

Digital Contract Governance and Service Quality Management in Saudi Community Facilities

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Abstract: Digital contract governance has become an important requirement for improving service quality, transparency, and operational efficiency in Saudi community facilities. As Saudi Arabia continues to advance Vision 2030 goals related to digital transformation, quality of life, sustainable infrastructure, and efficient service delivery, community facilities require stronger systems for managing service contracts, contractor performance, maintenance responsibilities, and resident satisfaction. Community facilities include residential buildings, guest houses, recreational areas, swimming pools, playgrounds, commissary centers, mini markets, cleaning services, landscaping, waste management, building maintenance, and general support services. These facilities depend heavily on contractors, making effective contract governance essential for reliable operations. This study examines the role of digital contract governance in improving service quality management in Saudi community facilities. The paper adopts a review-based approach to analyze how digital contract management systems, key performance indicators, service-level agreements, contractor monitoring, work-order tracking, and performance reporting can improve facility service delivery. It highlights that contract governance is no longer limited to preparing agreements and monitoring compliance manually. Instead, digital tools can support real-time tracking, faster issue resolution, better accountability, and data-driven decision-making. The study finds that digital contract governance can improve contractor accountability, reduce service delays, strengthen maintenance performance, enhance transparency, and support better service quality in community facilities. By integrating digital contract monitoring with facility management and KPI-based evaluation, Saudi organizations can improve community service performance and align facility operations with Vision 2030 priorities.

Keywords: Digital Contract Governance, Service Quality Management, Saudi Arabia, Community Facilities, Facility Management, Contractor Performance, Vision 2030.

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1. INTRODUCTION

Community facilities play an important role in supporting daily living, comfort, safety, and service continuity in Saudi Arabia. These facilities include residential buildings, guest houses, recreational areas, swimming pools, playgrounds, commissary centers, mini markets, cleaning services, landscaping,

waste management, building maintenance, and general support services. In large residential and organizational communities, these services are usually delivered through multiple contractors. Therefore, effective contract governance is necessary to ensure that service providers meet agreed standards, respond on time, follow safety

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requirements, and maintain consistent service quality.

Traditional contract governance often depends on manual reporting, paper-based records, email follow-ups, and periodic inspections. While these methods can support basic monitoring, they may not provide timely information about contractor performance, service delays, complaint resolution, maintenance completion, or quality failures. In community facilities, delays in maintenance, weak contractor supervision, poor reporting, and unclear service responsibilities can directly affect resident satisfaction, operational efficiency, and facility reliability. For this reason, organizations are increasingly moving toward digital contract governance systems that allow better tracking, transparency, and data-based decision-making.

Digital contract governance refers to the use of digital tools, dashboards, contract management systems, work-order platforms, performance reports, and key performance indicators to manage service contracts more effectively. These systems can help facility managers monitor contractor activities, track service-level agreements, evaluate monthly performance, identify repeated service issues, and take corrective action. Digital tools can also improve communication between facility teams, contractors, supervisors, and end users by making service information more visible and accessible.

In Saudi Arabia, digital contract governance is strongly connected with Vision 2030 priorities, especially digital transformation, quality of life, efficient infrastructure, and improved service delivery. Community facilities are important living and service environments, and their performance affects residents, employees, visitors, and service users. When contracts are managed digitally, facility managers can improve response time, reduce operational risks, strengthen accountability, and ensure that contractors deliver services according to agreed standards.

This paper examines digital contract governance and service quality management in Saudi community facilities. It focuses on how digital contract systems, contractor KPIs, service-level agreements, work-order tracking, performance dashboards, and quality monitoring can improve community facility operations. The study highlights digital contract governance as a strategic approach for improving contractor accountability, service reliability, resident satisfaction, and sustainable facility performance in Saudi Arabia.

