

## EVALUATING THE ROLE OF DIGITAL TRANSFORMATION IN THE PUBLIC SECTOR- A CASE STUDY OF SITA, SOUTH AFRICA

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### Abstract

The study aims to evaluate the digital transformation within SITA by examining the challenges faced, assessing the impact on service delivery, identifying employed strategies, and providing recommendations for enhancement. This qualitative study employs semi-structured interviews with SITA employees and a thematic analysis approach. Secondary data sources, including official SITA documents, were also analysed to provide context. The findings reveal systemic barriers such as resistance to change, technological constraints, and financial limitations. Despite these challenges, the implementation of security measures and the adoption of advanced technologies like cloud computing and big data analytics have shown potential for improving service delivery. The study provides actionable recommendations, including fostering strategic partnerships, enhancing organisational adaptation, and empowering employees through continuous training and clear communication. The study's limitations include a focus on a specific timeframe, reliance on qualitative data, and potential biases in stakeholder perspectives. Future research should, among others, explore long-term outcomes, and impact measurement to fully understand the implications of digital transformation in the public sector.

**Keywords:** Digital Transformation, Public Sector, SITA, South Africa, Technology-Organization-Environment (TOE) Framework, Service Delivery, Organisational Change, Advanced Technologies, Strategic Partnerships.

### 1. INTRODUCTION

The State Information Technology Agency (SITA) faces challenges in its digital transformation journey. This study aims to make a significant scientific contribution by extending existing knowledge on digital transformation in the public sector, focusing on SITA in South Africa. It will analyse challenges and opportunities associated with digital transformation, identify specific barriers SITA faces, and propose actionable recommendations. Additionally, it will assess the impact of digital transformation on service delivery, efficiency, and customer satisfaction within SITA, providing empirical data on the state of digital transformation in South Africa's public sector. This study aims to advance the theoretical understanding of factors influencing digital transformation in the public sector using the Technology-Organization-Environment (TOE) framework.

The increasing dominance of digital technologies presents unpredictable challenges for organisations, necessitating the development of capabilities to succeed in service delivery (Madyibi, 2020). Consequently, promoting innovation processes, especially in digital transformation, has become urgent (Vial, 2019). Thus, governments are adapting their

operational methods to enhance service delivery, increase efficiency, and achieve goals such as improved transparency, interoperability, and citizen satisfaction. Digital transformation in the public sector is a critical endeavour, particularly for entities like the State Information Technology Agency (SITA) in South Africa, which plays a pivotal role in modernizing government services. According to Shibambu (2024), the public sector has been greatly affected by the rapid emergence of digital technologies in the 21st century, leading to increased efficiency, accountability, and transparency. However, the transformation journey is fraught with challenges such as low digital literacy, poor digital infrastructure, and unreliable power supply, which hinder the effective implementation of ICT projects (Shibambu, 2024).

The role of digital transformation in enhancing public sector performance is well-documented, with studies highlighting the importance of efficiency and innovation in improving public services (Nurfadilah and Haliah, 2024). For instance, the adoption of digital technologies can streamline operations, cut costs, and improve decision-making processes, thereby addressing service delivery challenges in local governments (Hofisi and Chig, 2023). The experiences of European countries like Denmark, the Netherlands, and Estonia offer valuable lessons in managing digital transformation, emphasizing the need for change management, stakeholder consultation, and alignment of technology with societal values (Corbos et al., 2023).

In South Africa, the digital divide and lack of technological skills among bureaucrats remain significant barriers to transformation (Nurfadilah and Haliah). Moreover, the COVID-19 pandemic has accelerated the need for digital solutions, underscoring the importance of building trust in digital institutions and ensuring cybersecurity (Corbos et al., 2023). The integration of advanced technologies such as artificial intelligence, Big Data, and cloud computing into public administration can enhance analytical activities, improve data collection and integration, and optimize decision-making processes (Rohoza, 2024). However, these advancements also bring challenges related to data security and the need for qualified specialists (Nalbandyan et al., 2024).

The digital transformation of public administration in transition economies, including South Africa, has shown a positive impact on governance efficacy and citizen engagement, although the level of digitalization still lags behind developed nations (Karpenko et al., 2023).

## **2. LITERATURE REVIEW**

### **2.1 The Role of Digital Transformation in the Public Sector**

Digital transformation in the public sector involves leveraging advanced digital technologies to enhance service delivery, governance, and economic development, aiming to improve efficiency, spur innovation, and enhance the quality of life for citizens (Corbos et al., 2023).

One of the primary roles of digital transformation in the public sector is to increase operational efficiency by automating routine tasks and processes, thus reducing the time and resources required for public service delivery and allowing government employees to focus on more complex and strategic tasks (Nurfadilah and Haliah, 2024). For example, using digital platforms for citizen services can significantly reduce wait times and improve user satisfaction

by providing 24/7 access to information and services (Cheng et al., 2024).

Moreover, cybersecurity is a significant focus in the digital transformation of the public sector as governments digitise more services and collect vast amounts of data, making it paramount to implement cybersecurity measures and regulatory frameworks to protect sensitive information and maintain public trust in digital government services (Cheng et al., 2024).

Thus, digital transformation in the public sector is multifaceted and involves enhancing operational efficiency, transparency, inclusivity, cybersecurity, and economic development. By adopting advanced digital technologies and fostering a culture of innovation and collaboration, governments can significantly improve service delivery and meet the evolving needs of their citizens (Cheng et al., 2024).

## **2.2 Challenges in Digital Transformation**

The journey of digital transformation in the public sector is fraught with several challenges that impede its successful implementation. These challenges are multifaceted, encompassing technical, organizational, and human factors that must be addressed holistically to achieve the desired outcomes (Corbos et al., 2023).

One of the primary challenges is resistance from employees who may be apprehensive about changes to their routine workflows and job roles. Fulfilling a culture that embraces change and continuous learning is crucial to mitigate this. Engaging employees through comprehensive training programs and clear communication about the transformation's objectives can help alleviate these concerns (Edelman, 2023).

Effective leadership that champions the digital transformation agenda and change management frameworks are essential to successfully navigating these structural shifts (Ciancarini, 2023). A limited understanding of the key success factors can lead to misguided strategies and investments. Thus, conducting thorough research and benchmarking against successful digital transformation case studies can provide valuable insights into best practices and effective digital transformation strategies (Nuryadin et al., 2022).

Overcoming the challenges of digital transformation in the public sector requires a comprehensive approach that addresses technical, organizational, and human factors. By fostering a culture of innovation, investing in digital literacy, ensuring cybersecurity, and adapting regulatory frameworks, public sector organizations can effectively navigate these challenges and realize the full potential of digital transformation (Cheng et al., 2019).

