# Impact of Application of Governance Principles and Performance Management System on the Organization Performance: Study on Saudi Healthcare System

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ABSTRACT— This study investigates the impact of integrating governance structure and performance management systems on the organization performance in Saudi Arabia's healthcare sector. The research employs a causal investigative approach, grounded in agency theory, resource-dependency theory, and balanced scorecard principles, to explore how these systems enhance decision-making, accountability, and resource utilization. Primary data were collected through cross-sectional surveys targeting healthcare professionals across key regions in Saudi Arabia, supplemented by comprehensive literature reviews. The findings reveal a significant positive relationship between governance structures, performance management systems and organizational performance, with employee engagement and commitment as key mediators. With moderators such as organizational size and compliance with local regulations significantly influence this relationship. This integration fosters operational transparency, enhances patient satisfaction, and improves adaptability to the evolving Saudi healthcare market. It will have clear academic contribution as it addresses a significant gap in the existing literature concerning the integration of performance management and organizational governance systems within Saudi Arabia's healthcare sector. In addition, it will provide Practical Implications as this study focuses on specific challenges and gaps in integrating governance and performance management systems. It provides actionable recommendations which will promote accountability, transparency, and efficient resource allocation. By leveraging digital tools like Hospital Information Systems, these systems enable realtime performance tracking and data-driven decision-making. The study will act as supportive tool to healthcare leaders and policymakers to cultivate a culture of performance excellence, optimize resource allocation, and achieve sustainable strategic objectives which will reflect on improving patient outcomes which will be aligned with the Saudi Arabia's Vision 2030.

**Keywords**— strategic planning, governance, organizational performance

## 1. INTRODUCTION

The healthcare sector in Saudi Arabia has undergone a profound transformation since the 1970s, changing from a traditional system focused on basic services to a sophisticated network delivering advanced medical care. This progress is driven by substantial government investment and strategic initiatives under Vision 2030, which aim to enhance healthcare quality, accessibility, and efficiency across the Kingdom. In 2023, healthcare and social development accounted for 16.96% of the national budget, totaling \$50.4 billion, with the Ministry of Health overseeing 62% of hospitals and 53% of clinics [14]. The push to increase private sector participation from 40% to 65% by 2030 reflects the sector's dynamic growth, supported by privatization efforts and the establishment of Accountable Care Organizations [1]. Additionally, digital transformation initiatives, such as the adoption of Hospital Information Systems, have streamlined operations and improved data-driven decision-making [4]. However, the sector faces significant challenges, including a shortage of 15,000 doctors and 20,000 nurses, escalating operational costs due to advanced medical technologies, and raising patient expectations for high-quality care [11]. These issues strain resource allocation, hinder service delivery, and underscore the need for robust organizational frameworks to ensure sustainable progress.

A critical problem in Saudi Arabia's healthcare system is the fragmented integration of governance and performance management systems, which impedes effective strategic planning, accountability, and resource optimization. This misalignment results in inefficiencies, such as delayed decision-making and suboptimal resource use, leading to reduced patient satisfaction and challenges in achieving Vision 2030's ambitious goals for healthcare transformation [4].

Governance frameworks, are essential for aligning organizational objectives with national priorities, while performance management systems, incorporating Key Performance Indicators (KPIs) and Value-Based Healthcare principles, enable continuous monitoring and improvement of operational outcomes [17]. The lack of cohesive integration between these systems limits their potential to drive organizational excellence, such as addressing workforce shortages and meeting rising patient demands. This gap is particularly pressing the Saudi Arabia healthcare system, where regulatory compliance with standards set by the Ministry of Health and the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) is critical [4].

The significant of this study is it addresses this critical gap by examining how the proposed integration can enhance organizational performance in Saudi healthcare facilities. By fostering accountability, optimizing resource utilization, and aligning operations with strategic objectives, such integration can improve patient outcomes, enhance operational efficiency, and contribute to achieve Vision 2030's goals of creating a world-class healthcare system [1]. The research employs a causal investigative approach, grounded in agency theory, resource-dependency theory, and balanced scorecard theory, using primary data collected through surveys of healthcare professionals across key regions. This methodology ensures a robust analysis of how governance and performance systems interact to drive organizational success, offering evidence-based insights for policymakers and healthcare leaders.