2. Conceptual Background and Literature Synthesis

2.1 Contract Governance in Facility Services

Contract governance in facility services refers to the structured management of contractor responsibilities, service standards, compliance requirements, risk controls, reporting duties, and performance expectations. In Saudi community facilities, many services are delivered through external contractors, including building maintenance, cleaning, landscaping, swimming pool maintenance, waste management, guest house operations, commissary services, mini market support, pest control, safety services, and general repair works. Strong contract governance helps ensure that contractors understand their scope of work, follow safety requirements, respond within agreed timelines, and maintain consistent service quality. Facility management standards also emphasize the importance of organized service delivery, performance monitoring, and continuous improvement in managing built environments (International Organization for Standardization, 2018).

2.2 Digitalization of Contract Management

Digitalization of contract management means shifting from manual contract files, email follow-ups, spreadsheets, and paper-based reports to digital platforms that can store, monitor, and evaluate contract performance. Digital contract systems allow facility managers to access contract documents, service-level agreements, contractor obligations, renewal dates, payment milestones, work orders, inspection reports, and performance records in one system. This improves transparency and reduces the risk of missing information. In facility management, digital transformation supports better decision-making because managers can use real-time or near-real-time data to monitor service activities, identify delays, and take corrective action (Hossain *et al.*, 2020; Naticchia *et al.*, 2020).

2.3 Service Quality in Community Facilities

Service quality is a key requirement in community facilities because these facilities directly affect residents, employees, visitors, and service users. Community facilities must remain clean, safe, comfortable, and operational. Poor service quality in maintenance, cleaning, waste management, landscaping, guest house operations, swimming pools, or recreational facilities can lead to complaints, health and safety concerns, higher operating costs, and reduced satisfaction. Sustainable facility management research shows that service quality is closely connected with operational efficiency, user satisfaction, asset reliability, and long-term facility performance (Alfalah & Zayed, 2020; Opoku & Lee, 2022).

2.4 KPI-Based Contractor Performance Monitoring

Key performance indicators are useful tools for measuring contractor performance in a clear and practical way. In community facilities, KPIs may include complaint response time, work-order closure rate, preventive maintenance completion, cleanliness inspection score, waste collection punctuality, landscaping schedule compliance, safety performance, resident satisfaction, and monthly report submission. When these indicators are included in service contracts, contractor performance becomes more measurable and transparent. Performance-based contract models can also improve accountability because contractors are evaluated based on actual service outcomes instead of only routine activity completion (Tseng & Yang, 2024).

2.5 Digital Dashboards and Work-Order Tracking

Digital dashboards and work-order tracking systems can improve the daily management of community facility services. These tools allow facility teams to record complaints, assign tasks to contractors, monitor response time, track completion status, upload evidence, and review performance reports. For example, if a plumbing issue, cleaning complaint, landscaping defect, electrical fault, or swimming pool maintenance problem is reported, the digital system can assign the issue to the responsible contractor and track the full process from reporting to closure. This improves transparency, reduces delays, and creates a reliable record for contractor evaluation and audit purposes.

2.6 Vision 2030 and Digital Facility Service Delivery

Saudi Vision 2030 gives strong importance to digital transformation, efficient services, sustainability, quality of life, and improved infrastructure performance (Saudi Vision 2030, 2016). Digital contract governance supports these goals by improving how community facility services are planned, monitored, and evaluated. When contracts are managed digitally, organizations can reduce service delays, improve contractor accountability, strengthen maintenance performance, and improve user satisfaction. Therefore, digital contract governance is not only an administrative improvement; it is a practical service management approach that supports better community living environments and Vision 2030 objectives.

3. Analytical Focus and Research Direction

This study focuses on the digital transformation of contract governance in Saudi community facilities. The main research direction is to understand how contract management can move

from manual supervision, paper-based records, and scattered email reporting toward a more transparent digital governance model. In community facilities, service contracts cover many operational areas such as building maintenance, cleaning, landscaping, waste management, guest houses, swimming pools, commissary services, mini markets, recreational facilities, and general support services. These services require continuous contractor supervision because poor performance can directly affect service quality, user satisfaction, safety, and operational efficiency.

The analytical focus of the study is built around three main areas. The first area is contract digitalization, which includes digital storage of contract documents, service-level agreements, contractor obligations, inspection records, and monthly reports. The second area is performance monitoring, where digital dashboards, work-order systems, and KPI tracking are used to measure contractor response time, service completion, preventive maintenance, complaint resolution, and reporting accuracy. The third area is service quality improvement, which examines how digital governance can reduce delays, strengthen accountability, and improve community facility operations.

