ongoing performance tracking using KPIs, while others focus on structured reporting measures to ensure alignment with strategic goals.

#### ***4.4.3 Further insight Digital Leadership Strategies: Comparing Perspectives of Technology Leaders and Business Leaders***

Business leaders often talked about how digital leadership should align with the organisation's overall goals. They focused on ensuring accountability, working across different agencies, and addressing resistance to digital change. A major concern for them was finding the right balance between IT leadership and business decision-making, so digital projects truly support the organisation's needs. They also pointed out key challenges, such as limited budgets, policy restrictions, and gaps in employees' digital skills, which make digital transformation difficult. Business leaders emphasised the need for long-term digital strategies that keep criminal justice sector operations strong and resilient.

Technology leaders, on the other hand, mainly discussed the technical aspects of digital transformation. Their focus was on overcoming challenges related to system compatibility, cybersecurity risks, and IT management. They aimed to ensure that digital changes are not only strategic but also practical from a technical standpoint. Many technology leaders stressed the need for better collaboration between IT and business teams so that digital solutions truly meet organisational needs. They also highlighted the importance of making decisions based on data, using automation, and applying advanced analytics to support digital transformation with an evidence-based approach.

Overall, business leaders in criminal justice system organisations are more concerned with aligning digital leadership with organisational goals and solving operational challenges, while technology leaders focus on how to implement these digital changes effectively, ensuring they are technically sound and secure.

#### ***4.4.4 Summary of Findings for Proposition 2***

Digital leadership strategies in criminal justice organisations differ by structure, priorities, reporting, and technology implementation, shaped by organisational needs, policies, and technology maturity.

Centralised leadership, guided by IT or executives, ensures standardisation and policy alignment, while decentralised leadership offers flexibility and quick departmental responses. Strategic leadership focuses on long-term transformation aligned with national objectives, whereas operational leadership prioritises short-term efficiencies and immediate digital solutions.

Technology-driven approaches emphasise IT governance and modernisation, while business-driven approaches ensure digital initiatives directly support core justice operations. Resistance to digital change, particularly from middle management and frontline staff, remains a significant barrier due to reliance on traditional practices, digital literacy gaps, and job security concerns.

Strong leadership, effective communication, digital training, and stakeholder engagement strategies are vital to overcoming resistance and fostering adoption.

Organisations measure digital success either through performance-based indicators (KPIs) or compliance with regulations and policies.

## **4.5 Findings pertaining to Proposition 3**

### ***4.5.1 Identification of Codes, Categories and Themes for Proposition 3***

The initial open coding process produced forty-eight (48) primary codes related to Proposition 3. During this process, several similarities and overlaps were found between the two inquiries in the research instrument linked to RQ3. To refine the analysis, similar codes were grouped together, and duplicates were removed. The next step involved organising the primary codes into twenty-seven (27) categories. From these categories, six (6) key themes emerged, representing the main findings from the coding process.

#### ***4.5.1.1 Identified Themes and Descriptions***

Figure 24 provides an overview of all emergent themes, whilst Table 4 restates the research question and proposition while presenting the identified themes descriptions.

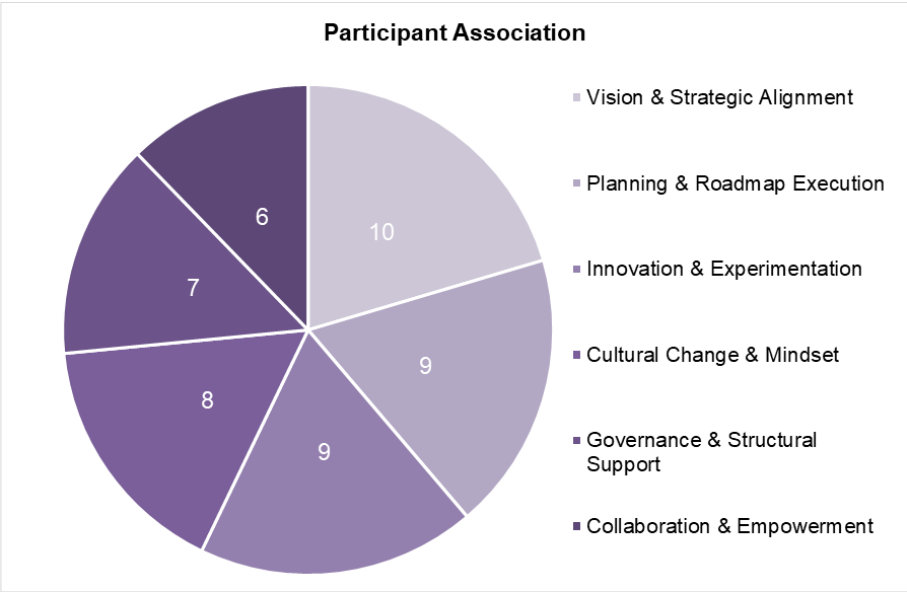


**Figure 24: Overview of themes for Proposition 3**

<b>Research Question 3</b>	<b>Proposition 3</b>	<b>Theme</b>	<b>Theme Description</b>
RQ 3. How does digital leadership contribute to the cultivation of a sustained digital transformation culture of innovation and agility, which is essential for value creation in criminal justice organisations?	Digital Leadership employs organisational-wide integration approaches (holistic and strategic approach, organisational architecture approach, connected leadership approach) to cultivate and sustain a digital transformation culture of innovation and agility in criminal justice organisations, given their contexts.	<b>Vision &amp; Strategic Alignment</b>	Leaders create and share a clear plan for digital transformation. This helps make sure that all efforts match the organisation's main goals and that leaders support the changes.
		<b>Planning &amp; Roadmap Execution</b>	Leaders develop clear plans for digital transformation, focusing on step-by-step progress. They give priority to quick and achievable improvements while also dealing with challenges related to funding and assessing the organisation's readiness for digital change. This helps ensure that innovation continues over time.
		<b>Innovation &amp; Experimentation</b>	Leaders support pilot projects, ongoing improvements, and accepting failure as part of the process. This helps build a lasting culture of digital innovation and flexibility.
		<b>Cultural Change &amp; Mindset</b>	Leaders help organisations move away from strict bureaucratic structures toward a more innovative and flexible way of working. They do this by setting an example, involving employees in the process, and providing training to develop digital skills.
		<b>Governance &amp; Structural Support</b>	Formal governance structures, like steering committees and executive oversight, help establish clear rules and responsibilities for digital transformation. These structures make sure that decisions are well-organised and that leaders are held accountable for progress.
		<b>Collaboration &amp; Empowerment</b>	Encouraging different teams to work together and share information while allowing decision-making to happen at various levels. This helps the organisation respond quickly to changes and adapt more effectively.

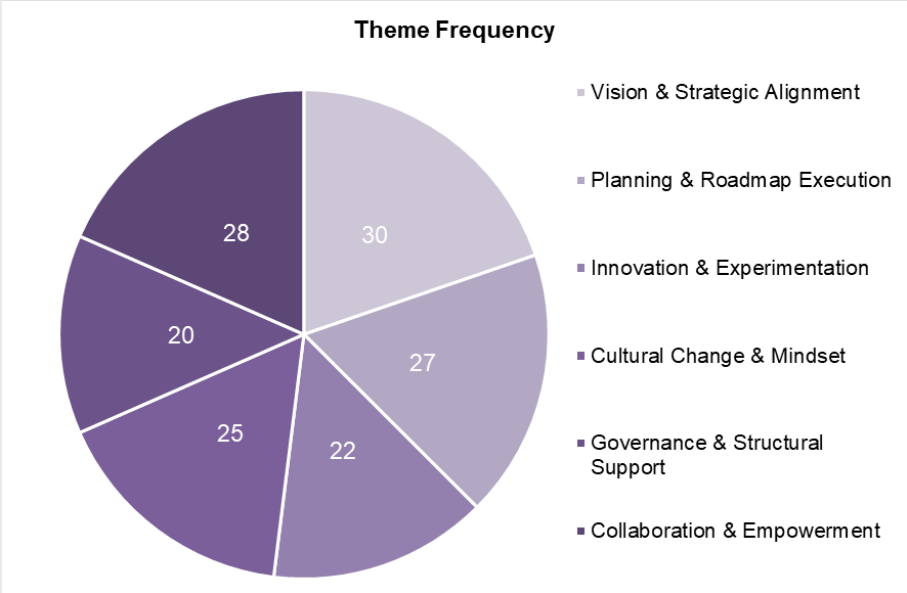
**Table 4: Research question, proposition, themes description for Proposition 3**

Figure 25 presents a summary of how many participants are associated with each theme.



**Figure 25: Participants associations to themes for Proposition 3**

Figure 26 presents a summary of how often each theme appears in the data.



**Figure 26: Theme frequency for Proposition 3**



#### **4.5.2.1 Vision & Strategic Alignment**

A total of ten participants (n=10) highlighted that having a clear vision & strategic alignment is essential for guiding digital transformation in criminal justice organisations. They explained that when a digital vision is well-communicated, it ensures that digital transformation efforts stay aligned with the organisation's overall goals. A strong strategic direction also helps gain leadership support, making it easier to secure resources, policy backing, and commitment from various levels of the organisation. Several participants described how their organisations include digital visioning in their strategic planning processes.

Participants shared that organisations hold structured planning sessions to communicate digital priorities to different business units. These sessions help employees understand the importance of digital transformation and how their work contributes to broader strategic goals. This approach ensures that digital initiatives are fully integrated into the organisation's overall strategy, rather than being seen as isolated IT projects.

*"How we run with the awareness is that once we have developed our plans, we obviously cascade all of that down to a more business process so that they can have an understanding of what is it that has been put up there as a strategic priority for the next financial year or for the next strategic period. And we then, everyone has to align with the strategic vision that has been put in place." - Participant B*

*"This is really in the process of crafting the strategy, one had to use different tools of analysing the opportunities and the threats and other elements within that so that your strategy is comprehensive and you're able to unpack every component or element that you need to include in your strategy..." - Participant I*

Securing leadership support was identified as a key factor in successfully driving digital transformation. Participants noted that when top executives actively promote digital initiatives, it creates a culture of innovation and speeds up the adoption of new technologies. In organisations where leadership is open to technology-driven improvements, digital transformation is embraced more easily and implemented more effectively across various levels.

*"We had very receptive top management. We have a very receptive board and very receptive executives that was very open to listen to suggestions to embrace technology and immediately saw the potential that it was." - Participant E*

*"So because once we have people in leadership, I mean, it's quite important that, I mean, they be aware of, you know, the technological advances that are out there that will make the, I mean, the executive as well, I mean, to be able then to make decisions faster, you know, information available and all of that." - Participant H*

Participants also indicated that external circumstances, such as crises, can push organisations to adopt digital solutions more quickly. The COVID-19 pandemic was mentioned as a major event that forced organisations to accelerate their digital transformation efforts. Due to restrictions on movement and in-person interactions, digital solutions became essential, leading to a greater focus on remote collaboration and technology-driven processes.

*"During the years of COVID-19. That is when the hype started to take shape. So, it started to take shape around that time because of the limited movement, the limited number of people that can be together. So, I think that this was the biggest time or the prime time where leaders were now forced to look at digital transformation and what it can do." - Participant A*

*"...and as well, what helped with the COVID-19 situation, to change that perspective altogether." - Participant K*

Essentially, participants emphasised that having a clear vision and strong strategic alignment is essential for sustaining digital transformation. Effective leadership, clear communication of digital priorities, and the ability to adapt to external pressures all play a critical role in ensuring long-term digital success in criminal justice organisations.

#### **4.5.2.2 Planning & Roadmap Execution**

Nine participants (n=9) indicated that careful planning and having a clear roadmap are essential for successful digital transformation in criminal justice organisations. They explained that a well-structured roadmap helps ensure a clear step-by-step plan,

making it easier to secure funding and align digital goals with the organisation's broader strategy.

Having a roadmap also helps organisations estimate costs, allocate resources properly, and phase out the implementation process to avoid disruptions. Participants highlighted that planning must be linked to the overall institutional strategy to ensure long-term success.

*"You've got an information or IT plan in place. If [you] want to call it, the information systems plan, it's got a road map. It's got the necessary funding required and that is how then you created then an implementation plan around this."* - Participant E

*"So, in our strategy we've defined the strategic objectives and towards the end we've got the roadmap."* - Participant M

Despite the importance of planning, participants frequently mentioned funding as a major obstacle to digital transformation. Budget limitations make it difficult to carry out large-scale projects, forcing organisations to consider alternative solutions like developing digital applications in-house instead of outsourcing. Some participants shared concerns that insufficient funding slows down progress, making it harder to expand digital initiatives effectively.

*"What I will add is that budget cuts are not helping with the digitalisation. It is making life a lot more difficult, and you need to think of other ways of implementing things. You know, things that you need to do in-house rather than outsource. So, yeah, the lack of funding is a deterrent."* - Participant E

*"...they see digital transformation as I would say a something that takes too much of a budget from operations from the core business, and they say you know I mean, why would we have to make this type of investment?"* - Participant H

To keep digital transformation moving forward, some participants suggested starting with small but impactful digital changes, known as "quick wins." These smaller initiatives can provide immediate benefits and help build confidence in digital projects. However, existing policies and organisational procedures sometimes slow down the

adoption of these changes. Participants noted that while quick wins may be small, they are important steps toward achieving larger digital transformation goals.

*"If we really want to be transforming, there are quick wins, small as they may be. Go digital, let's do them digitally. So, if we really want to be transforming, there are quick wins. And bigger things will then automatically come on later."* - Participant A

*"I just want to give an example of the use of a digital signature for example. I'm just using that Adobe digital signature as just a simple example, other than just implementing a comprehensive solution, but you can just show other people the value of digital transformation."* - Participant I

Another challenge raised by participants was the lack of formal assessments to track the maturity of digital transformation. While organisations are making efforts to go digital, there is little structured evaluation to determine whether these efforts are successful. Participants felt that having a clear maturity assessment framework would help organisations measure their progress, recognise achievements, and address challenges effectively.

