https://ijmp.regent.ac.za I Open Access

# An Adaptive IT Service Management Framework for Organisational Success

R. Moodley<sup>1</sup> (D); Co-Author, R. Ebrahim<sup>2</sup> (D)

## **REGENT Business School**

### ABSTRACT

Digital transformation has positioned IT Service Management as a critical function for optimising service delivery and integrating emerging technologies. However, organisations face challenges such as fragmented service models, inefficient adoption processes and misalignment between IT services and business objectives.

This study aims to develop an adaptive ITSM framework that enhances IT service alignment with business goals. It evaluates the influence of digital innovation, sustainability, customer experience, adoption and communication on ITSM effectiveness. The research focuses on organisations undergoing digital transformation, where ITSM is essential for maintaining service quality and customer satisfaction. A quantitative research approach was applied, collecting survey data from 163 professionals. Descriptive statistics provided insights into participant perspectives, Cronbach's alpha confirmed high construct reliability and Pearson correlation analysis identified moderate to strong positive relationships between ITSM constructs and service performance. The findings reveal that the proposed constructs play a crucial role in ITSM effectiveness.

Thought Leadership fosters innovation and industry engagement, while Digital Innovation ensures IT services remain aligned with business goals. Environmental Sustainability enhances operational efficiency and Customer Experience Management improves service quality. Additionally, Adoption and Communication Management support structured ITSM implementation, promoting collaboration and stakeholder alignment. By adopting an adaptive ITSM framework, organisations can enhance efficiency, agility and resilience, enabling them to navigate digital transformation more effectively and improve long-term business value and future research should explore the frameworks scalability across industries.

**Keywords**: IT Service Management, Digital Transformation, Emerging Technologies, Adaptive ITSM Framework.

<sup>&</sup>lt;sup>1</sup>Corresponding author: R. Moodley - <u>ryan.moodley@yahoo.com</u>

1

https://ijmp.regent.ac.za I Open Access

### 1.Introduction

Digital transformation is reshaping how organisations deliver services. with technology playing a central role in driving operational efficiency and enhancing customer experiences (Pfaff, Wohlleber, Münch, Küffner & Hartmann, 2023). While IT Service Management (ITSM) frameworks are widely adopted, they often fail to provide the flexibility needed to address the complexities of today's rapidly evolving technological landscape (Iden & Eikebrokk, 2013). The gap between existing ITSM models & frameworks and the demands of environments modern digital limits organisations' ability to fully leverage digital transformation (Barreto, Battaglin & Varga, 2019). This study aims to bridge this gap by developing an adaptive ITSM framework capable of responding to contemporary challenges.

Technology is a key driver of change, influencing organisational structures and broader societal interactions (Abubakre & Mkansi, 2022). For organisations to stay

competitive and support sustainable growth, it is essential to adapt their ITSM models and frameworks to meet evolving customer needs. regulatory requirements and technological advancements (Maremi, Thulare & Herselman, 2022). However, traditional ITSM models and frameworks struggle to integrate emerging technologies and align with dynamic business models (Gacenga, Cater-Steel, Toleman & Tan, 2012; Shahi & Sinha, 2021). Therefore, this research presents an adaptive ITSM approach designed to address these limitations by integrating technological, human, cultural, and governance elements into a more flexible and responsive framework. The adaptive framework aims to modernise ITSM practices, emphasising automation, alignment with digital transformation goals and strategic IT alignment.

By evaluating the practical impact of this adaptive framework, this study will assess its effectiveness in improving

https://ijmp.regent.ac.za I Open Access

service delivery, operational efficiency and organisational performance. The research objectives include examining existing ITSM models and frameworks, identifying their limitations and developing a framework that integrates emerging technologies while aligning with modern business needs. Ultimately, this study will contribute to the development of an adaptive ITSM framework that helps organisations adapt to and thrive in the rapidly changing digital landscape.

### 2. Literature Review

#### 2.1. Setting the Foundational Understanding of ITSM

ITSM is a critical discipline that focuses on aligning IT services with the needs of the business (Serrano, Faustino, Adriano, Pereira & da Silva, 2021). As organisations increasingly rely on IT to deliver value, ITSM has emerged as a vital component in ensuring the efficiency and effectiveness of IT service delivery. Shrestha, Cater-Steel, Toleman and Rout (2018) highlight that ITSM frameworks facilitate the structuring of IT operations in a manner that enhances service quality, consistency and customer satisfaction. Further emphasis from Van Bon, De Jong, Kolthof, Pieper, Tjassing, Van der Veen and Verheijen (2007) mentions that frameworks such as ITIL provide a comprehensive approach to managing IT

services and offer valuable guidance on best practices in ITSM. The ITIL framework, which is globally recognised, provides a comprehensive set of guidelines and processes for managing IT services (Marrone & Kolbe, 2010). Organisations that embrace ITSM practices stand to gain benefits, including enhanced service quality, increased customer satisfaction, cost reduction, and improved compliance with industry regulations and standards. Moreover, ITSM aids organisations in gaining a deeper understanding of their IT service delivery capabilities and identifying areas ripe for improvement (Gacenga et al., 2010). This foundational understanding of ITSM forms the basis

https://ijmp.regent.ac.za I Open Access

for exploring its role in the broader context of organisational transformation, particularly in the age of digital change.