The aim of this study is to investigate the impact of integrating governance principles and performance management systems on organizational performance, providing actionable recommendations to enhance strategic planning and service delivery in Saudi Arabia's healthcare sector. Preliminary findings indicate that this aim was achieved, as the study identifies significant positive relationships between integrated systems, employee engagement, as a mediator, and organizational outcomes, modirting by factors such as regulatory compliance and institutional scale. These insights pave the way for practical strategies to strengthen healthcare delivery, aligning with national priorities and addressing the sector's pressing challenges.

## 2. MATERIALS AND METHODS

The research design provides a comprehensive framework for exploring the impact of effective integration of governance principles and performance management systems in strategic planning and performance. This structured approach integrates philosophical assumptions, methodological strategies, and data collection techniques to address complex research questions in healthcare management, ensuring alignment with the dynamic needs of the sector under Vision 2030 [1]. By establishing a clear blueprint, the design facilitates hypothesis testing and evidence-based insights, critical for navigating challenges like workforce shortages and rising patient expectations in Saudi healthcare facilities [4]. The design's emphasis on methodological rigor supports the generation of actionable recommendations for healthcare leaders, contributing to improved resource allocation [9].

#### 2.1. Research Approach

The research approach outlines the strategy for addressing its objectives, as it adopts a deductive approach, leveraging existing literature to formulate hypotheses that predict positive relationships between governance principles, performance management systems, and organizational outcomes. By employing quantitative methods alongside exploratory studies, the research assesses the current state of strategic planning and governance adoption in healthcare facilities, using surveys to identify patterns and trends [3]. This hybrid methodology enables a thorough investigation of how integrated systems drive sustainable growth and accountability, offering insights into optimizing decision-making processes in the context of Vision 2030's healthcare reforms.

The research paradigm shapes the foundation of the study, guiding the interpretation of data and methodological choices. This study adopts a positivist paradigm, emphasizing empirical evidence and objective measurement to evaluate the impact of governance and performance management on strategic performance in Saudi healthcare. Positivism is particularly suited for this context, as it supports the use of quantitative data to test hypotheses and aligns with Vision 2030's which focus is on evidence-based decision-making to enhance accountability and efficiency [4]. By employing scientific methods, the study objectively analyzes relationships between variables, such as trust enhancement and risk management, providing robust insights for policymakers aiming to improve healthcare delivery [5].

#### 2.2. Research Methods

Research methods involve specific techniques for data collection and analysis, critical for ensuring the validity of findings in healthcare studies. This study utilizes a quantitative approach, employing questionnaire surveys to gather data on strategic planning and governance practices in Saudi healthcare facilities, complemented by analyses of published reports and direct observations [7]. These methods provide a comprehensive view of how governance and performance management influence organizational outcomes, capturing real-time insights into operational practices [2]. By integrating multiple data sources, the study ensures reliability, addressing the impact of these practices on achieving strategic objectives and fostering sustainable growth in a rapidly evolving healthcare landscape. Causal investigation is employed to establish cause-and-effect relationships between governance principles, performance management systems, and

organizational performance. Using quantitative tools such as surveys and report analyses, the study tests hypotheses to demonstrate direct impacts on strategic planning and sustainability, providing evidence to guide healthcare reforms. This method eliminates alternative explanations, ensuring robust findings that inform policymakers in the context of Saudi healthcare transformation [4].

## 2.3. Type of Data

The study relies on primary organizational data to explore strategic planning, governance, and performance management in Saudi healthcare facilities. Data is collected through surveys, published hospital reports, and observations, ensuring direct insights from the target population without reliance on secondary sources. This multi-faceted approach captures comprehensive information on resource allocation and performance metrics, aligning with the study's objective to assess real-world impacts [7]. By focusing on primary data, the research provides a nuanced understanding of how integrated systems enhance organizational outcomes in the Saudi context [2].