Instead of treating contract governance as only an administrative process, this study views it as a strategic service management system. Digital contract governance can help facility managers make faster decisions, identify repeated service failures, compare contractor performance, and improve future contract planning. This direction supports Saudi Vision 2030 priorities related to digital transformation, efficient services, quality of life, and sustainable community operations.

4. RESEARCH METHODOLOGY

4.1 Research Design

This study follows a review-based qualitative research design to examine digital contract governance and service quality management in Saudi community facilities. This approach is suitable because the paper focuses on understanding existing concepts, practices, and strategies related to contract governance, digital contract management, contractor monitoring, service quality, facility operations, and Vision 2030 alignment. The study does not use primary survey data; instead, it reviews academic literature, official strategy documents, facility management standards, and practical approaches used in contract-based service environments.

4.2 Data Sources

The study is based on secondary data collected from research articles, facility management literature, contract governance studies, digital transformation reports, Saudi Vision 2030 documents, and service quality management sources. The reviewed materials focus on digital contract systems, service-level agreements, key performance indicators, work-order tracking, contractor performance, maintenance management, and community facility services. The study also considers practical facility service areas such as building maintenance, cleaning, landscaping, waste management, swimming pools, guest houses, commissary centers, mini markets, recreational facilities, and general community support services.

4.3 Analytical Approach

The collected information is analyzed using a thematic approach. The main themes include contract governance, digital contract management, service quality, contractor accountability, KPI monitoring, work-order tracking, and Vision 2030 alignment. This method helps identify how digital tools can improve contract monitoring, reduce service delays, strengthen contractor performance, and improve service quality in Saudi community facilities.

4.4 Scope of the Study

The scope of this study is limited to community facilities in Saudi Arabia. It focuses on contract-based facility services that affect service quality, resident satisfaction, operational efficiency, and maintenance performance. The study does not focus on legal contract drafting or construction contract disputes. Instead, it focuses on the operational use of digital contract governance to improve facility service delivery and contractor performance.

4.5 Methodological Framework

The study follows four steps: reviewing relevant literature, identifying key community facility service areas, analyzing digital contract governance practices, and developing a practical framework for improving service quality through digital contract monitoring in Saudi community facilities.

5. Digital Contract Governance in Saudi Community Facilities

Digital contract governance has strong practical importance in Saudi community facilities because many essential services are delivered through contractors. These services include building maintenance, cleaning, landscaping, swimming pool maintenance, waste management, guest house operations, commissary services, mini market support, playground maintenance, pest control,

safety services, and general repair works. Since these services directly affect daily operations and user satisfaction, contracts must be managed carefully through clear responsibilities, measurable standards, and continuous monitoring.

In traditional contract governance, many activities are managed through manual documents, emails, spreadsheets, and physical inspection reports. This can make it difficult to track contractor performance in real time. Important information such as complaint status, work-order completion, response time, service delays, safety issues, and monthly reports may become scattered across different systems. As a result, facility managers may face difficulty in identifying repeated problems, evaluating contractor performance, and taking timely corrective action.

Digital contract governance helps solve these problems by creating a more structured and transparent system. Contract documents, scope of work, service-level agreements, key performance indicators, inspection reports, payment milestones, and contractor performance records can be managed through digital platforms. This allows facility managers to monitor whether contractors are delivering services according to agreed standards. For example, if a maintenance complaint is raised, the digital system can record the issue, assign it to the contractor, track response time, monitor completion, and store evidence of work done.

Digital governance also improves accountability. Contractors can be evaluated based on clear data instead of informal feedback. KPIs such as complaint response time, preventive maintenance completion, cleanliness score, safety compliance, work-order closure rate, and resident satisfaction can be reviewed monthly. This helps organizations identify strong and weak contractors and improve service delivery.

In Saudi community facilities, digital contract governance supports better operational control, faster decision-making, improved service quality, and stronger contractor supervision. It also supports Vision 2030 priorities by promoting digital transformation, efficient services, transparency, and better quality of life in community environments.

