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Optimising ICT Project Management Maturity at SITA in South Africa: A Framework for Sustainable Organisation Performance

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Abstract:

Effective ICT project management is essential for public sector performance, yet many organisations, such as South Africa's State Information Technology Agency (SITA), struggle with project maturity. This study aimed to develop a framework to optimise ICT project management maturity at SITA, thereby fostering sustainable organisational performance. Employing an exploratory qualitative design, semi-structured interviews were conducted with 10 experienced SITA staff. Thematic analysis identified key enablers, including technology adoption and process standardisation, and significant barriers, such as high staff turnover, bureaucratic processes, and insufficient senior management support. The study proposes a theoretically grounded framework that integrates governance, capacity building, and stakeholder engagement to elevate project management maturity. This framework offers SITA and similar public sector entities a practical roadmap to enhance project success, improve service delivery, and achieve long-term strategic goals through structured and sustainable improvements.

Keywords:

Project Management Maturity, ICT Project Management, Public Sector, SITA, Organisational Performance

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Introduction

Effective management of Information and Communication Technology (ICT) projects is critical for organisational success, yet many entities, including South Africa's State Information Technology Agency (SITA), face significant challenges in project execution due to gaps in project management maturity, which is crucial for strategic alignment and superior outcomes (Fernandes et al., 2020; Karim et al., 2023; Pace, 2019). For SITA, these challenges are multifaceted, stemming from the absence of a standardised project management framework, insufficient managerial support and training, a lack of institutionalised software leading to inefficient manual processes, and poor stakeholder communication (Kamaldien, 2012; Van der Waldt, 2020; Kerzner, 2019; Gusha, 2022). Achieving mature project management is essential for the success of ICT projects and sustainable organisational performance at entities like SITA (Karim et al., 2023; Pace, 2019). Yet, this goal is undermined by a constellation of challenges, primarily the lack of a standardised project management framework, which fosters inconsistent practices and insufficient stakeholder commitment (Kamaldien, 2012; Van der Waldt, 2020). Further impediments include chronic budget overruns, inadequate support and training for project managers, and a reliance on manual processes due to a lack of institutional software, all of which cause significant delays (Ciric et al., 2022; Khoza & Marnewick, 2020; Wen & Qiang, 2016). These issues are exacerbated by poor communication, ineffective contract management, high staff turnover, and deficient change management, leading ultimately to poor project outcomes and client dissatisfaction (Gusha, 2022; Kerzner, 2019; Mahote, 2022). Addressing these interconnected barriers is therefore critical for SITA to advance its project management maturity and fulfil its strategic objectives. These issues are exacerbated by ineffective budget and contract management, often resulting in overspending and high staff turnover, which disrupts continuity and fosters client dissatisfaction (Ciric et al., 2022; Khoza & Marnewick, 2020; Sidlayiya, 2022; Mahote, 2022; Wen & Qiang, 2016). To address these deficiencies and optimise project management maturity, a comprehensive framework is proposed, advocating for strategies such as establishing a Project Management Office (PMO), providing targeted training, adopting a structured methodology, and ensuring effective stakeholder engagement to provide a roadmap for SITA to achieve consistent delivery of high-quality ICT services that support governmental objectives (State Information Technology Agency, 2024). This study aims to guide SITA toward a more sustainable future by transforming ICT project management. This study responds by crafting a practical framework to elevate its project management maturity. The ultimate vision is an organisation that excels not only economically through greater cost control and operational efficiency but also socially, by investing in its people, fostering skills, and improving engagement. By embedding these principles into its core processes, the study aims to steer SITA toward a resilient and high-performing model, capable of consistently delivering public value. The following are the objectives of this study.

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- To evaluate the impact of current strategies implemented by SITA on the maturity level of ICT project management.
- To conceptualise and develop a comprehensive framework for optimising ICT project management maturity, aimed at fostering sustainable organisational performance at SITA in South Africa.

Literature Review

Project Management Maturity and Benchmarking Competencies

The evolution of project management maturity (PMM) signifies a shift from a narrow focus on process standardisation toward a holistic emphasis on inherent capability and strategic readiness for project execution (Karim et al., 2023). This reorientation is critical for ICT projects, which are fundamental to productivity, as traditional PMM models often overlook essential structural, cultural, and competency-based enablers necessary for strategic preparedness (Nikolaenko & Sidorov, 2023). Empirical evidence confirms that higher PMM levels correlate with greater project success, particularly in complex environments, underscoring the need to integrate competency frameworks where skill management is a key success factor with process maturity assessments (Pretorius et al., 2022; Riesener et al., 2023). Consequently, modern PMM benchmarking must adopt rigorous, design science-based approaches to evolve from descriptive diagnostics into dynamic tools that evaluate and enhance an organisation's integrated capability for strategic project delivery (Kırmızı & Kocaoglu, 2022).

Definition of Organisational Performance

Sustainable performance is a multidimensional construct reflecting an organisation's integration of economic, social, and environmental dimensions (Zgrzywa-Ziemak & Walecka-Jankowska, 2021). Organisational performance is an outcome-based concept reflecting strategic results, but is critically influenced by internal processes, resource analysis, and continuous improvements in structures and conflict resolution (Sinnaiah et al., 2023).

Critical Dimensions of Maturity

Modern project management relies on established best practices and standards from guides like PMBOK and PRINCE2 (Pereira et al., 2022), which are widely accepted as effective methods (PMI, 2021). To enhance capabilities, organisations should combine the adoption of these practices with benchmarking and the use of maturity models and competency frameworks (Kerzner, 2023, as cited in Menon, 2024; Pereira et al., 2022).