A cross-sectional time horizon is adopted, collecting data at a single point to provide a snapshot of governance and performance management practices in Saudi healthcare. This design is effective for assessing current relationships between variables, particularly in a sector undergoing rapid transformation [3]. The approach, supported by surveys and observations, tests causal links efficiently, reflecting stable organizational practices like governance structures and employee engagement [4]. The cross-sectional approach aligns with the research objectives, which focus on assessing existing relationships between governance, PMS, and organizational performance at a specific point in time. The variables under study are relatively stable and reflect established culture and policies, making a one-time assessment meaningful. Furthermore, practical constraints within Saudi healthcare sector necessitate capturing data during a singular, well-defined period. This ensures that findings accurately reflect the current landscape without being confounded by future regulatory or organizational changes, providing timely and actionable insights for policymakers and administrators.

#### 3. RESULTS.

This study empirically investigates the complex interrelationships between governance structures, performance management systems (PMS), employee engagement, and organizational performance within the healthcare sector of Saudi Arabia. Grounded in the context of the transformative Vision 2030, the research posits that the integration of robust governance and PMS, potentially mediated by employee engagement and moderated by contextual factors like organizational size and local regulations, is critical for enhancing strategic planning and ultimate performance outcomes. This results derived from a rigorous analysis of data collected from 393 healthcare professionals across Saudi Arabia, presents the key findings regarding the measurement model's validity, the testing of direct, mediating, and moderating hypotheses, and the broader implications of these results. The analysis confirms a robust theoretical model where governance and PMS serve as foundational drivers of performance, both directly and through the pivotal mechanism of employee engagement.

# 3.1. Demographic Characteristics and Descriptive Statistics

The sample demographics reveal a diverse, yet representative cohort of healthcare professionals as shown in (**Figure 1**), with 60% (n=236) from the Riyadh Region, 30% (n=117) from the Western Region, and 10% (n=40) from the Southern Region. Job roles were distributed as follows as shown in (**Figure 2**): Physicians (12.5%, n=49), Nurses (10.4%, n=41), Supervisors/Managers/Department Heads (42.5%, n=167), Pharmacists (18.3%, n=72), and Executives/General Managers/ Senior Leaders (16.3%, n=64). Experience levels indicated 41.2% (n=162) with four or more years, 56.7% (n=223) with two to three years, and 1.8% (n=7) with one to two years. Descriptive statistics for the composite constructs, based on the 1-5 scale as it shown in (**Table 1**), demonstrated high mean agreement levels: Organizational Performance (M=3.81, SD=1.03), Governance Structure (M=4.09, SD=1.04), PMS (M=4.11, SD=1.06), Employee Engagement & Commitment (M=4.24, SD=1.02), Organizational Size (M=4.15, SD=1.05), and Local Regulations (M=4.06, SD=1.06). These figures suggest predominantly positive perceptions, with sufficient variance to support factor and path analyses, reflecting consistent views on governance and engagement practices in the Saudi healthcare context.

Figure 1: Demographic distribution

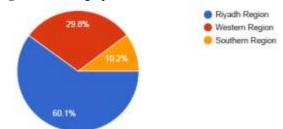
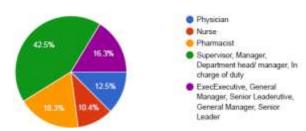


Figure 2: Professions distribution



Construct	Minimum	Maximum	Mean	Std. Deviation
Organizational Performance	1	5	3.806	1.0279
Governance Structure	1	5	4.091	1.0388
Performance Management System	1	5	4.106	1.0576
Employee Engagement & Commitment	1	5	4.238	1.0155
Organizational Size	1	5	4.147	1.0466
Local Regulations	1	5	4.066	1.053
			1	

#### 3.2. Reliability and Validity Testing

Proper reliability and validity testing enhance the credibility of research outcomes. It minimizes measurement error and confirms the scale's alignment with theoretical constructs. Reliability assessments for this study confirmed the robustness of the measurement scales, with Cronbach's alpha values exceeding 0.92 for each construct as it shown in (**Table 2**), Organizational Performance ( $\alpha$ =0.926), Governance Structure ( $\alpha$ =0.941), PMS ( $\alpha$ =0.935), Employee Engagement & Commitment ( $\alpha$ =0.920), Organizational Size ( $\alpha$ =0.935), and Local Regulations ( $\alpha$ =0.944), and an overall scale reliability of  $\alpha$ =0.9335, surpassing the 0.70 threshold for excellence [19].

