

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 prioritizes digital transformation as a driver of efficient, citizen-centered governance, with Information Technology Service Management (ITSM) positioned as a critical enabler. This study assessed how ITSM maturity influences digital service performance and contributes to national transformation goals. A sequential explanatory mixed-methods design was applied, including an online survey of 80 IT managers from ministries, municipalities, and utilities, 15 semi-structured interviews with senior IT leaders, and a case study of the Ministry of Interior's Absher platform. Survey data were analyzed using descriptive statistics, Pearson correlations, and linear regression; qualitative data were coded thematically. Results showed that agencies with higher ITSM maturity achieved significantly greater system uptime ($r = 0.53$, $p < .01$) and citizen satisfaction ($r = 0.70$, $p < .01$). Regression analysis confirmed that each one-point increase in maturity predicted approximately a 3.3% increase in service uptime and a 0.5-point gain in satisfaction on a five-point scale. Interviews and the Absher case highlighted leadership commitment, structured workforce training, and Vision 2030 alignment as key enablers, while skills shortages, legacy infrastructure, and cultural resistance were persistent barriers. The findings demonstrate that ITSM maturity directly supports the Kingdom's strategic targets for reliability and user satisfaction. Policymakers and public-sector leaders are encouraged to strengthen governance, invest in skills pipelines, and

modernize legacy systems to scale ITSM benefits across agencies and sustain Saudi Arabia's regional leadership in digital government.

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". Hence, 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. 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 the 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) through incident management, service delivery, and governance accelerate Saudi Arabia's digital government transformation, and under what conditions can it overcome skills gaps, legacy systems, and cultural resistance to meet Vision 2030 goals?

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. However, 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, and 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.

Recent empirical work further expands this perspective. Jyoti (2025) demonstrates that ITSM-based change management automation in cloud environments can accelerate responsiveness and compliance across sectors. This suggests that automation within ITSM processes may not only enhance efficiency but also mitigate some of the challenges faced in public-sector adoption, such as resource constraints and the need for faster service delivery. 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.

Methods

This study employed a sequential explanatory mixed-methods design to assess how IT Service Management (ITSM) contributes to Saudi Arabia's

digital government transformation under Vision 2030. The quantitative strand provided breadth on adoption, maturity, and outcomes across agencies; the qualitative strand supplied depth on mechanisms, enablers, and context, and a case study offered an embedded, practice-grounded illustration.

Quantitative strand (survey and statistical analysis)

An online survey targeted IT managers and team leaders across ministries, municipalities, and utilities. After screening for completeness and consistency, 80 valid responses were retained. The instrument captured (a) framework adoption (e.g., ITIL, COBIT), (b) process coverage and ITSM maturity, and (c) outcome indicators (e.g., service uptime and citizen satisfaction). Data were analyzed in SPSS using descriptive statistics to profile adoption/maturity, Pearson correlations to examine bivariate relationships among ITSM maturity, uptime, and satisfaction, and linear regression to estimate the predictive effect of maturity on outcomes. These quantitative procedures validate and strengthen the findings by establishing statistically significant associations and effect sizes prior to qualitative interpretation.

Qualitative strand (interviews and case study)

To explain the quantitative patterns and surface implementation mechanisms, semi-structured interviews were conducted with 15 senior IT leaders (CIOs, digital transformation managers, and ITSM specialists). Interview prompts probed leadership commitment, workforce development, resistance to change, legacy systems, governance, and Vision 2030 alignment. In addition, a case study of the Ministry of Interior's Absher platform was undertaken to illustrate advanced ITSM practice. Case data combined document analysis (official reports, policy documents) with follow-up interviews of informed stakeholders, enabling triangulation of reported practices (e.g., incident, problem, and change management) with observed performance patterns.

Qualitative analysis and coding

Interview transcripts and case materials were analyzed using thematic content analysis. A codebook was developed deductively from ITSM and digital-government literature (e.g., enablers such as executive sponsorship; barriers such as skills gaps and legacy infrastructure) and inductively from emergent data. Codes were iteratively refined through constant comparison, and themes were aggregated to explain how leadership, training, governance, and toolsets interact to influence uptime and satisfaction outcomes identified in the survey.