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Project Management Maturity Models for Establishing and Sustaining the Project Management Office

The establishment and sustained functioning of a PMO is widely recognised as a pivotal mechanism for advancing project management maturity, particularly within complex ICT environments. As underscored by maturity frameworks like Kerzner's PMMM and PMI's OPM3, strategic management support and a clearly defined PMO role are foundational for sequential progression through maturity levels, as they institutionalise standardised methodologies, governance, and performance management (Kerzner, 2019; PMI, 2013; Fabbro et al., 2021). For a PMO to be effective, it requires a sufficient mandate and structured authority to execute its core functions, which are comprehensively encapsulated in the following Hill framework. Practice Management entails project methodology standardisation and project management tool deployment. Infrastructure Management is realised through ensuring project management governance, resource allocation, and risk management processes. The resource Integration is about ensuring project management skills development and career pathing. While technical support entails mentoring of project teams, auditing of project management processes, and recovery. Business Alignment is about ensuring effective portfolio management and strategic value maximisation (Arbabi et al., 2020; Silviusa, 2021). Critically, the PMO's governance role involves creating decision-making frameworks to ensure project-strategy alignment, implementing rigorous risk management, and fostering accountability, while its technical support adapts to the organisation's maturity level, providing essential mentoring and audit functions that drive organisational learning and capability development (Virkkala, 2024; Bezuidenhout et al., 2024; Sandhu et al., 2024). Ultimately, sustained PMO efficacy and its contribution to enhanced maturity and project success are contingent upon unwavering executive sponsorship and its evolution from a supportive entity to a strategic partner integral to business performance and value realisation (Filmalter & Steenkamp, 2021; Chauma, 2017).

Technology Adoption and Strategic Senior Management Support in ICT Project Management

The adoption of specialised project management tools is a critical enabler for advancing project management maturity, as strategic investment in relevant software providing Agile reporting, contextual features, and integrated dashboards for data-driven decisions elevates organisational capabilities, while its absence impedes development (Chauma, 2017; da Silva Bezerra, 2021; Kamaldien, 2012;Kerzner, 2019) Crucially, this technological advancement must be underpinned by robust management support, as both senior and first-line management are essential for implementing a cohesive project management framework and providing significant, sustained backing to the Project Management Office, with standardised methods and steering committee guidance further identified as key enablers for achieving

higher maturity levels (Cooke-Davies, 2002, & Englund & Bucero, 2006, as cited in Fernandes et al., 2020; Karim et al., 2023; Martins et al., 2021).

The Influence of ICT Project Maturity on Sustainable Organisation Performance

Performance measurement is essential for implementing strategic goals and achieving a sustainable competitive advantage (Abdallah et al., 2022). Mature project management supports digital leadership, which enhances organisational performance, a process fundamentally dependent on cultivating a robust digital culture and augmenting employee capabilities (Shin et al., 2023).

Challenges and Barriers Hindering the Effectiveness of ICT Project Management

A primary barrier to effective ICT project management is insufficient senior management support, which is often linked to unclear and unrealistic project objectives, thereby hindering effective execution (Fernandes et al., 2020; Bogopa & Marnewick, 2022; Sidlayiya, 2022). This leadership deficit is compounded by a significant lack of competent project managers, a challenge exacerbated by poor leadership, inadequate training, and ineffective coordination, which collectively weaken project delivery and restrict management's ability to delegate tasks efficiently (Hamdulay, 2018; Fernandes et al., 2020; Gusha, 2022; da Silva Bezerra, 2021).Further critical challenges include unclear and ineffective communication with teams and stakeholders, a problem often rooted in the absence of a defined project methodology, which negatively impacts project outcomes and maturity (Fernandes et al., 2020; da Silva Bezerra, 2021; Gusha, 2022). These issues are paralleled by sub-optimal budget management processes, where unrealistic planning and mismanagement lead to significant project inefficiencies (Ciric et al., 2022; Khoza & Marnewick, 2020; Fulani, 2021). Ultimately, a lack of client engagement and failure to align project efforts with customer expectations severely weakens management effectiveness and compromises client satisfaction (Khoza & Marnewick, 2020; Sidlayiya, 2022; Ciric et al., 2022).

Strategies for Enhancing ICT Project Management Maturity, Stakeholder Engagement, and Methodology Optimisation

A fundamental strategy for advancing ICT project management maturity is the establishment and senior-level support of a Project Management Office (PMO), which serves as a central governance structure to standardise processes, ensure compliance, and drive continuous improvement in project delivery (Kamaldien, 2012; Van der Waldt, 2020). The PMO’s role extends beyond oversight to include practice management, infrastructure governance, resource integration, and technical support, all of which are critical for elevating organisational project management capability (Arbabi et al., 2020; Silvius, 2021). Without a PMO operating at the highest governance levels, organisations risk fragmented processes, inconsistent reporting, and immature project management practices (Van der Waldt, 2020). Complementing the PMO’s structural role, the adoption of a standardised, organisation-wide project