The validity of the constructs was rigorously assessed. Exploratory Factor Analysis (EFA) indicated superb sampling adequacy (KMO = 0.982) and a significant Bartlett's test of sphericity (p < .001). EFA results generally supported the presumed unidimensionality of most constructs, though Employee Engagement and Organizational Size showed evidence of potential sub-dimensions, a finding consistent with their theoretical complexity. Crucially, interitem correlation matrices for all constructs showed values appropriately within the moderate range of 0.30 to 0.70, confirming that items within each scale were coherently related without being redundant. Confirmatory Factor Analysis (CFA) of the six-factor measurement model as shown in (**Table 3**) yielded a mixed but acceptable fit with the data. While the incremental fit indices (CFI = 0.878, TLI = 0.872) were slightly below the ideal threshold, the absolute fit indices were excellent (SRMR = 0.050, RMSEA = 0.063 with a 90% CI [0.061, 0.065]). This, combined with the strong evidence of reliability and validity from prior tests, was deemed sufficient to proceed with testing the structural model.

Table 2: Constructs reliability

Construct	Cronbach's Alpha
Organizational Performance	0.926
Governance Structure	0.941
Performance Management System	0.935
Employee Engagement & Commitment	0.920
Organizational Size	0.935
Local Regulations	0.944
Overall Reliability	0.9335

Table 3: Fit indices for the six-factor measurement model

Fit Index	Obtained Value	Recommended Threshold for Acceptable Fit	Interpretation
$\chi^2$ (df)	1626 (734)		Significant (*p* < .001), as expected with a large sample size and complex model.
Comparative Fit Index (CFI)	0.878	> 0.90	Below the conventional threshold, indicating room for improvement in incremental fit.
Tucker-Lewis Index (TLI)	0.872	> 0.90	Below the conventional threshold, consistent with the CFI.
Standardized Root Mean Square Residual (SRMR)	0.050	< 0.08	Excellent absolute fit.
Root Mean Square Error of Approximation (RMSEA)	0.063	< 0.08	Acceptable absolute fit.
90% CI for RMSEA	[0.061, 0.065]		The entire confidence interval falls within the acceptable range.

## 3.3. Structural Equation Model (SEM) - Measurement and Structural Results

This section presents the results of the structural equation modeling analysis, which was used to simultaneously evaluate the measurement and structural components of the proposed research model.

#### 3.3.1. Model Estimation and Identification

The hypothesized structural model, incorporating the six latent constructs, was estimated in jamovi using the SEMLj package. The Diagonally Weighted Least Squares (DWLS) estimator with robust standard errors was employed to account for the ordinal nature of the Likert-scale data. The model successfully converged; however, an alert was generated indicating that the covariance matrix of the latent variables was not positive definite. This warning typically suggests extremely high correlations among latent factors, which can inflate fit indices and will be addressed in the interpretation. The overall fit of the structural model was evaluated in (**Table 4**) using a suite of standard goodness-of-fit indices. The results, presented in (**Table 5**), indicate an excellent fit of the data.

**Table 4.:** Structure model tests

Label	$\chi^2$	df	р
User Model	1626	734	<.001
Baseline Model	285417	780	<.001
Scaled User	1908	734	<.001
Scaled Baseline	48276	480	<.001

**Table 5:** Goodness-of-Fit indices for the structural equation model

Fit Index	Fit Index Value	
Robust CFI	0.997	Excellent fit
Robust TLI	0.997	Excellent fit
Scaled SRMR	0.043	Excellent fit
Scaled RMSEA [90% CI]	0.064 [0.060, 0.067]	Acceptable to good fit
$\chi^2$ (df)	1626 (734)	Significant (p < .001), as expected with large N

#### 3.3.2. Latent Variable Covariances and Variances

The estimated variances and covariances at the latent level are reported in (**Table 6**). The findings reveal substantively strong relationships among the core constructs of the model. The superior fit of the structural model (CFI/TLI > 0.99) affirms the validity of the proposed theoretical framework. The model successfully captures the core mechanisms through which governance and PMS influence outcomes, both directly and through employee engagement. A critical consideration emerging from the analysis is the discriminant validity between the latent constructs. The very high latent correlations and the associated "not positive definite" warning signal that these constructs, though theoretically separate, share a significant portion of their variance in this specific context. This is a plausible finding effective governance is often inherently linked to the implementation of robust PMS, and both are foundational to fostering engagement.

