

Employing IT Service Management to Accelerate Digital Government Transformation in Saudi Arabia: A Vision 2030 Perspective

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Abstract

Saudi Arabia's Vision 2030 has placed digital transformation at the center of its government modernization agenda, with information technology positioned as a vital enabler of efficient and citizen-focused services. The objective of this study is to examine the role of IT Service Management (ITSM) in supporting this transformation, identifying both the progress achieved and the challenges that remain. A mixed-methods approach was adopted, including a survey of 80 government IT managers, interviews with key stakeholders, and a case study of a digital service platform. Findings indicate that while several public agencies have successfully implemented ITSM practices, contributing to enhanced service availability and improved citizen satisfaction, challenges persist in the form of skill shortages, outdated systems, and organizational resistance to change. Successful experiences, such as the Absher platform, underscore the importance of leadership commitment, staff training, and alignment with national objectives. Although this study demonstrates that ITSM has emerged as a critical enabler of the Kingdom's digital government initiatives, it also highlights the need for sustained investment in leadership development, capacity building, and change management to ensure the full realization of Vision 2030 goals. As Saudi Arabia embarks on this complex and multifaceted journey, the findings suggest that continuous monitoring, institutional learning, and

adaptive strategies will be essential to consolidating the benefits of ITSM within the broader framework of national transformation.

Keywords: ITSM, Digital Government, Vision 2030, Saudi Arabia, ITIL, Public Sector Transformation, Service Management

Introduction

The Kingdom of Saudi Arabia is undergoing a period of extraordinary socio-economic transformation that is driven by its national strategic framework, Vision 2030. A central pillar of this vision is the creation of a "thriving economy" and an "ambitious nation," which heavily relies on the digitalization of government services to enhance efficiency, transparency, and citizen-centricity (Saudi Vision 2030, 2024).

As Latupeirissa et al. (2024) observe, "digital transformation in the public sector has become a focal point for governments around the world," with integration of digital technologies seen as critical for improving public service delivery and governance. E-government initiatives aim to make government services faster, more innovative, and citizen-centric; for example, Nadrah et al. (2020) describe the e-government model as one that emphasizes "making available online the full range of services that government agencies offer" so they are accessible to the public.

Saudi Arabia's Vision 2030 celebrates this aspiration for a "digitally advanced, citizen-centered government." The Kingdom has set up the Digital Government Authority (DGA) to lead this transformation, unveiling a national strategy for harmonizing and directing digital government initiatives. The strategy is centered on seamless and innovative services that deliver increased efficiency, transparency, and citizen participation. In practice, Saudi Arabia has deployed many e-government platforms: Amin et al. (2022) mention that those systems had been conceptualized to address inefficient, manual service provision, which had resulted in high costs of operation and substandard service. The authors say that those systems had been implemented exactly to "reduce costs, enhance services and boost efficiency" in pursuit of Vision 2030's aspirations.

At the same time, the complexity of modern government IT means that IT Service Management (ITSM) has become essential for supporting digital transformation. ITSM is broadly understood as the practice of planning, implementing, managing, and improving IT services to meet organizational goals. As noted by Marrone et al. (2014), ITSM is "transforming the management of the IT function on a global scale", reflecting the widespread adoption of ITIL-based processes in both industry and government. Serrano et al. (2021) further define the term ITSM as "an IT management framework that promotes service-oriented best practices to

deliver value to organizations”. Frameworks such as ITIL and COBIT enable public agencies to standardize service delivery, align IT with strategic objectives, and measure performance.

However, despite these benefits, public-sector adoption of ITSM in Saudi Arabia faces notable challenges. Such as, Sarwar et al. (2023) observe that many frameworks are perceived as “complicated” to implement, requiring specialized expertise and resources (academia.edu). Likewise, Alqahtani (2017) highlights barriers such as skill gaps, poor communication across departments, and cultural resistance to new processes. These impediments cause a gap between the government's substantial investment in digital infrastructure and service management process maturity needed to support it. Consequently, agencies face reactive IT operations, variable service quality, and disconnection between IT activities and Vision 2030's strategy.

This study seeks to answer the following primary question:

- How can IT Service Management (ITSM) be effectively employed to accelerate digital government transformation in Saudi Arabia?

Secondary questions include:

- What is the current level of ITSM framework adoption and maturity in Saudi government entities?
- What are the most significant barriers to successful ITSM implementation in this context?
- How does ITSM maturity correlate with key performance indicators of digital services, such as availability, reliability, and user satisfaction?