Integration and mixed-methods rigor

Integration occurred at three points: (1) design, where preliminary survey constructs informed the qualitative protocol; (2) methods, via triangulation of interview, case, and survey evidence; and (3) interpretation, where a convergence logic was applied (i.e., quantitative signals of maturity → performance were explained by qualitative mechanisms such as leadership commitment and workforce capability). This complementarity strengthened construct validity (different methods assessing the same phenomena) and explanatory power (clarifying how maturity improvements translate into measurable service outcomes).

Ethical considerations

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

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 Table 1. The average self-rated ITSM maturity score (on a 5-point scale) 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). Moreover, 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 is 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, agencies with well-developed ITSM frameworks are far more likely to keep their systems running smoothly and deliver experiences that leave citizens genuinely satisfied. These findings confirm that maturing ITSM practices deliver measurable service improvements.

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 that greater ITSM adoption and maturity are positively associated with digital service performance targets envisioned under Vision 2030.

Causal pathways (explanatory mechanisms)

Qualitative findings clarified how ITSM maturity translates into performance gains. Agencies with strong leadership and governance, particularly those where CIOs actively sponsored initiatives and reviewed SLA/OLA metrics, experienced fewer incidents and faster restoration. Enhanced workforce capability through structured training and certification improved first-time resolution and strengthened citizen satisfaction. Finally, advanced tooling and visibility, such as CMDB systems and monitoring platforms, enabled earlier detection of issues and reduced downtime. Together, these mechanisms provide explanatory depth for the quantitative associations between maturity, uptime, and satisfaction.

Contrasting cases (high vs. low maturity)

The Absher platform illustrated high-maturity practice, supporting 350+ services through structured incident/problem/change processes and delivering >99% availability with >90% satisfaction; interviewees attributed this performance to executive sponsorship, certified staff, and alignment with Vision 2030 benchmarks.

By contrast, several agencies at earlier maturity levels described fragmented legacy estates, limited monitoring, and ad-hoc change control; leaders in these contexts emphasized skills gaps and resistance to process standardization as ongoing constraints on uptime and user experience.

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.

Limitations and bias

These results should be interpreted with appropriate caution. First, self-reported satisfaction and uptime measures may introduce common-method bias and optimism effects. Second, the sample is not exhaustive of all Saudi public agencies; effects may differ in entities with distinct mandates or resource profiles. Third, the cross-sectional design supports association, not definitive causation; we rely on qualitative triangulation to articulate plausible mechanisms linking maturity to performance.

Readiness signals regarding challenges

Taken together, the data suggest that Saudi Arabia can surpass many of the identified challenges - particularly where leadership accountability, workforce development, and governance discipline are present. However, realizing system-wide gains depends on addressing skills deficits and modernizing legacy platforms; without these, benefits will remain uneven across agencies.

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, which 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.

This national-level data adds external validation: Saudi Arabia's Digital Experience Maturity Index for 2025 reached 86.71%, classified as 'Advanced' by the Digital Government Authority (DGA, 2025). This external maturity benchmark complements agency-level survey results and strengthens the argument that institutional digital services in the Kingdom are increasingly aligning with advanced practices.

Moreover, the 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. By contrast, several lagging agencies continue to experience difficulties with fragmented systems and limited monitoring capacity, highlighting the boundary conditions of ITSM impact; without leadership continuity, targeted training, and platform modernization, performance improvements remain uneven across the public sector.

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.

From my perspective, Saudi Arabia is well-positioned to succeed in overcoming these challenges, provided that governance, training, and modernization continue at the same pace. In the medium term (≈ 5 years), effective ITSM adoption can improve service reliability, strengthen citizen trust, and reduce downtime in critical systems. In the longer term (10+ years), the sustained integration of ITSM practices into institutional culture can ensure resilient digital services, stronger cross-agency coordination, and alignment with Vision 2030's broader goals, thereby consolidating the Kingdom's status as a regional leader in digital government.

Conclusions

This study shows that agencies with higher ITSM maturity achieve measurably better service reliability and citizen satisfaction, and it explains the mechanisms - leadership/governance, workforce capability, and tooling/visibility, which make those gains repeatable. In my assessment, Saudi Arabia is likely to succeed in overcoming the principal challenges where leadership accountability, capacity building, and legacy modernization proceed in parallel and are monitored against Vision 2030 KPIs. In the medium term, citizens should see steadier, more responsive services; in the long term, the public sector should embed resilient, data-driven service management that sustains high availability and trust. Realizing these outcomes at scale requires consistent policy signals, funded skills pipelines, and targeted investment in observability and platform renewal, particularly in lagging agencies.