**Table 6:** Selected latent variable variances and covariances

Relationship	Estimate
Governance (Variance)	0.664
PMS (Variance)	0.669
Organizational Performance	0.562
Employee Engagement & Commitment	0.715
Governance ↔ PMS	0.666
Governance → Organizational Performance	0.603
PMS → Organizational Performance	0.613
Governance → Employee Engagement & Commitment	0.645
PMS → Employee Engagement & Commitment	0.666
Employee Engagement → Organizational Performance	0.620

## 3.4. Results Of Hypotheses Tests

Direct Effects (H1 - H5): The analysis provided robust support for all five direct-effect hypotheses, as shown in (**Table7**). Both Governance Structure ( $\beta$  = 0.603, p < .001) and PMS ( $\beta$  = 0.613, p < .001) exhibited significant, strong positive direct effects on Organizational Performance, supporting H1 and H2. Furthermore, both independent variables were found to be powerful antecedents of Employee Engagement & Commitment (Governance:  $\beta$  = 0.795, p < .001; PMS:  $\beta$  = 0.818, p < .001), confirming H4 and H5. Finally, Employee Engagement itself had a significant and substantial direct effect on Organizational Performance ( $\beta$  = 0.620, p < .001), supporting H3. These results unequivocally establish that effective governance and PMS are not only directly beneficial for performance but are also instrumental in fostering a highly engaged workforce, which itself is a critical driver of performance.

Mediating Effects (H6 - H7): The study proposed that Employee Engagement & Commitment acts as a key mediating mechanism. Bootstrapping analysis with 5,000 samples confirmed this. The indirect effect of Governance on Performance through Engagement was significant ( $\beta = 0.344$ , p < .001), supporting H6. Similarly, the indirect effect of PMS on Performance through Engagement was also significant ( $\beta = 0.292$ , p < .001), supporting H7. In both cases, the direct effects remained significant even after accounting for the mediation, indicating a model of partial mediation. This signifies that while a substantial portion of the influence of Governance and PMS on Performance is channeled through increasing employee engagement, these systems also improve organizational outcomes through other direct, unmeasured pathways.

Moderating Effects (H8 - H9): The research examined the contextual boundaries of these relationships through moderation analysis. Hypothesis H8, which proposed that Organizational Size moderates the relationships, was partially supported. The interaction effect between PMS and Size was significant ( $\beta$  = 0.118, p = .040), indicating that the positive effect of PMS on Organizational Performance is strengthened in larger healthcare organizations. However, the interaction between Governance and Size was not significant (p = .259), suggesting that the benefits of good governance are consistent across organizations of different sizes. Conversely, Hypothesis H9 was not supported. The analysis found no significant interaction effects between Local Regulations and either Governance (p = .943) or PMS (p = .289). This indicates that the influence of these core practices on organizational performance is robust and does not vary systematically based on the strictness of the local regulatory environment.

**Table 7:** Summary of hypotheses testing

Hypothesis	Proposition	Supported?	Key Statistic	Note
H1	Governance has a positive direct effect on Organizational Performance.	Yes	$\beta =, p < .001$	Confirmed as a direct effect.
Н2	Performance Management Systems (PMS) have a positive direct effect on Organizational Performance.	Yes	$\beta =, p < .001$	Confirmed as a direct effect.
Н3	Governance has a positive direct effect on Employee Engagement.	Yes	$\beta = 0.795, p < .001$	Confirmed; part of mediation path.
Н4	Performance Management Systems (PMS) have a positive direct effect on Employee Engagement.	Yes	$\beta = 0.818, p < .001$	Confirmed; part of mediation path.
Н5	Employee Engagement has a positive direct effect on Organizational Performance.	Yes	$\beta = 0.432, p < .001$	Confirmed; part of mediation path.
Н6	Employee Engagement mediates the relationship between Governance and Performance.	Yes	Indirect Effect = 0.344, <i>p</i> < .001	Partial mediation established.
Н7	Employee Engagement mediates the relationship between PMS and Performance.	Yes	Indirect Effect = 0.292, <i>p</i> < .001	Partial mediation established.
Н8	Organizational Size moderates the Gov→Perf and PMS→Perf relationships.	Partially	PMS×Size: $\beta = 0.118, p = .040$	Supported for <b>PMS only</b> . Not supported for Governance.
Н9	Local Regulations moderate the Gov→Perf and PMS→Perf relationships.	No	Gov×Regs: $p = .943$ ; PMS×Regs: $p = .289$	No significant moderating effects found.