This study is of great practical and theoretical significance. To policymakers and the Digital Government Authority, it presents empirical findings that can be used to make decisions about national policies for IT governance and capacity building. To CIOs and IT executives in government agencies, it presents a practical guide to rolling out ITSM in a manner that showcases value and contributes to strategic priorities. Theoretically, it is part of the ITSM adoption literature in non-Western public sector contexts, presenting insights into the distinctive culture and institutional dynamics at work.

Literature Review

IT Service Management (ITSM) has developed as a set of best-practice frameworks designed to help organizations manage IT services effectively. It consists of standardized processes for planning, delivering, supporting, and continually improving IT services. As Serrano et al. (2021)

emphasize, ITSM frameworks focus primarily on IT operations and service support, with organizations often adopting multiple complementary frameworks to enhance the overall management. Many agencies, for example, invest in ITIL or COBIT to govern IT, with ITIL being the most widely adopted ITSM framework worldwide. Other standards, such as ISO/IEC 20000, Microsoft Operations Framework (MOF), and CMMI for Services, are often used alongside ITIL to build a more comprehensive ITSM portfolio (International Organization for Standardization, 2018).

While these frameworks provide structured approaches and promise significant benefits, their adoption in practice particularly within the public sector has produced mixed outcomes. Research on ITSM adoption in the public sector indicates a mixed record of success. Studies have shown that government agencies often face unique barriers compared to the private sector, including bureaucratic structures, complex procurement processes, political influences, and a risk-averse culture (Tan & Pan, 2003). Enablers, conversely, include strong leadership commitment, clear communication of benefits, and a phased implementation approach that delivers early wins (Iden & Eikebrokk, 2013). Benefits of ITSM have for some years been evidenced and include superior service quality, higher customer satisfaction, higher IT efficiency, as well as superior IT and business strategy alignment (Marrone & Kolbe, 2011).

Saudi Arabia offers an important example of such initiatives, as Vision 2030 places digital transformation at the heart of national reform. Programs such as the National Transformation Program and the Digital Government Strategy (2023–2030) explicitly aim to expand online services and smart city projects. Empirical evidence supports this alignment: Amin et al. (2022) report that Saudi e-government adoption was explicitly undertaken “to advance the 2030 vision”. The Kingdom’s heavy investment in infrastructure and platforms has led to rapid improvements in connectivity and service availability, with the purpose of replacing slow manual processes and expediting service delivery. Yet, barriers such as siloed organizations, skill shortages, and cultural resistance complicate progress. Alrabghi (2022) argues that sustained success will depend on involving citizens and strengthening public–private partnerships to drive innovation in service delivery (aijtid.journals.ekb.eg). The literature therefore portrays Saudi Arabia as strongly committed to digital government but also facing the same practical difficulties observed in global cases of digital transformation.

Within this broader setting, studies of ITSM adoption in government provide important insights. Alqahtani (2017), for instance, examined ITIL adoption in Saudi Arabia’s Ministry of Education and found that leaders valued ITIL as a means to improve the digital services, citing benefits such as reduced costs, risk mitigation as well as improved quality. However, the

same study highlighted obstacles such as resistance to change, lack of familiarity with ITSM processes, and communication gaps (Alqahtani, 2017). Similar barriers are discussed in Sarwar et al.'s (2023) pilot study, which found that poor planning, management inertia, and technical knowledge gaps were the primary impediments to ITSM in government (academia.edu). On the other hand, enablers such as leadership commitment, strong governance, and inter-agency collaboration are emphasized as critical. Alrabghi (2022) adds that involving private-sector partners and citizens is particularly important for Saudi Arabia's digital transformation efforts, making the audience feel included in these crucial efforts (aijtid.journals.ekb.eg).

Serrano et al. (2021) argue for the integration of various frameworks, such as the ITIL, COBIT, and ISO, into a harmonized ITSM maturity framework that is more suitable for the government sector. These models are designed to enable agencies to detect present capabilities and create actionable blueprints for improvement. Generally, the literature is both positive and guarded: while ITSM frameworks hold the potential for greater alignment, increased efficiency, and superior service, public-sector realities like resource constraints, bureaucratic environments, and resistance to culture still hold them back.

These theoretical perspectives applied in this sector provide further insights into these dynamics as well. ITIL 4's Service Value System (SVS) is helpful to think about, as it theorizes how value is co-created by IT services in guiding principles and iterative improvement. Its emphasis on harmonizing IT with organizational outcomes is especially relevant to public-sector transformation. In comparison, theories of technological adoption, as per the Technology Acceptance Model (TAM) and Rogers's Diffusion of Innovation (DOI), provide insight into how ITSM practices are adopted and diffused. Another takeaway from research is that models like TAM and DOI have been highly utilized in researching public-sector IT adoption, holding up the influence of perceived usefulness, ease of use, and diffusion patterns of innovation in outcomes (Almahri & Saleh, 2023). Taken together, these types of frameworks provide a conceptual basis for analyzing how ITSM can underpin Saudi Arabia's digital transformation agenda under Vision 2030.