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management methodology is essential for achieving maturity. A well-defined framework provides a common language and consistent processes, reducing variability and enhancing predictability in project outcomes (Kamaldien, 2012; Van der Waldt, 2020). The absence of such a methodology leads to informal practices, unclear evaluation criteria, and misaligned priorities, which hinder maturity progression (da Silva Bezerra, 2021). Moreover, methodology optimisation must be agile and adaptable to different project contexts, ensuring relevance and applicability across diverse ICT initiatives (Thesing et al., 2021). Equally important is comprehensive training and capacity development for project managers and key stakeholders. Continuous professional development, including technical, behavioural, and leadership training, ensures that project managers are equipped to handle complex ICT projects and align them with organisational strategy (Mahote, 2022; Kamaldien, 2012). Training should also extend to senior and intermediate management to foster a culture of project advocacy and support (Van der Waldt, 2020). Insufficient training not only impedes the effective implementation of project methodologies but also contributes to high turnover and skill gaps, further stalling maturity efforts (da Silva Bezerra, 2021). Furthermore, stakeholder engagement is a pivotal enabler of ICT project management maturity. Involving stakeholders from the outset ensures their needs are understood and integrated into project planning, thereby enhancing buy-in and reducing resistance (Kamaldien, 2012; Filmalter & Steenkamp, 2021). Effective engagement relies on a formal communication strategy that promotes transparency, manages expectations, and facilitates collaboration throughout the project lifecycle (Gusha, 2022). Stakeholders' knowledge and insights can significantly contribute to project refinement and success, turning potential barriers into opportunities for improvement (Shenhar & Dvir, 2007).

The Conceptual Framework

A conceptual framework, which serves as a study's rationale, outlines established knowledge from a literature review, identifies research gaps, and establishes the methodological basis for the research (Varpio et al., 2020). The framework for this study was developed by analysing relevant literature after breaking down the topic into components and selecting the independent and dependent variables.

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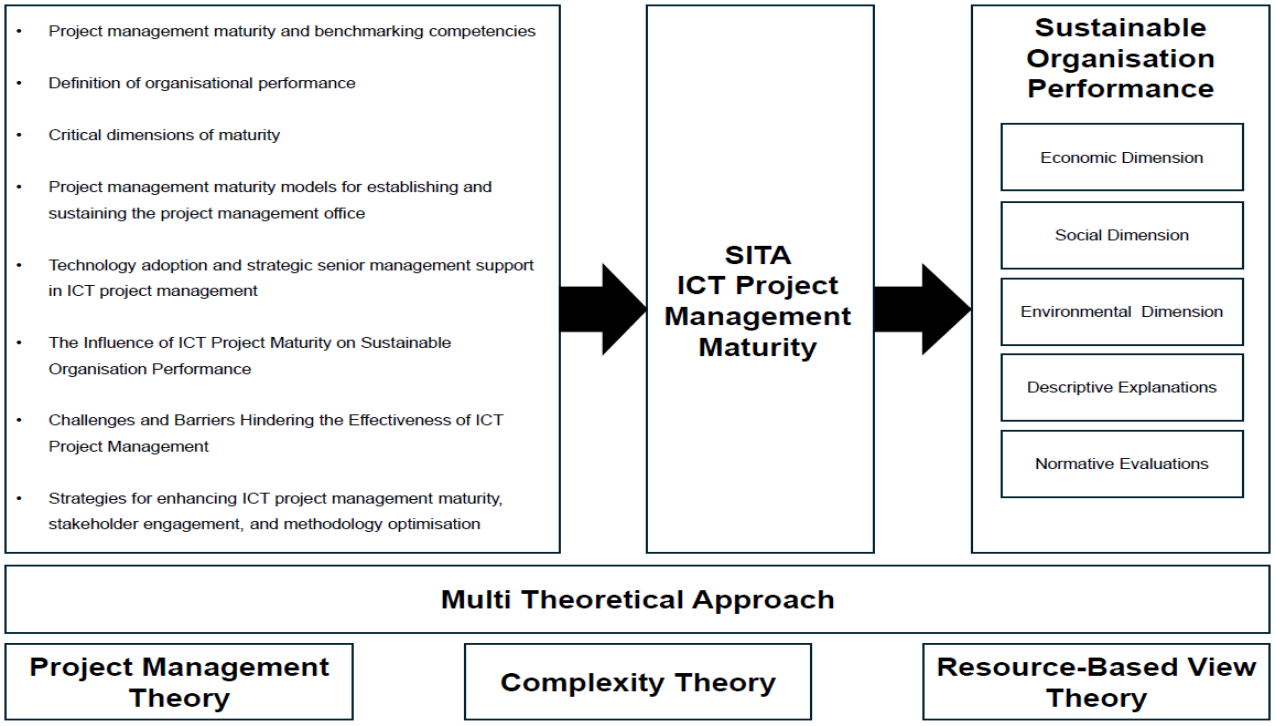


Figure 1: Conceptual framework

Interrelationships Among the Variables

The interrelationships among the key variables process standardisation, technology adoption, governance, and stakeholder engagement are central to achieving the study's first objective: evaluating the impact of SITA's current strategies on ICT project management maturity. Process standardisation provides the foundational consistency required for effective governance, while technology adoption enables the transparency and efficiency necessary to monitor and enforce these standards. Within SITA's context, bureaucratic governance structures and a lack of modern tools have created a cyclical barrier: immature processes hinder technological integration, and outdated systems perpetuate informal practices, thereby stalling maturity progression (Kamaldien, 2012; da Silva Bezerra, 2021). This interdependence highlights that isolated improvements are insufficient; rather, a synergistic enhancement across these variables is essential to break existing inefficiencies and elevate project management capability. These interconnected variables directly inform the study's second objective: developing a comprehensive framework for optimising maturity to foster sustainable organisational performance. The findings reveal that variables such as senior management support, project capacity management, and stakeholder engagement are not merely parallel enablers but are causally linked. For instance, without committed senior advocacy, resource allocation for training and technology remains inadequate, which in turn undermines stakeholder engagement and project outcomes (Fernandes et al.,

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2020; Filmalter & Steenkamp, 2021). Within SITA's operational environment, this implies that sustainable performance cannot be achieved through technical or procedural fixes alone; it requires an integrated approach where leadership, capacity building, and inclusive communication are systematically aligned. Thus, the proposed framework positions these variables as interdependent pillars, where progress in one dimension amplifies effectiveness in others, collectively driving the organisation toward higher maturity and long-term strategic resilience.