*"I don't think that we have found room to assess whether we are moving on the right track from a digital transformation point of view. One would have preferred a separate sort of a strategic evaluation report to see where we started and what are the quick wins and the challenges that we would be having. But we have not, as yet, got to that level of evaluating how we are maturing from that aspect."* - Participant B

*"I think that is also one of the things that is missing there. I don't think we've got a system that assists us to measure our level of maturity in terms of (digital) things, yes. So, at this point we're not measuring it, but we get a sense of it when we implement projects and see if they are being used or not."* - Participant D

Overall, participants emphasised that digital transformation in criminal justice organisations requires proper planning, stable funding, a focus on quick wins, and a way to assess progress. While many recognise the need for a roadmap, financial constraints and the absence of formal evaluation frameworks remain significant barriers to long-term success.

### 4.5.2.3 Innovation & Experimentation

Nine participants (n=9) discussed the importance of Innovation & Experimentation in making digital transformation successful in criminal justice organisations. They highlighted that organisations must continuously improve, adapt, and take risks to keep up with changing digital needs. Encouraging innovation helps organisations test new ideas, refine digital processes, and implement changes more effectively. Participants highlighted that digital leaders should create an environment where employees feel comfortable experimenting with new technologies and approaches.

Several participants pointed out that pilot projects and proof-of-concept (POC) initiatives are valuable for testing digital solutions before full implementation. These initiatives allow organisations to evaluate innovative technologies while reducing potential risks.

*"Yeah, I think for experimentation we do implement our work on the proof of concept just to test the market and see how certain solutions can assist us with the current challenges that we are experiencing. We have a number of POC that we are conducting." - Participant I*

*"Of course, then you need to go into developing pilots and prototypes, which is what we did, to try out new technologies, to say, can you give us a trial version of this, let's try it out and let's show the results into the business." - Participant L*

Another key insight was the importance of continuous improvement and agility in digital transformation. Participants explained that organisations need to be flexible and adjust their approaches over time to ensure digital initiatives remain relevant and effective in solving service delivery challenges.

*"...just to go around the issue of set approaches if you pilot something and people like it, we then go into a project mode, at least there's sufficient data to support that." - Participant L*

*"So, so look, we are actually in a continuous improvement process. It's a process of continuously improving and ensuring that we are then responsive to service delivery issues, and we touch the public in many ways." - Participant M*

Participants also stressed that creating a risk-tolerant culture is essential for fostering innovation. They noted that failure should not be seen as a setback but as an opportunity to learn. This mindset encourages employees to test new ideas without fear of negative consequences.

*"There has to be a culture created where innovation is fostered, where failure is not seen as a failure, but as simply a step to getting to the place you need to be." - Participant C*

*"And of course, you know, the public sector as well is, you know, culture in the environment, it doesn't really promote innovation, you know there's a lot of set processes that need to be followed but we do provide support and most of these things, just to go around the issue of set approaches..." - Participant L*

Fundamentally, the findings show that criminal justice organisations need to embrace pilot projects, continuous improvement, and a culture that supports innovation and experimentation to successfully drive digital transformation.

#### **4.5.2.4 Cultural Change & Mindset**

Eight participants (n=8) emphasised that changing the organisational culture and mindset is crucial for successfully implementing digital transformation in criminal justice organisations. They indicated that shifting away from rigid bureaucratic structures toward a more innovative, agile, and inclusive culture is necessary for long-term success.

Participants also indicated that clinging to outdated bureaucratic processes slows down progress, and leadership must take an active role in promoting a mindset that values efficiency, flexibility, and openness to change. They encouraged leaders to critically assess whether traditional structures still meet the organisation's needs.

*"I think the first thing, really, what we need to do, we need to start changing the culture. I know government, we are a bureaucracy, and we continuously pride ourselves of being a bureaucracy, but the question we need to ask ourselves, but is this bureaucracy helping us?" - Participant D*

*“The public sector is a different, I would say, work environment that one would have to be cognizant of the prescripts that are out there and that have to be followed, so you can’t, you know, it doesn’t give you room you know to do it other way than, you know, than falling [in line].” - Participant H*

Another key point raised was that leaders must set an example by adopting digital tools and practices themselves. When leaders personally use and demonstrate the benefits of digital technology, it becomes easier for employees to follow their lead. Participants stressed that leadership’s active involvement in digital adoption can help create trust and encourage employees to embrace transformation.

*“Yeah, I look on a very basic level, for example, with memorandums, I appreciate they’ve (staff) sent to me a soft copy; to track change so they can learn through the process when I send it back to them. Something as simple as that and making sure that they are able to do teams meetings (virtual) with me all the time.” - Participant C*

*“They normally say you lead by example, so you have to implement something, use it, ensure that it works for you, and if it works for you, then it can work for others as well.” - Participant I*

Participants also highlighted the importance of collaboration, shared ownership, and inclusivity in digital initiatives. Employees are more likely to support transformation efforts when they feel like active contributors rather than passive recipients of change. Creating a culture that encourages digital sharing, open communication, and structured change management leads to greater employee engagement and enthusiasm for digital transformation.

*“They come up with suggestions and proposals and you know with this young ones, it’s very interesting, because there are some of the things that you have never thought about... that’s when you get to say, oh no, on the system we do not even have that icon... then when you sit with them, that’s when you get to say, oh no... we do not even have that icon of making sure that we capture.” - Participant G*

*“Like what we’ve said to that about building awareness, that’s infusing, continue to infuse the new culture of sharing and the deployment of change management across,*

*making people feel that they are part of the team, they are part of the game."* - Participant M

Essentially, participants emphasised that a strong cultural foundation is necessary for digital transformation to be successful. Criminal justice system organisations need to move away from rigid, top-down structures and create more flexible, technology-driven environments. Leadership plays a key role in setting the tone, empowering employees, and ensuring digital adoption happens at all levels.

#### **4.5.2.5 Governance & Structural Support**

Seven participants (n=7) highlighted the importance of governance and structural support in maintaining digital transformation within criminal justice organisations. They explained that having clear governance frameworks, strong leadership oversight, and organised decision-making processes helps ensure that digital projects are successfully implemented and sustained over time. Effective governance provides accountability, guides resource allocation, and aligns digital transformation with broader organisational goals.

Participants described how governance structures, such as executive committees and ICT steering committees, play a key role in managing digital initiatives and securing necessary funding. These structures bring leaders together, promote collaboration, and create a systematic approach to decision-making.

*"[Organisation X] has got established governance structures that are really very effective, so we also use those, more especially the Exco, Opsco, which is very robust actually that is attended by the middle management and also the SMS members who are directors. But also, there is also a well-established ICT steering committee, which then directs and ensures that all the initiatives are funded."* - Participant K

*"So, with this one, we do it through from a perspective with what we call the three-tier governance structure, but also other lower committees below the [Organisation X]. So, all these committees, this governance structure are then crucial."* - Participant M

Monitoring progress and regularly updating executive management were also seen as crucial in sustaining digital transformation. Participants highlighted that structured reporting systems help keep leadership informed and encourage a culture of accountability and continuous improvement.

*“There are different structures in the organisation that also review that. I mean, for instance, we have what we call a governance structure...”* - Participant H

*“We have weekly meetings with executive management so just to give them regular updates on where we are with certain initiatives, no matter, regardless, of how minute the change might be, but at least we keep them abreast.”* - Participant L

Additionally, participants emphasised the role of compliance and formal governance processes in guiding digital projects. Steering committees and executive boards help track progress and ensure that different units remain accountable for their responsibilities.

*“We do have your governance structures throughout. From an IT perspective, it will be the steering committees reporting to the management, Exco reporting to the board. So those are the things that are done to hold units accountable.”* - Participant J

*“Once we, the modernisation steering committee, which is also part of the ICT steering committee, we are supposed to do the review, an annual review that is then going to be shared with both the ExCo and also the Audit Committee.”* - Participant K

Overall, participants agreed that having strong governance frameworks, leadership oversight, and structured decision-making is key to ensuring that digital transformation efforts are well-planned, properly funded, and sustained. By embedding governance into these initiatives, criminal justice system organisations can maintain control, accountability, and strategic direction in their digital transformation journey.

#### **4.5.2.6 Collaboration and Empowerment**

A total of six participants (n=6) highlighted that Collaboration and Empowerment are essential for successful digital transformation in criminal justice organisations. They

emphasised the importance of working together within across different departments, allowing decision-making at various levels, and breaking down rigid organisational structures. Without effective collaboration, digital initiatives often face delays due to strict hierarchies and a lack of teamwork between departments.

To improve collaboration, participants reported using cross-functional teams that bring together key stakeholders. These teams work through project collaboration platforms, where, as partners they can discuss and address important issues collectively. This approach ensures that all relevant individuals are actively engaged in decision-making and problem-solving for digital transformation.

*"Right now, what we have done was either through the [name of project] management meetings we're able to integrate all the partners and we're able to put them in one space and try to engage on the issues that are of course relevant at that particular moment."* - Participant B

*"...so, each and every component that is affected by the digital transformation, in whatever initiative, there should be some little, small teams with little team leaders that are responsible to make sure that as and when we roll out the digital transformation, everybody else gets excited about the process, everybody is on board. And in that case, you will see that everybody else is participating."* - Participant D

However, participants noted that strict hierarchical structures often slow down collaboration. While cross-functional teamwork is possible, final decision-making authority still depends on the leadership hierarchy. This means that decisions made at one level must often be escalated for higher approval, delaying progress.

*"The cross-functional collaboration and decentralised decision-making is okay if decisions can be made at my level, then I can deal with all chief directors from all other departments and make decisions. Then it has to go up to the next level if these decisions have to be made at that level."* - Participant C

*"I mean this is the bureaucracy that I'm talking about at times and because of the bureaucracy I mean it will make you look like you now incompetent right?"* - Participant H

Despite these challenges, participants agreed that encouraging collaboration in a flexible and adaptable way is crucial for digital transformation. They emphasised the need for continuous improvements in collaboration strategies to match the fast-changing digital environment and the needs of their organisations.

*"I suppose that will go a long way into fostering cross-functional collaboration in such a very dynamic way."* - Participant E

*"We need to have an integrated system. But then what we need to do is that [organisation X], when they develop a system, they should involve all of us so that whatever information that we need, we can also advise them so that it is incorporated in their system."* - Participant G

*"We're even conducting roadshows across member departments. We know that people now understand the [Organisation X] digital transformation strategy and also understand our project delivery framework, our change management initiatives."* - Participant M

The findings point that collaboration and empowerment are key factors in driving digital transformation in criminal justice organisations. While progress has been made in encouraging teamwork across departments, participants recognised the need to further reduce hierarchical barriers, promote decentralised decision-making, and build lasting collaboration structures that support digital innovation.

#### **4.5.3 Further Insights on Digital Leadership's Role in Innovation & Agility: Comparing Perspectives of Technology Leaders and Business Leaders**

Business and technology leaders have different but complementary views on how digital leadership supports innovation and agility in criminal justice organisations.

Business leaders (Participants A-G) emphasised the importance of aligning digital efforts with overall business goals, managing change effectively, and shaping the right organisational culture. They were particularly concerned that digital transformation is often treated as an IT-driven process rather than a shared responsibility across all

departments. This lack of broad engagement can slow progress. Business leaders stressed that strong governance, leadership commitment, and teamwork across departments are necessary for digital adoption. They also highlighted the need for structured change management, training employees in digital skills, and ensuring policies support a lasting digital culture.

Technology leaders (Participants H-M), on the other hand, focused more on execution, system integration, and governance. They discussed the challenges of implementing digital strategies, breaking down organisational silos, and driving continuous improvement. Their priorities included using ICT steering committees, enterprise architecture frameworks, and performance tracking to guide digital projects. They also supported the use of pilot programs and testing new ideas before full implementation to encourage innovation. However, they acknowledged difficulties in securing long-term funding and ensuring that business leaders are fully involved in digital decision-making.

While both groups recognised the importance of innovation and agility, business leaders were more focused on strategic alignment and cultural transformation, whereas technology leaders prioritised execution, governance, and ongoing improvements. Bridging these perspectives is crucial to building a strong digital transformation culture and ensuring long-term success in criminal justice organisations.

#### ***4.5.4 Summary of Findings for Proposition 3***

Digital leadership is essential for cultivating a lasting culture of innovation and agility in criminal justice organisations undergoing digital transformation. Findings from six key themes illustrate how leaders address challenges, align goals, implement plans, encourage innovation, support collaboration, and maintain strong governance.

Clearly communicated vision and strategic alignment are vital. When leaders effectively share digital goals and ensure they align with organisational objectives, digital initiatives gain necessary support and resources. Poorly articulated vision results in disorganised and ineffective efforts.

Effective planning and roadmap execution translate digital visions into practical results. Leaders must create clear plans, allocate sufficient budgets, and prioritise high-impact projects. However, limited funding and the absence of structured maturity assessments can hinder accurate tracking and continuous improvement.

Sustaining digital transformation requires continuous innovation and experimentation. Leaders must foster environments that encourage pilot projects and agile practices, allowing organisations to adapt effectively to evolving challenges. Innovation should be ongoing, rather than isolated.

Transformational success depends heavily on cultural shifts and overcoming resistance. Leaders need to actively promote digital adoption, agility, and structured change management, shifting workplace mindsets to embrace continuous digital improvements.

Strong governance and structural support stabilise and guide digital initiatives. Clear oversight, compliance, accountability mechanisms, and executive leadership ensure digital projects stay aligned with organisational priorities.