### 2.2. ITSM and Digital Transformation

Building on the foundational understanding of ITSM, it is important to examine its relationship with digital transformation. As organisations increasingly embrace digital technologies, the need for ITSM becomes even more critical in ensuring that IT services continue to meet the strategic objectives of the business (Morison, 2018; Sarwar, Abbas, Alyas, Alzahrani, Alghamdi & Alsaawy, 2023). The rapid adoption of new technologies demands that IT services remain agile and customer-centric, a concept explored by Li (2021) and Lombardi, Giordano and Farina (2022), who argue that ITSM must adapt to meet the evolving demands of the digital landscape. Li (2021) and Lombardi et al. (2022) further explain that digital transformation presents both opportunities and challenges for ITSM, particularly in terms of aligning legacy IT systems with emerging digital technologies. Resistance to change is often one of the key

barriers to successful digital transformation, but this challenge can be mitigated through the integration of ITSM into the transformation process. ITSM enables organisations to effectively manage the complexities associated with digital transformation, ensuring that IT services continue to support business objectives effectively while mitigating disruptions.

# **2.3. ITSM and Digital Transformation in the Context of the Industrial Revolutions**

The intersection of ITSM and digital transformation becomes more pronounced with the Fourth Industrial Revolution (4IR), marked by the convergence of physical, digital and biological systems (Schwab, 2016).

https://ijmp.regent.ac.zalOpen Access

Digital transformation is a strategy that leverages technological advancements to enhance efficiency and improve customer satisfaction (Kraus, Durst, Ferreira, Veiga, Kailer & Weinmann, 2022). In this context, ITSM plays a key role in helping organisations navigate the complexities of emerging technologies, such as Artificial Intelligence (AI), Internet of Things (IoT), Machine Learning (ML) and big data. These technologies introduce new challenges, requiring ITSM to evolve and ensure service reliability while managing technological complexity. ITSM's integration with these technologies provides a strategic advantage, enabling organisations to remain competitive by maintaining high service quality (Shilenge & Telukdarie, 2021). As organisations adopt AI, IoT, ML and big data, ITSM models and frameworks must address challenges like automation, data management, and security while minimising disruptions.

### 2.4. Influence of ITSM in Organisations

ITSM significantly impacts organisational effectiveness by integrating people, processes, and technology to align IT services with business goals. Davenport These models and frameworks also support continuous improvement through feedback and metrics, aligning IT services with the changing needs of the business in a rapidly evolving landscape.

Beyond the 4IR, the 5th and 6th Industrial Revolutions (5IR and 6IR) will further transform the technological landscape. Quantum computing, biotechnology and complex-computer interfaces will present new challenges for ITSM models and frameworks, requiring adaptation to these technologies' unique traits and ethical concerns (Noble, Mende, Grewal & Parasuraman, 2022; Osteen, 2023). ITSM will also need to address issues like privacy, data security and governance to ensure effective integration while maintaining trust and security. The evolution of ITSM will be crucial in enabling organisations to navigate these future technological advancements and stay competitive.

(1993) and Kihlstrom (2022) emphasise that this integration improves service delivery and customer satisfaction. Figure 1 demonstrates

https://ijmp.regent.ac.za I Open Access

how ITSM practices optimise business operations.

### Figure 1: ITSM Relationship with People, Process, Technology and Governance



Source: "Defining the relationships between ITSM and IT service governance" (Jäntti & Hotti, 2015)

For organisations to realise the full benefits of ITSM, it is essential to foster a culture of service excellence, which requires leadership support, effective training and a focus on continuous improvement. Creating a 2.5. Optimising Service Delivery: Synergising ITSM and ITIL for Enhanced Value Creation customer-centric mindset within IT teams is crucial for ensuring that ITSM initiatives are successful and deliver tangible value to the organisations.

https://ijmp.regent.ac.za I Open Access

Integrating ITSM and ITIL, which is the de facto standard for ITSM and is globally recognised, provides a comprehensive set of guidelines and processes for managing IT services (Marrone et al., 2010), is essential for optimising service delivery and creating value. ITIL's service lifecycle Service Strategy, Service Design, Service Transition, Service Operations and Continual Service Improvement (CSI), provides a structured

# 2.6. ITSM Implementation: Benefits, Challenges, and Critical Success Factors

Implementing ITSM offers benefits. including process standardisation, improved service quality and reduced downtime. By enhancing agility and streamlining IT operations, ITSM enables organisations to quickly adapt to changing business needs. It also boosts customer satisfaction and communication, improves internal contributing to more cohesive IT service delivery (Cook, Gann, Ray & Zhang, 2021).

However, ITSM implementation comes with its own set of challenges. These include resistance to change, limited resources, and approach that ensures IT services meet business needs (Cannon, 2011). ITIL's focus on utility and warranty helps align IT services with customer expectations and its flexibility supports the integration of emerging technologies such as AI and IoT, ensuring that IT services remain valuable and responsive in a dynamic technological landscape.

difficulties integrating new technologies. Overcoming these obstacles requires careful planning and management strategies to ensure that ITSM aligns with organisational goals and unlocks its full potential (Cook et al., 2021).

For successful ITSM adoption, critical success factors must be considered. These include strong leadership, stakeholder engagement, effective training and a focus on change management and performance measurement (Mohammadi, Ravasan & Hamidi, 2015). Addressing these factors

https://ijmp.regent.ac.za I Open Access

helps organisations overcome implementation challenges and ensures that ITSM delivers organisational value. Realworld case studies of successful adoption can offer valuable practical insights (Axelos, 2020).

