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Strategic Alignment of Information and Communication Technology (ICT) for Enhancing Service Delivery in eThekwini Municipality, South Africa

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Abstract:

Purpose: *To examine the role of strategic alignment in implementing Information and Communication Technology (ICT) within eThekwini Municipality to enhance municipal service delivery. In eThekwini, the absence of a cohesive ICT strategy aligned with municipal goals has led to inefficient resource allocation and limited service improvements.*
Design/Methodology/Approach: *A mixed-method approach was employed which consisted of 331 quantitative data and 7 qualitative data. An observation tool was used to triangulate data by translating, coding, and categorising information, and quantifying qualitative data. To ensure trustworthiness, criteria such as authenticity, reliability, credibility, transferability, and generalisability were applied, along with measures to reduce bias and confirm validity. Data collection methods included participant observation in a local government setting, archival records, and semi-structured interviews.*
Findings: *Results reveal a significant gap in the alignment of ICT strategy with the municipality's broader strategic goals. There is a critical need for top-level prioritisation of ICT governance, comparable to other essential governance functions. Poor communication about ICT roles and responsibilities. Findings underscore the value of strategic alignment in realising ICT's potential to streamline operations, increase transparency, and improve citizen engagement*
Practical Implications: *Municipal leaders must prioritise ICT as a strategic governance function. Engagement of executive leadership, ongoing training, and strategic participation are essential to ensure ICT investments translate into improved public services and citizen satisfaction.*
Originality/Value: *This study provides a framework for analysing ICT governance in municipal contexts and identifies actionable strategies to establish a more integrated, strategically aligned ICT approach within eThekwini. It contributes to broader discussions on smart city development and ICT-driven public sector transformation, offering a roadmap for municipalities aiming to improve service delivery through better ICT integration.*

Keywords: *Strategic alignment, ICT implementation, service delivery, municipal governance, public sector transformation.*
JEL Codes: *I10, I11, I18, J11, O33.*
Paper type: *Research article.*

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1. Introduction

In recent years, municipalities worldwide have increasingly turned to Information and Communication Technology (ICT) as a critical tool for improving service delivery, enhancing transparency, and fostering citizen engagement. The lack of efficient administrative systems, bureaucratic inefficiencies, corruption, and insufficient infrastructure exacerbate the problem, leading to disparities in service quality across regions.

This trend reflects a broader recognition of ICT's potential to transform public services and municipal operations. However, the implementation of ICT in municipal governance presents unique challenges, particularly in aligning ICT initiatives with overarching strategic objectives. Strategic alignment is an internal practice that combines an organisation's diverse activities primarily to promote change and innovation (Abdullahi *et al.,* 2019).

Without this alignment, ICT investments risk becoming fragmented, inefficient, and ultimately ineffective. Research by Dairo *et al.* (2021a) on the United Kingdom's (UK) government highlighted that substantial cost savings are achievable through effective ICT strategic alignment, emphasising the importance of innovation, sharing, and the reuse of solutions across the public sector. Such findings highlight the need for municipalities, including eThekwini, to leverage ICT as a strategic enabler for delivering services efficiently and cost-effectively.

The context of urban development and smart cities extends beyond mere technological advancements. Cities, such as Japan, prioritise the use of technology to create intelligent systems, infrastructure, governance models, and service delivery mechanisms that cater to the needs of people and society. This inclusive and cost-effective approach aims to improve the quality of life for all residents (Prakash, 2019), and maintain competitiveness.

According to Khawan (2019), implementing ICT strategy in the government sector can face various challenges such as a lack of consistent ICT standards across organisations, financial resources for technology upgrades, leadership support for ICT initiatives, and cultural and educational differences among staff. As South Africa navigates its unique challenges, such as cyber threats to critical information infrastructures (Malatji *et al.,* 2021), municipalities like eThekwini must explore innovative ways to harness the potential of ICT.

This includes strategically integrating technology to support the achievement of municipal goals and to address emerging challenges, such as supply chain management and fraud detection (Fourie and Malan, 2020, Alberto Leite *et al.,* 2018). In South Africa, municipalities face mounting pressures to improve service delivery against a backdrop of limited resources and complex social challenges.

Abdullahi *et al.* (2019) noted that South Africa is faced with challenges as the country develops its technology infrastructure in an environment with few ICT professionals. EThekwini Municipality is one of South Africa's largest and most economically active cities, the potential of ICT to address these issues is significant.