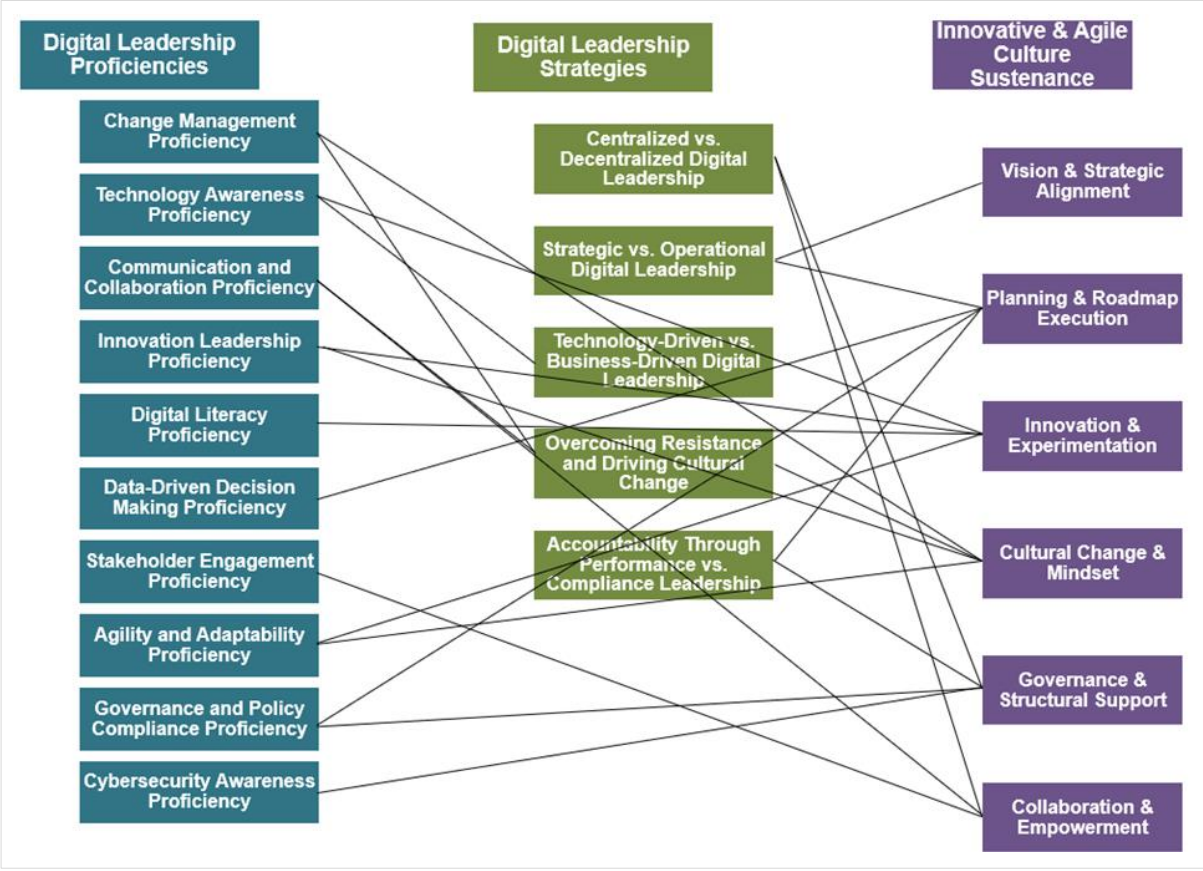
Collaboration and empowerment are crucial for overcoming silos and facilitating inclusive, decentralised decision-making.

By integrating these leadership qualities, criminal justice organisations ensure ongoing innovation, agility, and value creation.

## **4.6 Interconnectedness and Mutual Reinforcement of Themes**

Figure 28 below provides an overview of the interconnectedness and mutual reinforcement of the themes. These associations mean that each theme does not exist or operate in isolation. Instead, the themes mutually reinforce or depend on each other. When one theme (e.g., Change Management) is strong, it can support or enhance other themes (e.g., Communication and Collaboration). Likewise, if one theme (e.g., Digital Literacy) is weak or missing, it can limit the effectiveness of other related themes (e.g., Technology Awareness). Essentially, these themes form an interconnected network where success in one area tends to promote success in others, while gaps or

shortcomings in one theme often slow or complicate progress in other associated themes.



**Figure 28: Interconnectedness and Mutual Reinforcement of Themes**

### 4.7 Chapter Summary

This chapter presented key findings based on participant responses, starting with demographic details and progressing through the identification of themes, categories, and codes linked to each research proposition. Participants’ perspectives highlighted the role of digital leadership in guiding technological transformation within South Africa’s Criminal Justice System. A summary of findings for each proposition was provided, emphasising leadership’s influence on digital transformation. The next chapter will discuss these findings in relation to existing literature, providing deeper insights and contextualising the study’s contributions.

# CHAPTER 5. DISCUSSION OF THE FINDINGS

## 5.1 Chapter Introduction

This chapter presents the discussion of the study's key findings in relation to the research aims and the conceptual framework. It examines and interprets the findings for each research proposition, comparing them with the existing literature to identify areas of agreement and difference. The chapter also explores possible explanations for any differences that emerged. Overall, the discussion aims to show how the study contributes to existing knowledge and provides new insights into the research topic.

## 5.2 Recapitulation of the Research

### *5.2.1 Recapitulation on the Research Aims*

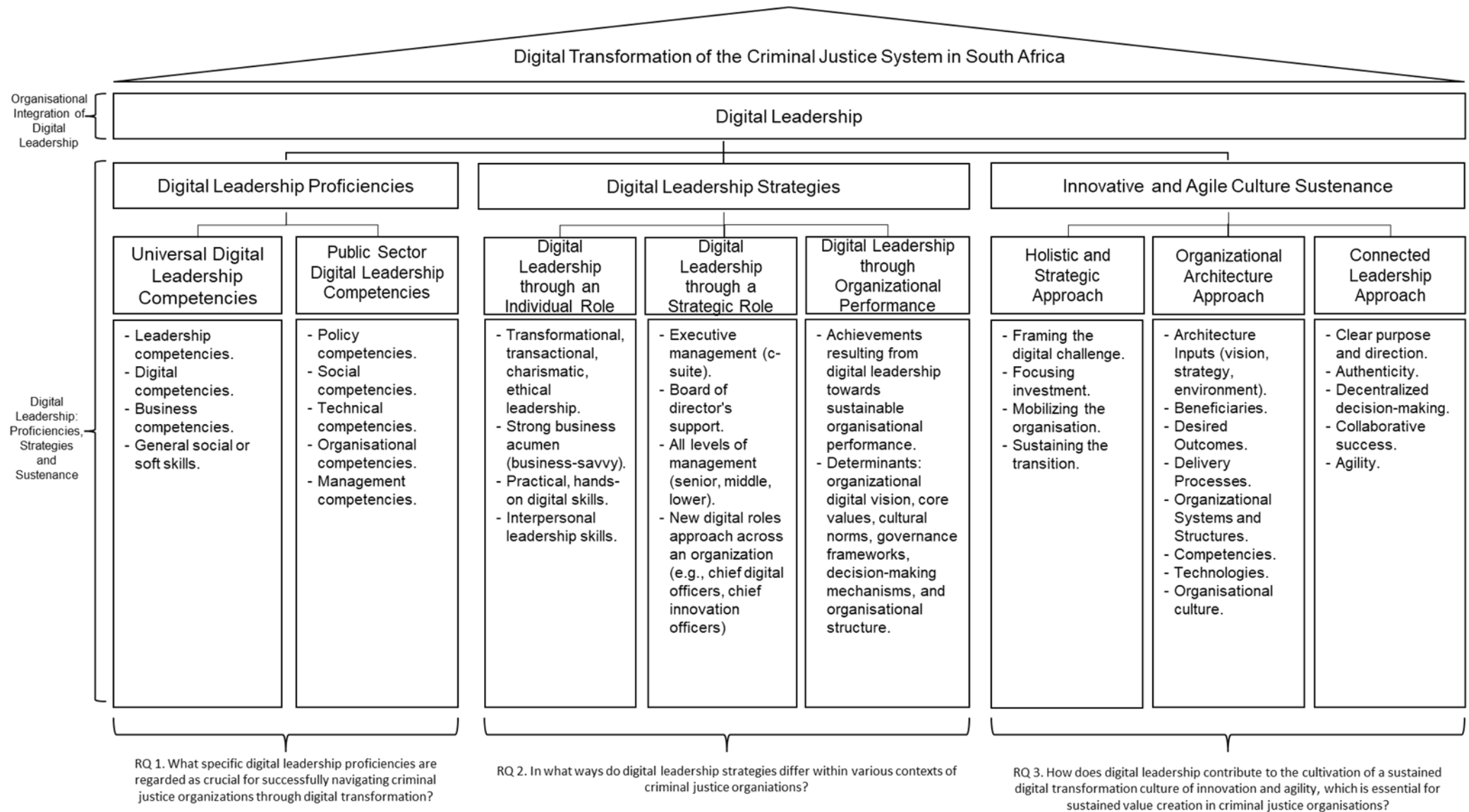
This qualitative study explored how leadership supports digital transformation in South Africa's Criminal Justice System. While global trends show that technology improves efficiency, transparency, and communication in criminal justice, successful transformation also presents challenges that require strong leadership. Research highlights the importance of leaders who drive innovation, collaboration, and strategic change. In South Africa, progress in modernising the system has been slow, making it important to understand leadership's role in guiding digital transformation. The study aimed to address this by answering the following research questions and propositions as per Table 5.

Research Question	Associated Research Proposition
<p>RQ 1. What specific digital leadership proficiencies are regarded as crucial for successfully navigating criminal justice organisations through digital transformation?</p>	<p>Successfully navigating criminal justice organisations through digital transformation requires Digital Leadership with a diverse set of proficiencies, which includes universal and public sector specific digital leadership competencies.</p>
<p>RQ 2. In what ways do digital leadership strategies differ within various contexts of criminal justice organisations?</p>	<p>Different Digital Leadership strategies (through an individual role, through a strategic role, through organisational performance) are employed to digitally transform criminal justice organisations, given their contexts.</p>
<p>RQ 3. How does digital leadership contribute to the cultivation of a sustained digital transformation culture of innovation and agility, which is essential for value creation in criminal justice organisations?</p>	<p>Digital Leadership employs organisational-wide integration approaches (holistic and strategic approach, organisational architecture approach, connected leadership approach) to cultivate and sustain a digital transformation culture of innovation and agility in criminal justice organisations, given their contexts.</p>

**Table 5: Restated research questions and associated research propositions**

### **5.2.2 Recapitulation of the Conceptual Framework**

The research explored how digital leadership influences the digital transformation of South Africa's Criminal Justice System. The study's restated conceptual framework (Figure 29) focused on how effectively applying digital leadership within these organisations can support successful digital transformation. It examined key digital leadership skills needed to navigate technological changes. In line with the research questions, the framework looked at how leadership strategies differed across various criminal justice settings and how these approaches contributed to fostering a culture of innovation and adaptability, essential for long-term improvement and value creation.



**Figure 29: Restated Conceptual framework**

## **5.3 Discussion of Findings pertaining to Proposition 1**

### ***5.3.1 Recapitulation of Findings for Proposition 1***

Digital leadership in criminal justice organisations requires a blend of strategic thinking, technical knowledge, and key competencies to drive successful digital transformation. Leaders must proactively manage change, communicate clearly, support employees, and foster collaboration to overcome resistance. Staying informed about emerging technologies enables aligned decision-making, while promoting innovation and digital literacy strengthens transformation efforts. Data-driven decisions improve service delivery and operations, while stakeholder engagement, agility, and adaptability ensure responsiveness to change. Adherence to governance and cybersecurity standards safeguards secure and ethical digital practices.

### ***5.3.2 Discussion of Findings for Proposition 1***

#### ***5.3.2.1 Change Management Proficiency***

Participants highlighted change management as a crucial digital leadership proficiency, focusing on overcoming resistance, driving cultural change, and leading transformation. They emphasised that, in the criminal justice system, effective change requires multi-agency collaboration across organisations in the system. This aligns with Westerman et al. (2014), who state that digital leaders must guide organisations and create a culture that supports continuous change. Schiuma et al. (2021) adds that leaders play a vital role in driving ongoing innovation and managing uncertainty, while Elia et al. (2024) highlights the importance of building momentum and promoting a culture focused on innovation during digital transformation.

However, while the literature emphasises internal change management, the participants' focus on collaboration across the organisations of the criminal justice system reflects a deeper complexity in criminal justice digital leadership. This

could be attributed to the systematic nature of the organisations in the criminal justice system who are independent but interconnected entities.

#### **5.3.2.2 Technology Awareness Proficiency**

Participants stated that digital leaders must have a good understanding of emerging technologies like AI and cloud computing, enabling them to engage with technical experts, ask the right questions, and make informed decisions without needing to be technical specialists themselves. This aligns with Adie et al. (2024) and Zeike et al. (2019), who describe technological awareness as a core digital leadership competency. Similarly, Kusanke et al. (2023) emphasise that mastering digital tools is essential for effectively leading digital transformation. The findings closely align with the literature.

#### **5.3.2.3 Communication and Collaboration Proficiency**

Participants spoke about the importance of clear and adaptable communication, especially when engaging with different stakeholders. They highlighted that, given South Africa's diversity, digital leaders must be mindful of cultural and language differences and avoid technical jargon, explaining things in simple, understandable ways when speaking to non-technical staff or the public. This reflects the criminal justice sector's need for leaders to ensure that everyone understands digital changes, regardless of their background. Likewise, Adie et al. (2024) and Clarke (2020) emphasise that communication and collaboration are essential skills for digital leaders, helping them build relationships and effectively engage stakeholders. Hayward (2016) also stresses that effective communication supports teamwork and shared decision-making within organisations.

However, while the literature highlights the general importance of communication, it does not specifically address the need for language flexibility or the ability to simplify complex digital concepts for the public. This difference likely stems from the criminal justice sector's public-facing role, where leaders must explain digital

changes clearly and simply to ensure understanding across South Africa's diverse communities.