Theoretical Framework for the Study

This study's theoretical framework, an essential guide for applying theory and maintaining a research structure (Varpio et al., 2020; Grant & Osanloo, 2014, as cited in Zawacki-Richter et al., 2020), is triangulated by integrating Koskela and Howell's (2002) project management theory emphasizing control and learning, the resource-based view (RBV) that positions mature project management capabilities as a strategic asset (Barney, 1991; Mansour et al., 2022), and complexity theory, which advocates for flexible practices to navigate modern projects' unpredictable contexts (Snowden & Boone, 2007; Whyte et al., 2022).

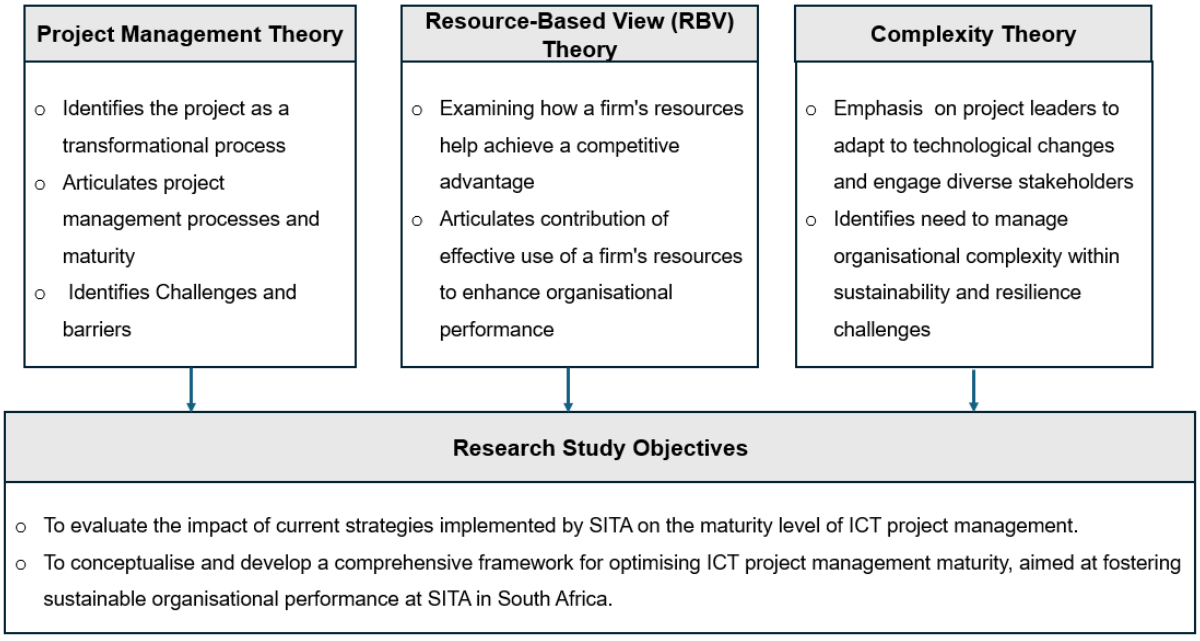


Figure 2: Theoretical framework of the study

Integrating the Theories

An integrated framework combining Project Management, Resource-Based View (RBV), and Complexity Theory offers a comprehensive approach. Project Management provides control, RBV highlights unique internal resources as a source of competitive advantage (Barney, 1991; Mansour et

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al., 2022), and Complexity Theory advocates for flexibility in unpredictable environments (Snowden & Boone, 2007; Whyte et al., 2022). Synthesising these theories enables organisations to balance structured control with the necessary agility for resilience and efficiency.

The Legislative Requirements Relating to the Study

International and national policies provide critical guidance for ICT project implementation. Globally, (Espejo Villar et al., 2022) offer a framework for inclusive e-learning, while the UK's HM Treasury (2022) outlines business case requirements. In South Africa, the Public Service Act (Proclamation No. 103 of 1994) establishes the foundation for service delivery, and the State Information Technology Agency Act (No. 88 of 1998), as amended, mandates SITA to provide and procure ICT services for government entities.

Research Objectives	Theoretical Frameworks	Link to Theory
To evaluate the impact of current strategies implemented by SITA on the maturity level of ICT project management.	Resource-Based View Theory	To analyse how SITA's internal resources and capabilities generate competitive advantage and enhance performance
	Project Management Theory	To explore management behaviors that contribute to ineffective project management.
	Complexity Theory	To assess SITA's project leadership through its flexibility, change management, stakeholder engagement, and iterative processes.
To conceptualise and develop a comprehensive framework for optimising ICT project management maturity, aimed at fostering sustainable organisational performance at SITA in South Africa.	Project Management Theory	Theory identified capability improvements needed to enhance effectiveness and advance project management maturity.
	Resource-Based View Theory	Theory was employed to analyse how SITA's internal resources and capabilities generate competitive advantage and enhance performance.
	Complexity Theory	Underpins a SITA framework optimizing sustainable ICT project management through leadership in flexibility, change, and stakeholder engagement.