6. Service Quality Management and Contractor Performance

Service quality management is a major part of successful community facility operations. In Saudi community facilities, services such as building maintenance, cleaning, landscaping, waste management, guest house support, swimming pool maintenance, commissary services, playground

operations, and general repair works must be delivered continuously and consistently. If these services are delayed or poorly managed, they can affect resident comfort, safety, hygiene, and overall satisfaction.

Contractor performance plays a direct role in service quality because many facility services are outsourced. Contractors are responsible for completing maintenance tasks, responding to complaints, following safety procedures, submitting reports, and meeting agreed service standards. Without proper monitoring, contractors may delay work, provide incomplete reports, miss preventive maintenance schedules, or fail to meet quality expectations. This can create repeated complaints and increase operational risks.

Digital contract governance improves service quality by making contractor performance more visible and measurable. Facility managers can use digital systems to track work orders, complaint response time, service completion, inspection results, and contractor reports. For example, if a plumbing issue, cleaning complaint, landscaping defect, or electrical fault is reported, the system can assign the task to the responsible contractor and record the time taken to complete it. This creates a clear performance record.

Key performance indicators are useful for measuring service quality. Common KPIs include response time, work-order closure rate, preventive maintenance completion, cleanliness score, safety compliance, resident satisfaction, and monthly report submission. These indicators help facility managers identify which contractors are performing well and which areas need improvement.

Overall, service quality management becomes stronger when contractor performance is measured through digital systems. It improves transparency, reduces service delays, supports corrective action, and helps community facilities maintain reliable, safe, and high-quality services.

7. Key Performance Indicators and Service-Level Agreements

Key performance indicators and service-level agreements are important tools for improving digital contract governance in Saudi community facilities. A service-level agreement explains the expected level of service that a contractor must provide, while KPIs measure whether the contractor is meeting those expectations. In community facilities, contracts should not only describe the scope of work but also include measurable standards for response time, work completion, reporting, safety, quality, and user satisfaction.

Digital contract governance makes KPI monitoring easier because performance information can be recorded and reviewed through digital systems. For example, if a maintenance issue is reported, the system can track when the complaint was received, when it was assigned to the contractor, when the contractor responded, and when the issue was closed. This creates a clear performance history and helps facility managers identify delays, repeated problems, and weak service areas.

Service-level agreements are especially useful for facility services such as building maintenance, cleaning, landscaping, waste management, swimming pool maintenance, guest house operations, and commissary support. Each service should have clear performance requirements. For example, cleaning services can be measured through inspection scores, waste management can be measured through collection schedule compliance, and maintenance services can be measured through response time and work-order closure rate.

KPIs also help improve contractor accountability. When contractors know that their performance is being measured digitally, they are more likely to follow agreed standards, submit reports on time, and respond quickly to service issues. Monthly KPI reports can support better decision-making, contract renewal decisions, penalty application, and service improvement planning.

Table 1: Digital Contract Governance KPIs for Community Facility Services

Service Area	KPI	Purpose
Building maintenance	Work-order closure rate	Ensure timely completion of maintenance tasks
Cleaning services	Cleanliness inspection score	Maintain hygiene and service quality
Landscaping	Schedule compliance	Improve appearance and reduce service gaps
Waste management	Collection punctuality	Maintain cleanliness and environmental performance
Swimming pool services	Safety and maintenance compliance	Protect users and maintain service standards
Contractor reporting	Monthly report submission	Improve transparency and accountability
Resident complaints	Response and resolution time	Improve satisfaction and reduce delays

Overall, KPIs and service-level agreements help transform contract governance from a manual supervision process into a measurable performance management system. This supports better service quality, stronger contractor control, and more efficient community facility operations.

8. Proposed Framework for Digital Contract Governance and Service Quality Management

The proposed framework explains how digital contract governance can improve service quality in Saudi community facilities. The framework connects contract planning, digital monitoring, contractor performance, service-level agreements, KPI review, and continuous service improvement. It is designed for community facility services such as building maintenance, cleaning, landscaping, waste management, swimming pool services, guest houses, commissary centers, mini markets, recreational facilities, and general support services.