#### **5.3.2.4 Innovation Leadership Proficiency**

Participants described innovation as a non-negotiable responsibility for digital leaders, explaining that leaders must create environments where creativity is encouraged, experimentation is supported, and teams feel safe to challenge traditional ways of working. Importantly, they emphasised that leaders also need to secure the necessary resources and space for innovation to succeed. This aligns with Mihardjo et al. (2019b) and Adie et al. (2022), who identify innovation, critical thinking, and risk-taking as essential attributes of digital leadership. Van Tonder et al. (2020) further emphasise that embedding innovation into digital transformation strategies is vital for success.

However, while the literature highlights the importance of innovation, it places less emphasis on the practical need for leaders to secure resources to support it. Participants' experiences showed that without active leadership in providing resources, innovation often stalls, particularly in the resource-constrained public sector, which the criminal justice system forms part of, where competing priorities make this support even more critical.

#### **5.3.2.5 Digital Literacy Proficiency**

Participants emphasised that digital literacy is a foundational leadership competency, describing it as the ability to understand digital platforms, emerging trends, and how these impact service delivery and operational efficiency. Similarly, Adie et al. (2024) and Zeike et al. (2019) highlight digital literacy as essential for leaders to align technological developments with organisational goals and effectively drive digital transformation. The findings closely align with the literature.

### **5.3.2.6 Data-Driven Decision-Making Proficiency**

Participants highlighted the role of data-driven decision-making, emphasising the use of real-time operational data to support immediate responses, guide resource allocation, and monitor performance. They saw data as central to daily criminal justice operations, not just a reporting tool. Westerman et al. (2014) and Saddique et al. (2023) support this view, stating that data analytics is essential for strategic decision-making and improving organisational performance. The findings closely align with the literature.

### **5.3.2.7 Stakeholder Engagement Proficiency**

Participants highlighted the importance of stakeholder engagement, stressing that early involvement is key to securing buy-in and reducing resistance. They explained that, in the criminal justice sector, stakeholders go beyond internal teams and also include the public, policymakers, and external partners. This aligns with Tate et al. (2023) and Makasi et al. (2022), who emphasise stakeholder engagement as a crucial digital leadership competency, with digital leaders playing a vital role in creating public value and ensuring meaningful citizen participation. The findings closely align with the literature.

### **5.3.2.8 Agility and Adaptability Proficiency**

Participants viewed agility as key for navigating continuous digital disruption. They indicated that leaders must adjust strategies, encourage learning, and adapt to changing digital environments. Hayward (2016), Bitzer et al. (2021) and Kusanke et al. (2023) supports this view by describing agility as a key characteristic of digital leadership, enabling leaders to respond effectively to constant change. The findings closely align with the literature.

### **5.3.2.9 Governance and Policy Compliance Proficiency**

Participants identified governance as multifaceted, covering compliance, understanding regulatory frameworks, and importantly, advocating for policy

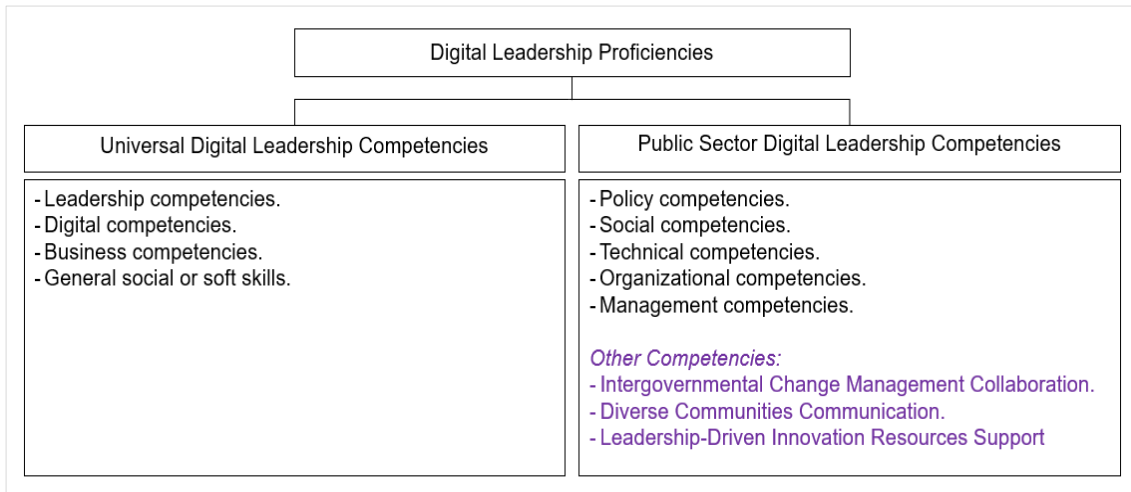
reform where existing regulations hinder digital progress. This aligns with Makasi et al. (2021), Kusanke et al. (2023), and Distel et al. (2019), who emphasise governance as a key digital leadership competency in the public sector, particularly stressing the importance of navigating complex bureaucratic constraints. The findings closely align with the literature.

#### **5.3.2.10 Cybersecurity Awareness Proficiency**

Participants highlighted cybersecurity awareness as a non-negotiable competency due to the rising threat of cyberattacks. Participants emphasised the importance of stringent cybersecurity measures, continuous monitoring, and compliance with data protection laws like POPIA. This perspective is echoed by Misuraca (2020) and Chansukree et al. (2022), who argue that protecting sensitive data is fundamental to preserving public trust and organisational integrity. The findings closely align with the literature.

### **5.3.3 Summary on Discussion of Findings for Proposition 1**

The findings mostly support the literature on essential digital leadership skills for criminal justice digital transformation, such as change management, technology awareness, communication, innovation, and cybersecurity. However, they also reveal public sector specific needs like multi-agency collaboration, securing resources for innovation, and adapting communication for diverse communities as illustrated in an augmented conceptual framework for Digital Leadership Proficiencies contained in Figure 30. Participants confirmed core competencies but added practical insights beyond theory. Overall, digital leadership in criminal justice requires both general skills and specialised abilities suited to its complex structures, governance demands, and public responsibilities.



**Figure 30: Augmented Conceptual Framework  
for Digital Leadership Proficiencies**

## 5.4 Discussion of Findings pertaining to Proposition 2

### 5.4.1 Recapitulation of Findings for Proposition 2

Digital leadership in criminal justice organisations varies by structure, priorities, and technology maturity. Centralised leadership ensures standardisation, while decentralised models enable flexibility. Strategic leaders drive long-term transformation; operational leaders focus on short-term gains. Technology-driven approaches prioritise IT governance, while business-driven strategies align digital initiatives with core justice functions. Resistance from middle management and frontline staff, driven by traditional practices, digital skills gaps, and job security fears, is a major barrier. Success depends on strong leadership, communication, digital training, stakeholder engagement, and measuring progress through KPIs or compliance.

## **5.4.2 Discussion of Findings Proposition 2**

### **5.4.2.1 Centralised vs. Decentralised Digital Leadership**

The findings showed that criminal justice organisations differ in how they set up digital leadership. Some follow a centralised approach, led mainly by CIOs, while others involve more collaboration with business units. This reflects the public sector's usual preference for top-down structures, where digital projects are managed from the top to maintain oversight and accountability.

However, Chauhan and Thangavelu (2024) point out that good digital leadership is now moving towards more decentralised and collaborative approaches that include people from various levels of the organisation. Eberl and Drews (2021) also warn that keeping digital transformation only within IT departments can create disconnected digital teams, stressing the importance of leadership roles shared across both business and technology areas. Similarly, Adie et al. (2024) explain that public sector digital leadership should involve different stakeholders to achieve full transformation.

Although the findings suggest some shift towards collaboration, many criminal justice organisations still rely on centralised, IT-led leadership. This likely reflects their need to manage risks and adhere to strict accountability systems, due to the hierarchical nature of criminal justice organisations.

### **5.4.2.2 Strategic vs. Operational Digital Leadership Priorities**

The findings observed a clear difference between organisations that include digital leadership in their long-term planning and those that mainly focus on short-term or operational improvements. Makasi et al. (2021) and Twizeyimana and Andersson (2019) stress that aligning digital transformation with wider policy goals and national development plans is key for making it sustainable and creating public value. Westerman et al. (2014) also explain that having a strategic approach gives digital projects direction and helps sustain them over time. Adie

et al. (2024) agree, saying digital leadership in the public sector should focus on long-term goals instead of only reacting to short-term problems.

However, the findings further observed that many criminal justice organisations concentrate more on daily operations, with service delivery needs and limited resources influencing their digital plans. This is not unusual, as Duan et al. (2022) note that public sector organisations often face pressures that push them to chase quick wins rather than long-term digital change. The criminal justice sector's tight budgets and demand for fast public services likely add to this challenge. Nonetheless, the literature suggests that a balance between strategic planning and operational delivery is necessary for lasting digital success.

#### **5.4.2.3 *Technology-Driven vs. Business-Driven Digital Leadership***

The findings show that criminal justice organisations have different views of digital leadership. Some focus mainly on technology, with IT departments leading digital transformation, while others take a business-driven approach. In many cases, IT still drives decisions, following traditional models where technical skills take priority. However, Benitez et al. (2022) and Westerman et al. (2014) explain that good digital leadership should balance both technology and business goals so that digital efforts support the organisation's overall strategy. Adie et al. (2024) add that digital leaders need both technical skills and business understanding to make sure digital projects improve service delivery and benefit citizens. This balance is especially important in the public sector, where digital work should create public value, not just be seen as IT projects.

However, the findings discovered that while some criminal justice organisations are shifting towards business-led digital leadership, others still rely mostly on IT. This gap compared to the literature may be due to legacy leadership models and limited digital literacy among business leaders, showing the need for better teamwork between business and technology, as Benitez et al. (2022) suggest.

#### **5.4.2.4 Overcoming Resistance and Driving Cultural Change**

The findings highlight that resistance to change was a common challenge, with many criminal justice organisations struggling with cultural inertia and hesitation to adopt new ways of working. Distel et al. (2019) and Westerman et al. (2014) explain that digital transformation is not just about technology but also about changing mindsets and behaviours, which strongly supports the findings. Public sector organisations, known for being rigid and bureaucratic, often face even more resistance to change (Araujo et al., 2021). Magesa and Jonathan (2020) also highlight that strong, transformational leadership is needed to overcome these barriers, as leaders must motivate teams, push for change, and create a culture of innovation and flexibility. The study confirms this, showing that leaders play a key role in sharing their vision, offering training, and guiding change to reduce resistance.

However, the findings also add a new point, many older in age staff feel disconnected from transformation efforts. This issue is not widely covered in the literature but stands out in criminal justice organisations with long-serving employees.

#### **5.4.2.5 Accountability Through Performance vs. Compliance**

The findings established that digital leadership strategies combined two types of accountabilities. On one side, leaders focused on performance by using KPIs and constant monitoring. On the other, they prioritised compliance by following rules and governance procedures. Adie et al. (2022) and Westerman et al. (2014) argue that digital leadership should mainly be judged by results, how well the organisation performs, how satisfied stakeholders are, and the public value created. Jewer and Van Der Meulen (2022) add that tracking progress with metrics and adjusting strategies is key. Still, public sector leaders must also work within strict rules to stay transparent and meet regulatory requirements (Philippart, 2022).

This balance showed up in the study, however, some organisations leaned more toward compliance, which might limit innovation. While the literature agrees that good governance matters, too much focus on compliance can reduce flexibility and slow digital progress (Mulyana et al., 2021). In criminal justice organisations, this heavy focus on compliance likely comes from the need for strong accountability and prescribed reporting.

#### ***5.4.3 Summary on Discussion of Findings for Proposition 2***

The study largely aligns with the literature, showing digital leadership as complex and context-driven, requiring strategy, cultural change, technical skills, and collaboration. Both emphasise integrating digital efforts, balancing performance, and compliance, and addressing resistance to change. However, justice organisations favour centralised, IT-led leadership, operational focus, and strict compliance, differing from the literature's focus on decentralisation, long-term strategy, and performance-driven accountability. These differences reflect the sector's unique pressures, such as hierarchy, legal mandates, and public accountability. Overall, the findings add valuable real-world insights into how digital leadership unfolds within the criminal justice context.

### **5.5 Discussion pertaining to Proposition 3**

#### ***5.5.1 Recapitulation of Findings for Proposition 3***

Digital leadership plays a key role in building a lasting culture of innovation and agility in criminal justice organisations during digital transformation. Leaders drive change by setting a clear vision, aligning goals, and gaining commitment. Strong planning, budgeting, and project prioritisation help progress, but limited funding and weak evaluation slow it down. Supporting innovation through pilot projects and experimentation helps organisations adapt. Still, changing mindsets and overcoming resistance remain challenges. Good governance and accountability keep digital efforts aligned with priorities. Encouraging collaboration and cross-

functional teamwork also helps break silos, making organisations more agile and focused on ongoing value creation.

### **5.5.2 Discussion of Findings Proposition 3**

#### **5.5.2.1 Vision & Strategic Alignment**

The findings emphasised that digital leadership plays a key role in setting a clear digital vision and aligning it with the organisation's strategic goals. Participants shared that integrating this vision into strategic plans and ensuring it flows through all levels of the organisation was essential for sustaining digital transformation. This reflects how framing the digital challenge requires creating and communicating a shared vision to align leadership and guide digital efforts, as noted by Westerman et al. (2014) and Adie et al. (2024). Participants also highlighted that digital leaders must inspire others and manage challenges to successfully drive this vision forward, which connects with Magesa and Jonathan (2020).