However, there is a growing concern that the municipality's ICT strategy lacks alignment with its strategic objectives, potentially undermining its effectiveness. A study by Makovhololo (2016) identified a deficiency in the ICT strategy framework for eThekwini municipality.

While the use of technology holds the promise of improving the lives of millions of people in the municipality, the absence of alignment between the ICT strategy and strategic objectives may pose challenges for the eThekwini municipality in achieving and sustaining long-term success in delivering value to its stakeholders.

Jonathan *et al.* (2021), highlighted the impact of ICT on municipal service delivery, emphasising its potential to streamline operations, increase accessibility, and enhance communication between the municipality and its residents.

The alignment of strategy with ICT allows for the personalisation and tracking of government services, as exemplified by the development of smart cities and smart grids in various countries; these initiatives enable real-time monitoring and adjustments, leading to increased efficiency, resilience, and cost savings (Makovhololo and Open Innovations Oct, 2018).

In cases where ICT projects are not closely aligned with institutional goals, misallocated resources, operational inefficiencies, and limited return on investment are common outcomes. To maximise ICT's potential, municipalities need robust governance frameworks and clear alignment between ICT strategies and service delivery goals.

This background highlights the need to explore the specific case of eThekwini Municipality, assessing how strategic alignment can influence ICT implementation to drive meaningful improvements in municipal service delivery. Molale (2019) explained that an IDP is a South African local municipal planning tool that sets out a municipal council's vision, priorities, objectives, and strategies to develop that municipality.

According to the Municipal Systems Act of 2000, developing an Integrated Development Plan (IDP) and performance management system will enable South Africa to deliver basic services (Act 106 of 2000). The IDP determines the desired level of development by setting the vision, objectives, targets, and key performance indicators that the eThekwini municipality must meet during its five-year term (Molale, 2019).

1.1 Problem Statement

Despite increasing government spending on ICT, there has not been a noticeable improvement in service delivery, particularly on the part of municipalities in South Africa (Pillay and Kikasu, 2024). Challenges emerge due to the intricacies of data management and collaboration among staff from various areas. This complexity leads to recurring errors, redundant data collection, inconsistent data, and suboptimal analyses, impacting the operational efficiency of the Municipality.

The rapid evolution of ICT significantly impacts municipal projects (Hariyanto and Anwar, 2019). In eThekwini Municipality, South Africa, this misalignment poses significant risks to service delivery, resulting in fragmented efforts, inefficient resource allocation, and limited impact of ICT investments. Research in the field of ICT alignment, particularly in South Africa, has focused on the private financial sector, as evidenced by studies conducted by (Alberto Leite *et al.,* 2018, Arundel *et al.,* 2019, Dairo *et al.,* 2021a).

In contrast, the public sector and municipalities have received limited attention regarding ICT alignment. This is despite municipalities' practical challenges in implementing ICT and governing it effectively, as highlighted by reports from the Auditor General in 2019.The problem is exacerbated by limited executive involvement in ICT strategy development, which contributes to a gap between ICT initiatives and municipal strategic objectives.

This research addresses the critical need to examine how strategic alignment between ICT and municipal goals can enhance service delivery, optimise decision-making, and ensure that technology investments deliver maximum value to the community. The primary research objective is to examine the role of strategic alignment in the implementation of ICT within eThekwini Municipality and its impact on effective service delivery.

Specifically, this research seeks to identify gaps between ICT strategies and municipal objectives, explore the factors contributing to these misalignments, and propose actionable solutions for establishing a more cohesive ICT strategy that aligns with the municipality's overarching goals.

2. Literature Review

Since the late 1990s, ICT has become more important in organisations, coinciding with increased technological development and utilisation. Given the rising significance of ICT, Abdullahi *et al.* (2019) posited that attaining strategic alignment between a business and its ICT is critical for improving organisational performance. The alignment of Information and Communication Technology (ICT) strategies with organisational goals is a critical factor influencing the success of ICT initiatives, particularly in the public sector. In municipal governance, strategic alignment

ensures that ICT investments are directed towards achieving meaningful service improvements, efficient operations, and enhanced accountability.