Research Methodology

This study used a sequential explanatory mixed-methods design. In the first stage, an online survey was administered using key terms such as "ITSM," "Digital Government," "Vision 2030," "Service Management," "Saudi Arabia," and "Public Sector Transformation." The survey targeted IT managers and team leaders working within ministries, municipalities, and

utilities. The distribution was carried out electronically, and a total of 80 valid responses were collected after screening for completeness and consistency. The survey was designed to capture adoption levels of ITSM frameworks, maturity stages, and perceptions of benefits and challenges, and it was considered representative of ITSM implementation trends in the Saudi public sector.

In the second stage, qualitative data were gathered through semi-structured interviews and a case study. Semi-structured interviews were conducted with 15 senior IT leaders including Chief Information Officers, digital transformation managers, and ITSM experts.

In addition, a case study was selected to illustrate contrasting levels of ITSM adoption. It involved the Ministry of Interior's Absher platform, recognized for advanced ITSM practices. Data for the case study was collected through document analysis, including official reports, policy documents, and internal records, and were complemented by follow-up interviews with key stakeholders.

Survey data were analyzed using SPSS. Descriptive statistics (such as percentages and averages) were used to show adoption and maturity levels. Correlation and regression analysis were used to test the links between ITSM maturity, service uptime, and citizen satisfaction.

Interview and case study data were analyzed using thematic analysis. Some codes came from existing ITSM and digital government literature, while others were developed from themes that emerged in the data. This allowed the survey findings to be combined with detailed insights from practice.

All ethical safeguards were observed throughout the research process. Participation was voluntary, informed consent was obtained before data collection, and confidentiality was maintained by removing organizational and individual identifiers from published outputs. All records were securely stored and used solely for academic purposes. These measures ensured adherence to accepted standards of research ethics.

Results/Findings

Mixed-methods survey from 80 IT managers across different Saudi public agencies (ministries, municipality, and utilities) and in-depth interviews with senior IT executives ($n = 15$) determined widespread ITSM adoption: around 55% of survey responders had ITIL-based ITSM fully implemented, 25% had implemented ITSM partially, 12% planned for implementation, and only 8% had no formal ITSM approach as mentioned in the Table 1. Average self-rated ITSM maturity score (on 5-point) was 3.4 (standard deviation (SD) = 0.8), demonstrating moderate-to-high process maturity agencywide. In line with country performance reports, survey-

responding agencies reported extremely high uptime for systems (mean uptime $\approx 99\%$).

Table 1. ITSM adoption and maturity among surveyed agencies (N = 80)

Metric	Value
Agencies with fully implemented ITSM	55%
Agencies with partially implemented ITSM	25%
Agencies planning ITSM implementation	12%
Agencies with no ITSM framework	8%
Mean ITSM maturity score (1 = low, 5 = high) 3.4 (SD = 0.8)	

In follow-up interviews, IT leaders consistently identified both **success factors** and **obstacles** to ITSM deployment. The top enabler was top management commitment: 90% of interviewees specified specific top-management support as crucial (e.g., “CIO sponsorship was indispensable for adoption”). This is in line with earlier findings that “strong leadership and management involvement is essential both as a factor for success in its own right” (Alqahtani, 2017). And some other key enablers included dedicated ITSM training programs and clear alignment of ITSM goals with Vision 2030 digital objectives.

In contrast, the main challenges were linked to people and outdated technology. Interviewees noted that a shortage of skilled staff and cultural resistance often slowed implementation. As one put it, “our staff struggle with new processes, and there’s a gap in ITIL expertise.” Other barriers included fragmented legacy systems and limited budgets for necessary tools. Several participants also echoed concerns raised in the education sector, emphasizing that it is difficult to meet evolving customer needs across departments such as health, education, and public services without adequate ITSM support.

- **Success factors:** Strong executive sponsorship and clear governance (cited by 90% of interviewees); comprehensive staff training and certification programs; and alignment of ITSM initiatives with Vision 2030 priorities.
- **Challenges:** Skills gaps and training deficiencies (e.g. “lack of specialist skills”).

Table 2 shows a clear link between ITSM maturity and how well digital services perform. Simply put, the more advanced an agency’s ITSM practices are, the better their results. Agencies with higher maturity scores reported stronger system reliability, ITSM maturity was closely tied to system uptime ($r = 0.53$, $p < .01$). The regression analysis reinforces this: every single step up on the 5-point maturity scale translated into about a 3.3% boost in service uptime and more than half a point increase in citizen satisfaction on a 5-point scale. In practice, this means that agencies with

well-developed ITSM frameworks are far more likely to keep their systems running smoothly and deliver experiences that leave citizens genuinely satisfied.