## **2.3 Impact of Digital Transformation**

Digital transformation is exerting significant pressure on various sectors, including healthcare, where it demands the optimization of service provision processes. This shift is particularly crucial in the inpatient sector, where digitization can enhance care quality and efficiency (Kobe and Bohnet-Joshcko, 2022). The broader service sector has also experienced productivity growth and international trade benefits due to digitalization, although it can disrupt labour markets and create skill bifurcations (Wren, 2022). Modern information and management technologies have been utilized in regional public service delivery to improve process

efficiency and sustainability (Sitnikov et al., 2022). Specialized services, such as parliamentary research, have also adopted digital platforms to overcome traditional delivery challenges, enhancing efficiency and satisfaction (Harbi and Jassim, 2021). Automated analysis and improvements in public service delivery processes further illustrate the potential of digital transformation to support decision-making in regional management and smart city development (Sitnikov et al., 2022).

Globally, the impact of digital transformation on service delivery is profound and multifaceted. In the healthcare sector, digital transformation necessitates hospitals to adapt their business models and enhance care quality through technology and data interoperability (Kobe and Bohnet-Joshcko, 2022). Public service sectors have seen improvements in citizen satisfaction due to digital interfaces, especially mobile applications, which simplify evaluation processes (Leo et al., 2022). Digital transformation has also redefined productivity and trade in service provision, leading to labour market disruptions and the necessity for workers to adapt their skills (Wren, 2022).

In Africa, digital transformation has significantly impacted various sectors. Innovations like digital health are crucial in providing healthcare services and detecting infectious diseases (Suleiman and Muhammad, 2021). The financial sector's digital transformation is influenced by organizational culture, driving socioeconomic changes through digital technologies (Ajigini et al., 2023). The growth of digital technologies is transforming service provisioning and wealth generation, reinforcing trends of 'servicification' and influencing global value chains (Hanson and Tang, 2020).

In South Africa, digital transformation has diverse impacts on service delivery across sectors. In financial services, factors such as organizational culture, structure, and IT application portfolios drive digital transformation (Ajigini et al., 2023). The service sector has seen improvements in crisis preparedness, life satisfaction, and customer orientation, especially during crises like the COVID-19 pandemic (Leo et al., 2022). Public service delivery requires embracing technological changes, necessitating new skills and strategies (Nhede et al., 2022). However, barriers like digital hesitancy and leadership voids hinder the adoption of digital innovations in local government (Shava and Vyas-Doorgapersad, 2022). Small and medium enterprises (SMEs) see digital transformation as essential for building customer relationships and ensuring business accessibility, despite challenges (Jeza and Lekhanya, 2022). Power dynamics and politics critically influence the institutionalization of new technologies in the public sector (Information Polity, 2022). In healthcare, digital transformation impacts patient care quality and service provision models (Romero et al., 2023). The concept of digital 'servitization' highlights the dynamic nature of service delivery in the digital age (Romero et al., 2023).

The State Information Technology Agency (SITA) is at the forefront of digital transformation in South Africa, aiming to enhance public service delivery efficiency, accessibility, and responsiveness (Public Service Commission, 2023). This transformation streamlines service delivery, enhances transparency, and improves public service quality (Alford and Yates, 2019). However, SITA faces challenges such as outdated infrastructure, procurement inefficiencies,

and lack of interoperability among government systems. Addressing these requires a comprehensive strategy that includes repurposing SITA, enhancing governance structures, and streamlining procurement processes (Mergel et al., 2019). Building a skilled workforce is also crucial for sustaining digital transformation initiatives (SITA, 2023). By overcoming these challenges and investing in human capital, SITA can fully realize the potential of digital transformation, improving public service delivery and strengthening the social contract between the government and its citizens (Public Service Commission, 2023).

## 2.4 Strategies for Successful Digital Transformation

Successfully implementing digital transformation in the public sector requires a multifaceted approach that addresses technical, organizational, and human factors (Corbos et al., 2023). The primary goal is to leverage digital technologies to enhance service delivery, improve governance, and drive economic development. Effective strategies must encompass comprehensive planning, stakeholder collaboration, continuous adaptation, and governance frameworks (Corbos et al., 2023).

Globally, strategic planning is critical to navigating digital transformation. This involves understanding the technological landscape and aligning digital initiatives with organizational goals (Kobe and Bohnet-Joshcko, 2022). Countries like Estonia and Singapore have demonstrated the importance of a well-defined digital strategy that integrates technology, organizational processes, and governance structures (Kobe and Bohnet-Joshcko, 2022). Furthermore, fostering a culture of innovation and continuous learning is essential. One of the strategies is to adopt a user-centric approach in designing digital services by engaging with citizens to understand their needs and preferences, ensuring that digital solutions are accessible and user-friendly (Cheng et al., 2024).

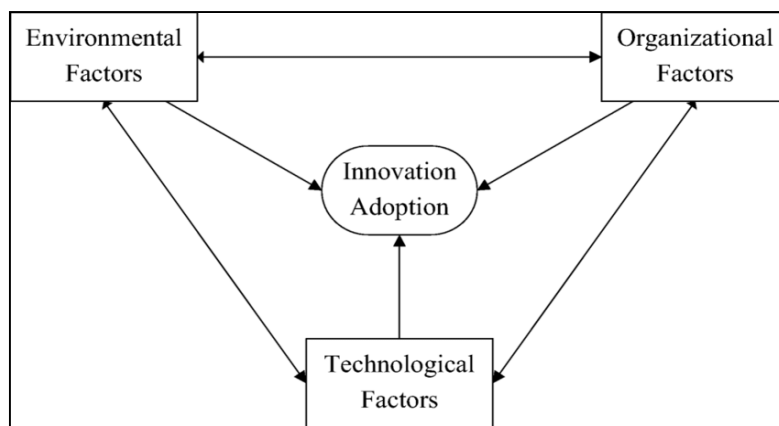
In Africa, the successful digital transformation of public services hinges on strategic investments in infrastructure, education, and innovation (Ajigini et al., 2023). Governments must prioritize the development of digital infrastructure, such as broadband connectivity, to bridge the digital divide and ensure widespread access to digital services (Ajigini et al., 2023). Fostering partnerships between the public and private sectors can also drive innovation and resource mobilization (Suleiman and Muhammad, 2021). Furthermore, addressing regulatory challenges and creating an enabling environment for digital entrepreneurship can spur economic growth and innovation (Mashao, 2023).

In South Africa, strategic frameworks and policies play a vital role in driving digital transformation (Nhede et al., 2022). The government has implemented initiatives such as the National Digital and Future Skills Strategy to prepare its workforce for technological advancements (Nhede et al., 2022). Addressing barriers such as digital hesitancy and leadership voids requires targeted interventions, including leadership development programs and initiatives to foster a culture of innovation within public sector organizations (Shava and Vyas-Doorgapersad, 2022). Developing a strong IT infrastructure is also crucial. Investments in broadband and cloud services can enhance connectivity and support the implementation of digital services (Ajigini et al., 2023). Additionally, engaging with stakeholders across

government entities, the private sector, and civil society is essential for ensuring that digital transformation initiatives are inclusive and address the needs of all citizens (Jeza and Lekhanya, 2022).