Figure 3: Linking the theories to research objectives

Methods and Data

Research Design and Methodology

An exploratory research design was employed, utilising in-depth semi-structured interviews to investigate the challenges impacting ICT project management effectiveness at SITA and to propose a

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practical roadmap to enhance its project management maturity and achieve sustainable organisational performance (Saunders et al., 2023).

Sample Size, Pilot Study, and Data Collection Methods

The study employed a purposive homogeneous sample of 10 participants from SITA's project management staff. This sample size was carefully determined to align with the exploratory qualitative nature of the research, which prioritises depth and richness of data over statistical generalizability (Creswell et al., 2020; Saunders et al., 2023). The selection of 10 participants was deemed appropriate as it allowed for in-depth engagement with experienced informants directly involved in ICT project delivery, thereby ensuring that the collected data were both meaningful and contextually grounded.

The adequacy of this sample size is further justified through the principle of data saturation, the point at which no new themes or insights emerge from additional data (Mocănașu, 2020; Mwita, 2022; Islam & Aldaihani, 2022). In this study, data saturation was achieved through the following combination of methodological strategies. Purposive homogeneous sampling was enabled through participants selected based on their shared experience in ICT project management at SITA, ensuring that the data collected were focused and relevant to the research objectives. Rigorous Thematic Analysis was employed, using systematic and iterative theme development (Lim, 2025), which identified recurring patterns and themes across the dataset. In-depth semi-structured interviews were conducted in a detailed and flexible manner, enabling participants to elaborate on key issues and share nuanced perspectives. The consistent emergence of similar themes across interviews indicated that saturation had been reached. The achievement of data saturation with 10 participants confirms that the sample size was sufficient to capture the core challenges, enablers, and dynamics influencing ICT project management maturity at SITA. This approach is consistent with qualitative research norms, where smaller, information-rich samples are often used to reach saturation efficiently (Saunders et al., 2023). Moreover, the study's pilot phase with one expert participant helped refine the interview instrument, ensuring that the questions were clear and effective in eliciting relevant responses. This preparatory step contributed to the efficiency of the data collection process and supported the validity of the saturation point.

Data Analysis

Thematic analysis is a qualitative method that systematically identifies meaningful patterns within data to organise, interpret, and derive conclusions from it (Braun & Clarke, 2006, as cited in Saunders et al., 2023). For this study, the process followed Saunders et al. (2023), beginning with familiarisation through repeated reading of transcripts, followed by the identification of key themes, and concluding with the refinement and validation of these themes using Microsoft Word.

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Trustworthiness

The study's trustworthiness was ensured by adhering to the principles of credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985, as cited in Nassaji, 2020). Credibility was established through appropriate research methods and design, engagement of knowledgeable participants, and regular supervisory discussions (Creswell et al., 2020). Dependability was achieved via ethical adherence and detailed documentation of processes, while confirmability was strengthened through triangulation and a decision trail to minimise researcher bias (Creswell et al., 2020). Transferability was addressed by providing rich, contextual descriptions, and authenticity was incorporated to address power dynamics and ensure fair representation (Lincoln & Guba, 1986, as cited in Amin et al., 2020), collectively ensuring the findings' reliability and validity.

Ethical Considerations

The following ethical considerations were integral to this study, ensuring adherence to normative behavioural standards that protect participants' rights (Creswell et al., 2020). Key ethical principles included obtaining informed consent, where participants were fully briefed on the research goals, nature, and their right to withdraw at any stage. Measures were taken to prevent harm, including emotional, physical, or psychological risks, with interviews conducted in a safe environment and counselling available if needed. Confidentiality and anonymity were maintained by using pseudonyms, securing data in password-protected storage, and restricting access to authorised personnel only. Additionally, formal permissions were obtained from both SITA and MANCOSA before commencing the study.

Results

The next section outlines the research findings and accompanying. Thematic analysis was used to interpret the collected data, and the subsequent discussion section will connect these findings with relevant academic literature.

Demographic Data

Demographic Profile of Participants

The data collection phase of this research study included asking the participants to specify their demographic attributes. These characteristics included their gender, age group, years of experience, highest level of education, and rank. To maintain the confidentiality and anonymity of the research participants, the participants were identified by numbers 1 to 10.

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Gender of Participants

This research study had 10 participants, as shown in the table below. Eight participants were female, which translated to 80 %, and two or 20%, were male. Most of the participants in the research study were women. This representation is a positive trend about female participation in formal project management (Baker and Clegg, 2023).

Gender	Number	Percentage
Female	8	80%
Male	2	20%
Total	**10**	**100%**

Table 1: Participants' gender

Age Group of the Participants

The age of the research study participants has been analysed in the table below.

Age Group	Number	Percentage
26 to 35	1	10%
36 to 45	6	60%
46 to 55	3	30%
56 and above	0	0%
Total	**10**	**100 %**

Table 2: Age of participants

The participant age distribution showed a significant majority (90%) were between 36 and 55 years old, while the 26-35 group was underrepresented at only 10%. This underrepresentation of younger participants corresponds with the high youth unemployment rate in South Africa (Ogbonna et al., 2022).

Years of Work Experience of the Participants

The work experience of the participants in this research study is analysed in the table below.