The first step is digital contract registration. All contract documents, scope of work, service standards, contractor responsibilities, safety requirements, and reporting obligations should be stored in a digital contract management system. This

allows facility managers to access contract details quickly and avoid confusion regarding responsibilities.

The second step is service monitoring. Facility teams should use digital platforms to record complaints, assign work orders, monitor contractor response, and track service completion. This helps reduce delays and improves transparency in daily facility operations.

The third step is KPI evaluation. Contractor performance should be reviewed through measurable indicators such as response time, work-order closure rate, preventive maintenance completion, cleanliness score, safety compliance, monthly reporting, and resident satisfaction. These indicators help facility managers identify weak service areas and take corrective action.

The final step is continuous improvement. Monthly reports, digital dashboards, and contractor performance reviews can be used to improve service planning, contract renewal decisions, and future procurement strategies.

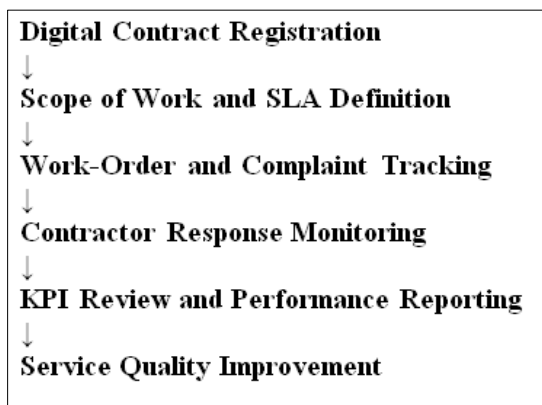


Figure 1A: Digital Contract Governance Framework

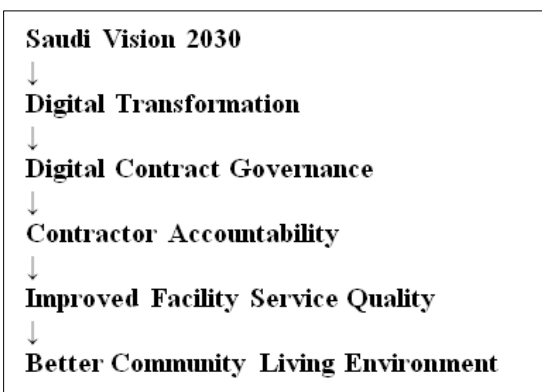


Figure 1B: Digital Contract Governance and Vision 2030 Linkage

This framework shows that digital contract governance is not only an administrative process. It is

a practical service management system that helps Saudi community facilities improve transparency,

contractor accountability, maintenance performance, service quality, and user satisfaction.

9. Strategic Implications for Saudi Vision 2030

Digital contract governance has important strategic implications for Saudi Vision 2030 because it supports the Kingdom's wider goals of digital transformation, efficient service delivery, quality of life improvement, and sustainable infrastructure management. Community facilities are part of the daily living environment, and their performance directly affects residents, employees, visitors, and service users. When facility service contracts are managed digitally, organizations can improve transparency, reduce delays, strengthen contractor accountability, and deliver better community services.

One of the main Vision 2030 implications is digital transformation. By replacing manual contract files, paper reports, and scattered email communication with digital contract platforms, community facility managers can access accurate service information in real time. This supports faster

decisions, better monitoring, and more professional contract administration.

Another implication is quality of life improvement. Community facilities such as residential buildings, guest houses, recreational areas, swimming pools, cleaning services, landscaping, waste management, commissary centers, and maintenance services must operate smoothly to create safe and comfortable living environments. Digital contract governance helps ensure that contractors respond on time, complete services properly, and maintain agreed quality standards.

Digital contract governance also supports operational efficiency. Facility managers can use dashboards, KPIs, work-order records, and service reports to identify repeated issues, compare contractor performance, reduce unnecessary costs, and improve future contract planning. This creates a more accountable and performance-based service model.