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References:

1. Almahri, F. A., & Saleh, N. I. (2023). Insights into technology acceptance: A concise review of key theories and models. *Studies in Systems, Decision and Control*, 569, 797–807. https://doi.org/10.1007/978-3-031-71649-2_6
2. Alqahtani, A. S. (2017). Critical success factors in implementing ITIL in the Ministry of Education in Saudi Arabia: An exploratory study. *International Journal of Advanced Computer Science and Applications*, 8(4). <https://doi.org/10.14569/ijacsa.2017.080432>
3. Alrabghi, R. (2022). Digital government in light of digital transformation programs and achieving the goals of the Kingdom of Saudi Arabia's 2030 vision: The Digital Government Authority as a model. *Arab International Journal for Information Technology & Data*, 2(2), 1–20. <https://doi.org/10.21608/aijtid.2022.117695.1005>
4. Amin, S. F., Saad, A. B., & Lajis, A. (2022). Technology acceptance factors for implementing the e-government systems in Saudi Arabia. *Advances in Internet of Things*, 12(4), 125–141. <https://doi.org/10.4236/ait.2022.124008>
5. Digital Government Authority. (2025). *The Digital Experience Maturity Index for 2025 rises to 86.71%*. Saudi Arabia: Digital Government Authority. Retrieved August 20, 2025, from <https://www.dga.gov.sa>
6. Iden, J., & Eikebrokk, T. R. (2013). Implementing IT service management: A systematic literature review. *International Journal of Information Management*, 33(3), 512–523. <https://doi.org/10.1016/j.ijinfomgt.2013.01.004>
7. Jyoti, S. N. (2025). ITSM-based change management automation in cloud environments: A cross-sector empirical study. *Review of Applied Science and Technology*, 4(2), 440–472. <https://doi.org/10.63125/xvjst226>
8. Latupeirissa, J. J. P., Dewi, N. L. Y., Prayana, I. K. R., Srikandi, M. B., Ramadiansyah, S. A., & Pramana, I. B. G. A. Y. (2024). Transforming public service delivery: A comprehensive review of digitization initiatives. *Sustainability*, 16(7), 2818. <https://doi.org/10.3390/su16072818>

9. Marrone, M., & Kolbe, L. M. (2011). Impact of IT service management frameworks on the IT organization. *Business & Information Systems Engineering*, 3(1), 5–18. <https://doi.org/10.1007/s12599-010-0141-5>
10. Marrone, M., Gacenga, F., Cater-Steel, A., & Kolbe, L. (2014). IT service management: A cross-national study of ITIL adoption. *Communications of the Association for Information Systems*, 34(1), 865–892. <https://doi.org/10.17705/1CAIS.03449>
11. Nadrah, R., Gambour, Y., Kurdi, R., & Almansouri, R. (2020). E-government service in Saudi Arabia. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(16), 21–29. <https://archives.palarch.nl/index.php/jae/article/view/8156>
12. Sarwar, M. I., Abbas, N., Alyas, A. I., & Alzahrani, A. I. (2023). Digital transformation of public sector governance with IT service management: A pilot study. *IEEE Access*, 11, 6489–6500. <https://doi.org/10.1109/ACCESS.2023.3237550>
13. Saudi Gazette. (2025, February). Absher platform completes more than 24 million electronic transactions. *Saudi Gazette*. Retrieved August 20, 2025, from <https://www.saudigazette.com.sa>
14. Saudi Vision 2030. (2024). *Saudi Vision 2030*. Government of Saudi Arabia. Retrieved August 20, 2025, from <https://www.vision2030.gov.sa/en>
15. Serrano, J., Faustino, J., Adriano, D., Pereira, R., & 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>
16. Tan, C.-W., & Pan, S.-L. (2003). Managing e-transformation in the public sector: An e-government study of the Inland Revenue Authority of Singapore (IRAS). *European Journal of Information Systems*, 12(4), 269–281. <https://doi.org/10.1057/palgrave.ejis.3000462>

Appendix A - Survey Questionnaire

Eligibility

Do you currently work in a Saudi public-sector organization?

☐ Yes → continue ☐ No → end survey (screen-out)

Is your role related to IT leadership/operations (e.g., IT manager, team lead, CIO/DT lead)?