Years of Work Experience	Number	Percentage
0-5 years	1	10
6-10 years	1	10
11-15 years	4	40
16 and above	4	40
Total	**10**	**100 %**

Table 3: Participants' work experience

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The majority of participants (80%) had over 10 years of work experience, indicating a well-experienced group. This is crucial as appointing experienced project managers enables effective project leadership and prevents senior leadership from being overburdened (Hamdulay, 2017; da Silva Bezerra, 2021). To address the lack of such managers, it is recommended that SITA review its recruitment and remuneration policies to attract and retain experienced talent.

Highest Level of Educational Qualifications of the Participants

The participants' highest qualification level was analysed in the table below.

Highest level of Educational Qualifications	Number	Percentage
Matric	0	0%
Certificate	0	0%
Diploma	1	10%
Degree	5	50%
Postgraduate	4	40%

Table 4: Participants' highest level of educational qualifications

The majority of participants (90%) held a degree or higher, indicating a well-educated group knowledgeable in project management. This is significant as educational qualifications are a major contributor to project competency (da Silva Bezerra, 2021). To address the identified problem of insufficient training (Kerzner, 2019; Mahote, 2022), it is recommended that SITA invest in regular, targeted training for project managers, including behavioural aspects (Kamaldien, 2012).

Rank of the Participants

The job ranking of the participants was analysed in the table below.

Rank	Number	Percentage
Project Manager	2	20%
Senior Project Manager	3	30%
Programme Manager	3	30%
Other	2	20%
Total	**10**	**100 %**

Table 5: Rank of participants

Of the participants, 60% held senior roles (Senior Project Manager or Programme Manager), providing experienced insights for the study. This supports the position that appointing senior project managers,

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who possess the necessary experience and leadership skills, benefits an organisation by addressing challenges of weak and inexperienced project leadership (Hamdulay, 2017).

Data Saturation

Data saturation, the point at which new data no longer yield novel findings, is influenced by several factors (Mwita, 2022). These include the use of pre-set codes, sample size, participant selection via purposive sampling, the application of multiple data collection methods, and session length to manage participant fatigue.

Table of Results

The table below categorises the key themes identified from the research project, aligning them with the study's research objectives.

Objective	Main Theme
To evaluate the impact of current strategies implemented by SITA on the maturity level of ICT project management.	Theme 1: Process standardisation and optimisation
	Theme 2: Use of technology to improve project management
	Theme 3: Governance for project management
	Theme 4: Need for a benchmarking exercise
	Theme 5: Project Management Skills
To conceptualise and develop a comprehensive framework for optimising ICT project management maturity, aimed at fostering sustainable organisational performance at SITA in South Africa.	Theme 6: Stakeholder Management
	Theme 7: Project Capacity Management
	Theme 8: Project management advocacy
	Theme 9: Support for the project management team

Table 6: Thematic Presentation of Results

The table below provides an organised overview of the research focus areas, linking each objective to its related questions and emphasising the key findings that respond to them.

Research Objectives	Research Questions	Findings / Themes
To evaluate the impact of current strategies implemented by SITA on the maturity level of ICT project management.	What is the influence of current strategies employed by SITA on the maturity of ICT project management?	Process standardisation and optimisation
		Use of technology to improve project management
		Governance for project management

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		Need for a benchmarking exercise
		Project Management Skills
To conceptualise and develop a comprehensive framework for optimising ICT project management maturity, aimed at fostering sustainable organisational performance at SITA in South Africa.	How can a structured framework be developed to optimise sustainable improvement in ICT project management maturity at SITA?	Stakeholder Management
		Project Capacity Management
		Project management advocacy
		Support for the project management team

Table 7: Linking research objectives, questions and findings

Discussion

The table below quantifies the frequency of each theme mentioned by respondents, offering insight into the critical issues and strategies that impact ICT project management effectiveness at SITA.

Respondents	Theme	Frequency	Percentage (%)
10	Process standardisation and optimisation	7	70%
	Use of technology to improve project management	10	100%
	Governance for project management	7	70%
	Need for a benchmarking exercise.	8	80%
	Project management skills	6	60%
10	Stakeholder management	5	50%
	Project capacity management	5	50%
	Project management advocacy	6	60%
	Support for the project management team	4	40%

Table 8: Response rate percentage on findings/themes

All respondents (100%) emphasised the importance of using technology in project management. A majority supported a benchmarking exercise (80%), process standardisation and governance (70%), while project management skills and advocacy received moderate support (60% each). Lower-priority areas included stakeholder management and project capacity management (50% each). Providing support to project teams was the least endorsed area (40%), indicating a key need for improvement. Balow is the detailed discussion of the above frequency of each theme mentioned by respondents. Based on research involving key stakeholders, the effectiveness of ICT project management at SITA is