The findings further revealed a unique insight about the influence of external pressures, such as COVID-19, which forced organisations to speed up digital adoption. Although agility and adaptability are recognised (Karippur & Balaramachandran, 2022), participants' experiences showed how crisis situations demanded proactive and flexible leadership. Their responses during the crisis emphasised the need for adaptable visioning and added to existing knowledge by showing how external factors can accelerate digital transformation.

#### **5.5.2.2 Planning & Roadmap Execution**

The findings highlight that participants viewed structured digital planning, clear roadmaps, and proper resource allocation as essential for aligning digital initiatives with organisational goals. This reflects the importance of having detailed digital roadmaps and governance structures to keep transformation efforts on track (Westerman et al., 2014; Zaoui & Souissi, 2020). Participants also stressed the role of digital leaders in securing funding and overseeing

implementation, which is supported by Magesa & Jonathan (2020) and Philippart (2022).

However, the findings also showed that ongoing funding challenges often forced participants to focus on quick wins. Although public sector constraints are recognised (Kusanke et al., 2023), participants described these financial difficulties as a major practical barrier. In addition, while assessing digital maturity is recognised as important (Haryanti et al., 2023), participants shared that there were no formal evaluation frameworks in place. This points to a gap where, despite strong planning efforts, practical challenges, especially around funding and measurement, may limit progress in criminal justice organisations.

### ***5.5.2.3 Innovation & Experimentation***

The findings show the importance of creating a culture that supports innovation and experimentation. Participants valued testing ideas through pilots and proof-of-concept projects and emphasised the need for risk-tolerant environments to improve digital processes. This connects with the focus on agile experimentation and continuous learning (Hayward, 2016; Schiuma et al., 2021).

Participants also raised concerns about how strict public sector bureaucracies make it hard to innovate, which aligns with Nuryadin et al. (2023) and Kusanke et al. (2023), who highlight how hierarchical structures limit agility. Still, participants emphasised the need for leadership to create spaces where innovation is supported, and failure is seen as part of learning. Both the findings and literature are aligned with each other.

### ***5.5.2.4 Cultural Change & Mindset***

Participants highlighted the need to move away from rigid, bureaucratic ways of working toward more flexible, collaborative, and technology-friendly environments. They indicated that leaders setting the example by using digital tools themselves was important, showing the value of transformational leadership (Mihardjo & Furinto, 2018; Ly, 2024). Empowering staff and creating an inclusive

environment also came through strongly as necessary for driving cultural change (Westerman et al., 2014; Schiuma et al., 2021).

However, participants provided further insights into public sector challenges, where strict regulations slow down cultural and mindset shifts. This highlights a practical gap where literature presents the ideal, but participants reveal the uphill task of overcoming legacy cultures. Change management strategies mentioned by participants, such as roadshows and structured communication, support the cultural shift and make the change process more practical.

#### ***5.5.2.5 Governance & Structural Support***

Participants highlighted the importance of having governance structures like ICT steering committees and executive oversight to support digital transformation, which is also reflected by Jewer and Van Der Meulen (2022) and Philippart (2022). They described how structured reporting and accountability help keep digital efforts on track, secure funding, and measure progress, aligning with these points. A slight difference came up around adaptability. Mulyana et al. (2021) point out that traditional governance might need to change to support agile digital transformation, but participants felt their current structures were still effective. This difference could be because criminal justice organisations have not yet faced challenges that requires them to rapidly changing their governance models. They however agree that continued success depends on governance that can adjust to meet changing digital demands.

#### ***5.5.2.6 Collaboration & Empowerment***

The findings emphasise that collaboration and empowerment are important for driving digital transformation, which is also supported by the literature (Hayward, 2016; Pandey et al., 2023). Participants talked about using cross-functional teams and allowing more decision-making at various levels, which fits with Connected Leadership ideas that focus on teamwork, influence, and agility (Hayward, 2016).

However, participants also shared that hierarchical decision-making is still common and sometimes clashes with efforts to empower teams. This challenge is expected in bureaucratic organisations like the criminal justice sector, as supported by Kusanke et al. (2023), but participants' frustrations show that strong hierarchical controls still remain. Additionally, while literature promotes external collaboration (e.g., citizen engagement), participants focused mainly on internal coordination, indicating a potential improvement area in broadening collaboration beyond organisational boundaries.

### **5.5.3 Summary on Discussion of Findings for Proposition 3**

The study's findings largely validate the literature's assertions that digital leadership in criminal justice organisations requires a clear vision, structured planning, innovation, cultural transformation, strong governance, and collaboration. Differences emerged in the practical challenges of funding, formal measurement, and shifting rooted bureaucratic cultures. These discrepancies stem from the unique public sector context, where legal mandates, resource constraints, and hierarchical systems influence digital leadership practices. Nevertheless, the convergence between empirical findings and the literature perspectives emphasises the critical role of digital leadership in cultivating an enduring culture of innovation and agility for sustained value creation in criminal justice organisations.

## **5.6 Chapter Summary**

This chapter restated the research aims and the conceptual framework guiding the study. It discussed the findings for each proposition, highlighting similarities and differences with the literature. Possible reasons for these differences were considered. Overall, the chapter shows how the study adds to existing knowledge and offers new insights into the research topic. The next chapter presents the study's conclusions, recommendations, and outlines suggestions for further research.

# CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS

## 6.1 Chapter Introduction

### 6.1.1 *Summary of Chapters*

Chapter 1 provided an overview of the study by introducing its purpose, background, and key focus areas. It outlined the research problem, questions, and rationale, explaining why this study is important. The chapter also defined the study's scope, setting clear boundaries and highlighting key concepts. Finally, it clarified the assumptions that guided the research process.

Chapter 2 reviewed key literature and theories on digital leadership, focusing on essential proficiencies, strategies, and its role in fostering innovation and agility. It also outlined the analytical framework and a conceptual framework that guided this study.

Chapter 3 outlined the research methodology used to explore digital leadership in South Africa's Criminal Justice System. It discussed the chosen research paradigm, approach, and design, ensuring alignment with the study's objectives. Data collection methods, sampling, and analysis strategies were detailed, highlighting efforts to ensure accuracy and reliability. Ethical considerations, potential limitations, and quality assurance measures were addressed to uphold research integrity.

Chapter 4 presented key findings based on participant responses, starting with demographic details and progressing through the identification of themes, categories, and codes linked to each research proposition. Participants' perspectives highlighted the role of digital leadership in guiding technological transformation within South Africa's Criminal Justice System. A summary of findings for each proposition was provided, emphasising leadership's influence on digital transformation.

Chapter 5 discussed the findings for each proposition, highlighting similarities and differences with the literature. Possible reasons for these differences were considered. Overall, the chapter shows how the study adds to existing knowledge and offers new insights into the research topic.

Finally, this concluding chapter, Chapter 6, presents the key conclusions drawn from the study, specifically addressing each research proposition. It further outlines the contributions this research makes to the existing body of knowledge within the field. Based on the findings, several practical recommendations are offered. The chapter also reflects on the limitations encountered during the research process, which may have influenced the study's outcomes. Finally, areas for further research are suggested to guide future studies and deepen the understanding of the topic.

### ***6.1.2 Recapitulation of the research propositions***

To recapitulate, the research propositions are as follows:

- Proposition 1: Successfully navigating criminal justice organisations through digital transformation requires Digital Leadership with a diverse set of proficiencies, which includes universal and public sector specific digital leadership competencies.
- Proposition 2: Different Digital Leadership strategies (through an individual role, through a strategic role, through organisational performance) are employed to digitally transform criminal justice organisations, given their contexts.
- Proposition 3: Digital Leadership employs organisational-wide integration approaches (holistic and strategic approach, organisational architecture approach, connected leadership approach) to cultivate and sustain a digital transformation culture of innovation and agility in criminal justice organisations, given their contexts.

## 6.2 Conclusions regarding Proposition 1

The research confirms that successfully guiding criminal justice organisations through digital transformation requires digital leadership with a diverse set of proficiencies. These proficiencies combine both universal digital leadership skills and those specific to the public sector. The participants made it clear that digital leaders must be able to manage change, lead cultural shifts, and collaborate across different independent but connected organisations within the criminal justice system. This highlights the unique need for multi-agency collaboration, which is a significant leadership challenge in the sector.

Technology awareness, digital literacy, and the ability to make data-driven decisions also emerged as critical leadership competencies. Leaders must understand digital tools and trends, use real-time data to improve service delivery, and make strategic decisions without needing to be technical experts. The findings also show that clear and adaptable communication is essential, especially in a diverse country like South Africa. Leaders must explain digital changes in simple, understandable ways to both internal teams and the public, ensuring no one is left behind during transformation.

Furthermore, fostering innovation is non-negotiable, and leaders must create environments that encourage creativity while securing resources to support innovative efforts. Agility and adaptability are equally important, allowing leaders to adjust strategies in response to fast-changing digital environments. Strong stakeholder engagement, governance knowledge, and policy compliance were also emphasised, with leaders needing to advocate for policy reforms where outdated regulations hinder progress. Cybersecurity awareness was highlighted as critical, given the sensitive nature of justice sector data and increasing cyber threats.

This research makes important contributions to the body of knowledge in several ways. Theoretically, it adds insight depth by showing how digital leadership competencies apply in a complex, public sector environment like the criminal justice system, where leaders face unique challenges not fully covered in existing literature. Practically, the findings provide guidance for developing digital

leadership capacity within criminal justice organisations, offering insight into the crucial skills needed to drive transformation. From a policy perspective, the research emphasises the need for supportive regulations and highlights that leaders must play a role in advocating for policy changes that enable digital progress.

### **6.3 Conclusions regarding Proposition 2**

The research verified that digital leadership strategies vary widely across South African criminal justice organisations, influenced by organisational structure, strategic goals, how technology is managed, the handling of staff resistance, and the ways in which accountability is enforced.

Some organisations prefer a centralised digital leadership model, typically led by senior technology executives, ensuring standardisation and tight control crucial for managing risks and complying with strict rules. Others follow decentralised, collaborative models, involving business units and stakeholders across various organisational levels. While decentralised models are recognised as ideal in literature, many criminal justice organisations still lean towards centralised leadership due to hierarchical cultures and strict accountability requirements.

Leadership strategies also differ in their focus where some organisations strategically plan digital initiatives with long-term objectives aligned to broader organisational goals and policies, ensuring sustainable transformation. Conversely, others primarily focus on operational and short-term improvements because of limited budgets and urgent service delivery pressures. Literature suggests balancing both strategic and operational approaches for successful digital transformation; however, practical pressures often prioritise short-term outcomes in the criminal justice context.

Regarding technology and business integration, some organisations maintain a technology-driven leadership approach, placing IT considerations at the forefront, reflecting traditional practices. Others are shifting towards a business-driven

approach, aligning digital efforts directly with core criminal justice functions and public service delivery. Although literature emphasises integrating both technology and business perspectives, legacy structures and limited digital literacy among business leaders mean many organisations remain predominantly technology focused.

Resistance to digital change was another major finding. Staff resistance, stemming from traditional working practices, limited digital skills, and fears about job security, strongly affected transformation efforts. The study highlighted a unique challenge where older, long-serving staff feel disconnected from digital initiatives, a point less discussed in existing literature, adding new insight into workforce challenges within criminal justice organisations.

Accountability approaches varied, with some leaders emphasising performance measures using KPIs, while others focused heavily on compliance and regulatory adherence. Although literature advocates performance-driven accountability, findings showed a strong preference for compliance-based approaches due to stringent governance requirements, potentially limiting organisational innovation.

This research makes contributions to the existing body of knowledge, where, theoretically, it improves understanding of how context shapes digital leadership in criminal justice organisations. Practically, it provides insights on the importance of balancing central control with collaboration, long-term planning with immediate operational needs, and technology-driven decisions with business-driven objectives. For policymakers, the study highlights the need to design flexible accountability systems that encourage innovation while meeting regulatory standards as well as shedding new light on workforce challenges such as generational complexities.

## 6.4 Conclusions regarding Proposition 3

It is evident that digital leadership indeed employs organisational-wide integration approaches, including holistic and strategic planning, organisational architecture, and connected leadership, to guide digital transformation efforts within these complex public sector environments.

The research shows that digital leaders play a critical role in framing a clear digital vision and ensuring strategic alignment. Leaders work to embed this vision into strategic plans, guiding the organisation's direction and keeping digital efforts on track. This supports the proposition that digital leadership takes a holistic approach, especially by aligning resources, people, and priorities toward a shared digital future.

Planning and governance structures emerged as essential parts of the organisational architecture approach. Digital leaders rely on structured plans, roadmaps, and governance frameworks like steering committees to prioritise projects, secure resources, and manage accountability. However, limited funding and weak digital maturity evaluation systems remain challenges that slow progress, especially in resource-constrained public sector settings.

The findings also confirm that connected leadership practices, such as encouraging collaboration, building cross-functional teams, and empowering staff, are increasingly recognised as necessary to break down silos and improve agility. However, hierarchical structures and traditional mindsets remain barriers that digital leaders must continually navigate.

Importantly, fostering a culture of innovation and experimentation is seen as central to sustaining digital transformation. Participants described how leadership support for pilots and proof-of-concept projects helps organisations adapt to changing conditions. However, overcoming resistance to change and shifting organisational mindsets remains a work in progress, particularly given the rigid nature of public sector environments.

This study contributes to knowledge where, theoretically, it expands understanding of digital leadership by demonstrating how leaders in South Africa's criminal justice organisations strategically apply vision-setting, structured planning, and collaboration to sustain a culture of innovation and agility during digital transformation. From a policy perspective, it highlights the need for strengthened governance frameworks, formal evaluation systems, and enhanced support for cross-functional collaboration and resource allocation. These policy recommendations can help public sector leaders foster more effective and sustainable digital transformations.