For the State Information Technology Agency (SITA) in South Africa, successful digital transformation requires a comprehensive approach that includes repurposing the agency, enhancing governance structures, and streamlining procurement processes (Public Service Commission, 2023). Building a skilled workforce is paramount. This involves developing training programs to enhance digital skills and fostering a culture of continuous learning and innovation (Hartley and Jarvis, 2019). Improving interoperability among government systems is another critical strategy.

## 2.5 Theoretical framework for the study



**Figure 1: The TOE Theory for the study**

Source: Tornatzky and Fleischer (1990)

The Technology-Organization-Environment (TOE) Framework, introduced by Tornatzky and Fleischer (1990), offers a holistic view of factors influencing the adoption of digital technologies within organizations, segmented into technology, organization, and environment contexts (Oliveira and Martins, 2011). The technology context assesses the readiness and characteristics of available technologies, the organizational context examines internal capabilities and culture, and the environmental context considers external pressures and opportunities. Organisational factors, including resistance to change, management support, budget availability, and IT infrastructure readiness, are critical for fostering change (Bulling, 2022; Li et al., 2022). Environmental factors such as government regulation, competitive pressure, and consumer readiness also significantly influence implementation, with external environment factors driving or hindering technology adoption (Defitri et al., 2022).

## 2.6 Linking the theory to the research objectives

Table 1 links the research objectives to the chosen theoretical (TOE) framework, ensuring a focused and structured approach to understanding and improving digital transformation within SITA.

**Table 1: Linking TOE and research objectives**

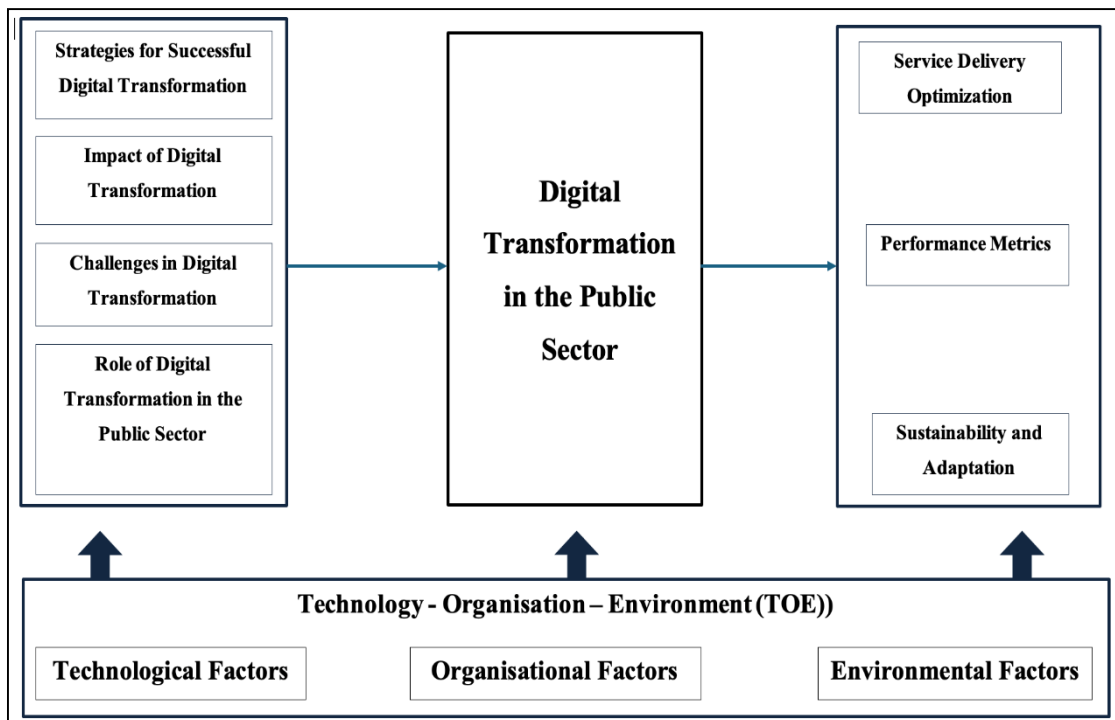
Objective	Link to TOE Framework	Description
<b>Objective 1: To examine the challenges faced by SITA in implementing digital transformation</b>	This objective examines all three contexts of the TOE framework: technology readiness and characteristics, internal capabilities and culture, and external pressures and opportunities.	The objective seeks to identify and analyse the challenges faced by SITA in its digital transformation, encompassing technological, organisational, and environmental factors, in order to pinpoint obstacles that hinder the successful implementation of this process.
<b>Objective 2: To assess the impact of digital transformation on SITA's service delivery</b>	This objective is linked to the technological context (impact of new technologies on service delivery) and the organizational context (internal improvements in processes and efficiency).	The objective is to assess the impact of digital transformation on SITA's service delivery, focusing on improvements in efficiency, accessibility, and responsiveness.
<b>Objective 3: To identify the strategies employed by SITA in its digital transformation journey</b>	This objective connects to the technological context (adoption of specific technologies), the organizational context (strategies and internal processes), and the environmental context (policies and external support).	This objective involves identifying and analysing SITA's digital transformation strategies, including frameworks, methodologies, technologies, processes, and policies, aim to improve service delivery and achieve its digital transformation goals.
<b>Objective 4: To provide recommendations for enhancing digital transformation within SITA</b>	The objective combines all three TOE framework insights to offer comprehensive recommendations in technological, organizational, and environmental contexts, focusing on best practices, strategic improvements, and leveraging external opportunities.	This objective aims to enhance SITA's digital transformation efforts by developing practical recommendations, informed by best practices, lessons learned, and identified needs, providing a roadmap for future improvements.

Source: Developed by researchers

## 2.7 Conceptual framework

Figure 2 shows information flow and influence from the identification of strategies, impacts, challenges, and roles related to digital transformation (input/influencing factors) to the actual implementation in the public sector (central concept). This, in turn, leads to desired outcomes such as optimised service delivery, effective performance metrics, and sustainable and adaptable solutions.

**Figure 2: Conceptual framework for the study**



Source: Developed by the researchers

The TOE framework underpins this entire process, providing a comprehensive and holistic approach to digital transformation by integrating technological, organisational, and environmental considerations.

This conceptual framework provides a foundation for understanding the complex dynamics of digital transformation in the public sector. By addressing key influencing factors, leveraging the supportive TOE framework, and aiming for specific outcomes, public sector organisations can successfully navigate the challenges of digital transformation and achieve significant improvements in service delivery, performance, and sustainability.

## 3. PROBLEM STATEMENT

The State Information Technology Agency (SITA) in South Africa is undergoing a digital transformation journey to modernize its operations and services. However, the agency faces



significant challenges that hinder the full realization of its objectives. The challenges faced during implementation must be thoroughly identified and evaluated to understand the strategies' effectiveness. Assessing the impact of digital transformation on SITA's service delivery is crucial for determining tangible benefits and identifying areas for improvement. To enhance digital transformation efforts, well-informed recommendations should be provided based on a comprehensive analysis of current strategies, challenges, and impacts. This study aims to investigate SITA's strategies, examine the challenges faced during implementation, assess the impact on service delivery, and provide recommendations for enhancing digital transformation efforts.