contingent upon the foundational practice of process standardisation and optimisation. A significant majority of participants (70%) emphasised the need to enhance project standards by benchmarking against external best practices to achieve predictable results. This aligns with academic literature, which identifies the adoption of a defined project management framework as critical for ensuring consistent processes and improving organisational maturity (Martins et al., 2021). Such a framework provides a standard methodology for all project managers to follow, creating a unified approach across the organisation. The modernisation of SITA's project management is further linked to the strategic use of technology and robust governance. Unanimously, participants (100%) recognised that adopting project management tools enhances transparency and reduces administrative burdens, with scholarly work noting that a lack of suitable technological support compromises project management maturity (da Silva Bezerra, 2021). Concurrently, effective governance was identified as a critical countermeasure to excessive bureaucracy and unclear policies, with 70% of participants calling for greater empowerment of project managers and senior management involvement. As Aslanova (2018) argues, developing a strong project management culture is key to promoting effective enterprise project governance, a need underscored by the current challenges. A prominent theme emerging from the data is the urgent need for a formal benchmarking exercise and a focus on project management skills. Eighty percent of participants advocated for enhanced collaboration and alignment with global standards, identifying benchmarking as an efficient method to uncover weaknesses and measure progress (Menon, 2024). Furthermore, 60% of respondents highlighted a skills crisis, citing high project manager turnover due to inadequate training and low pay. Addressing this requires not only technical training (Bezerra et al., 2021) but also ongoing initiatives to enhance behavioural skills, which are crucial and require management backing (Kamaldien, 2012). Finally, the human and structural elements of project success are encapsulated in stakeholder management, capacity management, advocacy, and team support. Half of the participants confirmed that adequate stakeholder management is vital for success, with Errida and Lotfi (2021) stressing that managing stakeholder resistance is essential for change implementation. Additionally, participants noted that the current project framework is outdated, advocating for a modernised system supported by continuous senior management support (Filmalter & Steenkamp, 2022). Ultimately, project management advocacy and direct support for the team are essential; this includes continuous training and strong leadership commitment to improve success rates (Kerzner, 2019; PMI, 2021), as inadequate support negatively impacts project effectiveness (Mahote, 2022; Kerzner, 2019).

Conclusion

To advance ICT project management maturity at SITA, a core framework of standardised processes and strong governance must be established and enforced by an empowered EPMO. This requires committed

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senior leadership to align strategy and resources, supported by skilled project managers and continuous organisation wide training. Adopting a flexible methodology and proactive stakeholder engagement is essential to navigate the complex, unpredictable nature of public ICT projects.

The findings are anchored in three complementary theories: Project Management Theory justifies the need for structured processes; the Resource-Based View treats project management as a strategic capability built on valuable human and technological resources; and Complexity Theory explains why an adaptive, non-linear approach is necessary. In practice, this demands concrete policy reforms, particularly in Human Resource Management, to recruit and retain project talent, and in procurement, to enable more agile and ethical service delivery. By integrating governance, capacity building, and engagement, SITA can build a mature, resilient project management function.

Governance and Structural Support

Implementation and Support of the Enterprise Project Management Office (EPMO)

The research underscores the critical importance of supporting and strengthening the EPMO at SITA, as it is central to advancing project management maturity. To be effective, the EPMO must drive continuous enhancements to the project management framework, ensuring it remains agile, applicable across various contexts, and aligned with global best practices through regular benchmarking. Additionally, this office must improve progress monitoring, recommend necessary interventions, and standardise governance processes to bolster overall project effectiveness.

Implementation and Optimisation of the Project Methodology and Framework

It is recommended that the company adopt a flexible, user-centred project management framework, led by the EPMO, to support its diverse projects. This should be accompanied by benchmarking against global standards and upgrading project management tools to improve both organisational maturity and project performance.

Improved Senior Management Support for ICT Project Management

The key to success is stronger senior management support. This includes securing project resources, improving talent retention in project teams, and actively advocating for project management practices. Leaders should also champion process improvements and streamline procurement to keep projects on time and on budget.

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Training and Capacity Building

Training for Project Managers and Stakeholders

Invest in ongoing training for project managers and stakeholders, focusing on risk management, communication, and change management. Developing skilled managers through this and dedicated coaching directly boosts project success and maturity. Training stakeholders also fosters greater support and participation, improving overall outcomes.

Coaching Programs for Continuous Support

Establish structured coaching for project and program managers, focusing on strategic and leadership skills like conflict management and stakeholder engagement. This complements broader support to improve project effectiveness and foster a more collaborative work environment.

Benchmarking Maturity Competencies

To advance project management maturity, SITA should benchmark against ICT peers. Analysing functions like the project framework, ICT tool use, and supportive culture will inform a targeted improvement roadmap.

Technology Adoption

It is recommended that SITA strategically identify, invest in and deploy modern project management software and tools to advance its maturity. This initiative should prioritise solutions and tools, such as agile reporting systems and integrated dashboards, that enhance communication, enable data-driven decision-making, and support effective project governance.

Stakeholder Engagement and Communication

Improve Stakeholder Inclusion and Engagement

SITA should enhance its stakeholder engagement by instituting effective communication, ensuring continuous alignment of project objectives with client goals, and prioritising active client participation. To ensure unified direction, consistent alignment between client relationship managers, project managers, and client representatives must be maintained throughout the project lifecycle.

Transparent Communication with all Stakeholders

To cultivate greater customer trust and enhance its organisational reputation, SITA must prioritise communication transparency. Establishing credible communication channels fosters increased customer participation and buy-in, thereby directly contributing to project success and stakeholder alignment.

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Alignment Between Customer Relationship Managers (CRM‘s), Project Managers and Client Representatives

Effective project execution is contingent upon the strategic alignment of its core participants, namely CRM’s, project managers, and client representatives. Maintaining this alignment throughout the project lifecycle establishes a unified position, which is essential for the coordinated management of change, risks, and emergent issues. This synergy directly enables proactive mitigation strategies and enhances overall project resilience.

Framework Outcomes

The maturity of the project management function is expected to yield the following key outcomes. Enhanced stakeholder engagement and inclusion; the development of advanced training and capacity-building programs; the implementation of robust governance and structural support systems; and, ultimately, a measurable and sustainable improvement in overall organisational performance. These outcomes are elaborated below.

Improved Stakeholder Inclusion and Engagement

It is recommended that SITA formally enhances its stakeholder engagement framework by institutionalising transparent communication protocols across all projects. This should include mechanisms to ensure continuous alignment of objectives with clients, actively prioritise client participation and feedback, and maintain consistent coordination among client relationship managers, project managers, and client representatives to ensure unified stakeholder direction.