# 2.7. The Role of ITSM Models and Frameworks in Digital Transformation

As digital transformation accelerates, there is a growing need for adaptive ITSM models and frameworks. The digital age demands IT services that are not only efficient but also flexible and responsive to continuous technological and business changes (Pajk, Indihar-Stemberger & Kovacic, 2012). ITSM models and frameworks provide structured approaches to managing IT operations, offering consistency, enhancing communication and ensuring alignment with industry standards (Gray & Rumpe, 2021).

Emerging technologies present both opportunities and challenges for ITSM and traditional ITSM models and frameworks,

# 2.8. ITSM Models and Frameworks Assessed in This Study

which were developed for a less complex technological environment, often lack the flexibility needed to address the rapid changes occurring today (Melendez, Dávila & Pessoa, 2016). Therefore, ITSM models and frameworks must evolve by incorporating principles such as adaptability, collaboration. and risk management (Shahsavarani & Ji, 2011; Kraus et al., 2021).

This study critically evaluates various ITSM models and frameworks to assess their strengths and limitations in the context of modern, digitally transformed environments. The insights derived from this evaluation have been instrumental in the development of an adaptive ITSM framework that integrates best practices while addressing the dynamic challenges of the digital era.

This study examines ITSM models and frameworks known for their effectiveness in enhancing IT service delivery. These provide

https://ijmp.regent.ac.za I Open Access

insights into ITSM best practices and their contributions to digital transformation. The

models and frameworks reviewed include those outlined in Table 1:

### **Table 1: ITSM Models and Frameworks Assessed**

Enhanced Telecom Operations Map Model (eTOM)
Microsoft Operations Framework (MOF)
International Business Machines Process Reference Model for IT (IBM PRM-IT)
Hewlett-Packard ITSM Reference Model (HP ITSM RM)
ISO/IEC 20000 Framework
Integrated Service-Oriented Architecture Governance Model (Integrated SOA Governance)
IT4IT Reference Architecture Model (IT4IT)
Service Integration and Management (SIAM)
Value-driven, Evolving, and Responsive Information Services Management (VeriSM)
ITIL Service Value Chain Model (ITIL SVC Model)

The insights gained from these models and frameworks inform the development of the proposed adaptive ITSM framework, ensuring that it integrates proven best practices while addressing the evolving demands of digital transformation.

# 2.9. Theoretical Adaptive ITSM Framework

To address digital transformation challenges and enhance ITSM adaptability, this study proposes a new adaptive ITSM framework. It builds on the strengths of the ten assessed models and frameworks shown in Table 1, integrating key principles to ensure continuous evolution and responsiveness in dynamic environments.

As depicted in Figure 2, the contribution of constructs from the existing models and frameworks is visually represented, with a colour-coded scheme indicating the elements incorporated into the new framework. By combining these established constructs with

### https://ijmp.regent.ac.za I Open Access

six newly defined constructs, the proposedrobust foundation for evolving ITSMadaptive ITSM framework establishes apractices.

### Figure 2: Existing ITSM Models and Frameworks



The six new constructs expand ITSM beyond traditional operational concerns. By integrating these with existing constructs, the proposed framework ensures a balance between strategic objectives, operational efficiency and customer-centricity. This integration fosters continuous improvement, innovation and alignment with business goals, positioning ITSM for sustained evolution in the digital age. Figure 3 illustrates the six new constructs that contribute to the theoretical adaptive ITSM framework.

### Figure 32: Indicator for Constructs in the Theoretical Adaptive ITSM Framework



https://ijmp.regent.ac.zalOpen Access

These constructs provide a holistic view of the factors that impact ITSM and extend beyond traditional operational concerns, ensuring a balance between strategic operational efficiency, objectives. and customer-centricity. This integration fosters continuous improvement, innovation and alignment with business goals. The following sections provide a detailed examination of each construct, outlining their significance, theoretical underpinnings, and practical implications within the adaptive ITSM framework.

### • Construct 1: Thought Leadership

Thought Leadership refers to the visionary guidance and proactive influence necessary for driving innovation within ITSM. It shapes industry standards, promotes new ideas, and fosters a culture of knowledge sharing and continuous improvement (Harvey, Mitchell, Jones & Knight, 2021) ; Petrucci, 2019). By embedding Thought Leadership at the core of ITSM strategy, organisations can stay ahead of industry trends, ensuring sustained innovation and competitive advantage.

# • Construct 2: Digital Innovation Management

Digital Innovation Management focuses on the strategic integration of emerging technologies to enhance IT service delivery. implementation Successful requires governance frameworks that align with evolving business needs (Nambisan. Lyytinen, Majchrzak & Song, 2017; Nylén & Holmström, 2015). This construct ensures by ITSM remains agile fostering experimentation, collaboration, and rapid adaptation to market demands.

# Construct 3: Environmental Sustainability Management

This construct embeds eco-friendly practices into ITSM, ensuring that decisions minimise environmental impact (Bellucci, Bini & Giunta, 2020; Chladek, 2019). Green IT initiatives and energy management strategies play a pivotal role in reducing carbon footprints while aligning ITSM with global sustainability goals. By integrating environmental considerations, organisations enhance their reputation and ensure longterm viability.

https://ijmp.regent.ac.za I Open Access

# • Construct 4: Customer Experience Management

Customer Experience Management ensures that IT services are designed to meet and customer needs expectations. It prioritises customer-centric design, service levels, and feedback loops to drive continuous service improvement (Miller, 2020; DuMoulin, 2022). By embedding this construct, organisations enhance customer satisfaction, loyalty, and engagement, making IT services more intuitive and valuedriven.