#### 4. DISCUSSION

This study empirically investigates the intricate mechanisms through which governance structures and performance management systems (PMS) drive organizational performance. The findings provide robust, evidence-based insights that not only confirm the hypothesized relationships but also illuminate the nuanced pathways and contextual boundaries of these effects. The significance of these results is multi-faceted. First, they empirically validate a comprehensive theoretical model within a critical yet understudied context, demonstrating that the integration of governance and PMS serves as a powerful dual engine for enhancing performance. The strong, significant direct effects of both governance (H1) and PMS (H2) on organizational performance underscore that these are not merely supportive functions but are foundational pillars directly linked to tangible outcomes such as operational efficiency, resource optimization, and ultimately, improved patient care. This finding is particularly benefits healthcare leaders and policymakers under Vision 2030, as it provides concrete evidence that investments in strengthening governance frameworks and implementing PMS are not administrative overheads, but essential strategic imperatives that yield direct performance dividends.

Beyond the direct effects, the study's most profound contribution lies in unpacking the how—the mediating mechanism. The confirmation of H6 and H7, establishing employee engagement and commitment as a significant partial mediator, shifts the discourse from a purely structural perspective to a human-centric one. The results compellingly argue that the value of robust governance and PMS is not solely in their design but in their capacity to motivate, align, and empower the workforce. Governance frameworks that clarify accountability and PMS that set clear expectations appear to create an environment of psychological safety and purpose, which in turn fuels the discretionary effort and commitment that are the lifeblood of healthcare delivery. This finding resonates strongly with global healthcare management literature, which increasingly identifies staff engagement as a critical bottleneck or catalyst for quality and performance. However, the partial nature of the mediation is equally telling; it indicates that while engaging employees is a powerful pathway, governance and PMS also enhance performance through other direct channels, such as streamlining decision-making processes, reducing waste, and ensuring regulatory compliance. This suggests a need for a balanced leadership approach that simultaneously optimizes systems and nurtures human capital.

The analysis of contextual moderators further enriches the discussion by delineating the boundaries of these relationships, offering crucial insights for tailored implementation strategies. The partial support for H8 reveals an important contingency: the effectiveness of PMS is significantly amplified in larger organizations. This is a logical finding, as larger entities typically face greater complexities in coordination, communication, and goal alignment. A sophisticated PMS provides the necessary tools to create coherence, track diverse performance metrics, and ensure strategic alignment across numerous departments, thereby unlocking value that might be less critical in a smaller, more agile setting. Conversely, the finding that organizational size does not moderate the governance-performance relationship (H8) is equally significant. It suggests that the benefits of clear governance—such as defined roles, accountability, and ethical oversight are universally essential, providing a stabilizing and performance-enhancing foundation regardless of an organization's scale. This universal applicability makes a strong case for prioritizing governance reforms across the entire healthcare spectrum, from small clinics to large medical cities. Perhaps the most striking contextual finding is the lack of support for H9, indicating that local regulations did not moderate the core relationships in the model. This non-finding carries substantial implications. It suggests that the positive impact of sound governance and effective PMS on performance is a fundamental management principle that holds true irrespective of the stringency of the external regulatory environment. In the Saudi context, this implies that healthcare facilities should not view CBAHI accreditation or MOH regulations as an end in themselves but as a baseline. Excellence in performance is driven by internally motivated, well-designed management practices that go beyond mere compliance. Organizations that proactively implement superior governance and PMS will likely outperform their peers, not because regulations force them to, but because these systems inherently create efficiency, quality, and engagement. This positions internal management innovation as a key differentiator for achieving competitive advantage and superior outcomes within the national framework.