Table 2: Strategic Link between Digital Contract Governance and Vision 2030

Vision 2030 Priority	Digital Contract Governance Contribution	Expected Outcome
Digital transformation	Digital contract platforms and dashboards	Faster and transparent service monitoring
Quality of life	Improved facility service quality	Better resident and user satisfaction
Operational efficiency	KPI-based contractor evaluation	Reduced delays and better performance
Sustainability	Better planning and reduced resource wastage	More responsible facility operations
Accountability	Digital records and performance reports	Stronger contractor control
Service excellence	Work-order tracking and SLA monitoring	Reliable community facility services

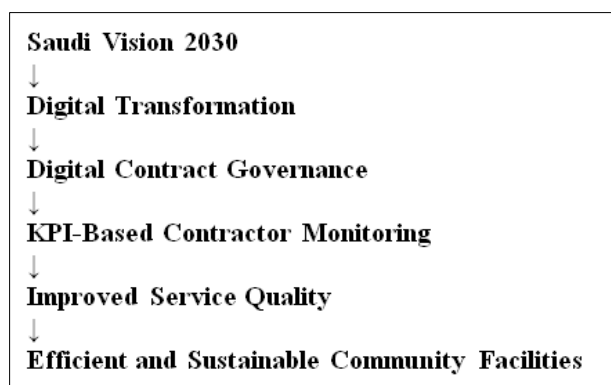


Figure 2: Vision 2030 Linkage with Digital Contract Governance

Overall, digital contract governance supports Vision 2030 by transforming community facility services into a more transparent, measurable, and performance-driven system. It helps Saudi organizations improve service quality, contractor accountability, operational efficiency, and community well-being.

10. Practical Recommendations

Saudi community facilities should adopt digital contract governance as a standard part of facility service management. Contract documents, scope of work, service-level agreements, contractor obligations, inspection reports, payment milestones, and performance records should be stored in a

centralized digital contract management system. This will help facility managers access information quickly and reduce confusion in daily contract administration.

Facility managers should also connect contract governance with digital work-order systems. All complaints, maintenance requests, cleaning issues, landscaping defects, waste management delays, swimming pool service issues, and guest house maintenance problems should be recorded digitally. Each request should show the assigned contractor, response time, completion status, delay reason, and final approval. This will improve transparency and reduce manual follow-up.

Contractors should be evaluated through monthly KPI-based performance reports. Important KPIs may include response time, work-order closure rate, preventive maintenance completion, cleanliness inspection score, safety compliance, SLA compliance, report submission, and user satisfaction. These KPIs should be linked with contract renewal, penalties, service improvement plans, and future contractor selection.

Saudi community facilities should also train facility staff and contractors to use digital dashboards, mobile reporting tools, and performance tracking systems. Digital systems will only be effective if users understand how to record, monitor, and review service data properly.

Overall, digital contract governance should be used not only for documentation but also for improving service quality, contractor accountability, operational efficiency, and user satisfaction in Saudi community facilities.

11. CONCLUSION

Digital contract governance is an important approach for improving service quality management in Saudi community facilities. The study shows that community facility services depend heavily on contractors for building maintenance, cleaning, landscaping, waste management, swimming pool services, guest house operations, commissary support, recreational facilities, and general service activities. When these contracts are managed manually, facility managers may face delays, weak reporting, poor visibility, and difficulty in measuring contractor performance.

The paper highlights that digital contract governance can improve contract monitoring by using digital platforms, work-order systems, dashboards, service-level agreements, and KPI-based performance reports. These tools help facility managers track contractor response time, service

completion, complaint resolution, preventive maintenance, safety compliance, and monthly reporting accuracy. As a result, service quality becomes more measurable, transparent, and accountable.

Digital contract governance also supports Saudi Vision 2030 by promoting digital transformation, efficient services, quality of life, operational transparency, and sustainable community facility management. By adopting digital contract systems, Saudi organizations can reduce service delays, improve contractor accountability, strengthen maintenance performance, and create better living and service environments for residents, employees, and visitors.

Overall, digital contract governance should be viewed as more than an administrative process. It is a strategic facility management tool that connects contract control, service quality, digital transformation, and community satisfaction. Its adoption can help Saudi community facilities achieve more reliable, efficient, and performance-driven service delivery.

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