While prior studies have examined ICT alignment in private sector organisations, limited empirical research exists within South African municipal contexts, particularly concerning service delivery outcomes. This gap in the literature highlights the need for focused investigation into how strategic alignment of ICT can enhance service delivery within local government institutions such as eThekwini Municipality.

2.1 Strategic Alignment in Public Sector ICT Initiatives

The role of Information and Communication Technologies (ICT) extends beyond managerial aspects, contributing to the establishment of good governance principles such as transparency and citizen participation (Câmara *et al.,* 2018). Strategic alignment between ICT and organisational objectives is widely regarded as a determinant of successful ICT implementation across sectors.

The ICT strategy serves as a comprehensive roadmap guiding the planning and execution of ICT initiatives within the municipality, with the central aim of elevating service delivery, fostering operational efficiency, and propelling digital transformation. Effective ICT strategic alignment ensures that an organisation's ICT initiatives and investments synchronise with its overarching objectives, enabling it to adapt to technological advancements, maintain competitiveness and deliver superior value to stakeholders (Kamel and Rizk, 2017).

The impact of ICT strategy and technological innovation strategic alignment on firm performance emphasises the direct influence of strategic alignment factors on the coherence between ICT and technological innovation, highlighting the significance of strategic alignment in driving organisational performance (Zerihun and Mashingo, 2022). The effect of human ICT capability on organisational agility underlines the moderating influence of ICT infrastructure spending on the human ICT-agility linkage, highlighting the multifaceted nature of factors influencing organisational agility and strategic alignment (Ngqondi and Mauwa, 2020).

The principles of ICT strategy development and strategic alignment encompass a broad spectrum of considerations, including organisational, cultural, environmental, and technological factors. These principles underscore the multifaceted nature of ICT strategy development and the need for strategies that align with diverse organisational, societal, and environmental objectives. In addition, the strategy entails a thorough analysis of the existing ICT infrastructure and capabilities, providing an insightful understanding of the current technology landscape and highlighting areas for improvement. A fundamental advantage of strategic alignment is that it leads to better decision-making and more cost-effective ICT spending (Sembodo Suroso *et al.,* 2018).

2.2 ICT and Service Delivery in Municipalities

Strategic alignment mitigates risk and improves municipal efficiency and effectiveness, contributing real economic value (Fonseca *et al.,* 2021). Effective service delivery in municipalities ensures access to critical resources like water and electricity, enhancing citizens' quality of life (Muthwa, 2019).

E-government promotes efficiency by making services more accessible, though significant investment and accountability are required (Bourdeau *et al.,* 2018). In smart cities, technology strengthens infrastructure and service delivery, as shown by strong leadership and partnerships in Estonia (Ahmad and Thornberry, 2018; Eze *et al.,* 2019).

2.3 Frameworks for Enhancing ICT Alignment in Public Organisations

Effective municipal governance requires decentralisation, a balanced fiscal approach, and transparent integration of ICT (Melnyk *et al.,* 2018). Adhering to legislative frameworks like the MFMA ensures financial integrity and improved service delivery. However, challenges such as those highlighted by AGSA (2018) show a need for aligned ICT strategies in municipalities like eThekwini, facing resource constraints and governance issues.

2.4 Challenges to ICT Strategy Alignment in Municipalities

Municipal ICT alignment faces obstacles, including leadership, budget constraints, and training limitations (Saputra *et al.,* 2019). The challenges are complex, ranging from cultural barriers to technological issues (Eze *et al.,* 2019). Addressing these issues requires comprehensive strategies that foster modernisation, governance, and collaboration, crucial for transforming municipalities into smart cities.

3. Research Methodology

The research paradigm employed in this study was pragmatism, which along with positivism, social constructivism and emancipatory, are the four paradigms in social science research. The focus of pragmatism is suitability, or what works. If solutions are found that assist in obtaining what is desired, it does not matter if there is a single reality (positivists) or numerous realities (social constructivists).

This study employed a mixed method design to implement the pragmatic philosophy, which is a method for collecting, analysing, and "mixing" quantitative and qualitative data at some stage of the research process within a single study to understand a research problem better. Mixed method research incorporates the philosophical assumptions, beliefs, and patterns of both qualitative and quantitative research. Mixed method advocates are pragmatic in nature; a mix of quantitative and

qualitative approaches allows the researcher to capitalise on the strengths of each while reducing the weaknesses of both in a single study (Flick, 2018).