# Construct 6: Communication Management

Effective communication ensures stakeholder alignment and collaboration throughout the ITSM lifecycle. Clear objectives, tailored communication and transparent strategies, information sharing essential are to reducing misunderstandings and enhancing coordination (Claassen & Verway, 1998; Martins, 2022). Well-structured communication management fosters

#### • Construct 5: Adoption Management

Adoption Management focuses on the seamless integration and acceptance of new IT solutions within an organisation. It involves stakeholder engagement, training, and iterative feedback to ensure successful implementation (Straub, 2009; Kujala, Sachs, Leinonen, Heikkinen & Laude, 2022). By minimising resistance to change and fostering a culture of continuous learning, this construct supports smoother digital transitions and improved IT adoption rates.

collaboration, ensuring that ITSM remains responsive and well-integrated.

With the six key constructs established, the Adaptive ITSM Framework is introduced as the culmination of insights derived from this study. Figure 4 illustrates how these constructs are seamlessly integrated into a cohesive and dynamic framework, designed to evolve in alignment with organisational needs and the broader business environment. The inclusion of these constructs emphasises their interconnectedness and highlights their role in shaping a more responsive and

https://ijmp.regent.ac.zalOpen Access

adaptive ITSM framework. The framework adopts a streamlined approach to ITSM, focusing on continuous improvement, innovation and strategic alignment. By incorporating these constructs, the framework balances operational efficiency, strategic goals, and customer-centricity, ensuring that ITSM remains aligned with the evolving business landscape.

The framework is structured across five levels, each contributing to a comprehensive and adaptable approach to ITSM. Each of these levels is further supported by a set of integrating activities, which are essential for facilitating the effective implementation and operationalisation of the model. Notably, the framework incorporates 31 pre-existing constructs, which originate from the assessment of the ten ITSM models and frameworks, and with the six newly defined constructs, marking a significant contribution to the extant body of ITSM literature.

The subsequent section will provide a detailed unpacking of the theoretical Adaptive ITSM Framework, presenting a comprehensive overview of the integration of both pre-existing and newly defined constructs in Figure 4.



### Figure 4: Theoretical Adaptive ITSM Framework

# 2.9.1. The Structure and Flow of the Adaptive ITSM Framework

Figure 4 visually represents the Adaptive ITSM Framework, which consists of two core levels that articulate the model's structure and flow:

# 2.9.1.1. Level 1: The Foundational Constructs

Level 1 functions as the strategic layer of the model, offering high-level ITSM concepts that define the overarching direction for IT service delivery. This level serves as the foundation for ensuring that IT services are aligned with both organisational goals and broader societal trends. In Level 1, the emphasis is on the strategic vision that drives ITSM, with particular focus on the following components:

- Strategic Service Management: Aligning IT services with the organisation's strategic objectives.
- Service Design: Ensuring that IT services are meticulously designed with clear integration and architecture to meet business needs.
- Service Transitioning: Managing smooth transitions for new services or

https://ijmp.regent.ac.za I Open Access

- modifications without disrupting ongoing operations.
- Operational Service Management: Overseeing day-to-day service delivery while maintaining agreed-upon service levels.
- Service Improvement Management: Continuously enhancing services based

on performance feedback, metrics, and ongoing analysis.

Level 1 advocates for a broader, more forward-thinking approach, addressing the gaps between strategic vision, customercentricity, and sustainability.

# 2.9.1.2. Level 2: Operational Processes, Technologies, and Strategies

Level 2 builds on the foundational constructs of Level 1, translating strategic directives into actionable operational processes, technologies and policies. This integration creates a flexible ITSM framework that adapts to organisational needs and market dynamics. The relationship between these levels is dynamic, with Level 1 providing strategic guidance and Level 2 transforming it into practical solutions. The framework facilitates digital transformation through an approach, interconnected where each construct plays a pivotal role. Thought Leadership provides the strategic vision, while Digital Innovation Management leverages emerging technologies to enhance

services. Customer Experience Management ensures these innovations align with customer needs, while Environmental Sustainability Management ensures they are eco-friendly.

Adoption Management collaborates with Customer Experience to enable smooth integration and adoption of new technologies. Communication Management underpins the entire process, maintaining transparency and alignment among stakeholders. Together, these constructs form a cohesive, adaptive framework that evolves in response to organisational priorities and digital trends, supporting continuous improvement and long-term success.

https://ijmp.regent.ac.za I Open Access

# 2.9.2. Addressing Key Gaps in ITSM: Integrating Strategic Constructs for Digital Transformation

The integration of six newly developed constructs into the Adaptive ITSM Framework addresses critical gaps in traditional ITSM models and frameworks, which often focus heavily on operational processes while overlooking strategic elements necessary for

digital transformation. By incorporating these strategic constructs, the model bridges the gap between operational efficiency and the dynamic, evolving demands of modern organisations.

Thought Leadership plays a pivotal role in this shift, highlighting the need for visionary leadership that drives innovation and guides organisations through ever-evolving technological landscapes (Shrestha et al., 2018). This leadership forms the foundation for Digital Innovation Management, which ensures that emerging technologies such as AI & IoT are embedded into service delivery, allowing organisations to remain agile and competitive in an increasingly fast-paced

environment (Nyagadza, Pashapa, Chare, Mazuruse & Hove, 2022). As digital transformation progresses, sustainability becomes increasingly vital. The framework incorporates Environmental Sustainability Management, addressing the need for ecofriendly practices within ITSM. This integration helps organisations minimise their environmental footprint while aligning IT services with broader corporate responsibility goals (Marrone et al., 2011).