Enhanced Project Management Training and Capacity Building

A key result of the SITA Framework is a stronger project management capability. This is accomplished by continuously training and coaching staff in essential skills such as risk and change management. Building this expertise fosters a more effective organisational culture, leading to better project performance, faster maturity in ICT practices, and an enhanced competitive edge for SITA.

Effective Governance and Structural Support

The SITA Framework will establish a balanced project governance model that meets compliance mandates while enabling agile execution. This empowers the EPMO and leadership to exercise continuous, strategic oversight of the project portfolio.

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Improved and Sustained Organisational Performance

Sustainable organisational performance will be enabled by the SITA Framework, which strategically aligns processes, resources, and continuous improvements to achieve a balance of economic, social, and environmental goals.

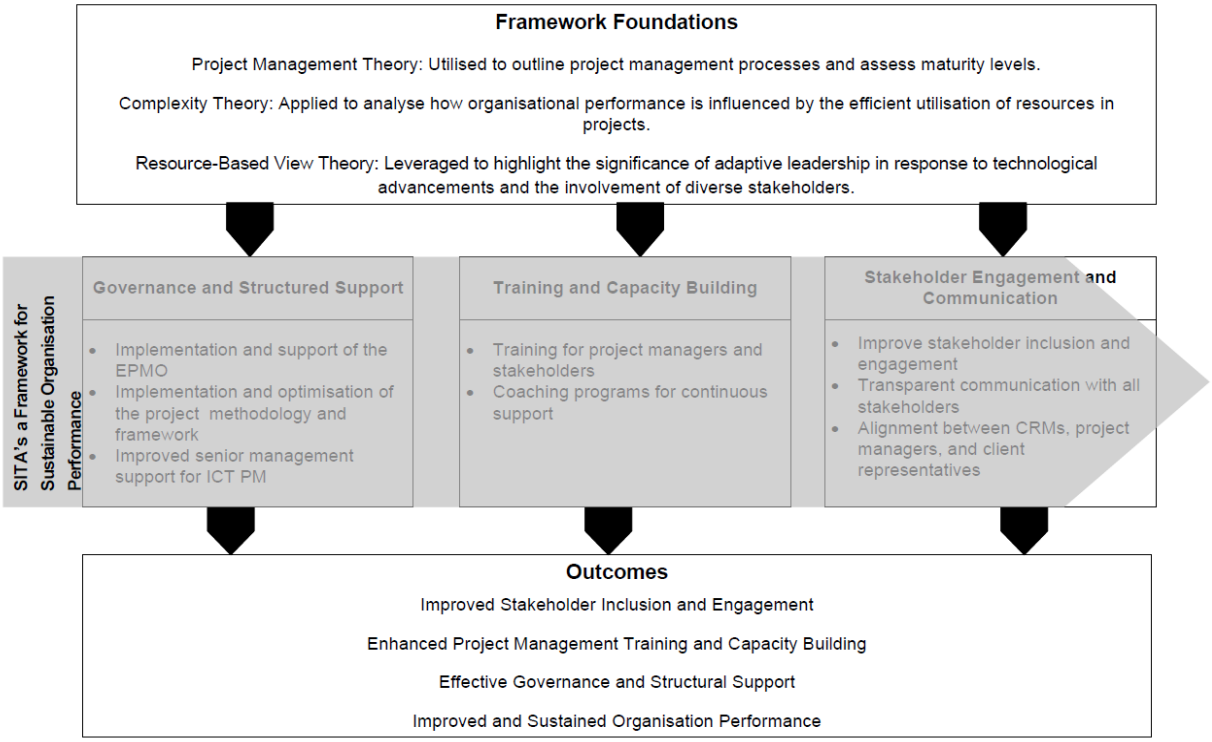


Figure 4: A Framework for sustainable organisation performance for SITA

This study's findings are primarily specific to SITA project management in the Western Cape and may not generalise to other regions or public services. While logistical issues like rescheduled interviews occurred, they did not affect the outcomes. The research proposes a framework (Figure 4)

Implications of the Study

This study yields significant implications and recommendations for SITA across theoretical, practical, managerial and policy domains.

Practical Implications

From a practical standpoint, the findings underscore the critical function of a well-established PMO and the necessity of consistent stakeholder engagement as pivotal drivers for enhancing project effectiveness and organisational maturity.

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Managerial Implications

Consequently, these insights necessitate substantive managerial and policy revisions within SITA, specifically advocating for a strategic overhaul of human resources policies concerning the recruitment of suitable project team members, remuneration, and retention of project management talent, alongside a modernisation of procurement processes to enable more agile, efficient, and ethically robust service delivery.

Theoretical Implications

Theoretically, it enriches project management and contingency theory by proposing a novel framework and an accompanying research instrument to assess and advance project management maturity, thereby providing a foundation for future scholarly inquiry aimed at improving public service delivery.

Areas for Further Research

Future research should prioritise the establishment of a weighted model to assess the relative influence of distinct project management maturity factors on the overall efficacy of SITA's project management function. The primary objective of this inquiry will be to conduct a granular analysis of the antecedent conditions and contextual variables that mediate the paradoxical negative impacts of ostensibly positive success factors. A complementary research avenue involves a critical examination of ICT portfolio management within SITA, with a dual focus: diagnosing its current maturity level and identifying the enabling factors that drive its enhancement to bolster organisational competitiveness.

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