☐ Yes → continue ☐ No → end survey (screen-out)

Section 1 - Organization Profile

Q1. Organization type (one): ☐ Ministry ☐ Municipality ☐ Utility ☐ Other:

Q2. Role (one): ☐ IT Manager ☐ Team Leader ☐ CIO/Director/VP ☐ Other:

Q3. Years in IT management (one): ☐ <5 ☐ 5–10 ☐ >10

Q4. Agency size (IT staff count): ☐ <25 ☐ 25–99 ☐ 100–249 ☐ 250+

Q5. Region: ☐ Central ☐ Eastern ☐ Western ☐ Northern ☐ Southern

Section 2 - ITSM Adoption

Q6. Which ITSM frameworks are used in your organization? (Select all that apply)

☐ ITIL ☐ COBIT ☐ ISO/IEC 20000 ☐ MOF ☐ CMMI-SVC ☐ None

Q7. Adoption level (one):

☐ Fully implemented across most IT services

☐ Partially implemented in selected domains

☐ Planning to implement within 24 months

Q8. ITSM process coverage (Yes/No each):

Incident management ☐ Y/☐ N

Problem management ☐ Y/☐ N

Change management ☐ Y/☐ N

Request/catalog services ☐ Y/☐ N

SLA/OLA monitoring ☐ Y/☐ N

CMDB/asset management ☐ Y/☐ N

Continual improvement ☐ Y/☐ N

Section 3 - ITSM Maturity

Q9. Overall ITSM maturity (1 = Very low, 5 = Very high):

1 2 3 4 5

(Optional robustness - not required for replication)

Q9a–Q9f. Please rate maturity for each process (1 = Very low, 5 = Very high):

Incident management
Problem management
Change management
Service catalog/request fulfillment
SLA/OLA management
Continual improvement

→ *Composite ITSM-M6 maturity score = mean of Q9a–Q9f (if ≥4 items answered)*

Section 4 - Outcomes, Benefits & Alignment

Q10. Average service uptime (last 12 months):

☐ <95% ☐ 95–97% ☐ 97–99% ☐ >99%

Q10b. If known, enter approximate uptime % (one decimal): ____ . ____ %
(optional)

Q11. Citizen satisfaction with your digital services (1 = Very dissatisfied, 5 = Very satisfied):

1 2 3 4 5

Q12. To what extent has ITSM contributed to the following outcomes? (1 = Not at all, 5 = To a great extent):

- a) Improved uptime
- b) Faster incident resolution
- c) Reduced operational cost
- d) Better alignment with Vision 2030 objectives
- e) Improved auditability/compliance
- f) Higher service-desk satisfaction (internal users)

Section 5 - Barriers & Enablers

Q13. How significant are the following barriers to ITSM implementation? (1 = Not a barrier, 5 = Major barrier):

- a) Skills gaps/training needs
- b) Resistance to change
- c) Legacy systems
- d) Budget limitations (tools/training)
- e) Cross-department communication gaps
- f) Framework complexity/overhead

Q14. Which enablers matter most for ITSM success? (Select up to three)

- ☐ Executive sponsorship/governance
- ☐ Dedicated training/certification programs
- ☐ Clear communication of benefits
- ☐ Alignment with Vision 2030 objectives
- ☐ Inter-agency collaboration

- ☐ Adequate budget allocation
- ☐ External partners/consultants

Section 6 - Investment & Capability Building

Q15. In the last 12 months, how many staff in your agency attended ITSM/ITIL training?

- ☐ 0 ☐ 1–5 ☐ 6–20 ☐ 21+

Q16. Planned investments in the next 12 months (Select all that apply):

- ☐ ITSM toolset upgrade
- ☐ Training/certification
- ☐ Process redesign
- ☐ CMDB/asset management
- ☐ Service catalog/portal
- ☐ Monitoring/observability tools

Section 7 - Governance & Strategy

Q17. Please indicate your agreement with the following statements (1 = Strongly disagree, 5 = Strongly agree):

- a) ITSM objectives are explicitly linked to Vision 2030 KPIs
- b) CIO/senior leadership actively sponsors ITSM initiatives
- c) We track SLA/OLA metrics and review them regularly
- d) Our ITSM program has a continual-improvement roadmap

Section 8 - Open-Ended

Q18. What top improvements would most enhance ITSM effectiveness in your organization?

[Open text box]

Disclaimer

This survey instrument was designed by the author specifically for this study. It is intended solely for academic research purposes within the scope of Saudi Arabia's Vision 2030 digital government transformation. The instrument is not a validated commercial tool and should not be interpreted as an official standard. Participation is voluntary, responses are anonymous, and findings are reported in aggregate only.