Equally important is the focus on Customer Experience Management, which ensures that IT services are tailored to meet customer needs and expectations, fostering long-term engagement and loyalty (Alblooshi, Hosseinian-Far & Sarwar, 2021). The connection between Digital Innovation Management and Customer Experience Management guarantees that technological advancements are not only innovative but also aligned with customer-centric goals.

However, adopting new technologies and services is not always seamless. Adoption Management ensures that the integration process is smooth, addressing stakeholder engagement, training, and effective change

https://ijmp.regent.ac.zalOpen Access

management to overcome common challenges and ensure successful implementation (Raza, 2019). Finally, Communication Management underpins all other constructs, providing clear and transparent communication across all levels of the organisation. By maintaining alignment among stakeholders and reducing misunderstandings, effective communication ensures that the ITSM lifecycle progresses smoothly and that the full potential of the framework is realised (Czarnecki & Dietze, 2017).

#### **3. Research Design and Methodology**

### 3.1. Research Approach & Study Design

A quantitative research design was chosen to objectively measure and analyse data, ensuring findings are based on verifiable metrics. The study used an electronically distributed questionnaire to explore how IT professionals perceive ITSM and how adaptable models and frameworks can facilitate digital transformation. This method enables measurable outcomes, contributing both theoretically and practically to adaptive ITSM frameworks.

form Collectively, these constructs ิล dynamic, interconnected framework that addresses critical gaps in traditional ITSM models and frameworks. The Adaptive ITSM Framework drives innovation, sustainability, and enhanced customer engagement while enabling smoother adoption and improving communication. This holistic approach empowers organisations to navigate and succeed in the rapidly evolving digital landscape.

As Green (2015) outlines, the two primary research methodologies are quantitative and qualitative. After evaluating both, a quantitative approach was preferred due to its capacity for precise measurement and data analysis, consistent with the goal of obtaining objective, verifiable knowledge. Yilmaz (2013) emphasises the value of quantitative methods in ensuring objectivity when analysing relationships between variables, supporting this choice. Saunders, Lewis, and

https://ijmp.regent.ac.za I Open Access

Thornhill (2009) also note that research design aids in investigating complex, poorly defined problems and provides insights into the ontological nature of reality, making quantitative methods ideal for categorising underexplored phenomena.

# 3.2. Study Population and Sampling Strategy

The target population consisted of IT support staff, managers, senior managers and executives from both public and private organisations worldwide. A simple random sampling strategy was employed, ensuring the sample was representative of the broader population facilitating statistical and inferences. Probability sampling is preferred in quantitative research to enhance reliability and minimise bias (Setia, 2016; Saunders et al., 2009). A total of 500 surveys were distributed, and 163 respondents actively participated, leading to a confidence level of approximately 90% with a 5% margin of error. The inclusion criteria involved IT professionals with experience in ITSM models & frameworks and digital transformation efforts, ensuring relevance to the research objectives. Exclusion criteria involved individuals without direct involvement in IT services or digital transformation processes.

### 3.3. Data Collection

Data was collected using an electronically distributed questionnaire via Microsoft Forms. This approach typically yields a higher completion rate and is efficient for gathering geographically data across dispersed respondents. The questionnaire featured a mix of single-choice questions for demographic data, multiple-choice questions for preferences, and a 5-point Likert scale to assess respondents' agreement levels with various statements. The data collection process was carefully structured to ensure clarity, and no significant language barriers or other issues were encountered during collection.

### **3.4. Data Analysis**

A quantitative, deductive approach was employed for data analysis (Bhandari, 2020). The data was analysed using Microsoft Power BI, which allowed for variable analysis and insights that inform decisionmaking. Reliability testing with Cronbach's

https://ijmp.regent.ac.za I Open Access

Alpha was conducted to confirm the internal consistency of the questionnaire. Additionally, descriptive statistics such as means and standard deviations summarised the data and Pearson correlation analysis was used to examine relationships between key variables (Samuels & Gilchrist, 2014).

Data visualisation tools, like Excel charts, helped highlight significant trends and patterns. The analysis aimed to provide insights into the factors influencing ITSM success in digital transformation.

### **3.5. Ethical Considerations**

The research adhered to ethical standards, ensuring that all data collection and analysis processes followed appropriate guidelines for integrity and participant safety. Ethical approval was obtained from the relevant ethics committee at the institution. The ethical clearance number and specific institution name are provided, as necessary. Informed consent was obtained from all participants, who were fully informed about the study's objectives. No psychological, physical, or social harm was caused to participants, and their well-being was safeguarded throughout the study (Saunders et al., 2009). All collected data was securely stored and encrypted, ensuring participants' confidentiality and anonymity. Participants were also assured that involvement was voluntary and they could withdraw at any time without consequences.

### 3.6. Pilot Study

A pilot study involving 20 respondents was conducted prior to the main study. This pilot helped to assess the research instrument's clarity and functionality, identifying and resolving any potential issues early in the process (Saunders et al., 2009).

### 4. Research Findings and Discussion

### 4.1 Results:

The study examined the impact of key constructs, Thought Leadership, Digital Innovation Management, Environmental Sustainability Management, Customer Experience Management, Adoption Management, and Communication Management on driving successful digital transformation. The findings from the data

https://ijmp.regent.ac.zalOpen Access

analysis provide insights into how these factors contribute to ITSM performance.

The descriptive analysis of the sampled population, which consisted of 163 respondents, revealed an average score of 3.8924, with responses clustering around the median and mode of 4. A standard deviation of 0.8695 indicated a moderate level of variation in responses. These results suggest that participants shared relatively consistent perspectives on digital transformation, reinforcing the reliability of the collected data.