The study was conducted at eThekwini municipality in KwaZulu-Natal province. ICT policy documents and human participants (selected government officials) formed the population of this study, while documents were utilised to investigate and analyse their importance, relevance, and meaning in relation to the research problem.

In the investigation conducted by Ngqondi and Mauwa (2020), an array of policy documents related to ICT was scrutinised, encompassing Internet access policy, strategic plans for curriculum development, institutional strategy, consolidation plans, technology stations policy, policy on electronic resource centres, and Internet centres policy. Additionally, an audit report on ICT was examined.

The eThekwini municipality is organised into nine clusters, each overseen by a deputy head. The Deputy heads were intentionally chosen to participate in the study considering their substantial expertise and profound understanding of ICT matters, as well as the strategic objectives within the municipality. Exclusive interviews were conducted exclusively with the Deputy heads responsible for each organisational cluster. It is crucial to note that participation in these interviews was entirely voluntary, with participants willingly taking part after being informed about the study.

A purposive sampling technique was used to select respondents from various population categories to determine the sample. The main objective was to carefully choose informants who were "information-rich" and who could best respond to the research questions. The advantage of this sampling technique is that a researcher can choose respondents based on their interests and use their research skills and prior knowledge to select respondents and analyse their responses (Elston, 2018).

Purposive sampling was utilised with the goal of reaching all nine Deputy heads who are accountable for the municipality's service delivery to the community. Out of the nine Deputy heads approached, seven responded and actively participated in the interviews, providing valuable insights into the challenges they face and offering recommendations related to ICT strategy alignment.

The study adopted a census approach for the quantitative data collection, which targets an entire population at any given time, space, and opportunity. The goal of a census is to provide users with contextually relevant population data, but it follows that this data must remain true to users' standards for quality.

Therefore, assessing and evaluating the quality of a census is crucial, both for planning future data collection and for increasing confidence in the information the census produces (Jonathan *et al.,* 2021).

As the census approach targets an entire population, all 49 senior managers, 280 operational managers and 12 ICT internal auditors formed the census for this review. Of the 341 people approached, the 331 who responded to the survey became the sample. The questionnaire was created and distributed electronically via email. As part of this process, a consent form was included to assure respondents of confidentiality.

The form affirmed that their identities would be safeguarded and not disclosed to any third party, ensuring their privacy and protection throughout the research process. 331 responses were received from the targeted population, indicating a robust and significant level of participation in the quantitative phase of the research. Primary and secondary data gathering approaches were utilised for this study.

Documents and interviews were employed as data collection instruments to conduct a critical analysis. Key documents included the ICT Strategy, Service Delivery Budget Implementation Plan for Municipalities and the Integrated Development Plan (IDP). The interviews consisted of 20 open-ended questions that were designed in response to the research questions. Each interview was expected to take less than an hour. The open-ended questions allowed the respondents to react and the researcher to construct follow-up questions as needed.

The use of a Likert scale in the quantitative data allowed for capturing nuanced responses and evaluating varying degrees of agreement or disagreement with specific statements, providing valuable insights into participant perspectives and attitudes. The data gathered from participants were systematically entered into a spreadsheet, with numerical codes assigned to each question for organisation and categorisation.

Quantitative data analysis was conducted utilising statistical procedures, with a particular focus on employing the SPSS® software tool. The analysis of the quantitative data included a Reliability Analysis, Descriptive Statistics (Frequency Analysis), Chi-Square Analysis, Correlations and Regression Analysis.

The interviews for the qualitative data were transcribed verbatim, preserving the participants' original responses to the questions asked. The data analysis process began with the transcription of the audio-recorded interviews, ensuring accuracy and fidelity to the participants' words.

The data files were uploaded into NVivo 10, a qualitative data analysis software. This allowed for open-axial selective coding, a methodological approach that facilitates the exploration and development of emerging themes and patterns within data.

The thematic analysis approach used in this research involved a systematic process for analysing the collected data.

Reliability and validity are fundamental concepts used in research methodology to assess the quality of measurements and the validity of research findings. They are crucial for ensuring the trustworthiness and accuracy of research results (Blanchflower, 2018).

To ensure the reliability of this survey instrument, a test-retest study was conducted with a sample of participants, and the results showed a high degree of consistency in responses over a two-week period. The questionnaire underwent a content validity review by a panel of experts in the field. The potential for response bias in the survey due to the reliance on self-reporting was acknowledged.