## **6.5 Recommendations**

### ***6.5.1 Recapitulation of the research problem***

In line with the research problem articulated in Chapter 1, the Criminal Justice System has the potential to be transformed through digital innovation. However, this transformation extends beyond the adoption of technology alone, relying significantly on the effective digital leadership to guide and sustain the change process. The lack of digital leadership capabilities is a key barrier to progress. The effective realisation of digital transformation within the Criminal Justice System depends on leadership capable of championing change, facilitating collaborative practices, and ensuring accountability throughout the process.

### ***6.5.2 Recommended solutions to the research problem***

The significance of this research was to explore the Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System. In doing so it identified essential Digital Leadership skills, examined the variability and influences on leadership strategies across different organisational contexts, and investigated how Digital Leadership fosters a culture of innovation and agility for ongoing value creation in the criminal justice system organisations. Drawing from the study's findings and participant insights, the following recommended solutions

are proposed to support criminal justice organisations in South Africa, in addressing the identified research problem.

- **Digital Leadership Development**

- Implement structured leadership training programs combining universal digital competencies (e.g., digital literacy, data analytics basics) with criminal justice sector-specific knowledge (e.g., criminal justice policies, processes, governance frameworks).
- Create tailored competency frameworks clearly defining required digital leadership skills for recruitment, development, and performance appraisal.

- **Vision Alignment and Communication**

- Establish regular digital vision communication channels (e.g., newsletters, ministerial and organisational (departmental) imbizo's) to consistently reinforce strategic goals and communicating progress with internal and external stakeholders.
- Introduce stakeholder forums or advisory groups involving digital leadership teams from multiple criminal justice organisations, civil society, the private sector, and academic institutions, to enhance digital transformation collaboration and secure stakeholder buy-in.

- **Integration of Strategic and Operational Priorities**

- Implement formal assessment tools to regularly evaluate progress, adjust plans accordingly, and inform resource allocation decisions. This includes public-value assessment mechanisms.

- **Inclusive Cultural Change Management**

- Offer inclusive digital literacy training sessions tailored specifically to different employee groups, particularly frontline and mid-level staff, to build confidence and competence.
- Design change management programs and frameworks that actively involve employees through participative approaches, such as workshops,

feedback sessions, and pilot testing groups, to reduce resistance and enhance engagement.

- Appoint internal digital transformation champions at various organisational levels to advocate for digital changes and positive attitudes towards digital adoption.
- **Innovation and Experimentation**
  - Create dedicated innovation labs or pilot programs to test new technologies or digital processes, fostering a risk-tolerant environment that encourages creativity.
  - Establish internal funding mechanisms to specifically support innovative projects and incentivise experimentation.
  - Review and adjust financial legislation (e.g., PFMA) to create safe spaces for innovation and experimentation by allowing controlled risk-taking, where failure and financial waste resulting from learning and testing innovative ideas are not punished but seen as part of the innovation process.
- **Robust and Adaptable Governance**
  - Conduct regular governance reviews to ensure structures remain responsive, agile, relevant, and aligned with organisational priorities and emerging digital trends.
  - Ensure executive-level sponsorship and oversight of digital initiatives through clearly defined roles and responsibilities, reinforcing accountability.
- **Technology and Cybersecurity Awareness**
  - Provide regular briefings and workshops on emerging digital technologies like artificial intelligence to tailored to strategic leaders without deep technical backgrounds.
  - Ensure mandatory cybersecurity training for all leadership and staff members, emphasising the protection of sensitive criminal justice information and regulatory compliance.

- Partner with the private sector through Public-Private Partnerships (PPPs) to overcome financial and skills shortages and support their digital transformation efforts.
  - Review and clarify the mandate of technology-enabling organisations (e.g., SITA) and reform rigid procurement processes to ensure they enable, rather than hinder, digital transformation by allowing faster and more flexible access to digital solutions. This should be done as a government-wide initiative.
  - Implement a single integrated digital platform across the criminal justice value chain to improve case information sharing, coordination, and overall efficiency.
- **Integrated Holistic Approach**
    - Establish a centralised Digital Leadership Office responsible for aligning digital vision, cultural change management, stakeholder engagement, governance, and innovation under a single strategic oversight body.
    - Regularly evaluate the holistic effectiveness of digital leadership approaches through maturity assessment mechanisms, allowing for continuous learning, adaptation, and improvement.

## 6.6 Limitations and Suggestions for further research

### 6.6.1 *Limitations*

The following limitations supplement those already outlined in Chapter 3.

- **Context-Specific Scope**

This study was limited to criminal justice organisations, reflecting their distinct operational practices, governance frameworks, hierarchical structures, regulatory requirements, and workforce characteristics. Accordingly, the findings may have limited applicability to other public sector domains or private sector organisations undergoing digital transformation.

Policymakers and organisational leaders should consider contextual differences when translating these findings into broader strategies. While certain digital leadership competencies and strategies identified may inform cross-sector initiatives, their application may require adaptation to align with sector-specific governance, regulatory compliance, and operational constraints. Future policy frameworks promoting digital transformation should incorporate mechanisms for contextual tailoring rather than adopting a one-size-fits-all approach.

- **Limited Exploration of External Collaboration**

The discussions primarily focused on internal collaboration within organisations. Limited attention was given to external partnerships with stakeholders such as citizens, other government agencies, or technology vendors. As a result, potential insights into broader stakeholder engagement and integration strategies may not have been fully captured.

For digital transformation policies and practices to be effective, leaders should prioritise establishing frameworks for external collaboration and multi-stakeholder engagement. Insights from this study could be supplemented by further research examining external partnerships to inform policies that enhance interoperability, citizen-centric service delivery, and collaborative innovation across the public sector.

### ***6.6.2 Suggestions for Further Research***

This study provides valuable insights into digital leadership within South Africa's criminal justice system; however, several limitations must be acknowledged, alongside opportunities for further research that address gaps in the current literature. The following are suggestions for further research.

- **Context-Specific Scope**

The research focused exclusively on criminal justice organisations, reflecting their distinct operational practices, governance frameworks, hierarchical

structures, and regulatory requirements. Consequently, findings may have limited applicability to other public sector domains or private sector organisations undergoing digital transformation. Future research could expand to other public sector contexts or cross-sector comparisons, enabling validation of the competencies and strategies identified while accounting for organisational and sectoral differences.

- **Limited Exploration of External Collaboration**

The study primarily examined internal organisational processes, with minimal attention to external stakeholder engagement, such as interactions with citizens, other government agencies, or technology vendors. This gap reflects an underexplored area in the literature regarding how digital leadership orchestrates cross-organisational collaboration to drive innovation. Further studies could investigate multi-stakeholder governance, co-creation processes, and citizen-centric digital initiatives to provide a more comprehensive understanding of digital leadership impact.

- **Temporal and Cultural Considerations**

The study captured a snapshot of leadership experiences at a specific point in time, leaving the long-term effects of digital leadership practices underexplored. Additionally, variations in organisational culture and structure across departments were not fully examined. Future research could adopt longitudinal and comparative approaches to explore how digital leadership behaviours influence sustained organisational innovation, agility, and digital transformation outcomes across different cultural and structural contexts.

- **Multi-Agency Collaboration and External Partnerships**

Further studies should explore digital leadership approaches to multi-agency collaboration and engagement with external stakeholders, including citizens, inter-agency partnerships, and technology vendors. Investigating these aspects may offer deeper insights into strategies for fostering effective collaboration in complex, interconnected environments similar to criminal justice organisations.

- **Practical Strategies for Innovation Resourcing**

Additional research should focus on how digital leaders secure and allocate resources to support innovation, particularly in resource-constrained public sector environments. Examining funding mechanisms, cost-effective initiatives, and quick-win strategies could provide practical guidance for sustaining innovation under financial limitations.

- **Digital Maturity Framework Development**

Future studies could focus on developing or evaluating digital maturity assessment frameworks tailored to criminal justice organisations and the public sector at large. Applying such frameworks may assist in systematically measuring digital transformation progress and identifying leadership practices that support effective digital advancement.

- **Organisational Culture and Resistance Dynamics**

Further research should examine the role of organisational culture in shaping digital transformation efforts. This includes exploring challenges such as resistance to change, digital skill gaps among long-serving employees, and leadership strategies aimed at overcoming these barriers, particularly within the public sector.

- **Adaptive Governance Models**

Research is needed to investigate governance models that support adaptability in dynamic digital environments, like criminal justice organisations and the public sector. Identifying flexible governance structures may reveal approaches that enhance organisational agility, accountability, and responsiveness during digital transformation initiatives.

- **Digital Leadership and Social Impact**

Further research is needed to explore how digital leaders assess the impact of technology on improving social outcomes and public value in public sector organisations. It is also important to understand how they see their role in

tackling challenges like the digital divide, especially since these issues are often widespread and systemic.

- **Quantitative and Mixed-Methods Approaches**

Building on this study's qualitative insights, future research could incorporate quantitative or mixed-method approaches to systematically assess the effectiveness of digital leadership practices and their impact on digital transformation outcomes.

In addressing these limitations, this study begins to fill notable gaps in the literature by providing empirical evidence on the proficiencies, strategies, and challenges of digital leadership in public sector criminal justice organisations. Simultaneously, it opens avenues for future research that can deepen theoretical understanding and inform practical strategies for cultivating effective, agile, and innovative digital leadership across broader public sector environments.

## **6.7 Chapter Summary**

This chapter has provided a comprehensive summary of the study's key findings in relation to each research proposition. It has highlighted the study's contributions to the existing body of knowledge, offering new insights that can support both academic understanding and practical application. The recommendations proposed aim to inform future policies, strategies, and practices within the field of digital leadership. Acknowledging the research limitations is aimed at framing the context within which the findings should be interpreted. The suggested further research emphasises the need for continued exploration to build on this study's outcomes and to expand knowledge in this important area of digital leadership.

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## APPENDIX A: PROPOSITION 1 DATA - CODES, CATEGORIES, THEMES

Codes	Categories	Theme	Theme Description	Participant Association	Percentage Participant Association	Theme Frequency
<ul style="list-style-type: none"> <li>• Managing resistance</li> <li>• Employee buy-in</li> <li>• Organisational culture shift</li> <li>• Leadership support for change</li> <li>• Training and capacity building</li> <li>• Sustaining transformation momentum</li> <li>• Understanding emerging technologies</li> <li>• IT system modernisation</li> <li>• Cloud computing knowledge</li> <li>• Digital tools adoption</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitating digital adoption</li> <li>• Overcoming resistance</li> <li>• Change leadership</li> <li>• Digital transformation readiness</li> </ul>	<b>Change Management Proficiency</b>	The ability to help organisations and people smoothly transition through digital transformation. This includes gaining their support, addressing concerns, and ensuring that new technologies are adopted without major disruptions.	13	100%	79
<ul style="list-style-type: none"> <li>• Awareness of AI and automation</li> <li>• Keeping up with tech trends</li> <li>• Stakeholder engagement</li> <li>• Transparent communication</li> <li>• Cross-agency coordination</li> <li>• Aligning teams on digital vision</li> <li>• Effective leadership messaging</li> <li>• Active listening</li> </ul>	<ul style="list-style-type: none"> <li>• Emerging tech trends</li> <li>• IT modernisation</li> <li>• Digital infrastructure</li> <li>• Technology forecasting</li> </ul>	<b>Technology Awareness Proficiency</b>	Having knowledge of both current and new digital technologies, understanding what they can do, and recognising how they can help improve justice system operations and services.	13	100%	79
<ul style="list-style-type: none"> <li>• Encouraging creativity</li> <li>• Embracing new digital solutions</li> <li>• Prototyping and experimentation</li> <li>• Fostering a culture of innovation</li> <li>• Leading digital transformation initiatives</li> <li>• Problem-solving with technology</li> <li>• Basic IT competency</li> <li>• Understanding data analytics</li> <li>• Ability to use digital platforms</li> <li>• Digital tool proficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Cross-functional teamwork</li> <li>• Digital engagement</li> <li>• Strategic messaging</li> <li>• Stakeholder communication strategies</li> </ul>	<b>Communication and Collaboration Proficiency</b>	Clearly explaining digital transformation plans, working effectively with different stakeholders, and making sure that all teams within the criminal justice system are aligned and working towards the same goals.	13	100%	68
<ul style="list-style-type: none"> <li>• Adapting to new software and applications</li> <li>• Promoting digital skills development</li> <li>• Using analytics for strategy</li> <li>• Evidence-based decision-making</li> <li>• Interpreting digital reports</li> </ul>	<ul style="list-style-type: none"> <li>• Tech-driven problem-solving</li> <li>• Digital transformation advocacy</li> </ul>	<b>Innovation Leadership Proficiency</b>	Encouraging creative thinking and new ideas in digital projects, promoting a culture where trying new approaches is welcomed, and	12	92%	45