#### **4. AIM AND OBJECTIVES OF THE STUDY**

The primary aim of this study is to evaluate digital transformation within SITA. The specific objectives are:

- To examine the challenges faced by SITA in implementing digital transformation.
- To assess the impact of digital transformation on SITA's service delivery.
- To identify the strategies employed by SITA in its digital transformation journey.
- To provide recommendations for enhancing digital transformation within SITA

#### **5. RESEARCH METHODOLOGY**

##### **5.1 Research design**

The research design adopted for this study is a qualitative approach, specifically utilising semi-structured interviews and thematic analysis. According to Creswell and Creswell (2018), qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. This design ensures that the findings are deeply grounded in the experiences and realities of the participants, thereby enhancing the study's credibility and relevance.

##### **5.2 Target population**

The target population is defined as the complete set of cases or group members that is the actual focus of the research inquiry from which a sample may be drawn (Saunders et al., 2019). It is the group of individuals from which the study will be conducted and conclusions drawn. For this study, the target population comprised approximately 3,000 SITA employees. The study included individuals with varied roles, experience levels, and perspectives to ensure a comprehensive understanding of the impact of digital transformation on the organisation.

##### **5.3 Sampling strategy**

A purposive sampling technique was best for the study's goal. This technique allowed the study to select participants based on research question-relevant features or criteria to offer a framework that connects digital transformation with agency public policy goals. This targeted selection strategy is suitable for in-depth qualitative research like this, which seeks to

comprehend complicated phenomena in a specific setting (Palinkas et al., 2015).

#### **5.4 Data collection method**

The pilot study was conducted under similar conditions as the data collection to ensure the effectiveness of the interview guide. Two participants were interviewed but not included in the main study. The decision not to include pilot participants in the main study helped maintain data integrity, while the insights gained from the pilot study, such as the need to increase interview length, significantly enhanced the quality and depth of data collected in the main study.

Saunders et al.'s (2019) research onion model guided the study's method and design selection. Semi-structured interviews were used for exploratory study on complex phenomena like digital transformation. Primary data were collected through semi-structured interviews with key informants involved in SITA's digital transformation projects. Purposive sampling was used to select interviewees, and 10 interviews, were conducted and offered. Secondary data sources included official SITA documents, such as annual reports, strategic plans, and project documentation, providing a contextual backdrop to the primary data. This combination of primary and secondary data sources enriched the study's findings, offering a comprehensive view of SITA's digital transformation efforts.

#### **5.5 Data analysis**

In this qualitative study, thematic analysis was employed to analyse the data obtained from the research interviews. This method facilitated the identification and categorisation of themes and subthemes. Thematic analysis is a commonly used research method when the researcher aims to understand the perspectives, opinions, knowledge, experiences, or values of participants based on qualitative data obtained from interview transcripts (Saunders et al., 2019). Thematic analysis can be conducted using different approaches, but the most prevalent method is as follows: The evaluation of the role of digital transformation in the public sector involved a systematic six-step process. This process included familiarisation, coding, generating themes, reviewing themes, defining and naming themes, and writing up the findings. Thus thematic analysis was employed to conduct this evaluation.

#### **5.6 Trustworthiness**

The trustworthiness of the qualitative analysis in this digital transformation study is assessed using criteria such as credibility, dependability, conformability, transferability, and authenticity (Creswell & Creswell, 2018). Credibility was established through in-depth interviews with the identified employees at SITA and their feedback, ensuring the findings reflect the actual experiences and perspectives of those involved in SITA's digital transformation efforts. Transferability involved providing sufficient contextual data to determine the study's applicability to other contexts, while dependability ensured the stability and trackability of data over time and conditions. Confirmability ensured the study results were shaped by participants' experiences and not researcher bias, using triangulation and participant feedback to ensure accurate interpretations.

## 6. RESULTS AND DISCUSSION

This is an analysis of digital transformation's challenges, strategies, and impacts on SITA's service delivery, focusing on ten main themes: systemic barriers, security measures, resistance to change, and advanced technology adoption. It includes quotes from participants and evaluates the empirical results. The chapter aims to provide actionable insights for enhancing digital transformation efforts and improving efficiency and organizational performance.

### 6.1 Table of results

Table 2 organizes the main themes that emerged from the research in relation to the study's specific objectives.

**Table 2: Thematic presentation of results**

Objective	Main theme
To assess the impact of digital transformation on SITA's service delivery.	Theme 1: Systemic barriers to digital transformation.
	Theme 2: Implementation of strong security measures and policies.
	Theme 3: Multifaceted resistance to digital transformation.
To assess the impact of digital transformation on SITA's service delivery.	Theme 4: Limited digital transformation
	Theme 5: Service accessibility
	Theme 6: Limited and inconsistent measurement of digital transformation.
To identify the strategies employed by SITA in its digital transformation journey.	Theme 7: Comprehensive and integrated strategy for digital transformation enhancement.
	Theme 8: Adoption of advanced technologies e.g. Cloud, Big data, IoT.
To provide recommendations for enhancing digital transformation within SITA.	Theme 9: Strategic partnerships.
	Theme 10: Organizational adaptation and empowerment for digital transformation.

Table 3 provides a structured overview of the research focus areas, linking each objective with relevant questions and summarizing key findings that address those questions. This helps in understanding the current state, challenges, and potential pathways for digital transformation within SITA.

**Table 3: Linking of research objectives, questions and findings**

Research objectives	Research questions	Findings/Themes
Challenges faced by SITA in implementing digital transformation.	What are the challenges faced by the SITA when implementing digital technologies?	Systemic barriers to digital transformation.
		Implementation of security measures and policies.
		Multifaceted resistance to digital transformation.
Assessment of the impact of digital transformation on SITA's service delivery.	How does digital transformation impact service delivery by the SITA?	Limited digital transformation.
		Service accessibility
		Limited and inconsistent measurement of digital transformation.
Identify the strategies employed by SITA in its digital transformation journey.	What are the strategies employed by SITA in its digital transformation journey?	Comprehensive and integrated strategy for digital transformation enhancement.
		Adoption of advanced technologies e.g. Cloud, Big data, IoT.
Recommendations for enhancing digital transformation within SITA	What are the recommendations on strategies and framework(s) that can enhance SITA's digital transformation efforts?	Strategic partnerships.
		Organizational adaptation and empowerment for digital transformation.

Table 4 provides a quantitative overview of how frequently each theme was mentioned by the respondents, offering insights into the most significant issues and strategies related to digital transformation at SITA.