To mitigate this concern, several measures were taken. Firstly, participants were assured of the utmost confidentiality regarding their responses, emphasising that their individual answers would remain anonymous and would not be linked to their identities. Secondly, to further minimise potential bias, randomised response techniques were employed.

Convergent validity is demonstrated by examining the correlations 132 between the questionnaire under study and a previously validated measure of the same construct. In the present research, the examination of the correlations revealed a significant and positive relationship ($r = 0.78$) between the questionnaire and the established measure, thereby supporting the convergent validity of the instrument.

4. Results and Discussion

This study's recommendation for robust ICT governance structures echoes the insights of Gregory *et al.* (2018), who emphasised the pivotal role of governance frameworks in aligning ICT initiatives with strategic objectives. The researcher employed statistical tests and data analysis procedures to introduce a quantitative dimension to the study.

This approach enabled a rigorous examination of the relationship between the variables related to aligning the ICT strategy with the municipality's strategic objectives for service delivery. The respondents largely disagreed or strongly disagreed with 225 statements concerning the comprehensiveness of the ICT strategy, its alignment with the municipality's strategy, the understanding of ICT capabilities by business units, and the definition and documentation of ICT goals and objectives.

Consistently, the mode values were recorded as 4 (strongly disagree), suggesting a prevailing trend of disagreement among respondents. The kurtosis values, indicating the distribution of responses, were less than 3, suggesting a leptokurtic distribution and further emphasising the consensus of disagreement. These findings corroborate previous research that has explored ICT strategy alignment. They indicate that eThekwini municipality lacks a well-defined ICT strategy and that there is a

disconnect between the ICT strategy and the municipality's overall strategic objectives.

The participants' feedback illuminated several key challenges associated with the current state of alignment. One prominent issue was the limited understanding and following of the current ICT strategic plan within the organisation. Furthermore, participants cited a lack of alignment between the ICT strategy and the Integrated Development Plan (IDP), which is a crucial strategic document for the municipality.

The findings also indicated varying levels of involvement in the formulation of the ICT strategy within eThekwini municipality. While some participants, such as the Chief Strategy Officer and the Deputy Head of the ICT department, actively participated in the formulation of the ICT strategy, others, like the Internal Auditor, played a role in ensuring its implementation.

The involvement of top officials, particularly the Municipal Manager, in ICT strategy formation is crucial for ensuring effective governance, aligning with the principles of accountability, transparency, and direction-setting emphasised by the King IV corporate governance code (Institute of Directors and King Committee on Corporate Governance, 2016).

The South African Local Government Association (SALGA) ICT guidelines further highlight the responsibility of the Municipal Manager in ICT governance, underlining the importance of their role in ICT decision-making and reporting to the ICT Steering Committee and Council. Despite this, challenges such as poor communication between ICT and business functions hinder effective alignment of ICT strategies with the municipality's objectives. This communication breakdown makes it difficult to clarify roles and responsibilities and impedes the alignment of technology decisions with the municipal strategy.

Additionally, the lack of training and knowledge among executives regarding their roles in achieving ICT alignment exacerbates the problem. Without a clear understanding of their role and business processes, executives struggle to support alignment efforts. These challenges reflect the operational and strategic consequences of misalignment, as highlighted by Aklilu and Kagiso (2020).

Based on the responses provided by the participants, the most critical factor in improving the ability of ICT to play a more significant role in eThekwini municipality is the need for strategic alignment and collaboration across different levels and departments. Participants' suggestions for improving alignment by promoting cross functional collaboration, automation, technology utilisation, training, and involving ICT in strategic planning are in line with the literature that advocates for strategic partnerships between business and ICT (de Oliveira *et al.,* 2022).

These recommendations underscore the holistic nature of alignment, which involves not only technological considerations, but also cultural and organisational aspects.

The participants also pointed out that the ICT department staff may lack the necessary knowledge and understanding of what is important to the business, which makes it difficult for them to effectively align their initiatives with business requirements.

Additionally, the lack of involvement of the ICT department in departmental strategic planning and decision-making processes creates a disconnect between ICT and the overall business strategy. Participants similarly mentioned a lack of buy-in from business executives as well as flaws in the documentation of business processes, which make mapping ICT processes challenging.