In a broader context, this research contributes significantly to theoretical discourses in healthcare administration. It successfully integrates principles from agency theory, resource-dependency theory, and the balanced scorecard into a unified model, demonstrating their interconnectedness in a real-world setting. The very high latent correlations, while posing a methodological note of caution, are themselves a substantive finding; they reflect the reality that in high-performing organizations, good governance, performance management, and employee engagement are deeply intertwined and mutually reinforcing phenomena. This study moves past examining these constructs in isolation, offering a more holistic and realistic view of organizational dynamics. For the global audience, this research provides a validated model that can be tested in other healthcare systems undergoing reform, particularly in Gulf Cooperation Council (GCC) or emerging economies.

However, acknowledging the cross-sectional nature of the data, future investigations could employ longitudinal designs to track causal dynamics over time, or comparative analyses with private versus public facilities to refine these insights. For the Saudi context, the study delivers a timely, evidence-based blueprint for action, affirming that the strategic integration of governance, PMS, and employee engagement is not just an academic concept but a practical pathway to achieving the ambitious and vital goals of Vision 2030.

#### 5. CONCLUSION

The findings of this study illuminate the transformative potential of integrating robust governance structures and performance management systems (PMS) within Saudi healthcare sector, offering a compelling case for their strategic alignment to drive organizational excellence. The significant positive relationships identified between governance, PMS, and organizational performance, mediated by employee engagement, underscore the critical interplay between structural accountability and human-centric motivation in achieving sustainable healthcare outcomes. This integration fosters an environment where transparent decision-making and continuous performance monitoring not only enhance operational efficiency but also empower healthcare professionals to deliver superior patient care, aligning seamlessly with the ambitious objectives of Saudi Arabia's Vision 2030. The partial mediation by employee engagement highlights a deeper insight: fostering a committed workforce is not merely a byproduct of effective systems but a deliberate mechanism through which governance and PMS amplify their impact, transforming organizational culture into one that prioritizes both accountability and empowerment. The partial moderation by organizational size further suggests that while larger institutions may leverage PMS more effectively due to their scale, the universal applicability of governance principles across all sizes points to their foundational role in ensuring resilience and adaptability in a rapidly evolving sector. The absence of significant moderation by local regulations, meanwhile, implies that these frameworks are robust enough to thrive independently of stringent compliance environments, advocating for a proactive adoption of best practices that transcend regulatory mandates. In a broader context, these insights challenge traditional healthcare management paradigms by emphasizing the synergy of governance and engagement as a catalyst for systemic reform, offering a model that could inspire similar transformations in other emerging healthcare markets. This research advocates for a strategic reorientation toward integrated systems that prioritize human capital alongside technological advancements, positioning Saudi Arabia's healthcare sector as a potential global exemplar of innovation and efficiency. Future explorations could delve into longitudinal impacts or cross-national comparisons to further refine these strategies, ensuring that the sector continues to evolve in alignment with global standards while addressing local nuances. Ultimately, this study positions integrated governance and PMS as not just administrative tools but as dynamic enablers of a healthcare ecosystem that is responsive, sustainable, and deeply attuned to the needs of its stakeholders.