**Table 4: Responses rate percentage on findings/themes**

Respondents	Findings/themes	Frequency	Percentage (%)
10	Systemic barriers to digital transformation.	6	60%
	Implementation of strong security measures and policies.	5	50%
	Multifaceted resistance to digital transformation.	5	50%
10	Limited digital transformation	6	60%
	Service accessibility	5	50%
	Limited and inconsistent measurement of digital transformation.	5	60%
10	Comprehensive and integrated strategy for digital transformation enhancement.	7	70%
	Adoption of advanced technologies e.g. Cloud, Big data, IoT.	5	50%
10	Strategic partnerships.	4	40%
	Organizational adaptation and empowerment for digital transformation.	5	50%

The most frequently identified theme was the need for a comprehensive and integrated digital transformation strategy, as 70% of respondents mentioned. Systemic barriers to digital transformation and limited digital transformation were each noted by 60% of participants, highlighting significant challenges in advancing digital initiatives. Implementation of strong security measures, multifaceted resistance to digital transformation, service accessibility, adoption of advanced technologies, and organizational adaptation each received a 50% response rate, underscoring these as critical areas of concern and opportunity. Strategic partnerships were identified by 40% of respondents, suggesting that while important, this area may need more emphasis to support overall digital transformation efforts. These findings provide a clear picture of the current state and necessary focus areas for enhancing digital transformation at SITA.

## 6.2 Discussion

### 6.2.1 Objective 1: To identify the challenges facing the SITA when implementing digital technologies

#### Theme 1: Systemic Barriers to Digital Transformation

Systemic barriers to digital transformation at SITA include organizational inertia, resistance to change, outdated technological infrastructure, and financial constraints. These barriers hinder the successful implementation of digital transformation initiatives.

Participant 1 (P1) highlighted the internal resistance and bureaucratic challenges: *“SITA bureaucracy - the same people have been in positions for too long they are not interested in new innovation. Old policies and procedures. Lengthy approval process. Technology - SITA people are comfortable with old technology and are afraid of change. Environmental (external) - SITA operates in a highly political environment. it reports to a Minister, and it takes long to adopt any change. Government departments are comfortable with old technology and are afraid to change; new technology will break their business systems. Financial challenges - SITA is funded by the government via government departments. It is difficult to introduce new technologies because you need a government order before you can implement. SITA’s delivery model is too expensive; even for a prototype, you need the whole process and a large team to deliver.”*

Participant 10 (P10) emphasized the structural and skills-related challenges: *“Silo-based structure, clients with legacy systems, SITA skills shortage specifically AIR type skills, budget shortages to modernize systems.”*

Participant 2 (P2) noted the inadequacies in change management and technological understanding: *“Lack of or inadequate change management both within SITA and with Government departments. SITA’s slow action in driving innovation in the public service and thereby being overtaken by Industry, especially OEMs. Inadequate understanding of the latest technology by both Customer Advocates and CRMs makes selling these technologies and services a challenge.”*

Participant 3 (P3) discussed financial constraints and competition: *“SITA does not get fiscal allocations from National Treasury. Legacy systems and technologies are still operational in SITA. SITA’s service costs are perceived to be expensive by the clients. Growing competitors in the private sector offer competitive solutions at cheaper prices. Lack of skills required for digital transformation. Lack of connectivity in some areas where services are required by citizens.”*

Participant 9 (P9) pointed out the need for reskilling and technological upgrades: *“The majority of the current SITA workforce is highly skilled in supporting existing legacy systems, meaning the current workforce will need to be reskilled to successfully implement digital technologies. There are a number of legacy on-premise compute and storage infrastructures that host legacy systems across government, impeding SITA’s ability to integrate government systems to increase data value.”*

Participant 7 (P7): *“Culture resistance and leadership challenges that are derived from the political landscape.”*

Sixty percent (60%) of respondents at SITA identified systemic barriers as significant challenges to digital transformation, including organizational inertia, resistance to change, outdated technological infrastructure, and financial constraints. Organizational inertia stems from bureaucratic processes and long tenure, while resistance to change stems from familiarity with old technologies. The political environment complicates change adoption due to lengthy approval processes. Financial constraints exacerbate these challenges, as SITA relies on limited

government funding for new technological initiatives.

## **Theme 2: Implementation of Strong Security Measures and Policies**

SITA has implemented security measures and policies to manage the risks associated with digital transformation. These efforts are crucial for protecting data and ensuring privacy, thus supporting the overall digital transformation initiatives.

Participant 1 (P1) explained: *“Data security - SITA has data security policies and procedures, including firewalls, proxies, encryptions, and passwords. You apply to be granted access to the systems, and any system should apply to access data or other systems. Privacy concerns and other related risks are managed using usernames, encrypted expiry passwords, and one-time pins implemented in systems, in line with the POPI Act.”*

Participant 2 (P2) added: *“Mandatory training on POPIA and PAIA was offered to SITAzens via SITA Varsity. The SITA Security Operations Center is fully operational and monitors both SITA and onboarding more clients. Recent partnership with CISCO is also another effort to show how serious SITA is regarding data security and privacy. SITA’s GPCE is centred around data security and privacy through private clouds.”*

Participant 3 (P3) described the security framework: *“SITA developed a reference architecture approved by the SSA (State Security Agency). SITA built a government cloud ecosystem enabling government departments or entities to host classified data in a secure on-premise SITA cloud.”*

Participant 9 (P9) highlighted the implementation of a Security Operations Center: *“Embedded in SITA's Cybersecurity Strategy is the implementation of a Security Operations Centre, which will monitor and ensure compliance with data security and privacy requirements, ensuring related risks are properly managed. SITA has also defined a reference architecture that enables secure access to other public environments while maintaining compliance with data sovereignty and residency requirements.”*

Participant 10 (P10) mentioned: *“GPCE federation is addressed by prime and backup data centres in SA before technology is adopted in the Reference Architecture. Cyber and Network Security is one of SITA's prime focus areas.”*

Fifty percent (50%) of the respondents identified the implementation of strong security measures and policies as a significant challenge. These measures are crucial for managing the risks associated with digital transformation, protecting data, and ensuring privacy. The complexity of establishing data security frameworks and the need for continuous training on data protection regulations such as POPIA and PAIA represent a substantial challenge for SITA. Additionally, developing a government cloud ecosystem and implementing security operations centres are critical steps, but they require significant resources and coordination. The literature echoes the importance of security measures. Cheng et al. (2024) emphasize that cybersecurity and data privacy are fundamental to maintaining public trust and ensuring the successful implementation of digital initiatives. These measures not only protect sensitive information but also build confidence in digital systems, which is essential for widespread adoption.

### **Theme 3: Multifaceted Resistance to Digital Transformation**

Resistance to digital transformation within SITA and its stakeholder community is multifaceted. It involves fear of job loss, reluctance to adopt new technologies, and lack of trust in SITA's capabilities.