In a rapidly evolving digital landscape, organisations, including municipalities, are increasingly leveraging data to gain insights, identify patterns, and make informed choices. Participants' mention of Wi-Fi installation on public buses highlights a strategic move towards enhancing digital connectivity for citizens.

Bridging the digital divide and providing access to reliable internet services is essential for promoting inclusivity and ensuring that all citizens can benefit from the advantages of digitalisation. Such initiatives align with the goal of creating a smart city that enhances citizen engagement and access to public services through digital platforms.

The emphasis on cybersecurity, the adoption of mobile devices, and the launch of a Revenue Management System (RMS) signifies the municipality's recognition of the need to adapt to technological trends and challenges.

The qualitative data analysis revealed the importance of training, communication, and collaboration in achieving strategic alignment. Participants stressed the need for a culture that facilitates alignment and recognition of ICT's significance in supporting the municipality's objectives for service delivery.

They further emphasised the need for collaboration, knowledge management, and the centralisation of ICT decisions, and highlighted the importance of innovation, automation, and staying up to date with the latest technology to improve efficiency and effectiveness. The governance structure was also seen as a critical factor for ensuring alignment.

Participants suggested that the municipality's strategy office should participate in ICT strategic discussions to ensure strategic alignment, and that ICT management should be included as part of institutional strategic planning to align their plans with the municipality's overall goals.

Based on the responses provided by the participants, eThekwini municipality faces challenges in measuring the value of ICT investments and realising the benefits of these investments. These challenges indicate that the municipality needs to develop a more structured and systematic approach to measuring the value of ICT investments and ensuring that the benefits are effectively realised. This could involve implementing a robust benefit realisation framework, setting clear performance indicators, and establishing mechanisms for monitoring and evaluating the outcomes of ICT projects.

The participants also mentioned a lack of consistency in the development of strategic plans across different units within the municipality. This inconsistency hinders the alignment between departmental goals and the ICT strategy, leading to challenges in supporting service delivery effectively. Some participants expressed additional concerns about the municipality lagging in terms of ICT, indicating a potential lack of prioritisation and attention to ICT initiatives.

Given these challenges, eThekwini municipality needs to develop a standard mechanism to align its ICT strategy with its strategic objectives for effective service delivery. This mechanism should address the issues of measuring ICT investment value, benefit realisation, communication, alignment, and strategic planning, and should involve the active involvement of senior management, the creation of clear communication channels, and a structured approach to evaluating the impact of ICT initiatives on service delivery.

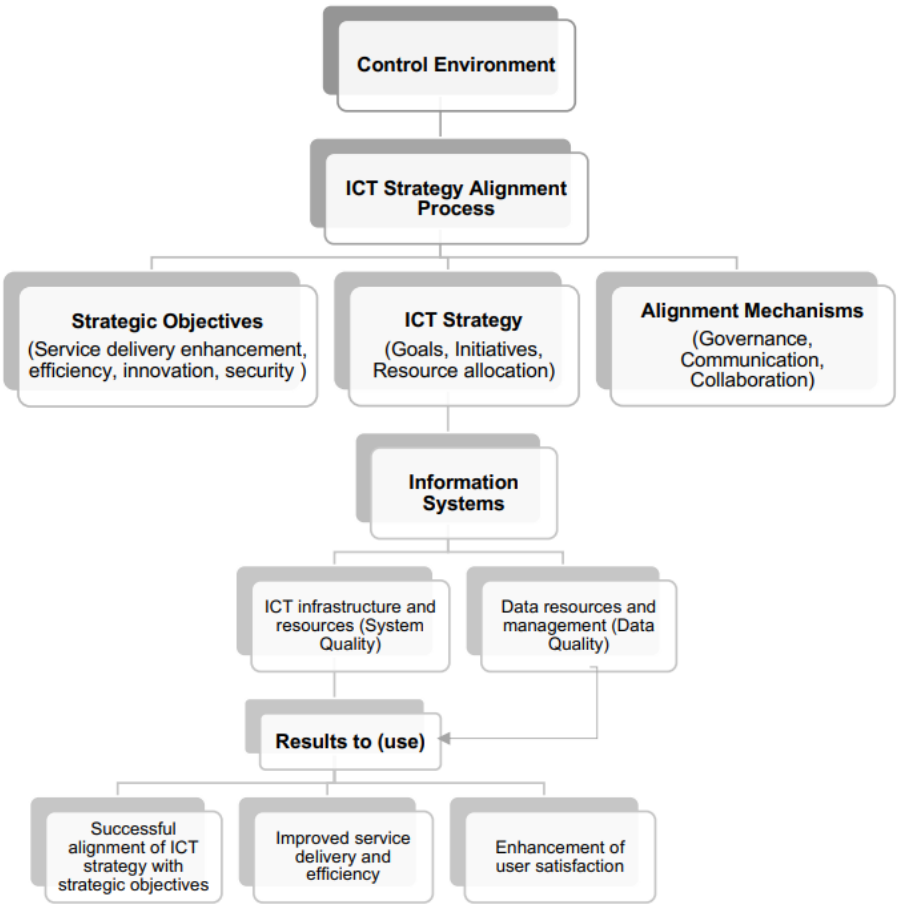
The proposed conceptual framework for aligning eThekwini municipality's ICT strategy with its strategic objectives drew upon the foundations of two theoretical frameworks, namely the Strategic Alignment Model (SAM) and the Information Systems Success Model (ISM). Integrating the ISM and the SAM in this conceptual framework provided a comprehensive and structured approach to assess the effectiveness and alignment 236 of the municipality’s ICT strategy.