To further assess the consistency of the constructs used in the study, Cronbach's Alpha values were calculated. The results demonstrated high internal reliability across all constructs, with values ranging from 0.7626 to 0.95198. Given that a Cronbach's Alpha above 0.7 signifies strong internal consistency, these findings confirm that the survey instrument effectively measured the intended dimensions of digital transformation, ensuring the robustness of the analysis.

Building on this, Pearson correlation analysis was conducted to explore the relationships between these key constructs and ITSM performance outcomes. The results indicated moderate to strong positive correlations, improvements meaning that in these constructs are associated with enhanced ITSM performance. Digital Innovation Management and Environmental Sustainability Management exhibited strong relationships with **ITSM** positive performance, highlighting that organisations prioritising innovation and sustainability tend to experience significant improvements in service management outcomes. Thought Leadership and Customer Experience Management showed moderate positive correlations, suggesting that while these factors contribute to ITSM success, their impact is slightly less pronounced. Similarly, Adoption Management and Communication Management demonstrated moderate to strong correlations. emphasising the importance of structured processes and effective communication in navigating digital transformation.

Overall, the findings indicate that organisations focusing on digital innovation,

https://ijmp.regent.ac.za I Open Access

sustainability, leadership, customer experience, adoption processes, and communication management are more likely to achieve improved ITSM performance. By strategically integrating these elements into transformation their digital initiatives, organisations can enhance their service delivery, increase efficiency, and drive longterm success in an evolving digital landscape.

#### 4.2 Discussion

The key findings of this study highlight the critical role of key constructs in driving successful ITSM outcomes during digital transformation.

- Thought Leadership was strongly linked to innovation, industry engagement, and collaboration. Organisations prioritising thought leadership stay ahead of ITSM trends.
- Digital Innovation Management demonstrated a strong correlation with service design, emphasising the need to align innovation with organisational business goals.
- Environmental Sustainability Management showed a positive

relationship with improved operational performance, highlighting its importance in efficient service delivery.

- Customer Experience Management was directly linked to enhanced customer satisfaction and service quality, indicating the critical role of responsive service.
- Adoption and Communication Management were moderately correlated with organisational success, underlining the importance of effective communication, structured processes, and stakeholder involvement in ITSM and digital transformation.

The results are consistent with previous studies, which have found that digital innovation and customer experience management are key drivers of organisational success in ITSM (Samuels et al., 2014). Moreover, the strong relationship between Environmental Sustainability and service performance is in line with emerging trends in sustainable IT practices (Bhandari, 2020).

https://ijmp.regent.ac.za I Open Access

### 4.3. Delineations and Limitations:

Despite the valuable insights gained from this study, certain limitations be must acknowledged. The sample size of 163 respondents, while sufficient for statistical analysis, may limit the broader generalisability of the findings. Future studies incorporating larger and more diverse samples could enhance the robustness of these results. Additionally, as the data was collected through self-reported surveys, there is a possibility of response biases. Variations in participants' interpretations of survey questions could affect the accuracy of the findings. To mitigate this limitation, future research could incorporate mixed-method approaches, integrating qualitative insights or objective performance metrics to provide a more comprehensive analysis.

Overall, the research provides valuable insights into the factors influencing ITSM success during digital transformation. The constructs identified Thought Leadership, Digital Innovation, Environmental Sustainability, Customer Experience, Adoption, and Communication Management, which are key contributors to successful ITSM and digital transformation. Future studies could explore these constructs across different industries and organisational contexts to further validate and extend these findings.

#### **5. Recommendations and Conclusion**

This study successfully developed an adaptive ITSM framework aimed at helping organisations align IT services with evolving business goals and capitalise on emerging technologies. The framework emphasises continuous adaptation and integrates key elements such as thought leadership, digital innovation management, and customer experience management. By adopting this flexible ITSM framework, organisations can improve operational efficiency, enhance service quality and increase customer satisfaction.

The study provides strategic recommendations for organisations to position themselves for success in the digital age. Future research should explore the integration of emerging technologies like AI, IoT, machine

https://ijmp.regent.ac.zalOpen Access

learning, and big data into ITSM practices and customise models and frameworks for specific industries. Policymakers should ITSM adoption support through standardisation and digital literacy, while organisations are encouraged to foster continuous improvement, stakeholder and leadership ITSM. engagement in Embracing the adaptive ITSM framework

will enable organisations to navigate digital transformation challenges with agility and resilience. By integrating digital innovation, customer-centric strategies, and sustainability into ITSM practices, organisations will ensure their long-term success and adaptability in an ever-evolving technological landscape.

### ACKNOWLEDGEMENTS

I sincerely extend my gratitude to the International Journal of Management Perspectives (IJMP), a continuous publication (CP) academic journal of REGENT Business School, South Africa, for their invaluable support. Additionally, I would like to express my appreciation to all the respondents who participated in this study. Their time, insights and contributions were essential in shaping the findings of this research.

https://ijmp.regent.ac.za I Open Access

### REFERENCES

Abubakre, M., and Mkansi, M. (2022). How do technologists do "ICT for development"? A contextualised perspective on ICT4D in South Africa. European Journal of Information Systems, 31(1), 7-24. https://doi.org/10.1080/0960085X.2021.1978343.

Agutter, C., van Hove, S., Steinberg, R., and England, R. (2017). VeriSM: A service management approach for the digital age. Van Haren.

Agutter, C. (2021). Service Integration and Management (SIAM<sup>TM</sup>) Foundation Body of Knowledge (BoK) (2nd ed.). IT Governance Limited. <u>https://doi.org/1787783103</u>.