Participant 1 (P1) observed: *"SITA - People are afraid of losing their jobs and starting something new. Stakeholder Community - They do not trust SITA can innovate anything as most previous innovations have failed with costs. They say SITA fails to maintain the current old technologies."*

Participant 2 (P2) noted: *"Inadequate appreciation of the benefits, lack of skills associated with latest technologies, conflicting priorities, and lack of budgets to fund projects with advanced technologies."*

Participant 3 (P3) highlighted data-sharing issues: *"Data sharing amongst government departments or entities to enable quick decision making and improve service delivery. The signing of MOUs (Memorandum of Understanding) mitigates this, but the process is very lengthy as each department and entity involves their legal teams for approval."*

Participant 7 (P7): *"Culture resistance and leadership challenges that are derived from the political landscape."*

Participant 9 (P9) pointed out resistance among the aging workforce and government departments: *"Within SITA, the aging workforce resists being reskilled, while government departments want to hold on to their on-premise platforms for control purposes."*

Participant 10 (P10) emphasized internal competition and budget constraints: *"Silo mentality in SITA and 'competition' between business units. Budget constraints from clients and clients' lack of trust in SITA's abilities."*

Fifty percent (50%) of the respondents identified multifaceted resistance to digital transformation as a significant challenge. This resistance includes fear of job loss, reluctance to adopt new technologies, and a lack of trust in SITA's capabilities. Staff fear that new technologies might render their skills obsolete, leading to job insecurity.

Additionally, there is a perception that previous technological innovations have failed, leading to scepticism about current digital transformation efforts. This lack of trust is compounded by the siloed nature of the organization and competition between business units, which hampers collaborative efforts towards digital transformation.

The literature supports the significance of resistance to change as a barrier to digital transformation. Cheng et al. (2024) discuss the need for effective change management and stakeholder engagement to overcome these challenges. They highlight that addressing the human aspects of digital transformation, such as fear and resistance, is crucial for successful implementation.



## 6.2.2 Objective 2: To assess the impact of digital transformation on SITA's service delivery.

### Theme 4: Limited Digital Transformation

Digital transformation at SITA is still in its infancy, and implementation is not yet widespread or fully realized, affecting overall efficiency and service delivery.

Participant 1 (P1) stated: *“Without the adoption of digital transformation, clients are forever complaining and escalating issues because the systems are always not working, preventing clients from serving citizens optimally.”*

Participant 2 (P2) noted: *“SITA’s digital transformation is at its infancy in terms of implementation. Digital collaboration platforms have improved efficiency to some extent, but other aspects, such as CRM systems and service management, are still not fully digitized.”*

Participant 3 (P3) observed: *“For now, I can say very minimal because the implementation is still at an infant stage. However, after the implementation, we envisage a huge service delivery improvement.”*

Participant 4: *“Long waiting period due to lengthy processes, such as SCM processes, customers waiting period is unpredictable and tiring.”*

Participant 9 (P9) mentioned: *“This is very much work in progress. However, SITA has already implemented a client portal which provides customers with status updates on their requests.”*

Participant 10 (P10) pointed out: *“The impact has been small to date except in the case of eServices. Resistance to transformation is evident in cases such as SASSA and DHA, where there is an unwillingness to share data. SITA has to go through several hoops to access data in order to develop customer-centric solutions.”*

Sixty percent (60%) of the respondents highlighted that digital transformation at SITA is still in its early stages, with implementation not yet widespread or fully realized. The current state of digital transformation is marked by minimal integration of digital technologies across various departments.

While there have been some advancements, such as the development of digital collaboration platforms, other critical aspects, like customer relationship management (CRM) systems and service management, remain underdeveloped. The slow pace of digital transformation affects overall efficiency and service delivery, as many processes are still reliant on outdated systems and manual interventions.

The literature supports these findings, indicating that digital transformation is often a gradual process requiring consistent efforts and adaptation. Joel et al. (2024) note that the initial stages of digital transformation frequently show limited impact as organizations grapple with the complexities of integrating new technologies into existing structures. They also emphasize that the full benefits of digital transformation are typically realized over an extended period, as organizations progressively overcome barriers and optimize their digital strategies.

### **Theme 5: Service Accessibility**

Digital transformation has improved service accessibility and customer satisfaction to some extent, with the implementation of eServices and mobile applications.

Participant 1 (P1) provided an example: *“The implementation of eServices allows citizens to access government services anywhere, such as eMatric services where candidates can apply for remarking and reissue of their lost matric certificates online. ePermit for transporting animals is also done online.”*

Participant 3 (P3) mentioned: *“Verification of citizenship on the Department of Home Affairs. The Department of Social Development and SASSA can use SITA Verification APIs to verify grant applicants' citizenship on the Department of Home Affairs population registry, preventing fraud and ensuring grants are given to the right beneficiaries.”*

Participant 5 (P5) noted: *“Employees have access to online systems, improving our turnaround times. Customers have access to some of SITA's online services.”*

Participant 9 (P9) highlighted: *“SITA has implemented a number of e-Services accessible anywhere via connected digital platforms, significantly improving the accessibility of government services to South African citizens.”*

Participant 10 (P10) added: *“eServices and mobile apps bring services closer to citizens. However, the huge potential of digital transformation such as APIs and Big Data/AI has not been realized due to lack of funds or trust in new technologies.”*

Fifty percent (50%) of the respondents identified improvements in service accessibility as a notable impact of digital transformation at SITA. The implementation of eServices and mobile applications has made government services more accessible to citizens. For example, initiatives like eMatric services and ePermit systems have allowed citizens to access critical services online, reducing the need for in-person visits and streamlining service delivery. These digital solutions have improved customer satisfaction by providing more convenient and efficient ways to interact with government services. The literature highlights the positive impact of digital transformation on service accessibility and customer satisfaction. Jones et al. (2020) emphasize the role of digital transformation in breaking down barriers to service access, particularly in underserved and remote areas.

### **Theme 6: Limited and Inconsistent Measurement**

There is a notable lack of consistent metrics or indicators to measure the impact of digital transformation on service delivery at SITA.

Participant 1 (P1) stated: *“They use customer satisfaction surveys.”*

Participant 3 (P3) mentioned: *“CSI - Customer Survey Index for each service implemented.”*

Participant 5 (P5) commented: *“I don't think we have measures or metrics.”*

Participant 9 (P9) highlighted: *“SITA measures the impact by the number of users making use of its e-Services portals.”*

Participant 10 (P10) added: *“APP (Annual Performance Plan) and individual project assessments.”*

Sixty percent (60%) of the respondents pointed out the lack of consistent metrics and indicators to measure the impact of digital transformation on service delivery at SITA. There is currently no standardized framework for evaluating the effectiveness of digital initiatives, making it challenging to assess progress and identify areas for improvement. Some departments use customer satisfaction surveys or specific project assessments, but these methods are not uniformly applied across the organization. This inconsistency in measurement hampers the ability to make data-driven decisions and track the overall impact of digital transformation efforts.

The literature underscores the importance of robust metrics and eval. Cheng et al. (2024) highlight that having clear, consistent metrics is crucial for monitoring the progress of digital transformation initiatives. Effective measurement frameworks enable organizations to evaluate their performance, identify gaps, and make informed adjustments to their strategies. Without these tools, it is difficult to demonstrate the value of digital transformation and justify further investments.