Codes	Categories	Theme	Theme Description	Participant Association	Percentage Participant Association	Theme Frequency
<ul style="list-style-type: none"> <li>• Leveraging big data</li> <li>• Performance monitoring through data</li> <li>• Data-informed policy-making</li> <li>• Building relationships with key partners</li> <li>• Public sector collaboration</li> <li>• Ensuring digital transformation buy-in</li> <li>• Community and criminal justice sector partnerships</li> <li>• Working with external agencies</li> <li>• Involving staff in digital initiatives</li> <li>• Responding to technological shifts</li> <li>• Flexibility in leadership approaches</li> <li>• Quickly adjusting digital strategies</li> <li>• Handling unforeseen digital challenges</li> <li>• Promoting adaptive work culture</li> <li>• Scaling digital initiatives efficiently</li> <li>• Ensuring regulatory adherence</li> <li>• Aligning digital strategy with policy</li> <li>• Navigating bureaucratic processes</li> <li>• Understanding digital governance frameworks</li> <li>• Policy-driven technology adoption</li> <li>• Public sector compliance management</li> <li>• Data protection policies</li> <li>• Cyber risk management</li> <li>• Preventing cyber threats</li> <li>• User security training</li> <li>• Compliance with privacy regulations</li> <li>• Incident response planning</li> </ul>	<ul style="list-style-type: none"> <li>• Experimentation culture</li> </ul>		using technology to improve how justice process's function.			
	<ul style="list-style-type: none"> <li>• Technical fluency</li> <li>• Digital tools proficiency</li> <li>• Online security awareness</li> <li>• User competency development</li> </ul>	<b>Digital Literacy Proficiency</b>	Being skilled in using and understanding digital tools, platforms, and data to make justice system operations more efficient and effective.	12	92%	50
	<ul style="list-style-type: none"> <li>• Performance analytics</li> <li>• Predictive modelling</li> <li>• Evidence-based leadership</li> <li>• Big data utilisation</li> </ul>	<b>Data-Driven Decision-Making Proficiency</b>	Using data and factual insights to make informed leadership decisions, improve justice system processes, and make digital transformation efforts more effective.	11	85%	40
	<ul style="list-style-type: none"> <li>• Public-private collaboration</li> <li>• Multi-agency alignment</li> <li>• Digital service co-creation</li> <li>• Intergovernmental cooperation</li> </ul>	<b>Stakeholder Engagement Proficiency</b>	Building positive relationships and working closely with both internal and external stakeholders to gain their support and ensure that digital transformation efforts in the justice system are successful.	10	77%	30
	<ul style="list-style-type: none"> <li>• Rapid response strategies</li> <li>• Iterative implementation</li> </ul>	<b>Agility and Adaptability Proficiency</b>	Being able to quickly adjust to new technologies, changing priorities, and unexpected challenges by modifying strategies and	10	77%	38

Codes	Categories	Theme	Theme Description	Participant Association	Percentage Participant Association	Theme Frequency
	<ul style="list-style-type: none"> <li>• Digital resilience</li> <li>• Continuous learning culture</li> </ul>		leadership approaches to keep digital transformation on track.			
	<ul style="list-style-type: none"> <li>• Regulatory alignment</li> <li>• Policy-driven IT strategy</li> <li>• Public sector digital governance</li> </ul>	<b>Governance and Policy Compliance Proficiency</b>	Making sure that digital transformation efforts follow all legal, regulatory, and policy requirements while effectively handling bureaucratic processes to drive digital change in justice organisations.	9	69%	25
	<ul style="list-style-type: none"> <li>• Risk mitigation</li> <li>• Data protection policies</li> <li>• Compliance enforcement</li> </ul>	<b>Cybersecurity Awareness Proficiency</b>	Knowing how to protect sensitive digital information, prevent cyber risks, and follow privacy and security rules in digital justice environments.	7	54%	22

## APPENDIX B: PROPOSITION 2 DATA - CODES, CATEGORIES, THEMES

Codes	Categories	Theme	Theme Description	Participant Association	Percentage Participant Association	Theme Frequency
<ul style="list-style-type: none"> <li>• Centralised decision-making</li> <li>• IT-led strategy</li> <li>• Executive-driven leadership</li> <li>• Hierarchical control</li> <li>• Distributed responsibility</li> <li>• Single-leader model</li> <li>• Authority concentration</li> <li>• Decision-making autonomy</li> <li>• IT governance</li> <li>• Strategic leadership ownership</li> <li>• Leadership silos</li> <li>• Command-and-control structure</li> <li>• Leadership bottlenecks</li> <li>• Long-term digital planning</li> <li>• Tactical digital improvements</li> <li>• Strategic goal alignment</li> <li>• Operational efficiency focus</li> <li>• Future-proofing digital strategy</li> <li>• Short-term digital wins</li> <li>• Adaptive strategy execution</li> <li>• Resource planning</li> <li>• Digital roadmap</li> </ul>	<ul style="list-style-type: none"> <li>• Executive-driven decision-making</li> <li>• IT governance structures</li> <li>• Decentralised leadership models</li> <li>• Hierarchical vs. collaborative decision-making</li> <li>• Cross-departmental leadership integration</li> </ul>	<b>Centralised vs. Decentralised Digital Leadership</b>	Organisations take different approaches to leading digital transformation. Some keep decision-making and leadership within a central IT team, while others spread digital leadership responsibilities across different business units.	13	100%	35
	<ul style="list-style-type: none"> <li>• Strategic digital transformation planning</li> <li>• Tactical efficiency improvements</li> <li>• Resource allocation challenges</li> <li>• Long-term vs. short-term digital priorities</li> </ul>	<b>Strategic vs. Operational Digital Leadership</b>	Some organisations focus on long-term digital transformation, planning for the future and making big changes over time. Others concentrate on short-term improvements, using digital tools to solve immediate operational challenges.	13	100%	47

Codes	Categories	Theme	Theme Description	Participant Association	Percentage Participant Association	Theme Frequency
<ul style="list-style-type: none"> <li>• Organisational agility</li> <li>• Digital strategy formulation</li> <li>• Execution roadblocks</li> <li>• Incremental digital adoption</li> <li>• Tech-first transformation</li> <li>• Business process integration</li> <li>• IT leadership focus</li> <li>• Business-driven IT projects</li> <li>• Technology adoption</li> <li>• Innovation-driven leadership</li> <li>• System modernisation</li> <li>• Digital investment decisions</li> <li>• Enterprise IT architecture</li> <li>• Scalable digital solutions</li> <li>• Digital-first mindset</li> </ul>	<ul style="list-style-type: none"> <li>• IT-led transformation initiatives</li> <li>• Business-aligned digital strategies</li> <li>• Innovation-driven leadership</li> <li>• Technology-first vs. user-centred approaches</li> <li>• Enterprise-wide vs. function-specific digital adoption</li> </ul>	<b>Technology-Driven vs. Business-Driven Digital Leadership</b>	In some organisations, technology itself is the main force behind digital change. Others take a business-first approach, ensuring that digital initiatives support business goals and everyday operations.	13	100%	39
<ul style="list-style-type: none"> <li>• Legacy system migration</li> <li>• Tech-driven strategic pivots</li> <li>• User resistance</li> <li>• Leadership hesitancy</li> <li>• Cultural adaptation</li> <li>• Digital adoption challenges</li> <li>• Mindset shift</li> <li>• Organisational inertia</li> <li>• Legacy systems reliance</li> <li>• Workforce scepticism</li> <li>• Behavioural resistance</li> <li>• Change management bottlenecks</li> <li>• Digital change fatigue</li> <li>• Resistance to automation</li> <li>• Staff pushback on digitisation</li> <li>• KPI-based evaluation</li> <li>• Compliance reporting</li> </ul>	<ul style="list-style-type: none"> <li>• Organisational resistance to digital change</li> <li>• Cultural adaptation strategies</li> <li>• Leadership buy-in challenges</li> <li>• Behavioural change management</li> <li>• Stakeholder engagement in transformation</li> </ul>	<b>Overcoming Resistance and Driving Cultural Change</b>	People often resist digital transformation at different levels within an organisation. To succeed, leaders must actively manage this change by engaging with employees and fostering open communication.	11	85%	58

Codes	Categories	Theme	Theme Description	Participant Association	Percentage Participant Association	Theme Frequency
<ul style="list-style-type: none"> <li>• Performance tracking</li> <li>• Regulatory adherence</li> <li>• Impact assessment</li> <li>• Outcome-driven leadership</li> <li>• Target-setting</li> <li>• Audit compliance</li> <li>• Results-based monitoring</li> <li>• Policy-driven metrics</li> <li>• Performance dashboards</li> <li>• Risk-based monitoring</li> <li>• Legislative performance tracking</li> </ul>	<ul style="list-style-type: none"> <li>• KPI-based performance evaluation</li> <li>• Compliance-driven reporting</li> <li>• Regulatory adherence monitoring</li> <li>• Impact measurement and assessment</li> <li>• Auditing and governance oversight</li> </ul>	<p><b>Accountability Through Performance vs. Compliance Leadership</b></p>	<p>Organisations measure the success of digital initiatives in different ways. Some focus on achieving strategic goals and outcomes, while others emphasise meeting compliance requirements and following performance reporting standards.</p>	<p>9</p>	<p>69%</p>	<p>33</p>

## APPENDIX C: PROPOSITION 3 DATA - CODES, CATEGORIES, THEMES

Codes	Categories	Theme	Theme Definition	Participant Association	Percentage Participant Association	Theme Frequency
<ul style="list-style-type: none"> <li>• Strategic vision</li> <li>• Leadership buy-in</li> <li>• Communicating digital value</li> <li>• External drivers of change</li> <li>• Aligning digital goals</li> <li>• Executive advocacy</li> <li>• Top-down digital leadership</li> <li>• Vision translation into strategy</li> <li>• Digital roadmap</li> <li>• Quick wins</li> <li>• Funding challenges</li> <li>• Lack of maturity assessment</li> <li>• Phased implementation</li> <li>• Resource allocation</li> <li>• Budget prioritisation</li> <li>• Scaling digital initiatives</li> <li>• Steering committees</li> <li>• Executive oversight</li> <li>• Governance structures</li> <li>• Progress monitoring</li> <li>• Cross-department collaboration</li> <li>• Accountability mechanisms</li> <li>• Policy frameworks</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic Vision &amp; Alignment</li> <li>• Executive Sponsorship &amp; Advocacy</li> <li>• Communicating Change Benefits</li> <li>• Policy-Driven Adoption</li> <li>• Organisational Buy-In</li> </ul>	<b>Vision &amp; Strategic Alignment</b>	Leaders create and share a clear plan for digital transformation. This helps make sure that all efforts match the organisation's main goals and that leaders support the changes.	10	77%	30
	<ul style="list-style-type: none"> <li>• Structured Roadmap &amp; Incremental Transformation</li> <li>• Optimised Resource Allocation &amp; Funding</li> <li>• Tactical Digital Initiatives</li> <li>• Assessing Digital Maturity</li> </ul>	<b>Planning &amp; Roadmap Execution</b>	Leaders develop clear plans for digital transformation, focusing on step-by-step progress. They give priority to quick and achievable improvements while also dealing with challenges related to funding and assessing the organisation's readiness for digital change. This helps ensure that innovation continues over time.	9	69%	27
	<ul style="list-style-type: none"> <li>• Institutional Governance &amp; Accountability</li> <li>• Structured Decision-Making</li> <li>• Cross-Functional Policy Frameworks</li> <li>• Performance Tracking</li> </ul>	<b>Innovation &amp; Experimentation</b>	Leaders support pilot projects, ongoing improvements, and accepting failure as part of the process. This helps build a lasting culture of digital innovation and flexibility.	9	69%	22

Codes	Categories	Theme	Theme Definition	Participant Association	Percentage Participant Association	Theme Frequency
<ul style="list-style-type: none"> <li>• Institutionalising digital governance</li> <li>• Overcoming bureaucracy</li> <li>• Leading by example</li> <li>• Employee engagement</li> <li>• Digital skills investment</li> <li>• Culture shift</li> <li>• Change resistance</li> <li>• Training programs</li> <li>• Mindset transformation</li> <li>• Breaking silos</li> <li>• Cross-functional collaboration</li> <li>• Empowered decision-making</li> <li>• Hierarchical constraints</li> <li>• Departmental synergy</li> <li>• Stakeholder inclusion</li> <li>• Information sharing</li> <li>• Decentralised leadership</li> <li>• Pilot projects</li> <li>• Continuous improvement</li> <li>• Tolerance for failure</li> <li>• Grassroots innovation teams</li> <li>• Agile methodologies</li> <li>• Experimentation culture</li> <li>• Scaling innovation</li> <li>• Iterative digital transformation</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership-Driven Cultural Change</li> <li>• Proactive Change Management</li> <li>• Building Digital Literacy</li> <li>• Empowering Workforce Innovation</li> <li>• Sustaining an Adaptive Digital Mindset</li> </ul>	<b>Cultural Change &amp; Mindset</b>	Leaders help organisations move away from strict bureaucratic structures toward a more innovative and flexible way of working. They do this by setting an example, involving employees in the process, and providing training to develop digital skills.	8	62%	25
	<ul style="list-style-type: none"> <li>• Strategic Cross-Sector Collaboration</li> <li>• Integrated Organisational Cohesion</li> <li>• Distributed Decision-Making</li> <li>• Facilitating Open Communication</li> </ul>	<b>Governance &amp; Structural Support</b>	Formal governance structures, like steering committees and executive oversight, help establish clear rules and responsibilities for digital transformation. These structures make sure that decisions are well-organised and that leaders are held accountable for progress.	7	54%	20
	<ul style="list-style-type: none"> <li>• Iterative Innovation &amp; Experimentation</li> <li>• Agile Transformation Culture</li> <li>• Encouraging Risk-Taking</li> <li>• Sustained Innovation Pipeline</li> <li>• Institutionalising Innovation Ecosystems</li> </ul>	<b>Collaboration &amp; Empowerment</b>	Encouraging different teams to work together and share information while allowing decision-making to happen at various levels. This helps the organisation respond quickly to changes and adapt more effectively.	6	46%	28

## APPENDIX D: PARTICIPANT INFORMATION SHEET



WITS Business School, 2 St David's Place, Parktown, Johannesburg, 2050

### **Re: Invitation to participate in a research study**

Dear Sir / Madam

My name is Lochan Singh, a Masters student at the University of the Witwatersrand in Johannesburg, under the supervision of Dr. Manamela Matshabaphala. I am conducting a research study on the Role of Leadership in guiding South African Criminal Justice organisations through Digital Transformation. The study is titled “The Role of Leadership in the Digital Transformation of South Africa’s Criminal Justice System.”

I am inviting you to participate in a single interview for this research study. Should you choose to take part, the interview will last approximately 1 to 1.5 hours. It will be conducted either in person at your workplace or virtually via video conferencing, preferably during work hours.

With your consent, I would like to audio record the interview. The recordings will be securely stored in an access-controlled cloud storage environment and will be deleted after three years. Only I, the researcher, will have access to this data.