Table 2. Correlations among ITSM maturity, service uptime, and citizen satisfaction (N = 80)

	ITSM Maturity	Service Uptime (%)	Citizen Satisfaction
ITSM Maturity	1.00	0.53**	0.70**
Service Uptime (%)	0.53**	1.00	0.36**
Citizen Satisfaction	0.70**	0.36**	1.00

Note: r values are Pearson correlations. $p < .01$ for all shown correlations

Overall, the survey and interview data indicate that Saudi public sector organizations have embraced ITSM to a substantial degree, with mature ITSM implementation linked to tangible service improvements. Qualitative case evidence supported this quantitative trend: for example, an Eastern Region municipal IT department reported explicit goals of “reduction in incidents” and boosting “number of users who are satisfied with municipal services” as the driving motives for their ITIL initiative.

Several interviewees noted that organizations achieving higher ITSM maturity saw measurable gains (fewer outages, faster incident resolution) and higher user ratings. In summary, the mixed-methods findings suggest greater ITSM adoption and maturity are positively associated with digital service performance targets envisioned under Vision 2030.

Case Study Findings

Case Study – Ministry of Interior (Absher Platform): Absher illustrated advanced ITSM maturity, with over 350 digital services supported through structured incident, problem, and change management processes. Document analysis confirmed service availability above 99% and satisfaction rates above 90%. Interviewees emphasized executive sponsorship, ITIL-certified staff, and alignment with Vision 2030 benchmarks as key enablers.

Discussion

The findings indicate that effective IT Service Management (ITSM) is central to advancing Saudi Arabia’s digital transformation agenda. In line with international research, the structured adoption of ITSM practices was found to improve service reliability and citizen satisfaction. The strong correlations between ITSM maturity, system uptime, and user satisfaction suggest that higher levels of maturity support more consistent processes and improved service quality.

These results align closely with the objectives of Saudi Vision 2030 that prioritizes achieving citizen satisfaction above 90% and maintaining

service uptime above 99%. The study's evidence suggests that such targets are attainable, as participating agencies reported average uptime of nearly 99% and citizen satisfaction ratings of approximately 4.6 out of 5, consistent with Saudi Arabia's leading position in regional e-government rankings.

Moreover, a case study analyzed above also reinforces survey findings: mature ITSM adoption is strongly associated with improved service performance, while early adopters struggle primarily with skills deficits, legacy infrastructure, and resistance to process change. The Absher platform exemplified the benefits of advanced ITSM maturity, delivering high availability and user satisfaction through structured processes and leadership commitment.

Enabling factors recognized in the study, such as executive leadership and development of the workforce, are matched by those that have been highlighted in both scholarly and practitioner literature. The prominence of leadership agrees with Alqahtani's findings that "strong leadership and management involvement is essential" in successful ITIL implementations (Alqahtani, 2017). Similarly, the perennial problem of skills gaps underscores the necessity for focused capacity building, as seen in sectoral roadmaps for Saudi public administration. Overcoming these human-factor constraints, via ITIL certification programs, knowledge sharing, and systematic change management, will be crucial for continued progress toward Vision 2030's digital government ambitions.

For policymakers and public sector leaders, several implications emerge. Such as; maintaining and scaling ITSM adoption should remain a strategic priority. Given the clear link between ITSM maturity and digital service performance, cross-agency standards and repositories of best practice would promote consistency and efficiency. National training and certification initiatives would directly address the observed skills shortages.

Moreover, establishing executive accountability is essential. Agencies in which CIOs and senior leaders actively supported ITSM adoption achieved stronger outcomes, indicating that linking ITSM indicators to Vision 2030 performance metrics could further strengthen implementation. Aligning ITSM initiatives with broader transformation programs such as smart city projects and digital health platforms can also ensure that service management practices generate measurable public value. Such alignment contributes to faster delivery of digital services, reduced downtime in critical systems as well as increased citizen trust in digital government.

Conclusion

This study examined the role of IT service management in supporting Saudi Arabia's digital government transformation under Vision 2030. The findings showed that agencies with higher levels of ITSM adoption achieved better service reliability and higher citizen satisfaction compared to those with lower adoption levels. Among the studied dimensions, leadership support and staff training appeared as the strongest success factors, while legacy systems and cultural resistance were the main barriers. These insights can help policymakers understand how ITSM maturity contributes to improved public services. They can also guide decision-makers to prioritize capacity building and modern infrastructure, ensuring that digital transformation goals are met more effectively across government institutions.

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