Alblooshi, Y., Hosseinian-Far, A., Sarwar, D. (2021). Identification of Critical Business Processes: A Proposed Novel Approach. https://doi.org/10.1007/978-3-030-68534-8\_25.

Axelos. (2019). ITIL 4: A pocket guide. TSO.

Axelos. (2020). Relationship management: ITIL 4 Practice Guide. Axelos.com.

Barreto, G., Battaglin, P. D., and Varga, S. (2019). Ensuring efficient IT service management to increase information systems availability. Journal of Information Systems Engineering & Management.

Bellucci, M., Bini, L., and Giunta, F. (2020) Implementing environmental sustainability engagement into business: sustainability management, innovation and sustainable business models, Chapter 4 - Pages 107-143, https://doi.org/10.1016/B978-0-12-817382-4.00004-6

Bhandari, P. (2020). How to find the mean. https://www.scribbr.com/statistics/mean

Cannon, D. (2011). ITIL Service Strategy (2nd ed., pp. 200-203, 244-246). The Stationery Office. https://doi.org/978113313044.

Chladek, N. (2019) Successful Business Sustainability Strategy. The Importance of Sustainability in Business.

Claassen, T., and Verway, S. (1998) Managing communication in the organisation: an integrated communication management model. Communicare 110117(1). December 1998:73-89.

Cook, A. E., Gann, A. S., Ray, D. A., and Zhang, X. (2021). Advantages, challenges, and success factors in implementing information technology infrastructure library. Information Systems, 22(2), 187-198. <u>https://doi.org/10.48009/2\_iis\_2021\_196-208</u>.

Czarnecki, C., and Dietze, C. (2017) Domain-Specific Reference Modelling in the Telecommunications Industry. In: Maedche, A., vom Brocke, J., Hevner, A. (eds) Designing the Digital Transformation. Desrist 2017. Lecture Notes in Computer Science, vol 10243. Springer, Cham. https://doi.org/10.1007/978-3-319-59144-5\_19.

Davenport, T. H. (1993). Process innovation: Reengineering work through information technology. Harvard Business Review, 20-30.

DuMoulin, T. (2022) The Service Catalog Is the Central Pillar of an IT Service Organisation.

Gacenga, F., Cater-Steel, A., Toleman, M., and Tan, W.-G. (2012). A proposal and evaluation of a design method in design science research. The Electronic Journal of Business Research Methods, 10(2), 89-100.

Gray, J., and Rumpe, B. (2021). Reference models: How can we leverage them? Software & Systems Modelling, 20, 1775–1776. https://doi.org/10.1007/s10270-021-00948-0.

Green, C. A. (2015). Approaches to mixed methods dissemination and implementation research: Methods, strengths, caveats, and opportunities. Health Research, Portland.

Harvey, W.S., Mitchell, V.-W., Almeida Jones, A., and Knight, E. (2021), "The tensions of defining and developing thought leadership within knowledge-intensive firms", Journal of Knowledge Management, Vol. 25 No. 11, pp. 1-33. <u>https://DOI.org/10.1108/JKM-06-2020-0431</u>.

HP.(2003). The HP ITSM Reference Model. https://doi.org/10.1016/j.comnet.2015.12.023

IBM. (2008). PRM-IT V3 Reference Library. IBM.

Iden, J., and Pinebrook, T. R. (2013). Implementing ITSM: A systematic literature review. International Journal of Information Management, 33(3), 512-523. https://doi.org/10.1016/j.ijinfomgt.2013.01.004.

https://ijmp.regent.ac.za I Open Access

Jäntti, M., and Hotti, V. (2016). Defining the relationships between ITSM and IT service governance. Information Technology Management, 17, 141–150. https://doi.org/10.1007/s10799-015-0239.

Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., and Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. International Journal of Information Management, 63, 102466. https://doi.org/10.1016/j.ijinfomgt.2021.102466.

Kujala, J., Sachs, S., Leinonen, H., Heikkinen, A. and Laude, D. (2022). Stakeholder Engagement: Past, Present and Future. Business and Society, 61(5), 1136–1196. https://DOI.org/10.1177/00076503211066595.

Li, S. (2021). How does digital transformation improve customer experience? In Pompella, M., and Matousek, R. (Eds.), The Palgrave Handbook of FinTech and Blockchain. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-66433-6\_21.

Lombardi, R., Giordano, F., and Farina, A. (2022). Digital transformation and customer experience: A systematic literature review. Journal of Business Research, 141, 1-14.

Maremi, K., Thulare, T., and Herselman, M. (2022). The benefits of digital transformation addressing the hindrances and challenges of e-government services in South Africa: A scoping review. IST-Africa 2022 Conference Proceedings, ISBN: 978-1-905824-68-7.

Martins, J. (2022) 12 tips for effective communication in the workplace.

Melendez, K., Dávila, A., and Pessoa, M. (2016). Information technology service management models applied to medium and small organisations: A systematic literature review. https://doi.org/10.1016/j.csi.2015.10.001.

Miller, K. (2020) 3 methods for identifying and leveraging your customers' needs. 3 Methods for Identifying Customer Needs.

https://ijmp.regent.ac.za I Open Access

Mohammadi, M. M., Ravasan, A. Z., and Hamidi, H. (2015). Investigating critical success factors in implementing ITIL framework: The case of a developing country. International 13(1), 74-91. https://doi.org/10.4018/IJSR.2015010104.