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# 7. REFERENCES

- [1] Alasiri, A. A., & Mohammed, V. (2022). Healthcare Transformation in Saudi Arabia: An Overview Since the Launch of Vision 2030. *Health Services Insights*, 15(1), 117863292211212. https://doi.org/10.1177/1178632922112124
- [2] Alharbi, & F, M. (2018). An investigation of the Saudi healthcare system's readiness for change in the light of Vision 2030: The role of transformational leadership style. *Journal of Health Sciences*, 6(1), 45–53.
- [3] Alotaibi, A, Saleh, M, W., Abdulbaqi, H, A., & Alosaimi. (2022). Setting the health research priority agenda for the Ministry of Health, Kingdom of Saudi Arabia 2020–2025. *Journal of Epidemiology and Global Health*, 12(4), 413–429. https://doi.org/10.1007/s44197-022-00061-5
- [4] Althuwaybi, M. A., Alshammari, T. M., Shabana Tharkar, Alodhayani, A. A., Al-Muammar, M., Mahmoud Abulmeaty, & Almutari, K. M. (2025). National Healthcare Transformation Program in Saudi Arabia: Awareness of the New Models of Care Among Health Professionals. *Risk Management and Healthcare Policy*, *Volume 18*, 2259–2274. https://doi.org/10.2147/rmhp.s509155
- [5] Damschroder, L. J., Reardon, C. M., Widerquist, M. A. O., & Lowery, J. (2022). The updated Consolidated Framework for Implementation Research based on user feedback. *Implementation Science*, 17(1), 1–16. https://doi.org/10.1186/s13012-022-01245-0
- [6] Dicuonzo, G., Galeone, G., Shini, M., & Massari, A. (2022). Towards the Use of Big Data in Healthcare: A Literature Review. *Healthcare*, 10(7), 1232. https://doi.org/10.3390/healthcare10071232
- [7] E. S, A., K. E, A., & D. E, E. (2021). Data collection techniques in organizational research. *International Journal of Research and Innovation in Social Science*, *5*(9), 563–571. https://www.ahrq.gov/research/data/primary-data.html
- [8] Endalamaw, A., Khatri, R. B., Mengistu, T. S., Erku, D., Wolka, E., Zewdie, A., & Assefa, Y. (2024). A scoping review of continuous quality improvement in healthcare system: Conceptualization, models and tools, barriers and

- facilitators, and impact. BioMed Central Health Services Research, 24(1), 487. https://doi.org/10.1186/s12913-024-10828-0
- [9] Fuertes, G. (2020). Conceptual Framework for the Strategic management: a Literature Review—descriptive. *Journal of Engineering*, 2020(6253013), 1–21. https://doi.org/10.1155/2020/6253013
- [10] Gebremedhin, M., Gebrewahd, E., & Stafford, L. K. (2022). Validity and reliability study of clinician attitude towards rural health extension program in Ethiopia: exploratory and confirmatory factor analysis. *BMC Health Services Research*, 22(1). https://doi.org/10.1186/s12913-022-08470-9
- [11] Gulin Gedik, Jalal, A., Gohar Wajid, Awad Mataria, Hajjeh, R., & Al-Mandhari, A. (2024). Health workforce in the Eastern Mediterranean Region: From COVID-19 lessons to actions. *The International Journal of Health Planning and Management*. https://doi.org/10.1002/hpm.3756
- [12] Hala Muaddi, Lovrics, O., Walker, R. J., Mestral, C. de, Nathens, A., Stukel, T. A., & Karanicolas, P. J. (2024). Research methodologies for eliciting patients' preferences in invasive procedures: a scoping review. *Langenbeck S Archives of Surgery*, 409(1). https://doi.org/10.1007/s00423-024-03520-8
- [13] Lorenzini, E., Oelke, N. D., & Marck, P. B. (2021). Safety culture in healthcare: mixed method study. *Journal of Health Organization and Management*, *ahead-of-print*(ahead-of-print). https://doi.org/10.1108/jhom-04-2020-0110
- [14] Ministry of Finance. (2023). *Budget Performance Reports for 2023*. Mof.gov.sa. https://www.mof.gov.sa/en/financialreport/2023/Pages/default.aspx
- [15] OECD. (2023). Health at a Glance 2023: OECD Indicators. In *Health at a glance*. OECD Publishing. https://doi.org/10.1787/7a7afb35-en
- [16] Petersen, E. E., Lyng, H. B., Ree, E., & Wiig, S. (2021). Relationship between management and resilience in healthcare: a study protocol for a systematic review. *BMJ Open*, 11(7), e047855. https://doi.org/10.1136/bmjopen-2020-047855
- [17] Rousseaut, D. M., & Have, S. ten. (2022). Evidence-based Change Management. *Organizational Dynamics*, *51*(3), 1–13. ScienceDirect. https://doi.org/10.1016/j.orgdyn.2022.100899
- [18] Shi, J., & Norgeot, B. (2022). Learning Causal Effects from Observational Data in Healthcare: A Review and Summary. *Frontiers in Medicine*, 9. https://doi.org/10.3389/fmed.2022.864882
- [19] Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management*, 5(2), 18–27. https://doi.org/10.2139/ssrn.3205035