In doing so, it provides a structured approach to evaluate different dimensions of ICT effectiveness, user satisfaction, and organisational impact, leading to informed decision-making and continuous improvement. Figure 1 below is suggested as a conceptual model that integrates the factors driving the effective alignment of ICT's strategic objectives.

The successful alignment of eThekwini municipality's ICT strategy with its strategic objectives is a multifaceted endeavour with far-reaching implications for service delivery, efficiency, and user satisfaction.

The literature underscores the importance of engaging with business managers, providing training, and ensuring user understanding of ICT's role in achieving strategic objectives. This aligns with the advocacy for cross-functional collaboration and knowledge management as highlighted by Al-Barghouthi (2022).

Figure 1. *Proposed Model.*



Source: *Devised by the authors.*

The involvement of business managers and the provision of training are essential components of ensuring that ICT initiatives are aligned with the broader organisational goals and that users are equipped to leverage ICT effectively to achieve strategic objectives. Furthermore, regular measurement and assessment of societal impact are crucial aspects of successful alignment, resonating with research on the importance of tracking the impact of ICT initiatives and communicating these benefits to the public (de Oliveira *et al.,* 2022).

This emphasis on measurement and assessment aligns with the broader understanding that the impact of ICT initiatives should be systematically evaluated and communicated to stakeholders, including the public, to demonstrate the value generated through the alignment of ICT strategy with strategic objectives. Aligning the ICT strategy with eThekwini municipality's strategic objectives holds the

promise of increased resource efficiency, enhanced service delivery, and greater citizen satisfaction. Through drawing on the insights from the literature and leveraging a comprehensive framework that encompasses governance, communication, collaboration, knowledge management, ICT infrastructure, data management, and clear objectives, the municipality can position itself to realise the full potential of ICT in driving organisational success and delivering value to its stakeholders.

5. Conclusion

This study emphasises the need for a robust ICT governance framework within eThekwini Municipality to align ICT strategies with broader municipal goals. The findings highlight significant gaps in stakeholder communication and engagement, stressing the importance of collaboration and clear governance structures. The research reveals that ICT alignment goes beyond technical issues and requires involvement from all management levels, consistent training, and a culture that views ICT as a strategic asset.

To address these challenges, the study recommends a structured approach for evaluating ICT investments, enhancing communication, and involving senior leadership in decision-making. By integrating the Strategic Alignment Model (SAM) and the Information Systems Success Model (ISM), the proposed framework offers a systematic path to improve ICT alignment, accountability, and effectiveness. Implementing this framework will help eThekwini leverage ICT more effectively, supporting its service delivery goals and advancing its progress towards becoming a smart city.

This study contributes new knowledge by contextualising ICT strategic alignment within a South African municipal environment, an area that has received limited scholarly attention compared to the private sector. Furthermore, by linking ICT alignment to smart city development and public sector transformation, the study broadens the discourse on digital governance in developing contexts, providing both theoretical advancement and actionable insights for improving municipal service delivery

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