Marrone, M., and Kolbe, L. M. (2010). Uncovering ITIL claims: IT executives' perception on benefits and Business-IT alignment. Information Systems E-Business Management, 9, 363–380. https://doi.org/10.1007/s10257-010-0131-7.

Morison, C. (2018). ITSM best practice for delivering digital transformation.

Nambisan, S., Lyytinen, K., Majchrzak, A., and Song, M. (2017). Digital Innovation Management: Reinventing Innovation Management Research in a Digital World. MIS Quarterly, 41(1), 223–238. https://www.jstor.org/stable/26629644.

Noble, S. M., Mende, M., Grewal, D., and Parasuraman, A. (2022). The fifth industrial revolution: How harmonious human–machine collaboration is triggering a retail and service, 98(2), 199-208. <u>https://doi.org/10.1016/j.jretai.2022.04.003</u>.

Nyagadza, B., Pashapa, R., Chare, A., Mazuruse, G., and Hove, P.K. (2022) Digital technologies, Fourth Industrial Revolution (4IR) and Global Value Chains (GVCs) nexus with emerging economies' future industrial innovation dynamics, Cogent Economics and Finance, 10:1, 2014654, DOI: 10.1080/23322039.2021.2014654.

Nylén, D., and Holmström, J. (2015), Digital innovation strategy: A framework for diagnosing and improving digital product and service innovation, Business Horizons, Volume 58, Issue 1, Pages 57-67, ISSN 0007-6813, https://DOI.org/10.1016/j.bushor.2014.09.001.

Osteen, J. B. (2023). Future of Information Technology Service Management (ITSM).

Pajk, D., Indihar-Stemberger, M., and Kovacic, A. (2012). Reference model design: An approach and its application. Proceedings of the ITI 2012 34th International Conference on Information Technology Interfaces.

https://ijmp.regent.ac.za I Open Access

Petrucci, A. (2019) Visionary Leadership: Five Insights to Shape an Emerging Industry. Forbes Leadership.

Pfaff, Y. M., Wohlleber, A. J., Münch, C., Küffner, C., and Hartmann, E. (2023). How digital transformation impacts organisational culture – A multi-hierarchical perspective on the manufacturing sector. Computers and Industrial Engineering, 183, 109432. https://doi.org/10.1016/j.cie.2023.109432.

Raza, M. (2019). What Is IT4IT? BMC Blogs. Retrieved October 20, 2022, from https://www.bmc.com/blogs/it4it-introduction/.

Samuels, P., and Gilchrist, M. (2014). Pearson correlation.

Saunders, M., Lewis, P., and Thornhill, A. (2009). Research methods for business students (5th ed.). Pearson.

Sarwar, M. I., Abbas, Q., Alyas, T., Alzahrani, A., Alghamdi, T., and Alsaawy, Y. (2023). Digital transformation of public sector governance with IT service management – A pilot study. IEEE Access, 11, 6490-6512. https://doi.org/10.1109/ACCESS.2023.3237550.

Schwab, K. (2016). The fourth industrial revolution. Crown Business. ISBN: 1524758876.

Serrano, J., Faustino, J., Adriano, D., Pereira, R., and da Silva, M. M. (2021). An IT service management literature review: Challenges, benefits, opportunities, and implementation practices. Information, 12(3), 111. https://doi.org/10.3390/info12030111.

Setia, M. S. (2016). Methodology series module 5: Sampling strategies. Indian Journal of Dermatology, 61(5), 505-509. https://doi.org/10.4103/0019-5154.190118.

Shahi, C., and Sinha, M. (2021). Digital transformation: Challenges faced by organisations and their potential solutions. International Journal of Innovation Science, 13(1), 17-33. https://doi.org/10.1108/IJIS-09-2020-0157.

https://ijmp.regent.ac.za I Open Access

Shahsavarani, N., and Ji, S. (2011). Research in information technology service management (ITSM): Theoretical foundation and research topic perspectives. CONF-IRM 2011 Proceedings, 30. http://aisel.aisnet.org/confirm2011/30.

Shilenge, M., and Telukdarie, A. (2021). 4IR integration of information technology best practice framework in operational technology. Journal of Industrial Engineering and Management, 14(3), 457-476.

Shrestha, A., Cater-Steel, A., Toleman, M., and Rout, T. (2018). Benefits and relevance of international standards in design science research project for process assessments. Computers and Standards Interfaces, 60, 48-56.

Straub, E. T. (2009) Understanding Technology Adoption: Theory and Future Directions for Informal Learning. Review of Educational Research, 79(2), 625–649. https://DOI.org/10.3102/0034654308325896.

Susanti, F., and Sembiring, J. (2011). The mapping of interconnected SOA governance and ITIL v3.0. Proceedings of the 2011 International Conference on Electrical Engineering and Informatics, 1-5.

The Open Group. (2017). The Open Group IT4IT<sup>™</sup> Reference Architecture (2nd ed.). The Open Group. https://doi.org/ISBN: 1-937218-84-3.

TM Forum. (2023). Process Framework (eTOM).

Van Bon, J., De Jong, A., Kolthof, A., Pieper, M., Tjassing, R., Van der Veen, A., and Verheijen, T. (2007). Foundations of IT Service Management Based on ITIL V3 (3rd ed., pp. 173-175, 78). Van Haren Publishing, ISBN: 9789087530570.

Van Bon, J., and Dyer, J. (2009). Cross-Reference ITIL® V3 and MOF 4.0. The Stationery Office.

https://ijmp.regent.ac.za I Open Access

Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. European Journal of Education, 48(2).