### **6.2.3 Objective 3: To identify the strategies employed by SITA in its digital transformation journey.**

#### **Theme 7: Comprehensive and Integrated Strategy for Digital Transformation Enhancement**

A comprehensive and integrated strategy is essential for overcoming barriers to digital transformation at SITA. Participants emphasized the need for policy reviews, continuous reskilling, and change management programs.

Participant 1 (P1) suggested: *“Review and amend old policies and procedures to be more adaptable to the ever-changing digital space. Continuous reskilling and move those who cannot be reskilled to where they can offer their service. Restructure without using the same people to implement it.”*

Participant 2 (P2) recommended: *“A full-on change management program for digital transformation (the program itself must also be digital). Each Executive and Head of Department must be change agents/champions with programs they are implementing as part of digital transformation. Ensure all SITAzens understand digital transformation from the enterprise architecture point of view (we are an IT organization, so all employees need to understand technical jargon).”*

Participant 3 (P3) emphasized: *“Refresh the current technologies deployed. Employ the right skills required. Review the packaging and costing of the services. Consider the partnering model to deliver some of the services. Ensure that reliable connectivity is implemented where it is required. Amend the PFMA Act and other laws inhibiting quicker processes to procure. Encourage SMMEs to utilize the Innovation Hubs built already but also build new ones across the country to enable more access.”*

Participant 5 (P5): *“Invest in technology-enabled platforms. Recruit the right people. Provide financial backing to the programs.”*

Participant 7 (P7) stated: *“Embed the transformation strategy internally and ensure that there are resources dedicated to drive this strategy within SITA.”*

Participant 10 (P10): *“A business drive from the Government side to have depts support the drive, SITA is driving from bottom-up and therefor uptake is slow.”*

Participant 9 (P9) proposed: *“I would strongly propose a dialogue between all the relevant stakeholders, i.e., GITOC, National Treasury, the Shareholder department led by SITA, to assess the funding model for ICT projects across government to consider centralized transversal funding.”*

Seventy percent (70%) of the respondents emphasized the need for a comprehensive and integrated strategy to enhance digital transformation at SITA. This strategy should involve policy reviews, continuous reskilling, and robust change management programs. Participants highlighted that a well-coordinated approach is crucial for overcoming systemic barriers and ensuring the successful implementation of digital initiatives. An integrated strategy would address issues such as outdated policies, bureaucratic inertia, and the need for alignment across various departments.

The literature supports this need for comprehensive strategic planning. Cheng et al. (2024) argue that continuous learning and adaptation are essential components of a strong digital transformation strategy. They highlight that organizations must proactively review and update their strategies to keep pace with technological advancements and changing environmental conditions.

### **Theme 8: Adoption of Advanced Technologies**

The adoption of advanced technologies such as cloud computing, big data, AI, and IoT is crucial for modernizing and enhancing SITA’s services. Participants stressed the importance of these technologies for future-proofing digital transformation efforts.

Participant 1 (P1) stated: *“They are the future. We use AI-based technology daily. Without them, SITA will lose its relevance and value to the government.”*

Participant 2 (P2) mentioned: *“Cloud, Cyber Security, Big Data Analytics and Business Intelligence, Artificial Intelligence, Blockchain, Robotic Process Automation.”*

Participant 3 (P3) emphasized: *“SITA must ensure that they partner with the OEMs/SMMEs who are leading in digital transformation solutions.”*

Participant 8 (P8) noted: *“Big Data and Artificial Intelligence.”*

Participant 10 (P10) added: *“APIs, Big Data, and AI. SA uptake on AI and IoT is very slow compared to other countries.”*

Fifty percent (50%) of the respondents identified the adoption of advanced technologies such as Cloud computing, big Data, and the Internet of Things (IoT) as critical for modernizing and

enhancing SITA's services. These technologies are seen as essential for future-proofing digital transformation efforts and improving service delivery. The respondents stressed the importance of partnering with leading technology providers to leverage cutting-edge solutions and ensure SITA remains competitive and relevant.

The literature underscores the importance of adopting advanced technologies to drive digital transformation. UNCTAD (2021) highlights that cloud computing, big data analytics, and IoT are pivotal for enhancing operational efficiency and enabling data-driven decision-making.

#### **6.2.4 Objective 4: To provide recommendations for enhancing digital transformation within SITA**

##### **Theme 9: Strategic Partnerships**

Strategic partnerships with technology providers, government entities, and other stakeholders are essential for successful digital transformation. These partnerships provide access to cutting-edge technologies, skills, and resources.

Participant 1 (P1) highlighted: *“They have restructured; for example, Applications Development has new departments for IoT, AI, Big Data Analytics, and Mobile Development. It has destabilised the departments as people were moved around from their usual reporting lines; some were moved to newly created departments to assume new roles.”*

Participant 3 (P3) mentioned: *“Encourage the SMMEs to utilise the Innovation Hubs built already but also build new ones across the country to enable more access to that.”*

Participant 7 (P7) stated: *“Embed the transformation strategy internally and ensure that there are resources dedicated to drive this strategy within SITA.”*

Participant 9 (P9) emphasised: *“I would strongly propose a dialogue between all the relevant stakeholders, i.e., GITOC, National Treasury, the Shareholder department led by SITA, to assess the funding model for ICT projects across government to consider centralised transversal funding.”*

Strategic partnerships are seen as essential for accessing cutting-edge technologies, skills, and resources that SITA might not possess internally. Collaborating with leading technology companies can help SITA leverage advanced solutions and stay competitive in the rapidly evolving digital landscape. Additionally, partnerships with other government entities can facilitate knowledge sharing and coordination, enhancing the overall effectiveness of digital transformation initiatives (Nuryadin et al., 2022).

##### **Theme 10: Organizational Adaptation and Empowerment for Digital Transformation**

Organisational adaptation and empowerment are crucial for achieving digital transformation goals. This involves reviewing policies, fostering a culture of innovation, and ensuring continuous training and reskilling.

Participant 1 (P1) suggested: *“Employ more younger people in higher strategic level management positions. Stronger trusted organizational change management drives for the*

*older workforce. More funding and support for experiential programs.”*

Participant 2 (P2) recommended: *“Drive digital consciousness. Fuel innovation at all levels. Recognize and reward digital transformation pockets of excellence at all levels. Management must be digital transformation champions in action, with indicators of progress made for their environments. Encourage upskilling for all employees to the digital transformation-related technologies.”*

Participant 3 (P3) emphasized: *“Ensure that all employees are taken on board as part of the implementation. No one must be left behind. Employees must be trained and encouraged to embrace technology in all they do. Each SITA business unit must have a digital transformation champion who will drive these initiatives at a unit level.”*

Participant 9 (P9) noted: *“SITA needs to bring back the role of Chief Digital Officer who will drive the digital transformation agenda for the whole of government.”*

Participant 10 (P10) added: *“A flatter non-siloed structure and elimination of duplicate functions and 'competition' in the silos.”*

Fifty percent (50%) of the respondents identified organizational adaptation and empowerment as critical for achieving digital transformation goals. This involves reviewing and updating policies, fostering a culture of innovation, and ensuring continuous training and reskilling of employees.

Organizational adaptation requires a shift in mindset, where employees are encouraged to embrace change and innovation. Empowerment involves providing employees with the tools, resources, and support to implement digital initiatives successfully.

The literature emphasizes the importance of organizational adaptation and empowerment in digital transformation. Cheng et al. (2024) highlight the need for continuous training and development programs to equip employees with the skills required for digital transformation. They emphasize that empowering employees improves job satisfaction and performance and enhances the overall success of digital initiatives.

The relationship between the empirical results and the literature is largely consistent, with significant alignment on the key challenges and strategies for digital transformation. However, the practical difficulties and specific contextual barriers highlighted by the empirical findings underscore the importance of translating theoretical insights into practical, context-specific strategies. This study contributes valuable empirical evidence from SITA, offering lessons for other public sector organizations facing similar challenges.

The empirical findings further highlight the critical components of successful digital transformation, including comprehensive strategies, adoption of advanced technologies, strategic partnerships, and organizational adaptation. These insights provide valuable lessons for SITA and other public sector organizations aiming to enhance their digital transformation efforts.

## **7. CONCLUSIONS**

### **7.1 Technological Context**

The study reveals that SITA has made efforts to integrate new technologies, such as cloud computing and big data analytics. However, there are inconsistencies across departments. Legacy systems remain a significant barrier, causing integration challenges. To achieve successful technological integration, it is important to implement standardised adoption and phased upgrades.

This approach helps to ensure uniformity and efficiency throughout the organisation. The study further underscores the importance of implementing a more organised approach to deploying innovative technologies. It is crucial to ensure that all employees have access to and training on these tools in order to achieve the desired transformation.

### **7.2 Organizational Context**

The study highlights the importance of effective leadership, employee empowerment, and effective internal communication in driving digital transformation at SITA. Resistance to change persists, and leadership engagement and cultural shifts are needed.

Empowerment through comprehensive training programs and clear communication of digital transformation benefits can enhance participation and innovation. Improving internal communication channels can bridge gaps and align employees towards common digital transformation goals.

### **7.3 Environmental Context**

The study highlights the importance of regulatory compliance, stakeholder engagement, and strategic partnerships in implementing digital transformation at SITA. Compliance with regulations is crucial for legal adherence and a conducive environment. SITA needs to strengthen stakeholder engagement and strategic partnerships to align with public policy goals and access new technologies.

The TOE framework provides a comprehensive understanding of factors influencing digital transformation, emphasizing standardization of technology adoption, leadership, culture, employee empowerment, internal communication, regulatory compliance, and stakeholder engagement.

## **8. CONTRIBUTION**

### **8.1 Theoretical contributions**

The findings of this study contribute to the theoretical understanding of digital transformation in public sector organizations, specifically through the Technology-Organization-Environment (TOE) framework. The study reveals how organizational and environmental contexts, such as leadership commitment, internal communication, and regulatory frameworks, influence the effectiveness of digital transformation efforts.

These insights can inform future theoretical models and studies on digital transformation, offering a more comprehensive view of the factors that drive or hinder technological adoption in public sector settings.

## **8.2 Practical contributions**

From a practical standpoint, the study provides actionable recommendations for enhancing SITA's digital transformation efforts. The identified strategies, such as implementing a unified communication strategy, developing interactive training sessions, and strengthening leadership commitment, are designed to address specific challenges faced by the organization.

By focusing on improving internal communication and providing adequate training, SITA can increase employee engagement and acceptance of new technologies. The study also highlights the need for regular technology assessments and upgrades, which can help ensure that the organization's IT infrastructure supports the adoption of advanced digital tools.

Furthermore, the establishment of continuous monitoring and evaluation systems will allow SITA to measure the impact of its digital initiatives, facilitating ongoing improvements and adaptations.

## **8.3 Policy contributions**

The study suggests that SITA should review and revise existing policies to support digital transformation, advocating for flexible regulatory frameworks. SITA should proactively shape these policies and foster a conducive environment for digital initiatives. Strategic partnerships with industry leaders and academic institutions can enhance technological capabilities and access to cutting-edge solutions. Aligning digital initiatives with organizational goals and leveraging external expertise can help achieve sustainable improvements in service delivery.

## **9. RECOMMENDATIONS**

### **9.1 Objective 1: To examine the challenges faced by SITA in implementing digital transformation.**

The continuous adaptation framework addresses the need for a dynamic organizational structure capable of integrating new technological trends and feedback. It supports the TOE's organizational context by advocating for an agile and responsive organization in a rapidly changing digital landscape. Enhanced support structures, such as help desks or expert teams, assist employees in overcoming barriers to new technology adoption, enhancing user confidence and competency.

### **9.2 Objective 2: To assess the impact of digital transformation on SITA's service delivery.**

These initiatives leverage digital technologies to enhance service delivery by integrating tools that directly improve service efficiency and customer satisfaction. In the TOE framework, this approach enhances the Technology context by ensuring that the technological tools implemented are beneficial to organizational goals.



Establishing mechanisms to gather employee and customer feedback ensures digital solutions align with user needs and industry standards. This continuous feedback loop facilitates ongoing improvements and adaptations to the digital services, fitting into the Environmental context of the TOE framework by integrating external user feedback into organizational strategies

### **9.3 Objective 3: To identify the strategies employed by SITA in its digital transformation journey.**

Developing strategic partnerships with technology providers and academic institutions enriches SITA's technological capabilities and innovation potential. This approach broadens the organization's access to cutting-edge solutions and best practices, fitting into the Environmental context of the TOE framework by leveraging external resources and expertise to enhance digital transformation strategies.

### **9.4 Objective 4: To provide recommendations for enhancing digital transformation within SITA.**

Promoting an organizational culture that embraces change and innovation is essential for successful digital transformation. These initiatives reshape organizational values and behaviours towards a more digitally agile workforce, enhancing the Organizational context within the TOE framework.

## **10. LIMITATIONS, AREAS OF FURTHER STUDY AND CONCLUSION**

The study on digital transformation at SITA has several limitations, including not including all key stakeholders, using a qualitative approach, minimizing biases through triangulation and thematic analysis, using the Technology Acceptance Model and the Technology-Organization-Environment framework, and is conducted within a specific timeframe.

These limitations limit the ability to fully assess the impact and acceptance of digital initiatives across all stakeholders and may not capture the complexity and nuances of digital transformation in a public sector context like SITA

The study reveals a need for further research in areas such as impact measurement, cultural adaptation, technological upgrades and integration, long-term outcomes, comparative studies across different sectors, comparative analysis of digital transformation policies, the impact of specific legislations on digital transformation, stakeholder perceptions on current policies, barriers and enablers in existing legislation, future-proofing digital transformation policies, and the role of public-private partnerships in shaping digital legislation.

In conclusion, the study highlights the importance of effective change management, policy restructuring, leadership engagement, skill development, communication strategies, and strategic partnerships in driving digital transformation in the public sector. It provides actionable recommendations for SITA's strategy and contributes to the broader discourse on digitalization.

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