The interview will be both confidential and anonymous. When sharing the results of the research study, I will not include your name or any other identifying information. With your consent, the data collected may be used by other researchers; however, your name and any personal details will not be disclosed or shared. Only your designation will be included, and pseudonyms will be used to ensure there are no identifying details about your organisation.

Participation in this research study is entirely voluntary. You are not obligated to take part and can withdraw at any time. You are free to skip any questions you prefer not to answer. Joining the study will not provide you with any direct benefits, nor will you lose any services, benefits, or rights if you choose not to participate. Participation will not incur any costs, except for data charges if the interview is conducted virtually. You will not receive any payment for participating in this study.

The risks associated with this research study are comparable to those encountered in everyday life. However, should some questions evoke any feelings of sadness or discomfort, I will pause the interview and resume it at a later time.

This research study will be documented as a research report and made accessible on the university library website. If you would like a summary of the report, I will be pleased to provide it to you.

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

Yours sincerely,

Researcher: Lochan Singh  
[2738424@students.wits.ac.za](mailto:2738424@students.wits.ac.za)

Supervisor: Dr. Manamela Matshabaphala  
[Manamela.Matshabaphala@wits.ac.za](mailto:Manamela.Matshabaphala@wits.ac.za)

# APPENDIX E: CONSENT TO PARTICIPATE: AGREEMENT FORM



WITS Business School, 2 St David's Place, Parktown, Johannesburg, 2050

## The Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System

I, \_\_\_\_\_ (full name), agree to participate in this research project.

I agree to the following:  
(Please circle the relevant options below)

The research study was explained to me. I understand what this study is about.	YES	NO
I understand that I can volunteer to take part in the study	YES	NO
I agree that the interview will be audio recorded	YES	NO
I agree that direct quotations from my interview may be used by the researcher in their research report.	YES	NO
I agree that my participation will remain anonymous (my name or other identifying data will not be used by the researcher in their research report)	YES	NO
I agree that other researchers may use the information I provide in my interview (depending on their own ethics clearance being obtained) but my name and any personal information will not be used or passed on.	YES	NO

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

Name of participant: \_\_\_\_\_

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

# **APPENDIX F: INSTRUMENT (INTERVIEW GUIDE)**

## **1. Interview Logistics**

- Design: One-to-one semi-structured interview
- Engagement: Virtual
- Virtual Platform: Microsoft Teams or other
- Duration: 1 - 1.5 hours per interview

## **2. Introduction and Orientation**

The interview should start with a brief introduction and discussion, lasting no more than 10 minutes. This part will explain the context (2.1), purpose (2.2), and methodology (2.3) of the research interview to the participant. Before continuing, the participant must give their consent. If they do not consent or choose not to proceed, the interview will be stopped at this point.

### **2.1 Research Context**

- Student: Lochan Singh
- Institution: Wits Business School; University of the Witwatersrand
- Program: Master of Management (in the field of Digital Business)
- Supervisor: Dr. Manamela Matshabaphala

## 2.2 Research Purpose

**Topic:** The Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System.

**Purpose:** The significance of this research is to explore the Role of Leadership in the Digital Transformation of South Africa's Criminal Justice System. It aims to identify essential Digital Leadership skills, examine the variability and influences on leadership strategies across different organisational contexts, and investigate how Digital Leadership fosters a culture of innovation and agility for ongoing value creation in the criminal justice system organisations.

## 2.3 Research Methodology

**Design:** A phenomenological study design through a qualitative approach, aiming to gather and interpret data on the lived experiences of individuals concerning Digital Leadership within criminal justice organisations in South Africa.

**Sampling:** Semi-structured one-on-one interviews conducted either in person or virtually through video conferencing. Participants are selected based on their senior roles, skills, experience, knowledge, and involvement in digital transformation within South African criminal justice system organisations.

## 2.4 Participant Consent

Verify that the participant has comprehended the contents of and signed the provided informational and consent documents listed below, indicating their voluntary agreement to participate in the research study under these specified conditions.

- (i) Appendix D: Participant Information Sheet
- (ii) Appendix E: Consent to Participate: Agreement Form

### 3. Interview Questions, Probes and Prompts

The interview questions below establish a uniform structure to ensure consistency across all participants' interview experiences, thereby reducing the potential for interview bias. However, the researcher has the flexibility to follow up on emerging details and explore further aspects that may arise during the interview.

#### 3.1 Using Probes and Prompts

The researcher should utilise probes to solicit additional information and seek explanations from participants (Creswell & Creswell, 2018). Furthermore, prompts can be employed to explore the interview respondent's significance of events, characteristics, and experiences; their framework of norms; their interpretations of cause and effect; and their opinions on sensitive subjects (Jiménez & Orozco, 2021). Table 6 provides an overview of the probes and prompts.

<b>Probes to consider</b> (Creswell & Creswell, 2018)	<b>Prompts to consider</b> (Jiménez & Orozco, 2021)
"Tell me more" (asking for more information)	How would you describe ___ to someone unfamiliar with it? <i>(Solicits the respondent's account of the salience of events, attributes, and experiences)</i>

<b>Probes to consider</b> (Creswell & Creswell, 2018)	<b>Prompts to consider</b> (Jiménez & Orozco, 2021)
"I need more detail" (asking for more information)	What would __ be like if __ didn't happen? <i>(Solicits the respondent's account of the structure of what is normal)</i>
"Could you explain your response more" (asking for an explanation)	How would you compare __ to __? <i>(Solicits the respondent's account of their perceptions of cause and effect)</i>
"What does _____ mean?" (asking for an explanation)	Some people say / feel __ and others say / feel __. And, I have heard lots of views in between. What do you think? People have shared with me lots of different opinions / experiences / behaviours related to __. Tell me about your view / your experience/what you've done. <i>(Solicits the respondent's account of behaviours, experiences, and views related to sensitive topics)</i>

**Table 6: Interview Probes and Prompts**

### 3.2 Interview Questions

The tables below (Table 7, Table 8, Table 9) outlines all the interview questions that align with the research questions, literature review, and theoretical framework.

Research Question (RQ)	Literature Insight Area		Interview Question
RQ 1. What specific Digital Leadership proficiencies are regarded as crucial for successfully navigating criminal justice organisations through digital transformation?	Universal / Generic Digital Leadership Competencies	Leadership competencies	1.1. Can you describe the Leadership skills you find most crucial for successfully guiding your team through the process of digital transformation?
		Business competencies	1.2. Can you describe the Business Specific skills you find most crucial for successfully guiding your team through the process of digital transformation?
		Digital / Technological competencies	1.3. What Technological skills do you find most critical for effective Digital Leadership within your organisation?
		Social or Soft competencies	1.4. What Social or Soft skills you find most crucial for successfully guiding your team through the process of digital transformation?
	Public Sector Digital Leadership Competencies	Public Sector Policy Competencies	1.5. Can you describe the Public Sector Policy competencies you find most crucial for successfully guiding your organisation through the process of digital transformation?
		Public Sector Social-Citizen Competencies	1.6. What Social-Citizen competencies do you find most crucial for successfully guiding your organisation through the process of digital transformation?
		Public Sector Technical Competencies	1.7. Given that your organisation deals with a vast amount of public data, can you describe the ways in which you manage risks in terms of Public Data Security and Protection?
			1.8. How do you perceive the importance of Public Sector Organisational Competencies in facilitating effective Digital Leadership within your organisation?
		Public Sector Organisational Competencies	1.9. How do you perceive the importance of Public Sector Management competencies (as opposed to general or private sector management competencies) in facilitating effective Digital Leadership within your organisation?
		Public Sector Management Competencies	1.10. How do you perceive the importance of Public Sector Management competencies (as opposed to general or private sector management competencies) in facilitating effective Digital Leadership within your organisation? (e.g., policy formulation, regulatory compliance, public value monitoring, etc.)

**Table 7: Interview questions for RQ 1**

<b>Research Question (RQ)</b>	<b>Literature Insight Area</b>	<b>Interview Question</b>
RQ 2. In what ways do Digital Leadership strategies differ within various contexts of criminal justice organisations?	Organisational Digital Leadership Strategy: Construct Approach Selection	2.1 How would you describe the Digital Leadership strategies currently employed within your organisation. Is it through an “Individual Role” or “Strategic Role” or is it shaped as an “Organisational Performance Strategic Imperative” or any amalgamation of this? What core values and vision supports your approach to choose this Digital Leadership strategy? What core values and vision support your organisations approach to choose this Digital Leadership strategy?
	Organisational Digital Leadership Strategy: Construct Institutionalisation	2.2 If through an “Individual Role”, in your view, what are the leadership characteristics these individual digital leaders possess? If through a “Strategic Role” perspective, how is Digital Leadership defined If through a “Organisational Performance strategic imperative” perspective, how is Digital Leadership defined and implemented throughout your organisation?
	Evaluating the Impact of Organisations Chosen Digital Leadership in terms of Organisational Performance	2.3 Given your organisations Digital Leadership Strategy Approach above, could you describe how do you assess the effectiveness of your organisations chosen approach, including its contribution to achieving your organisational objectives?
	Evaluating the Impact of Organisations Chosen Digital Leadership in terms of Long-Term Vision and Resilience	2.4 Given your organisations chosen Digital Leadership Strategy Approach above, could you describe how do you assess if this chosen approach is shaping the long-term vision and resilience of your organisation?
	Evaluating Organisations Digital Leadership Chosen Strategy Challenges and Opportunities	2.5 Could you please describe the key difficulties you encountered when introducing and institutionalising this chosen Digital Leadership Strategy Approach within your organisation? Additionally, can you highlight any potential benefits or opportunities that institutionalising Digital Leadership has presented for your organisation?
	Assessing the Future Direction of the Organisation enabled by Organisations Chosen Digital Leadership Approach	2.6 How do you see Digital Leadership evolving in your organisation in the future, and how do you foresee integrating Digital Leadership practices more deeply, institutionally across your organisation?
	Personal Reflections	2.7 As a leader, how do you typically keep yourself informed about the latest trends and practices in Organisational-wide Digital Leadership? Could you share insights or recommendations for emerging or current leaders within criminal justice organisations who are looking to enhance their Organisation-wide Digital Leadership practices?

**Table 8: Interview questions for RQ 2**

Research Question (RQ)	Literature Insight Area		Interview Question
RQ 3. How does Digital Leadership contribute to the cultivation of a sustained digital transformation culture of innovation and agility, which is essential for value creation in criminal justice organisations?	Holistic and Strategic Approach	Strategically Framing the Digital Challenge	3.1 Can you describe your approach to envisioning and building awareness among top leaders on the opportunities (and threats) that digital transformation brings?
			3.2 How are you assessing the maturity of your organisation's digital capabilities and competencies?
			3.3 How are you evaluating and challenging your current business model from a digital perspective?
		Focusing Investment	3.4 Can you describe how do you translate your digital vision into actionable strategic goals and develop an associated funded roadmap for digital transformation initiatives?
		Mobilising the Organisation	3.5 How do you convey the goals and advantages of digital transformation across your entire organisation, and how do you cultivate a culture that promotes the adoption of digital technologies and innovative work approaches, given that the public sector is rigid and hierarchical in nature?
	Sustaining the Transition	3.6 What strategies do you use to institutionalise digital transformation within your organisation (e.g., governance structures and decision-making processes), and what management processes do you have in place to monitor, measure iterate/review digital initiatives?	
	Organisational Architecture Approach		3.7 Given your organisation's Overall Organisational Architecture (i.e. organisational strategy, external environmental, internal environment, public beneficiaries, desired outcomes, business processes, organisational structures, skills and competencies, technologies, culture), can you describe how do you integrate Organisational Digital Leadership strategies into your organisation's overall Organisational Architecture?
	Connected Leadership Approach		3.8 Given the public sectors rigidity and hierarchical structures, how do you foster cross-functional collaboration and shared decision-making in your organisation?
			3.9 Can you possibly provide examples and elaborate of how cross-functional collaboration and decentralised decision-making, which has been enabled by technology, has been implemented within your organisation?
			3.10 How do you continuously encourage and support innovation and experimentation among your employees to ensure that your organisation's digital capabilities remain agile and responsive to continuous changes in service delivery and public demands?

**Table 9: Interview questions for RQ 3**

#### **4. Closing Instructions**

The interview concludes when either a saturation point is reached or the agreed maximum duration between researcher and participant has elapsed. Approximately 5 minutes should be allocated at the end of the session for closure, focusing on the following:

- (i) Inquire if the participant has any questions or concerns regarding the interview.
- (ii) Provide contact information for addressing any post-interview queries.
- (iii) Communicate the subsequent phases of the research and, if necessary, outline when and how the participant will be contacted in the future.
- (iv) Express gratitude to the participant for their time and valuable contribution to this research study.

# APPENDIX G: ETHICS CLEARANCE CERTIFICATE

Graduate School of Business Administration  
University of the Witwatersrand, Johannesburg



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

## Ethics Clearance Certificate

**Ethics protocol number:** WBS/DB2738424/518

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

<b>Project title</b>	The role of leadership in the digital transformation of South Africa's criminal justice system
<b>Investigator / Researcher</b>	Mr Lochan Singh
<b>Nature of Project</b>	MM (Digital Business)
<b>Decision of the Committee</b>	Approved, provided stakeholders and participants are guaranteed confidentiality.
<b>Issue Date of Certificate</b>	02/09/2024
<b>Expiry date</b>	Date of submission of the project / research report
<b>Chairperson</b>	Dr Ayanda Magida ☎ +27 11 717 3953 ✉ <a href="mailto:ayanda.magida@wits.ac.za">ayanda.magida@wits.ac.za</a>

A handwritten signature in black ink, appearing to read 'Ayanda Magida', enclosed in a rectangular box.

### Declaration by Researcher

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

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

A large, stylized handwritten signature in black ink, written over a horizontal line.

Signature

04/09/2024

Date: