JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue

JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

Evaluating the Role of Governance in Enhancing Efficiency and Resilience in Oman's Public Administration: A Mixed Methods Study

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Abstract: Following the COVID-19 pandemic era, governments around the world undertook significant restructuring of their public sectors, guided by governance principles aimed at mitigating the crisis's socio-economic impacts. Within this context, the present study explores the role of governance in shaping public sector performance in the Sultanate of Oman, with a particular emphasis on reform initiatives aligned with Oman Vision 2040. The research is centered on two key questions: how governance practices influence the efficiency of public sector performance, and how digital transformation facilitates the delivery of more efficient government services. These inquiries contribute to a broader understanding of the evolving relationship between governance mechanisms and public administration, particularly in the context of post-pandemic recovery and modernization efforts. The findings aim to provide insights into how strategic governance reforms and the integration of digital technologies can enhance the effectiveness, transparency, and responsiveness of public institutions in Oman.

Despite increasing interest in governance practices, empirical studies assessing their applicability remain scarce, particularly from the perspective of Omani public sector employee's voices that are underrepresented in existing scholarly discussions. To bridge this gap, the study employed a mixed-methods grounded theory approach aimed at developing a conceptual model to guide both policymakers and institutional stakeholders. The research design integrated qualitative and quantitative methods to capture employee insights. The qualitative strand followed Strauss and Corbin's (1990) grounded theory methodology, involving theoretical sampling, twenty in-depth interviews, and the examination of institutional documents. The quantitative phase entailed a structured survey administered to 390 public employees across various institutions. Data were analyzed using SPSS software, and methodological triangulation was applied to enhance analytical robustness and reduce bias.

Findings emphasized the pivotal role of staff perspectives in driving institutional adaptability, supporting digital transformation, and improving performance evaluation mechanisms through effective governance. While participants acknowledged the importance of reform initiatives, they also expressed concerns over practical implementation and capacity-building efforts. Core principles including transparency, accountability, and inclusive governance emerged as essential elements for enhancing institutional effectiveness. Furthermore, Oman's public sector transformation mirrored broader global patterns, particularly in areas related to digital governance and administrative modernization.

The research contributes to the field of public administration by integrating interdisciplinary perspectives and utilizing the conditional/consequential matrix within a newly developed theoretical model. It offers pragmatic policy recommendations and advocates for the adoption of longitudinal research approaches to trace reform trajectories across diverse administrative context.

Index Terms **-** Digital transformation, Change management, Efficiency, Governance, Oman Vision 2040.

The COVID-19 pandemic compelled governments worldwide to implement significant reforms in public administration to mitigate and manage its adverse impacts (Organization for Economic Co-operation and Development [OECD], 2023). These reforms also aimed to enhance the efficiency and adaptability of public institutions in responding to sudden disruptions, both at the national and organizational levels (OECD, 2023). Assessing public sector performance, therefore, necessitates more than an examination of immediate outcomes and financial expenditures; it also requires evaluating the sector's capacity for autonomous and resilient operation during times of crisis. In essence, short-term fiscal efficiency should not overshadow the imperative of long-term resilience and institutional sustainability (de Beer, P. T., & Keune, M., 2022).

The Sultanate of Oman, like other nations, responded promptly to the COVID-19 crisis by implementing Oman Vision 2040 for its Administrative Apparatus in early 2020. Oman Vision 2040, a national strategic framework designed to reform public sector operations and elevate institutional performance. The Vision places strong emphasis on administrative efficiency, aligning reform objectives with international governance norms. It promotes principles such as; innovation, accountability, and transparency, seeking to harmonize domestic practices with global standards. To improve public service delivery and eliminate bureaucratic delays, the government introduced digital solutions. As part of this digital transition, all public institutions were

required to integrate into Ejada, a unified digital platform. The move marked a shift away from conventional processes toward streamlined, technology driven operations.

To add, Oman Vision 2040 is structured around four strategic pillars: Social Development, Economic Prosperity through Diversification, Institutional Governance and Oversight, and Environmental Continuity. It offers a comprehensive national roadmap to steer development policies and reform initiatives up to the year 2040. Central to the Vision is the institutionalization of governance principles to ensure effective resource utilization and efficient project delivery. The plan aspires to cultivate a productive, flexible, and outcome-oriented public sector reflecting international expectations for institutional resilience and innovation. The integration of e-government systems has also accelerated service processes, improved decision-making through data use, and enhanced administrative responsiveness. Public sector institutions can allocate resources strategically and meet citizen needs more efficiently by leveraging automation and analytics. The digital evolution also fosters a results-driven culture focused on operational excellence.

Human capital development is another critical area of the 2040 Vision focus. It highlights the importance of cultivating leadership, offering ongoing professional training, and implementing targeted capacity building strategies. These initiatives aim to prepare public employees for the dynamic demands of governance. Strategic workforce planning also plays a key role in reinforcing institutional effectiveness, minimizing inefficiencies, and promoting merit-based performance. Furthermore, the Vision advocates for collaborative governance by strengthening partnerships between government institutions and the private sector. These synergies aim to accelerate innovation, improve service efficiency, and unlock national development potential. Moreover, it also calls for regulatory modernization and administrative restructuring to support institutional adaptability.

Thus, given the scarcity of empirical research on governance within Oman, the study employed a mixed-methods approach grounded in primary data. The qualitative phase involved 20 semi-structured interviews with frontline and mid-level government personnel to explore their perspectives on governance reforms in line with Vision 2040. To enhance methodological rigor, the study included a complementary quantitative survey administered to 390 employees from diverse public institutions. The dual method approach enabled cross level comparisons and deeper analysis of reform perceptions. The study constructed a theory informed framework based on employee insights and institutional realities. Additionally, it contextualized findings within global reform experiences, allowing for a comparative assessment of common barriers and country specific opportunities. Drawing from this, the study presents evidence based recommendations to enhance governance practices, improving institutional outcomes, and fostering a more adaptive and sustainable public sector in Oman.

2. RESEARCH QUESTIONS

There is few scholarly literature addressing integrated governance approaches within Oman's public sector. Most available sources comprise limited national reports, studies and brief analyses published post-2020. Although the global public sector has undergone significant transformations following the COVID-19 pandemic, its specific impact on governance reform in Oman remains underexplored. Accordingly, this study seeks to address the following research questions:

1. How do governance practices influence efficiency of public sector performance?
2. How does digital transformation facilitate more efficient government services?

3. SIGNIFICANCE OF THE STUDY

The research holds substantial academic and practical relevance. It offers valuable insights for scholars and decision-makers alike by contributing empirical knowledge to a field that has received limited attention in the Omani context. Importantly, the study equips policymakers with an in-depth understanding of how governance frameworks can be leveraged to improve institutional performance across public agencies. It also identifies critical success factors necessary for implementing governance reforms effectively. Moreover, the study provides evidence-based recommendations aimed at enhancing the public sector's institutional capacity to fulfill the objectives outlined in Oman Vision 2040 and support long-term national development. It highlights the strategic importance of administrative leadership in directing sustainable transformation efforts across multiple dimensions of state planning. Ultimately, this work presents practical strategies that may facilitate the realization of governance outcomes aligned with national priorities, thereby reinforcing institutional efficiency and promoting sustainable growth.

4. RESEARCH OBJECTIVES

The primary objective of the study is to evaluate the prospective impact of Oman Vision 2040 on public sector governance and administrative configurations. To achieve this overarching aim, the research is guided by several specific objectives. First, it seeks to analyze public employees' perceptions concerning the legitimacy and effectiveness of reform initiatives aimed at enhancing institutional efficiency in accordance with the national Vision. Second, the study aims to assess the role of governance frameworks in influencing organizational performance and productivity within the public sector. Finally, it endeavors to provide evidence based recommendations for aligning governance mechanisms with the dynamic demands of public sector transformation.

5. LITERATURE REVIEW

Oman Vision 2040 has emerged as a central priority for Omani society, reflecting a collective national commitment to long-term development goals. Ensuring the effective implementation of the 2040 Vision particularly in terms of delivering tangible outcomes that enhance citizens' well-being is equally as vital as upholding the rule of law and ensuring the provision of essential emergency services.

5.1 Key concepts

5.1.1 Definition of Efficiency

Public administration has focused on efficiency to achieve better public services. Consequently, efficiency remains a central theme in examining public administration and government operations. The framework is rooted in Woodrow Wilson's influential 1887 essay, which advocated for a professionalized approach to the field. Efficiency is commonly defined in technical terms as the ratio of output to input (Manzoor, A., 2014) or as: the relationship between one or more inputs and one or more outputs. Other sources define efficiency as the ability to execute the same plan with fewer resources, to perform tasks with existing resources, or to accomplish more with fewer resources. Manzoor, A. (2014) defines efficiency in his SAGE Open article "A Look at Efficiency in Public Administration: Past and Future" as the accomplishment of tasks by public departments to meet goals related to public goods and services. Similarly, Deva, S. (1985) defines efficiency as the output per unit of input. Moreover, efficiency encompasses minimizing waste, redistributing resources, and optimizing technology use. The Canadian Audit & Accountability Foundation (2013) describes efficiency as maximizing an organization's available

resources to achieve the highest quality of outputs and capabilities. The concept reflects how well a system or process reduces waste, time, and effort, all while maximizing desired outcomes (Chervenkova, M., 2023).

5.1.2 Governance and Public Sector Efficiency

Hwang, J., & Akdede, S. H., (2011) assert that governance indicators are crucial for assessing public sector performance. These measures are essential not only for policymakers but also for society at large. According to (Negri, C., & Dincă, G., 2023) reform initiatives should focus on strengthening government institutions both technically and operationally. The emergence of the New Public Management movement has intensified the emphasis on treating citizens as clients, reflecting a significant advancement in contemporary public administration within an increasingly dynamic environment (Vigoda, E., 2003). A governance framework provides a structured approach that allows both senior executives and operational personnel to clearly define, monitor, and align expectations, objectives, and performance. Additionally, it facilitates effective communication within the organization (Smith, C. L., & Brooks, D. J., 2013).

5.1.3 Digital Transformation, Innovation and Public Sector Efficiency

Digital transformation involves the integration of digital technologies within organizations (Tang, D., 2021). In public sector, the process entails adopting technological solutions to reduce costs and improve access to information and services (Ayoko, O. B., 2021). Additionally, digital transformation requires restructuring organizational frameworks to create value through technology. A clear strategy targeting specific areas is crucial for organizations undergoing this transition (McKinsey & Company, 2024). Moreover, digital transformation strengthens transparency and accountability by increasing public access to information. When citizens can track government activities and outcomes, trust grows, fostering civic engagement (Jang, H., & Han, S. H., 2021). In the digital economy, innovators must thoroughly understand platform dynamics and ecosystems to effectively harness technological advancements (Song et al., 2023).

5.1.4 Change Management in Public Sector

Adaptation is critical for an organization's long term viability, both in strategic planning and operational effectiveness (Mustapha et al., 2004). In public sector, particularly during crises such as; economic downturns, the ability to adapt is fundamental to progress. Consequently, leadership plays a vital role in facilitating change. However, leaders are often the most resistant to change, making them difficult to persuade of its necessity. Two primary factors influence employees' willingness to embrace change: the extent of information shared about the transition and their level of involvement in the process.

5.2 Principles of Good Governance in the Public Sector

Mangham (2024) emphasizes that sound public governance rests upon core principles articulated by the United Nations. These include; competent leadership, legal accountability, and strict adherence to established legal norms. Furthermore, transparency plays a vital role in preventing institutional crises, while integrity and stakeholder involvement are essential for fostering public trust. Governments must also demonstrate responsiveness by continually evaluating risks and maintaining flexibility when addressing emerging challenges. In addition, adaptability is crucial in modifying strategies, policies, or operations in response to shifting circumstances. Decision-making should incorporate stakeholder input, yet remain compliant with legal and ethical standards. Moreover, embracing diversity not only encourages innovation but also enhances equitable and inclusive governance. Finally, ensuring efficiency and effectiveness supports sustainability, reduces resource waste, and promotes long-term public value. Collectively, these principles underpin trust, institutional resilience, and the effective functioning of public administration amid uncertainty (Mangham, 2024).

To add, Lopes, A. V., & Farias, J. S. (2020) explored the function of governance in promoting collaborative innovation within public entities. Their systematic analysis of 36 empirical studies revealed that effective collaboration depends on establishing trust, utilizing digital tools, and fostering leadership committed to clear goals. Notably, while many studies emphasize innovation creation, further inquiry is required into governance practices that facilitate implementation.

Mudey, M. H., & Arshad, R. (2024) investigated governance challenges, identifying corruption as a primary impediment. Contributing factors include institutional weakness, socio-cultural dynamics, limited accountability, and insufficient political will. Although anti-corruption mechanisms have been introduced such as; the National Anti-Corruption Commission their impact is hindered by external pressures and internal deficiencies. Multilevel governance enables cooperation among national, regional, and local authorities. When these layers align, policy outcomes improve across regions (OECD, 2025). Decentralization and private sector collaboration are further endorsed by the World Bank framework, which views these strategies as means to achieve transparency, accountability, and efficiency (Kulshreshtha, 2008).

Klijn et al. (2015) described governance networks as; frameworks used to manage intricate public sector issues. The networks consist of interdependent actors with divergent interests, necessitating coordinated efforts to navigate strategic and institutional complexity. Governments are redefining their relationships with the public, private, and community sectors in response to global shifts. According to Edwards (2002), this redefinition is necessary to address uncertain future challenges. Bevir et al. (2003) further emphasized that evolving governance models such as; New Public Management and state decentralization highlight how globalization is transforming the public domain.

5.3 Digital Transformation and Governance

Digital innovation plays a pivotal role in advancing contemporary public administration. According to Roseth et al. (2021), many employees struggled to complete vital responsibilities at the height of the pandemic challenges that digital governance could have mitigated. In the same vein, Di Giulio and Vecchi (2021) emphasize that digital transformation redefines administrative practices, streamlines operations, and fosters cohesive policy development. Correspondingly, the OECD (2025) highlights the significance of digital tools in promoting openness, strengthening citizen participation, and reinforcing institutional credibility.

6. CONCEPTUAL FRAMEWORK

A conceptual framework provides the analytical foundation for articulating the theoretical perspective through which research is both conducted and interpreted. In grounded theory research, the framework is intentionally flexible, emphasizing sensitizing concepts rather than predetermined hypotheses. The methodological orientation allows for the inductive generation of theory, grounded in the lived experiences and contextual realities of participants. In the present study, the conceptual framework is constructed to examine the alignment between public sector governance practices in Oman and the strategic priorities set forth in

Oman Vision 2040. It further explores the ways in which governance mechanisms influence the efficiency, responsiveness, and overall quality of public service delivery.

A key focus of the framework involves investigating public employees' perceptions of reform efforts and their views on institutional strategies aimed at enhancing administrative performance. Moreover, the study considers how the intersection of governance structures and digital innovation contributes to the transformation of public administration in terms of adaptability and service responsiveness. The framework guiding this study is rooted in the methodological principles advanced by Strauss and Corbin's grounded theory, which emphasizes systematic theory construction through iterative coding, theoretical sampling, and constant comparative analysis. To ensure methodological rigor and analytical depth, the research adopts a mixed-methods grounded theory design, integrating both qualitative and quantitative components. Qualitative data are collected through semi-structured interviews and focus group discussions, capturing nuanced perspectives from public sector employees. Quantitative insights are obtained through structured surveys, offering broader empirical validation. The conceptual framework supports a multidimensional exploration of reform dynamics, revealing both the challenges and opportunities associated with strengthening governance within the Omani public sector by synthesizing these data sources.

Table 3.1: The Conceptual Framework of the Study

Steps	Description
Main Research Focus	Omani public sector reform for efficient realization of the Oman 2040 Vision.
Research Main Objectives	To investigate public sector employees prospective about public sector reform for efficient realization of the Oman Vision 2040.
Research Key Questions	1. How do governance practices influence the efficiency of public sector performance? 2. How does digital transformation facilitate more efficient government services?
Research key concepts based on the mixed methods analysis	Governance, Digital transformation, Efficiency, Change management
Grounded Theory Process	Utilization of Mixed Methods Grounded Approach based on Strauss and Corbin (1990) approach. Other qualitative approaches also were used in the discussion to point out to some Strauss and Corbin approach.
Input Sources	Qualitative Data: 20 Focus Groups interviewees. Quantitative Data: Structured Surveys distributed to 390 government sector employees
Data Collection	Qualitative: In-depth focus group interviews, and semi structure interviews. Coding and Categorization (open, axial, selective codes), based on Strauss and Corbin (1990) grounded theory approach. Quantitative: A survey, followed by statistical analysis using (SPSS).
Data Analysis	Qualitative: Initial Coding (identifying key themes and concepts) based on Strauss and Corbin grounded theory approach. Quantitative: Statistical Analysis using SPSS using Likert scale.
Integration of Data	Constant Comparison Method: Compare qualitative codes with quantitative findings, refine categories. Thematic Analysis: Identify patterns across data sets and develop core themes. Determining the cause-and-effect relationships. Compare the results with the qualitative results.
Theory Development	Emerging Theory: Synthesize data into public sector reform theories with existing knowledge. Validation through triangulation: via quantitative analysis and second sources data.
Theoretical Model	Final Model: Present the grounded theory with key constructs and relationships

7. RESEARCH METHODOLOGY

Grounded theory is a structured qualitative research methodology designed to develop theoretical concepts directly from empirical data (Cullen, M. M., & Brennan, N. M., 2021). Originally introduced by Glaser and Strauss in 1967, it provides a foundational approach for investigating complex social phenomena through data-driven inquiry. Glaser and Strauss established grounded theory as an inductive method focused on identifying underlying social processes. Unlike traditional approaches that begin with hypotheses, grounded theory emphasizes discovery. It is particularly well-suited to research that explores dynamic systems, social interactions, or lived experiences (Lingard et al., 2008).

The methodology offers both flexibility and analytical rigor, making it ideal for studying context-specific or understudied areas. In this study, a mixed-methods grounded theory design underpins the research approach. The methodological framework enables a comprehensive investigation of public sector reforms associated with Oman Vision 2040. The qualitative phase includes focused group discussions with 20 government officials, capturing in-depth experiential data. To complement these insights, a structured survey was distributed to 390 public sector employees, offering a broader quantitative perspective.

Qualitative data were analyzed using thematic coding to identify recurring patterns, while SPSS software was employed to process the quantitative data and detect statistical trends. The integrated strategy ensures greater analytical depth and enhances the validity of the emerging theoretical model. The study aims to develop an explanatory framework that reveals how principles of efficiency and adaptability can be embedded within Oman's evolving governance structures. Based on empirical evidence, the research concludes with targeted policy recommendations. These are intended to assist public institutions in meeting the strategic

objectives outlined in Oman Vision 2040, particularly by strengthening institutional responsiveness and improving operational performance.

7.1 Research Design

The study adopted a mixed-methods approach that integrated both qualitative and quantitative strategies for data collection and analysis. The researcher employed an exploratory sequential design to investigate the perceptions of Omani public sector employees regarding administrative reform. The process began with a qualitative phase, which informed the development of the subsequent quantitative stage to confirm and expand upon the initial findings.

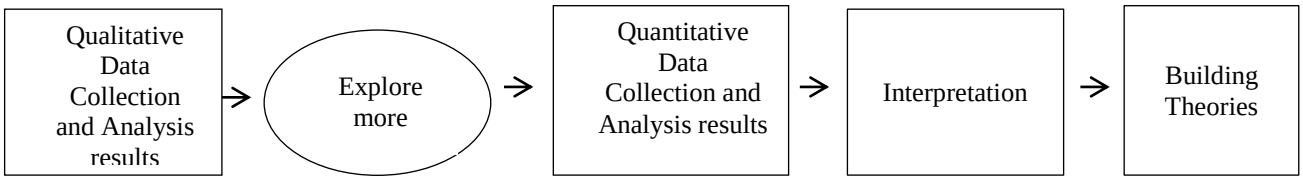


Figure 7.1: Exploratory Sequential Design Method

Source: Adapted from: Creswell, J. W. (2014), Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: Sage Publications. **Copyright:** Sage Publications.

7.1.1 Qualitative Data Collection Procedures

This study employed a qualitative-driven mixed-methods strategy, with the primary mode of data collection involving 20 semi-structured, in-depth interviews. Theinterviews engaged senior policymakers, sector experts, and frontline employees directly involved in implementing public sector reforms in line with Oman Vision 2040. To add, the interview protocol was developed using insights from the literature review and consultations with experts in administrative reform. Data collection took place through multiple channels, including face-to-face sessions, audio calls, email exchanges, and WhatsApp communications. Data collection and analysis proceeded simultaneously, allowing for ongoing refinement of themes and theoretical constructs.

Participants were selected through purposive sampling based on their proximity to decision-making processes and their involvement in Oman Vision 2040. The group included both male and female professionals with academic qualifications ranging from bachelors to doctoral degrees. The sample consisted of 20 individuals from 10 of Oman's 11 governorates. Among them, 13 were male and 7 were female. Participants represented a diverse age range, with the majority aged between 36 and 45. Several were over 46, indicating a mix of mid-career professionals and senior officials. Educational attainment was notably high, with many holding masters and doctoral qualifications. Those with undergraduate degrees contributed meaningfully, drawing from substantial professional experience. Participants' work experience ranged from 6 years to over two decades, equipping them with extensive sector knowledge. Many held leadership roles such as department heads, directors, and senior managers. Their positions allowed them to provide both strategic and operational perspectives.

A multimodal approach was adopted to accommodate participant preferences and logistical constraints. Senior officials, who often addressed complex reform matters, generally preferred face-to-face interviews. Others opted for phone calls or digital correspondence due to schedule limitations. Online interviews were used where necessary, enabling participation from remote locations. The methodological flexibility ensured accessibility while maintaining data richness and depth. The interviews were Face-to-face sessions, typically lasted between two and two and a half hours, while phone interviews were shorter. All interviews were audio recorded using two mobile devices with prior consent. One participant provided written responses via email. A trained moderator facilitated group discussions.

The semi-structured interview guide focused on key reform topics, such as; institutional challenges, capacity-building strategies, and innovation in public service delivery. The discussions were transcribed and coded for in-depth thematic analysis. The researcher adhered strictly to ethical standards, ensuring informed consent, participant anonymity, and data confidentiality throughout the research process. Despite the robust research design, the data collection process was not without challenges. A key issue was the language barrier, which necessitated conducting some interviews in Arabic. This required additional time for accurate translation into English.

However, allowing participants to communicate in their preferred language encouraged openness and provided deeper insights. Another obstacle involved the reluctance of certain institutions to participate in interviews. To address this, the researcher incorporated publicly available data from institutional websites and national and international databases. Selecting the most appropriate mode of communication also posed initial difficulties, resolved by combining audio recordings with written documentation to ensure reliability and comprehensiveness. To mitigate potential bias, strict confidentiality protocols were applied. Anonymizing participant identities ensured honest responses and safeguarded the integrity of the data. The careful attention to methodological rigor and ethical compliance contributed to the credibility and trustworthiness of the research findings.

7.1.2 Quantitative Data Collection Procedures

To supplement the qualitative findings from the initial interview stage, the study incorporated a structured survey targeting a wider segment of public sector personnel engaged in reform implementation. The integration of these data with qualitative insights enabled methodological triangulation, allowing the researcher to corroborate and expand upon interview findings using numerical evidence. A total of 390 public sector employees from various governmental institutions participated in the survey. Their responses provided measurable indicators that supported and clarified the theoretical insights derived from the qualitative component. The combined approach contributed to the construction of a robust, data-informed framework for understanding reform dynamics within Oman's public administration.

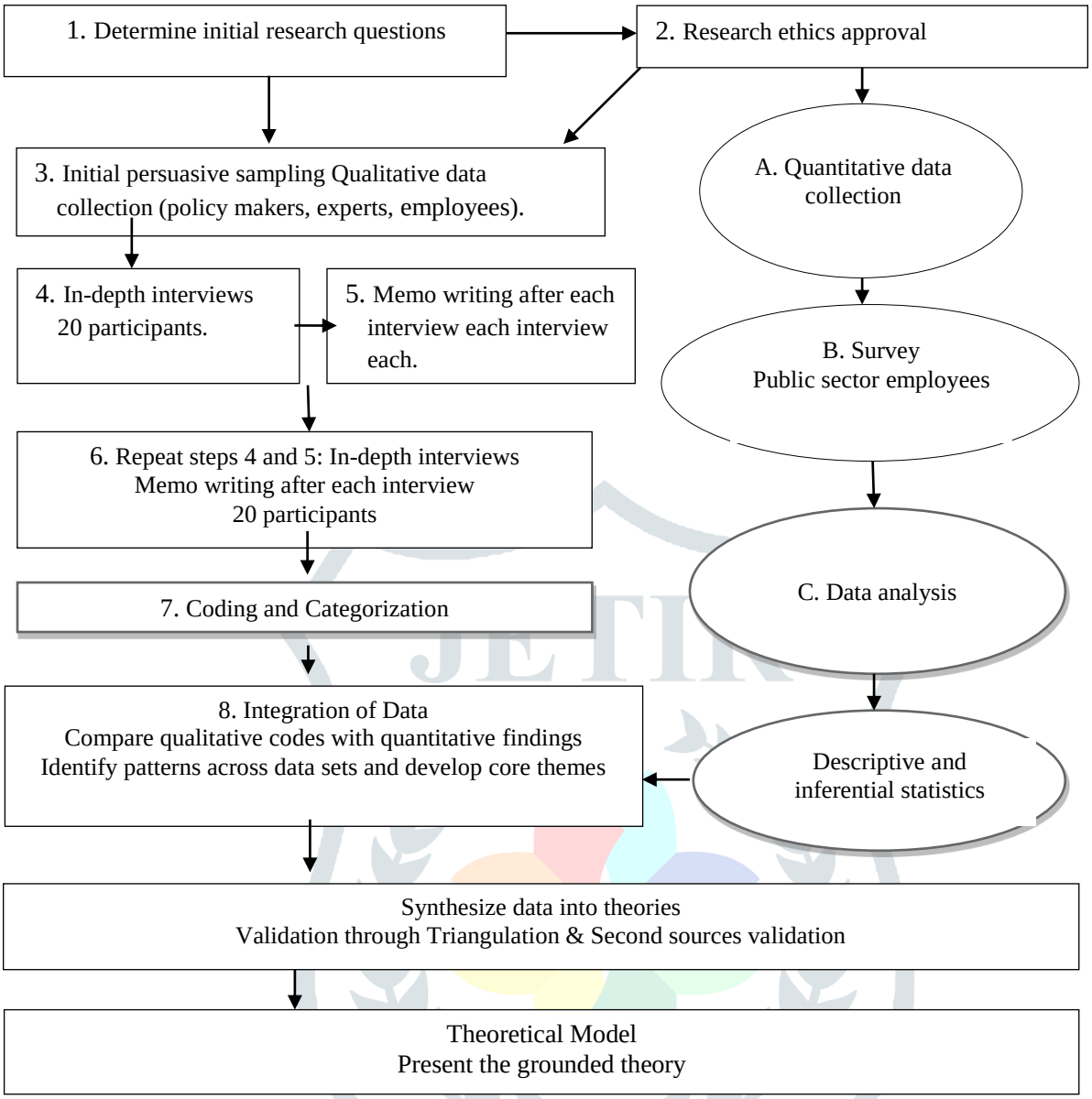


Figure 7.2: Mixed Methods Grounded Theory Model for the Omani Public Sector Reform
Source: The Researcher

7.1.3 Qualitative Data Analysis

The analytical process began with **open coding**, which involved deconstructing the data into smaller units to identify initial codes and meaningful patterns. Interview transcripts and textual data were reviewed line by line to extract concepts, which were then categorized into initial themes. Next, the researcher conducted **axial coding**, which entailed organizing the initial codes into more refined categories and subcategories. At this stage, the analysis focused on identifying relationships among concepts, particularly causal conditions, contextual factors, intervening influences, and their impact on the central phenomenon.

Following axial coding, the analysis moved into the **selective coding** stage, where a core category was identified. The central theme synthesized the earlier categories and explained the main process under investigation. Throughout all coding stages, the researcher engaged in **memo writing**, a critical component of grounded theory analysis. These written notes supported the researcher in tracking thought processes, refining categories, and ensuring conceptual clarity.

Theoretical sampling continued until **saturation** was achieved that is, until no new categories or insights emerged from the data. This ensured that the **theory** was well-developed, robust, and grounded in the participants' perspectives. In addition, **triangulation** was employed by comparing emerging themes with both the quantitative data secondary data sources. The step enhanced the trustworthiness of the findings and helped verify the consistency of the theoretical model.

7.1.4 Quantitative Data Analysis

To complement the qualitative findings, the study incorporated a quantitative phase involving a structured survey. The survey included closed-ended items designed to capture employees' evaluations of reform success, satisfaction levels, and perceived institutional challenges. A total of 390 respondents representing various government entities completed the questionnaire. The quantitative data underwent a multi-step analysis process:

1.**Data Cleaning and Preparation**: Survey responses were screened for completeness and accuracy. Missing values were addressed using appropriate statistical procedures.

2.**Data Coding and Entry**: Responses were organized and entered into SPSS for structured statistical analysis.

3.**Descriptive Statistics:** Key demographic variables, including age, gender, job title, and years of service, were analyzed.

4.**Reliability Testing:** The internal consistency of survey items was assessed using Cronbach's Alpha, ensuring the reliability of the instrument.

5.**Triangulation with Qualitative Data:** Quantitative results were compared with patterns identified during the qualitative phase to reinforce or challenge emerging themes and reduce interpretive bias.

6.**Data Visualization:** Charts, tables, and graphs were used to present findings clearly, aiding interpretation and enhancing the accessibility of key results.

7.2 Ethical Considerations

1) The study followed institutional and international ethical standards for research involving human subjects.
2) Ethical approval was granted by the relevant institutional review board after detailed review.
3) Informed Consent and Participant Rights: All participants received detailed information about the study's aims, procedures, risks, and benefits.
4) Participants were informed of their right to withdraw at any time without consequence.
5) Remote consent options were provided, including electronic forms and flexible participation formats.
6) Confidentiality and anonymity were maintained throughout the research process.
7) Personal identifiers (names, job titles, affiliations) were removed or generalized to prevent re-identification (Kaiser, 2009; Lincoln, 2009; Miller et al., 2012; Mandal & Parija, 2014).
8) Anonymity during interviews was ensured through a coded system.
9) Digital data including transcripts, audio files, and survey responses were stored on encrypted platforms with multi-factor authentication.
10) Participants were informed of how their data would be stored, used, and protected, including retention periods.
11) All data will be destroyed after its designated research use.
12) Demographic data were reported in aggregated form to prevent individual identification.
13) Direct quotes or raw data that could risk anonymity were excluded from final reporting.
14) Ethical integrity guided all stages of research, from data collection to publication.

7.3 The Conditional/Consequential Matrix

The study applied the conditional/consequential matrix, a key analytical tool in grounded theory developed by Strauss and Corbin (1998). This framework helps researchers examine how conditions and consequences interact to shape social processes. It connects broader political, economic, and social contexts with individual actions and localized outcomes (Creswell, J.W., 2013; Lingard, L., Albert, M., & Levinson, W.,2008). It is useful in complex or culturally diverse settings where norms and power dynamics shape institutional behavior (Birks, M., & Mills, J. (2015). Charmaz, K. (2006) highlighted its strength in capturing nuanced experiences and avoiding reductionist interpretations.

7.4 Validity and Research Reliability

The final stage of the research involved validating and articulating the developed theory. The researchers rigorously evaluated the trustworthiness, contextual relevance, and practical applicability of the grounded theory by comparing it with both primary data and secondary sources. The finalized theoretical model was presented in a structured manner, highlighting the synthesis of qualitative and quantitative insights. This integration ensured a robust and multidimensional explanation of the central phenomenon under investigation. Throughout the research process, the iterative character of mixed-methods grounded theory allowed for continuous refinement. Data collection, coding procedures, analytical strategies, and theoretical development evolved in tandem. The ongoing refinement ultimately led to the emergence of a well-grounded, logically coherent, and empirically supported theory.

8. STUDY FINDINGS

8.1 Qualitative Analysis and Findings

The study employed Strauss and Corbin's (1990) grounded theory methodology to explore how governance practices and digital transformation influence the efficiency of public sector performance in the Sultanate of Oman. Through open coding, axial coding, and selective coding, themes emerged that reflect a complex, evolving relationship between reform-oriented governance mechanisms and service delivery efficiency. Data were generated from in-depth interviews with senior public sector officials engaged in the implementation of Oman Vision 2040. The findings are presented according to the two central research questions.

1. How do governance practices influence efficiency of public sector performance?

A dominant theme across participants' responses was the growing emphasis on governance mechanisms to enhance the rational use of public resources. Several participants reported that reforms aimed at resource optimization had begun to yield tangible outcomes. For example, one participant noted;

"Reduction has begun, including conferences and seminars, as the quality of these events was not previously taken into account, but now the focus on quality and efficiency comes first."

This perspective highlights a reorientation toward value-based spending and program effectiveness rather than traditional bureaucratic procedures. In addition, the adoption of financial governance frameworks aligned with Oman Vision 2040 was widely acknowledged. One interviewee stated;

"The new financial system will meet the requirements of Oman Vision 2040, the requirements of budgeting programs, performance programs, and other enablers of the vision."

Similarly, the use of Key Performance Indicators (KPIs) was emphasized as essential to achieving targeted outcomes. As another participant expressed;

"It will succeed at a rate of 90%, due to the presence of follow-up indicators to measure the implementation of the vision's goals and priorities."

The analysis also revealed the perceived necessity of leadership support in sustaining these governance reforms. One respondent remarked;

"I believe that the vision will achieve more than its goals as a result of the support by the senior leadership and its determination to make the vision a success."

Leadership involvement was closely associated with credibility, momentum, and institutional commitment to reform goals.

However, views on governance effectiveness were not uniformly positive. While many participants acknowledged progress, others expressed concerns regarding transparency and institutional inertia. One participant candidly stated;

"I think that transparency has not reached the required level yet, but there is significant progress in this area."

This suggests that although reforms are underway, challenges related to openness and institutional accountability persist. A related area of focus was the need for enhanced training practices and internal evaluation systems. Several interviewees underscored the importance of evaluating training not merely in quantitative terms but for its qualitative value. For instance; one participant explained;

"We had to examine training practices in government units to evaluate the entire process and ask the following question: Is the training qualitative? Is it training just for the sake of training?"

Additionally, policies governing internal job postings were cited as reflective of institutional financial governance, where fiscal constraints directly influenced hiring decisions. Moreover, the institutionalization of performance appraisal systems, such as the Ijada platform, was seen as a means of fostering accountability and linking individual performance with organizational outcomes. Still, concerns emerged about the increased competitiveness and pressure this might generate among staff. One participant reflected;

"The Ijada system created tension among employees due to increased competition and pressure."

2. How does digital transformation facilitate more efficient government services?

Digital transformation was broadly recognized by participants as a key for administrative and operational efficiency. Multiple interviewees highlighted that automation of financial transactions and administrative workflows significantly improved speed, control, and accuracy. As one respondent stated;

"Transfers are made through the current financial system and bank accounts," while another noted, *"Unified the accounts of government agencies into a single central account supervised by the Ministry of Finance in coordination with the Central Bank."*

Participants further discussed how digital platforms have redefined performance management systems. The Ijada system was repeatedly referenced for its ability to link promotions and bonuses with performance benchmarks. As one participant put it;

"Ejada is the most worthy measure for measuring performance efficiency, because this system links periodic bonuses and promotions to it."

This was viewed by many as fostering greater individual responsibility and institutional coherence, though, as mentioned earlier, it also raised tensions within the workplace. Respondents consistently associated digital tools with enhanced transparency and public accountability. One illustrative comment came from a participant who explained;

"The Follow-up Office presents an annual report via social media to the public, showing the amount of progress in indicators and the achievement of public sector entities."

Such practices were seen to bridge the gap between governance and citizen engagement. Nevertheless, the transition to digital platforms was not without complications. Some participants reported implementation challenges, particularly among older employees unaccustomed to using digital tools. One participant stated;

"Despite this, challenges were noted for older employees unfamiliar with technology."

This indicates a learning curve and the need for complementary capacity-building strategies to support digital transformation. Innovation was also prominent in discussions of public-private partnerships and Lean governance practices. The "Manjam Labs" initiative was cited as a pioneering model that simplified administrative procedures through collaboration with private sector actors. As one respondent noted;

"The ministry also cooperated with the Oman Vision 2040 Implementation Follow-up Unit to implement the 'Manjam Labs' initiative to simplify government procedures."

Finally, digital transformation was strongly associated with enhanced data integration and workflow management. As a participant described;

"The system contributed in knowing the amount of work required from each administrative division,"

Employees indicate improved clarity in resource planning and task delegation. The use of dashboards to track institutional performance and the uploading of individual work plans into centralized digital systems were cited as evidence of a move toward data-driven governance.

8.2 Analysis of Quantitative Findings

8.2.1 Demographic Characteristics of the Study Participants

To complement the qualitative findings, the researcher administered a structured survey targeting 390 employees. The selected participants were drawn from multiple government institutions, both within and beyond the capital, Muscat. The sample consisted of 390 individuals, with a marginally higher female representation (54.1%) compared to male respondents (45.9%). Age-wise, the largest segment fell within the 36–40 age bracket (31.8%), followed by the 41–45 category (25.4%). Other age groups included 31–35 years (17.4%), 46–50 years (14.4%), 26–30 years (5.9%), 51 years and older (4.1%), and those under 25 (1.0%). With respect to professional roles, the majority (54.6%) identified as general employees. Department heads constituted 19.5% of the sample, while managers accounted for 11.5%. A smaller group held senior executive positions such as general manager or higher (2.1%), and 12.4% occupied various other job titles.

Table 8.1: The Demographic Characteristics of the Survey Sample

Demographic Characteristic	Category	Frequency (N)	Percentage (%)
Gender	Male	179	45.9
	Female	211	54.1
	Total	**390**	**100.0**
Age Group	Less than 25 years old	4	1.0
	26-30	23	5.9
	31-35	68	17.4
	36-40	124	31.8
	41-45	99	25.4

	46-50	56	14.4
	51 above	16	4.1
	Total	**390**	**100**
Sample Jon Titles	Employee	212	54.6
	Employee-Technical	1	.3
	General manager higher	8	2.1
	Head of the Department	76	19.5
	Manager	45	11.5
	Other	48	12.1
	Total	**390**	**100.0**
Sample Educational Levels	Bachelor	193	49.5
	Higher diploma	47	12.1
	Less high School qualification	4	1.0
	Master	90	23.1
	PhD	20	5.1
	Secondary School diploma	36	9.2
	Total	**390**	**100.0**

In terms of academic qualifications, close to half of the respondents (49.5%) reported holding a bachelor's degree. Additionally, 23.1% had earned a master's degree. Those possessing higher diplomas represented 12.1% of the sample, whereas individuals with doctoral qualifications constituted 5.1%. Participants with only a secondary school certificate comprised 9.2%, and a minimal percentage (1.0%) indicated educational attainment below the high school level.

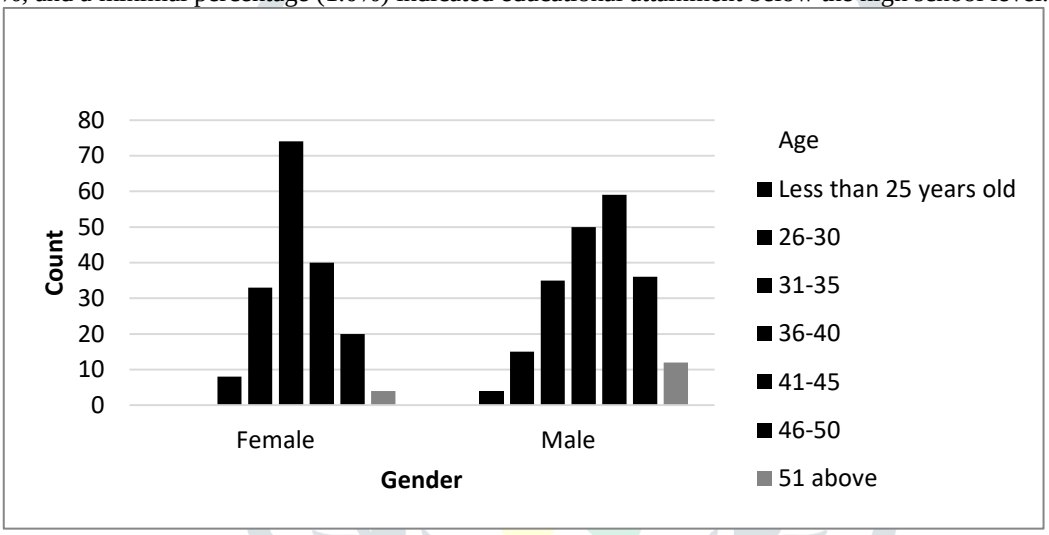


Figure 8.1: Males and Females Participated in the Study

8.2.2 Factor Analysis of Likert-Scale Items

The researcher also employed the Likert scale to facilitate nuanced interpretation of attitudes, while also supporting comparisons across demographic groups. The table presents the interpretation of responses on a five-point Likert scale based on calculated mean intervals. Scores were categorized to reflect the intensity of agreement or disagreement. A mean between 1.00 and 1.79 indicates strong disagreement and reflects a very high difference from the expected norm. Means from 1.80 to 2.59 denote disagreement and suggest a high level of difference. Scores ranging from 2.60 to 3.39 represent a neutral stance. Values between 3.40 and 4.19 indicate agreement, interpreted as a low level of difference. Finally, means from 4.20 to 5.00 reflect strong agreement, indicating a very low difference.

Table 8.2: Factor Analysis of Likert Scale

Interpretation	Difference	Likert Scale	Interval
Strongly disagree	Very high	1	1 to 1.79
Disagree	High	2	1.80 to 2.59
Neutral	Neutral	3	2.60 to 3.39
Agree	Low	4	3.40 to 4.19
Strongly agree	Very low	5	4.20 to 5

Note: 5 strongly agree, 4 agree, 3 neutral, 2 disagree, strongly disagree

8.2.3 The evaluation statistical significance (the p-value)

The researcher also used the p-value to evaluate statistical significance between male and female responses. The measure indicates whether observed differences are likely due to chance. A p-value below 0.05 suggests a statistically meaningful difference. The analysis revealed significant gender-based differences in two specific themes and in the overall results. This implies that gender influenced responses in those areas. However, no significant differences were found regarding digital transformation, innovation, government agility, or Lean practices. Likewise, gender did not affect responses related to performance management or governance of the State's Administrative Apparatus.

Table 8.3: The P-value

Theme	Gender	N	Mean	t	P-value
Individual performance and institutional excellence measurement system	Female	179	3.319	-4.432	0.000
	Male	211	3.5929		
Governance Indicators	Female	179	3.567	-2.902	0.004
	Male	211	3.7763		
Digital Transformation and Innovation	Female	179	3.4876	-1.189	0.235
	Male	211	3.5605		
Agility and Lean Government	Female	179	3.602	-1.419	0.157
	Male	211	3.6931		
Over All	Female	179	3.4939	-2.806	0.005
	Male	211	3.6557		

8.2.4 Measuring the Internal Consistency of the Research Tool

The researcher applied Cronbach's alpha to assess the reliability of the study instruments. The coefficient measures internal consistency, indicating how closely related the items are within a scale. Values range from 0 to 1. A value closer to 1 reflects higher reliability and stronger inter-item correlation. The table presents Cronbach's alpha values for each theme, indicating the internal consistency of the study scales. Values above 0.70 reflect acceptable reliability. The individual performance and institutional excellence theme showed moderate consistency ($\alpha = 0.74$). Governance indicators, digital transformation and innovation, and agility and Lean government each demonstrated high consistency, with alpha values of 0.88, 0.84, and 0.81, respectively. The overall scale, comprising 40 items, showed very high internal consistency ($\alpha = 0.94$).

Table 8.4: Cronbach's Alpha Value

Theme	N of Items	Cronbach's alpha value	Result
Individual performance and institutional excellence measurement system	10	0.74	moderate internal consistency
Governance Indicators	11	0.88	high internal consistency
Digital Transformation and Innovation	11	0.84	high internal consistency
Agility and Lean Government	8	0.81	high internal consistency
Over all	40	0.94	very high internal consistency

8.3 Comparative Analysis of the Qualitative and Quantitative Findings

The integrated analysis of qualitative and quantitative data revealed both convergence and divergence across respondent groups. Inputs from focus group discussions and survey responses highlighted shared views on several themes, alongside key differences.

1. The findings confirm that the success of Oman Vision 2040 depends on interconnected elements, including governance frameworks, digital transformation, human capital development, and strategic partnerships. Awareness-raising and effective knowledge dissemination also play critical roles.
2. Addressing barriers such as limited transparency, inadequate training, and organizational resistance is essential for reform implementation. A coordinated, multi-dimensional approach is needed to enhance public sector performance and ensure alignment with Vision 2040.
3. Governance practices were identified as central to institutional performance. Clear mechanisms, performance metrics, and fiscal oversight support national goals. Yet, rigid structures and inefficiencies hinder outcomes. Flexible governance models are needed to enhance adaptability and accountability. A synergistic link between governance and digital transformation was also evident.
4. Digital transformation emerged as a catalyst for modernization. Platforms like Ejada have improved transparency and decision-making. However, infrastructural weaknesses, resistance to innovation, and limited training constrain progress. Targeted interventions are required to strengthen digital capacity.
5. Human capital development significantly affects institutional efficiency. Training programs and job rotation enhance capacity and adaptability. Still, gaps in motivation, leadership, and fairness in evaluation persist. Integrated HR strategies are needed to empower personnel and improve institutional performance.
6. Human capital development is closely tied to digital progress, as training supports technological adoption. Agility and Lean government practices were viewed positively across respondent groups.
7. Decentralization was seen as beneficial in reducing administrative burdens and supporting regional equity.

Overall, the study underscores that realizing Oman Vision 2040 requires an integrated strategy. This includes reinforcing governance, advancing digital innovation, developing human capital, and promoting collaboration. Addressing persistent challenges through coordinated efforts is essential to achieving sustainable public sector transformation.

Table 8.5: Comparison of Quantitative Results and Qualitative Findings

Main Category	Themes	Quantitative Perceptions	Qualitative Perceptions
Knowledge of Oman Vision 2040	Awareness and alignment with Vision 2040	Not analyzed in the quantitative data.	Mixed Perceptions - Positive: Senior officials showed strong understanding of Vision 2040. - Negative: Lower-level employees lacked awareness and engagement.
Digital Transformation and Innovation	Role of technology in enhancing efficiency	Mixed Perceptions - Positive: Employees widely support digital transformation for modernization and efficiency. - Negative: Concerns about implementation speed and effectiveness.	Mixed Perceptions - Positive: Tools like "Ejada" enhanced governance and efficiency. - Negative: Resistance, infrastructure issues, and training gaps.
Governance	Transparency, accountability, and decision-making	Mixed Perceptions - Positive: Employees value structured governance mechanisms, clear KPIs, and transparency. - Negative: Concerns about resource allocation and rigid governance.	Mixed Perceptions - Positive: Unified financial systems improved accountability. - Negative: Bureaucratic inefficiencies hindered flexibility and adaptation.
Agility and Lean Government	Decentralization, privatization, and efficiency reforms	Positive Opinion - Employees support lean practices and decentralization to enhance service delivery.	Positive Opinion - Decentralization promoted regional stability and lean practices reduced waste, improving operations.
Human Capital Development	Employee training and performance enhancement	Not explicitly addressed in quantitative data.	Mixed Perceptions - Positive: Training programs and job rotation improved skills. - Negative: Gaps in training quality and leadership development remain.
Change Management Challenges	Resistance and adaptability to reform	Not explicitly addressed in quantitative data.	Mixed Perceptions - Positive: Communication and leadership helped overcome resistance. - Negative: Resistance and lack of readiness hindered reforms.
Performance Evaluation System	Ejada system and fairness in performance measurement	Mixed to Negative Perceptions - Positive: Ejada Job Rotation supports skill development. - Negative: Ejada's fairness and transparency are doubted.	Mixed to Negative Perceptions - Positive: Ejada promoted structured performance alignment. - Negative: Evaluation lacked fairness and transparency.

8.4 Theoretical Saturation

Due the fact that the current study is guided by the grounded theory principles which states that the data collection phases end when no further information are needed (Glaser, B. and Strauss, A., 1967, Strauss, A., & Corbin, J., 1998), by this stage the completion of data collection came to its end and the theoretical saturation was accomplished. The constant comparative method was developed by Glaser and Strauss, described in their book, Awareness of Dying (1990). They were seen as the founders of classic grounded theory. Grounded research is different from experimental research or scientific inquiry as it does not need a hypothesis theory at the start to verify. The final stages of the analysis involve developing and refining the theory. Saturation in research denotes the stage at which data collection yields no further new information, themes, or insights. It signifies that additional data is unlikely to contribute anything significantly novel to the understanding of the research question.

9. INTERPRETING THE FINDINGS

Corbin, J., & Strauss, A. (2014) defined the theoretical integration from the emerged themes as construction of an explanatory planning for the concepts. Theoretical integration within grounded theory enables linking emerging themes into a cohesive framework that explains the observed phenomena, which is useful for making generalizable conclusions or policy recommendations.

9.1 Knowledge Sharing Foster Efficiency

The findings revealed that awareness of Oman Vision 2040 is essential for effective alignment with its objectives. However, this awareness depends on stakeholder involvement, communication, and knowledge sharing. Participants noted that awareness levels differ among public sector employees based on their roles. Those directly engaged in implementation demonstrated greater understanding of the Vision's key performance indicators. These differences align with the Diffusion of Innovations Theory, initially proposed by: Gabriel Tarde in (1903) and later expanded by: Rogers, E. M. (2003) mapped its five stages process

(Kaminski, J., 2011). According to Rogers, E. M. (2003) awareness is the first step in the adopting new ideas that require a sequential process. Building on that theory, employees' knowledge contributes on their adopting to new ideas, and involvement in streamlining their work efficiently with the 2040 Vision. Persuasion is the second step what aids in encouraging individuals to become more interested in seeking for more information about the new change (Sahin, I., 2006). Decision or evaluation stage flowed by the trial stage to convince employees to fully get involved in implementation process (Rogers, E. M., 1983). According to the theory, the final step is the adoption and confirmation stage. Within the Omani case, employees reach to the adoption and confirmation stage will foster work efficiency to realize 2040 Vision goals (Taylor et al., 2018). However, limited exposure and understanding decreases work efficiency within the Omani public sector, from the participants prospective. These insights also align with Transformational Leadership Theory (Bass, B. M., & Riggio, R. E., 2006), which emphasizes the leader's role in articulating a shared vision. Participants believed that strong leadership and employee engagement narrow the knowledge gap and foster greater commitment to institutional goals.

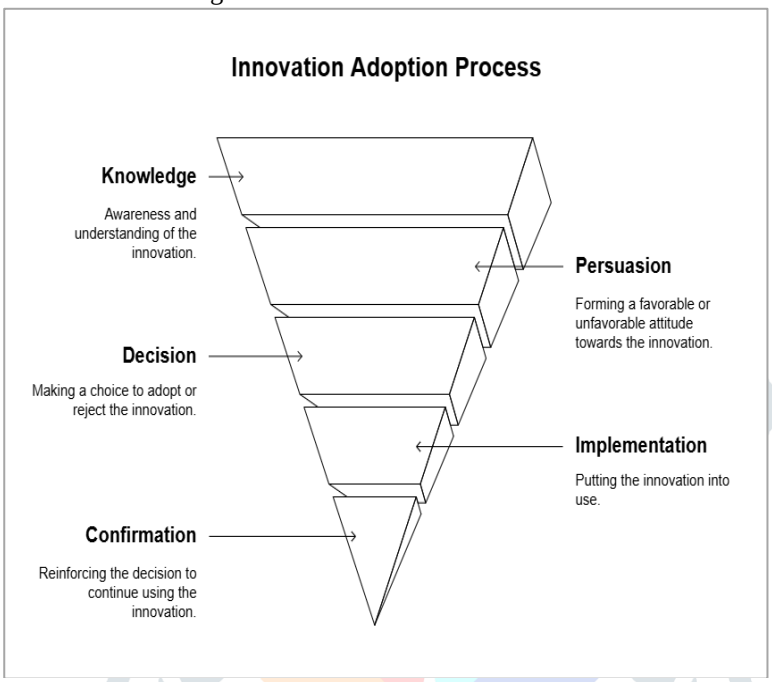


Figure 9.1: The Diffusion Theory. Source. Adapted from: Diffusion of Innovation Theo*r*y by **J. Kaminski**, 2011, Canadian Journal of Nursing Informatics, 6(2). Retrieved from *https://cjni.net/journal/?p=1444*. **Copyright** : Canadian Journal of Nursing Informatics.

9.2 Governance Oriented Reform Strategies

One of the primary goals of public sector reform in Oman is the application of governance indicators to enhance efficiency. Findings revealed mixed perceptions among employees regarding governance as a reform tool. Both focus group participants and survey respondents acknowledged that governance frameworks contribute in improving transparency and accountability. Systems like Ejada were viewed as mechanisms to support institutional integrity. However, some participants noted that transparency efforts remain superficial and access to governance tools is limited. Emerging themes underscored the central role of governance in aligning institutional performance with Oman Vision 2040. The alignment is supported by principles of accountability, transparency, and stakeholder engagement. According to Institutional Theory (DiMaggio, P. J., & Powell, W. W., 1983), external pressures shape how institutions adopt reforms, particularly through the influence of norms and expectations. Vision 2040 reflects these dynamics by seeking to reduce bureaucracy, simplify regulations, and improve coordination.

Sociopolitical pressures, intensified by; the COVID-19, accelerated Oman's adoption of governance reforms in 2020. Among these reforms were the creation of a unified financial system and the launch of Ejada, a performance measurement platform. Ejada evaluates employee performance against key performance indicators (KPIs), encouraging fairness in workload distribution and fostering a results-based culture (Ali, S. M. H. S., 2024). It reinforces transparency and enhances evaluation processes.

The study also draws on Agency Theory (Eisenhardt, K. M., 1989; Jensen, M. C., & Meckling, W. H., 2019), which explains the divergence between leadership goals and managerial behavior. In Oman, strict KPIs were introduced to ensure institutional compliance with Vision 2040. Ejada serves as a governance tool under this framework, incorporating performance monitoring and incentive mechanisms. The platform also requires employees to submit career development plans, enabling joint assessments by institutions and the Ministry of Labor. On the other hand, some participants expressed concerns about Ejada's limited capacity to address deep-rooted institutional issues.

Governance-driven reform, as highlighted in the findings, extends beyond compliance. It also involves accountability for performance outcomes, resource management, and service quality. Governance plays a broader societal role in ensuring cost-effective service delivery. This aligns with New Public Management (NPM), which emerged over recent decades to address bureaucratic inefficiencies and promote responsiveness (Almquist et al., 2013). Since 2020, Oman has introduced measures to improve financial governance and reduce public debt. The Medium-Term Fiscal Plan aimed to lower debt from 80% of GDP in 2020 to 60% by 2024 (Rajab, A., 2023). Reforms included reducing deficits, diversifying income sources, and controlling expenditures. Focus group participants praised the reforms for promoting transparency in financial management.

Ahmed, Y., & Gökberk, C. (2023) analyzed global data and found that public governance is positively linked to financial reporting quality. The World Bank's Worldwide Governance Indicators also confirm this relationship, emphasizing the importance of oversight and regulatory mechanisms. A key initiative in Oman included establishing an independent unit to report on institutional performance directly to His Majesty the Sultan. This supports efficient resource allocation, aligns budgets with outcomes, and reinforces accountability. These efforts are consistent with the Public Financial Management (PFM) Framework (PEFA Secretariat, 2016), which promotes fiscal discipline, strategic planning, and transparent budgeting. Effective PFM systems

ensure that policies are implemented as intended. In this context, Oman also pursued privatization of selected state-owned enterprises and launched the National Digital Economy Program as part of its Vision 2040 strategy (Oman Vision 2040 Implementation Follow-up Unit, 2024).

9.3 A Conceptual Model for Digital Transformation Implementation

The participants and study sample acknowledged that systems such as Ejada and Wasool have enhanced efficiency. Both groups agreed that automating services fosters an innovation driven culture, which is crucial for the success of Vision 2040. However, they also identified challenges in fully implementing these systems. Bureaucratic obstacles within Ejada's operational framework, along with skill gaps among some employees, may hinder the achievement of e-government objectives. To address these issues, they recommended digital literacy training and system revisions to accelerate the adoption of new technologies and support the realization of e-government goals.

The Digital Transformation Adoption model suggests that integrating technology enhances efficiency and service quality in the public sector. The theme aligns with the Technology Acceptance Model (Davis, F. D., 1989), which asserts that facilitating ease of use promotes the adoption of new technologies. In the Omani context, Ejada and Wasool are recognized as effective tools for improving performance; however, skill gaps present a barrier to widespread acceptance. From another perspective, the successful implementation of digital transformation requires careful preplanning, particularly in preparing public sector employees who may lack the necessary skills to operate new technologies. Therefore, based on both theoretical foundations and participant insights, targeted training programs are essential to bridging the skills gap, facilitating technology acceptance, and achieving Vision 2040 objectives.

9.4 Human Capital Development and Organizational Change Model

The focus group, participants and the sample perceive training as essential but insufficient in many institutions. They think that coordination challenges, slow digital infrastructure development cause resistance to change. They also agreed that human resource development is the very effective method to manage change and achieve Vision 2040 goals. Participants highlighted cultural resistance and bureaucratic barriers to innovation, advocating for leadership advocacy and streamlined processes. From their point of view, prioritizing infrastructure improvements, and addressing skills gaps and leadership quality positively would impact human capital service provision. From another prospective, the survey data reflected a cautious optimism, with a majority recognizing the benefits of lean governance, suggesting a slowly improving adaptability. Quantitative findings, however, focus more on the structural aspects, such as; agility and lean government initiatives, to foster innovation.

The findings align with Lewin's Change Management Model (Lewin, 1947). Lewin's Change Model begins with the unfreeze stage, where leaders prepare stakeholders for change by improving readiness, and ensuring effective communication to gain support (Burnes, B., 2004). Key actions include analyzing processes, creating a vision, addressing concerns, and securing approve. The change stage involves implementing the transition through open communication; workshops, employee empowerment, and celebrating small wins help manage uncertainty. In the final refreeze stage, leaders focus on stabilizing the change, reinforcing new behaviors, using digital tools support long-term adoption. Participants perceived such steps as positive way to foster change.

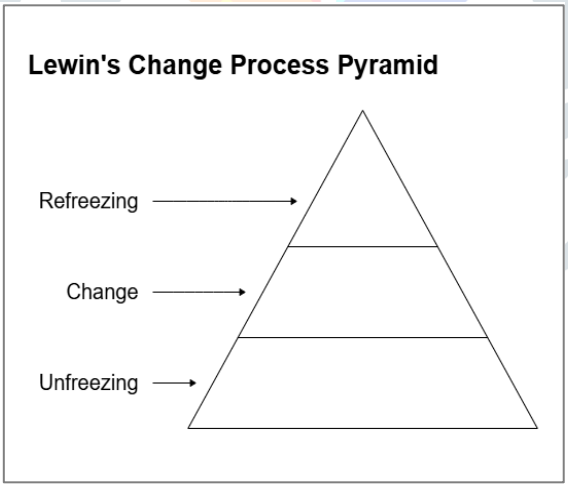


Figure 9.2 Kurt LewinThree Steps Change Model. Source: Adapted from: Kurt Lewin and the Planned Approach to Change: A Re-appraisal by B. Burnes, 2004, Journal of Management Studies, 41(6), 977–1002. https://doi.org/10.1111/j.1467-6486.2004.00463.x. **Copyright**: John Wiley & Sons Ltd.

Furthermore, the findings on the importance of training and resistance to change align with Human Capital Theory (Becker, G. S., 1964). The theory emphasizes that investing in employee skills and knowledge enhances productivity and organizational performance. The perceived insufficiency of training programs is linked to Goal Setting Theory, which focuses on establishing clear, specific goals and objectives for employees, along with a system to monitor their progress (Locke, E. A., & Latham, G. P., 2013). These goals are typically quantitative, allowing employees to clearly see their advancement. The theory is commonly used by organizations aiming to enhance employee productivity.

Within the Omani context, the Ejada program highlights the value of aligning individual performance with organizational goals through continuous professional development and skill-building, addressing Vision 2040 call for a skilled and efficient workforce. Ejada's focus on performance metrics and goal alignment can leverage this theory to improve workforce productivity and accountability. Oman Vision 2040 wanted to strengthen the role assigned to government institutions and improve their efficiency by re-engineering their operations and procedures. For example, the Omani government attached the follow-up of the performance of government agencies to direct follow-up by His Majesty Sultan Haitham bin Tariq, his private office, and other competent authorities. It also assigned the Ministry of Finance, the Ministry of Labor, and the State Audit Institution to work with all government units and the Vision Implementation Follow-up Office in order to follow up the performance indicators of work efficiency in those institutions.

9.5 Theory Generating

Based on the theoretical integration which was built on the themes emerged from both the qualitative and quantitative analysis and, their alignment with theories in the existing knowledge this mixed method grounded theory proposed the following theory;

"The efficiency of the public sector is conceptualized as the outcome of an integrated process involving governance reform, the adoption of digital transformation, and the strategic development of human capital under effective leadership."

When aligned with Vision 2040, these elements foster a performance-oriented, accountable, and adaptive public administration. Strauss and Corbin's (1990) Systematic Grounded Theory, emphasizes structured processes in order to link outcomes reflected on the model regarding the assumed public sector framework.

9.6 The Conditional/Consequential Matrix

The grounded theory developed explains public sector efficiency in Oman as the result of an integrated process involving governance reforms, digital transformation, and leadership involvement by sharing knowledge, human capital development. The framework is shaped by several interrelated conditions. Causally, the post-pandemic period catalyzed a wave of public sector reforms, including the adoption of governance frameworks such as; performance system and the advancement of e-government platforms (Ejada) aiming to enhance transparency and aligning with Oman Vision 2040. The context in which these reforms are embedded is characterized by varying levels of awareness among employees, institutional rigidity, and persistent cultural and procedural barriers to change. Intervening conditions such as limited digital literacy, insufficient training, and inconsistent communication practices either facilitate or hinder the effectiveness of these reforms.

In response, public institutions have adopted strategies including; the institutionalization of performance management systems, capacity-building initiatives, and efforts to strengthen transparency and accountability mechanisms. These strategies are often guided by transformational leadership, which plays a critical role in articulating the vision and motivating stakeholder engagement. The consequences of these actions include; improved organizational adaptability, more efficient service delivery, and enhanced alignment with national strategic goals. Thus, public sector efficiency is not a product of isolated reform efforts but rather the outcome of a complex interplay between structural governance mechanisms, technological innovation, and leadership-oriented human resource development. All of which are conditioned by institutional readiness and strategic alignment with Vision 2040.

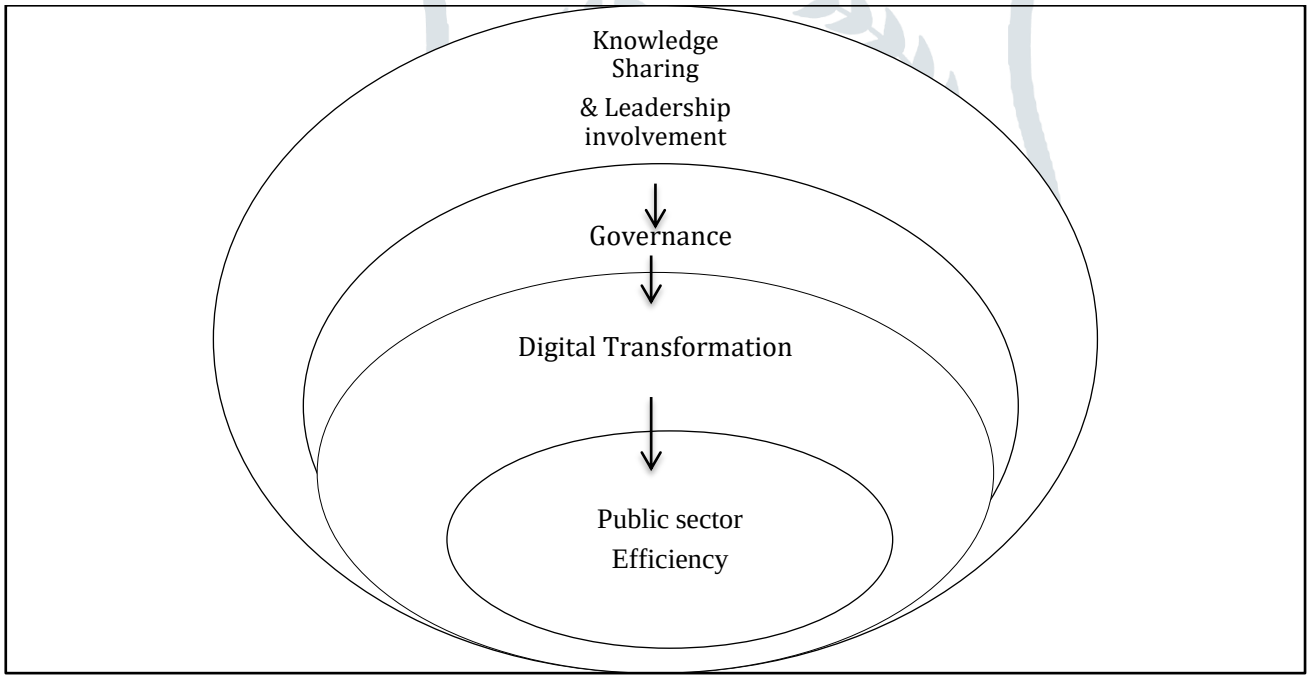


Figure 9.3: The Integrated Public Sector Efficiency Framework Grounded Theory Conditional/Consequential Matrix Diagram
Source: The researcher

9.7 Theoretical Lens for Research Credibility

Urquhart, C. (2019) emphasized the importance of linking emergent grounded theory to existing literature to ensure its validity, credibility, and theoretical depth. Similarly, Corbin & Strauss, (2014) highlighted the necessity of analyzing emergent findings through established theoretical perspectives to contribute to existing knowledge. Moreover, exploring these connections can reveal broader, cross-disciplinary implications. The study developed its theoretical framework by employing Strauss and Corbin's (1990) qualitative approach alongside quantitative analysis. The integration of these methods facilitated the synthesis of emerging themes and findings, leading to the formulation of a grounded theory.

Additionally, quantitative data was utilized to triangulate results, demonstrating significant correlations between key themes and patterns. These insights strengthened the credibility of the emergent framework, ensuring it is both empirically sound and theoretically grounded. The analysis identified critical themes, including knowledge sharing, employee involvement, human capital development, governance, and digital transformation. These factors serve as key enablers in addressing the distinct sociopolitical and institutional challenges facing the Omani public sector.

The study examines governance policies implemented by the Omani government to advance the sector and achieve the objectives of Oman Vision 2040. Consequently, the findings of this mixed-methods grounded theory study align with the Adaptive Governance framework, which focus on the importance of effective bottom-up communication in enhancing institutional capabilities and decision-making processes (Janssen, M., & van der Voort, H., 2016). Scholars argue that organizations must rapidly adapt to disruptive changes to maintain resilience. The study's findings suggest that a government's

ability to flexibly incorporate resource management feedback and restructure its operational framework is essential for aligning with organizational objectives and Vision 2040 goals.

Also, the study's quantitative data validate key aspects of adaptive governance by highlighting the significance of training middle and lower level employees to address resistance to change caused by skill gaps. Moreover, the research aligns with Resilience Theory, which emphasizes adaptive strategies to enhance human capital's capacity to navigate evolving frameworks (Zimmerman, M. A., 2013). Participants in this study perceived that closing skill gaps would accelerate their work processes, a view that also corresponds with Resilience Theory (Southwick et al., 2014).

9.8 Alignment with New Public Management (NPM) Practices

New Public Management (NPM) was founded by Hood, C. (1995) in the 1980s to present best accountability policies and practices for the public sector. It contrasts conventional bureaucracy in public administration. To add, it is characterized by paradigms such as; Public Choice and Managerialism. Furthermore, NPM manages the public sector by separating policy-making from operations (Kalimullah et al., 2012). It advocates for a smaller, more efficient government, emphasizing decentralization, empowerment, and customer satisfaction. It also promotes institutional development, and the efficient delivery of services. The participant and sample of this study agreed that getting public sector employee's feedback to acquire their opinions about the holistic change and the way to perform their work efficiently. This is aligned with NPM practice which is associated with Public Choice paradigms.

NPM focuses on improving efficiency, and this is incorporates with the study findings by linking governance practices with performance measurement and, ensure that institutional goals align with the 2040 Vision outputs. For example; Ejada system reflects NPM emphasis on accountability and results-based evaluation by integrating individual and institutional performance metrics. To add, NPM promotes decentralization to improve flexibility and responsiveness. Thus, the generated framework supports this by emphasizing governance reforms such as; aligning institutional operations with Oman Vision 2040 goals, fostering transparency, and reducing bureaucratic barriers. Moreover, NPM advocates for citizen centric service delivery. The framework's focus on digital transformation aligns with this principle by improving accessibility, speed, as advised by participants and the sample of this study. Public administration scholars hold the belief that digital transformation improves public administration and governance by fostering innovation in response to societal needs. They guarantee that digital transformation enhances efficiency and effectiveness in service delivery, economy, and administration (Matnenko, N., 2020, Sanina et al., 2021).

To add, NPM stresses performance metrics to ensure transparency and accountability. The framework extends this by advocating for balanced metrics that combine quantitative and qualitative evaluations, as demonstrated by Ejada adoption employees. Shedding the light on the integration of governance and reform goals, while NPM emphasizes managerial autonomy, the framework extends this by focusing on governance as the foundation for reform. It connects governance to digital transformation, and human capital development, which ensure cohesive alignment with strategic goals of Vision 2040.

Moreover, the framework goes beyond traditional NPM practices by positioning digital transformation as a central pillar for the reform. The framework addresses the demands of a modern Administrative Apparatus by incorporating technologies to enhance service delivery, data transparency, and operational efficiency. Researchers revealed that efficient governance has positive effects on the quality of public services (Abdullah et al., 2022). Also, they believe that the public sector having Key Performance Indicators (KPI) capable to measure both organizational and individual performance will have the ability to optimize efficient service provision.

To add, governance efficiency has a positive impact on economic growth promotion (Georgiou, M. N., 2015). On the contrary, NPM, emphasizes structural changes, yet the framework focuses more on the importance of human capital. Driven by the fact that employees are the drivers of sector' operation, training and skill-building prepare them to adapt the reforms. This is in line with Human Capital Theory (Becker, G. S., 1964), which emphasize worker' training to qualify them to become more productive and efficient.

10 AN APPLIED FRAMEWORK FOR THE OMANI PUBLIC ADMINISTRATION

The findings highlighted several important implications for an advanced public sector focusing on areas such as; organizational change, human resource development, digital transformation, governance, and policy reform.

1. **Analyse Cultural Determinants Influencing Organizational**

Investigating methods to enhance employee motivation and promote innovation through incentive structures and engagement initiatives could offer further valuable findings. Regarding digital transformation, identifying obstacles to technology adoption in the public sector is critical. Moreover, assessing the effects of digital governance on operational efficiency and transparency would provide deeper insights into its broader implications.

2. **Strengthen the Structural Foundations of Digital Transformation**

Enhance digital transformation framework while ensuring inclusivity for both urban and rural areas. Also, government can facilitates implementation of remote work as a proactive measure for emergency preparedness. Fostering a flexible work environment can contribute in improving efficiency and adaptability in the public sector.

3. Change Engaging Stakeholders in the Pre-Implementation Phase of Holistic Change

Implementing preparatory training programs for government employees prior to the adoption of comprehensive policies and practices is necessary to ensure effective execution and organizational readiness.

4. Establish Effective Feedback Loops Channels

Developing reliable job satisfaction assessment tools and establishing effective communication channels between policy makers and public sector employees. This may enhance engagement, feedback mechanisms, and informed decision making.

5. Implement Periodic Evaluation for Government Policies and Practices

Apply a flexible framework for the periodic evaluation of government policies and practices is vital. This will enable the continuous refinement of effective policies, the replacement of ineffective ones, and the optimization of public sector efficiency. For example, critically reviewing the Ijada program's operational framework in individual performance evaluation and enhancing comparative mechanisms for competency-based selection and recognition will strengthen fairness, meritocracy, and employees' sense of justice and belonging in the public sector.

11. THE GENERATED GROUNDED THEORY CONTRIBUTION TO PUBLIC ADMINISTRATION KNOWLEDGE

The grounded theory framework presented in this study offers a tailored approach to overcoming the sociopolitical and institutional challenges that Oman's public sector encountered in 2020 while pursuing Vision 2040. The framework provides policymakers and practitioners with practical strategies to mitigate inefficiencies and advance sustainable public sector reforms. It incorporates governance, digital transformation, and human resource development and performance measurement, highlighting their interdependent roles in achieving reform objectives. In 2020, governments worldwide faced similar challenges due to the adverse effects of COVID-19, prompting urgent policy and operational restructuring within the public sector. Accordingly, this study supports the formulation of strategies that are both context specific and adaptable to other nations with comparable reform priorities. It presents a comprehensive model for enhancing public sector efficiency and driving effective governance transformations.

The study also contributes to the literature in terms of its focus on the cultural aspects influencing the political, economic, and social context as well as the inter-cognitions of the contemporary Arabian Gulf region. Few studies have addressed and elaborated on the issue of the Omani public sector, and even fewer on political changes and public sector reforms. The study is also unique in being explicative, in that it seeks new knowledge to inform a fundamental and supportable future role of the public sector in harmony with a promising fresh evolving Vision. It adds to the literature of the contextual and cultural knowledge of the public sector; particularly, it investigates the cultural and historical drive to understand particular issues. It presents suggestions to assist policy makers, senior executive officers, and government stakeholders in their decisions on envisioning an ambitious and realistic roadmap for the future public sector, and it outlines a taxonomy model that illustrates these issues in a deeper perspective.

1. Theoretical Contributions

(1) Grounded theory contributes in enhancing the interaction between pragmatism and grounded theory based on collecting data from society and lived reality. Therefore, the researcher develops an understanding that solutions are not always necessarily absolutely correct, but can be used in more than one context and their correctness is proven by repeatedly obtaining the same results each time. The difference in social or cultural status as well as the philosophical dimension affects the results of any experiment that may appear similar on the surface but in reality differ.

(2) Processing data by applying the ethics of data confidentiality and informing participants that the information they provide is valuable, teaches the researcher to respect the data he collects and respect the opinions of others.

2. Methodological Contributions

Methodologically, the research demonstrates the strength of combining mixed methods with Strauss and Corbin's systematic grounded theory approach, allowing for a rigorous process of theory development that effectively incorporates qualitative and quantitative data. The approach not only ensures a robust foundation for the emergent framework but also serves as a replicable model for future studies in diverse contexts. Also, utilizing more than one tool allowed measuring prouder viewpoints about the topic. This aided the researcher to learn whether triangulation using quantitative method would match focus group of experts or not. It was also useful way to delve into expanded assumptions among the public around some of government practices and policy. Thus, using mixed methods can be handy for researchers who want to use such methods in different contexts.

3. Practical Contributions

The study contributes to the advancement of knowledge by employing a mixed methods grounded theory approach to explore the perspectives of a diverse group of public sector employees across various government entities. The findings offer valuable insights for governments and policymakers seeking to enhance the efficiency of public sector organizations. The study assists leadership in understanding how employees perceive existing policies and practices, and how these can be improved to support the effective realization of Oman Vision 2040 by providing evidence-based recommendations. Through its theoretical framework and comprehensive review of relevant literature, the study examines the influence of key factorsincluding; lean government practices, governance mechanisms, digital transformation initiatives, and the Ejada performance system on the operational efficiency of the Omani State Administrative Apparatus. The study also offers theoretical implications that can enrich the underdeveloped body of Omani literature in this domain, addressing a notable gap in current academic discourse. Furthermore, the study's findings may accelerate leaders' responsiveness to employee-raised concerns, thereby fostering a more agile and participatory reform process.

12. RECOMMENDATIONS

12.1Recommendations Based on Research Findings

1) Actively encourage public sector personnel to participate in leadership-led forums and public engagements. Utilizing digital communication platforms, particularly social media, can facilitate constructive dialogue between decision-makers and employees across institutional levels.
2) Invest in inclusive change management strategies that account for generational and professional diversity among employees. Promoting curiosity and openness toward emerging technologies can help reduce organizational resistance to change.
3) Strengthen transparency frameworks and accountability protocols to foster greater public confidence in governmental institutions.
4) Foster employee participation in institutional reform processes. The findings revealed a shared perception among respondents regarding the critical need for regularly reviewing administrative procedures especially performance evaluation tools such as the *Ejada* system to ensure continuous improvement.
5) Expedite the implementation of digital transformation strategies across all regions, not solely within the capital. The current data highlights an evident gap in articulating the operational pathways required to achieve a holistic and equitable digital transition across the public sector.
6) Prioritize sustained crisis preparedness. Given recent global challenges, it is vital to continuously assess the capacity of public institutions to manage socio-economic and geopolitical disruptions effectively.
7) Promote targeted capacity-building programs in advanced technologies, particularly artificial intelligence.
8) Up skilling public employees in this domain will address digital literacy gaps and enhance technological resilience.
9) Strengthen collaboration between governmental institutions and academic researchers.

10) Establishing effective partnerships and facilitating access to official data are essential to advancing knowledge, particularly for postgraduate research initiatives.
11) Expand research focused on the political dimensions influencing governmental decisions. There is a clear need for scholarly inquiry into how top-down governance structures such as those in Oman, respond to political and societal norms in the absence of participatory decision-making models.
12) Benchmark and adopt proven administrative practices from international counterparts. Drawing on global experiences can inform the adaptation of context-specific solutions to improve public sector efficiency and innovation.

12.2 Recommendations for Theory Development

(1) Grounded theory serves as a foundational approach for generating verifiable knowledge that others can later test through replication. As knowledge informs practice, applying the same methodology across varied contexts whether similar or different can affirm or challenge the results of this study.
(2) The approach also facilitates theory development through sustained interaction between researchers and participants. Such engagement enhances researchers' capacity to investigate new themes, thereby expanding and enriching the broader body of academic knowledge.
(3) Grounded theory provides a valuable bridge between philosophical pragmatism and empirical inquiry. it fosters deeper reflection on existing philosophical frameworks and contributes to the advancement of both theory and researcher capability via emphasizing real-world data collection and lived experiences,.
(4) From both methodological and epistemological standpoints, interdisciplinary research offers critical pathways for evolving qualitative inquiry. The integration enhances analytical precision and interpretation, supporting the refinement of conceptual understanding and model development.
(5) Interdisciplinary approaches extend beyond traditional academic boundaries, facilitating richer theoretical interpretations through the convergence of diverse knowledge domains. Reapplying grounded theory in other geographical or institutional settings remains essential for contextual comparison. In turn, longitudinal and quantitative studies can build upon these insights, employing the developed conceptual model as a methodological foundation for further investigation.

12.3 Recommendations for Future Researches

The researcher's reflections affirm that solutions are not always universally definitive, but may retain their validity across multiple contexts when results are consistently reproduced. The grounded theory study applied through a mixed-methods lens offered a comprehensive exploration of the unique social, institutional, and administrative dynamics influencing public sector transformation in Oman. To advance this work, future studies should adopt a longitudinal design that traces the evolution of these factors over time. The approach would allow for further empirical testing of the current findings and offer insight into the extent of progress made across public sector institutions. Such investigations could also uncover new variables or dimensions that emerge during the ongoing reform process, contributing to more robust theoretical frameworks and practical applications.

13. RESEARCH LIMITATION

The study faced several constraints, primarily linked to procedural complexities encountered at different stages of the research process.

- One of the principal limitations emerged from the absence of prior scholarly work addressing Oman's recent endeavor to implement comprehensive reforms in the public sector. This gap posed initial challenges in establishing a theoretical and contextual foundation.
- Another significant barrier involved restricted access to official data from selected government institutions. Certain documents and datasets were classified and available only to high-level administrative personnel.
- The researcher also encountered logistical difficulties in securing interviews with all intended officials. Limited availability, competing responsibilities, and demanding schedules prevented some participants from providing timely input or written feedback. Additionally, a number of respondents declined to have their interviews recorded due to the confidential nature of their roles.
- Language barriers presented further complications. Some participants had limited proficiency in English, which necessitated the translation of survey instruments and interview questions into Arabic. The process required careful back-translation to ensure conceptual accuracy, thereby increasing the researcher's workload and time commitment.
- Personal challenges during the data collection phase further intensified time constraints. Despite these pressures, the researcher remained committed to completing the study within the defined schedule.
- Lastly, the researcher anticipated the potential for cultural and personal bias to influence participant responses. To mitigate this risk, clear assurances were given regarding the confidentiality of responses and the exclusive use of data for academic purposes. These measures were essential in fostering trust and encouraging honest engagement throughout the study.

14. CONCLUSION

Post the COVID-19 pandemic, governments worldwide undertook substantial restructuring of their public sectors, guided by governance principles aimed at alleviating the socio-economic impacts of the crisis. Within this global context, the present study examined the role of governance in shaping public sector performance in the Sultanate of Oman, with a specific focus on reform initiatives aligned with Oman Vision 2040. The research was framed by two central questions: how governance practices influence the efficiency of public sector performance, and how digital transformation supports the delivery of more effective and responsive public services. These inquiries have advanced a broader understanding of the dynamic relationship between governance mechanisms and public administration, particularly within the context of post-pandemic recovery and institutional modernization. The findings of this study offer critical insights into how strategic governance reforms, when coupled with the integration of digital technologies, can enhance the transparency, responsiveness, and overall effectiveness of public institutions in Oman.

Despite the growing scholarly interest in governance frameworks, empirical studies assessing their application particularly from the perspective of public sector employees in Oman remain limited. To address this gap, this study adopted a mixed-methods grounded theory approach to develop a conceptual model intended to inform both policymakers and institutional leaders.

The research design incorporated both qualitative and quantitative components to ensure a comprehensive understanding of employee perspectives. The qualitative strand followed Strauss and Corbin's grounded theory methodology, involving theoretical sampling, twenty in-depth interviews, and the review of institutional documents. The quantitative phase included a structured survey distributed to 390 public sector employees across various institutions. Data were analyzed using SPSS, and methodological triangulation was employed to enhance analytical rigor and minimize potential bias.

The findings underscore the importance of incorporating employee perspectives in efforts to improve institutional adaptability, facilitate digital transformation, and strengthen performance evaluation mechanisms through effective governance practices. While there was general acknowledgment of the value of ongoing reform initiatives, participants also expressed concerns regarding practical implementation challenges and the need for more robust capacity-building strategies.

Key governance principles namely transparency, accountability, and inclusiveness emerged as foundational to enhancing institutional performance. Additionally, Oman's public sector transformation was found to reflect broader international trends, particularly in areas concerning digital governance and administrative reform. The research contributes to the field of public administration by integrating interdisciplinary perspectives and applying the conditional/consequential matrix to develop a grounded theoretical model. It further provides actionable policy recommendations and advocates for the implementation of longitudinal studies to monitor and evaluate the evolution of governance reforms across diverse administrative contexts.

ACKNOWLEDGMENT

I am honored to extend my sincere gratitude to Professor: Gan Tian for his constant support and professional guidance through my Phd academic study path.

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DISCLOSURE STATEMENT

This is to acknowledge that there is no financial or other interest in the direct applications of this research

REFERENCES

(1) Abdullah, A. S. B., Zulkifli, N. F. B., Zamri, N. F. B., Harun, N. W. B., & Zainal Abidin, N. Z. (2022). The benefits of having key performance indicators (KPI) in public sector. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 12(3), 719–726. https://doi.org/10.6007/ijarafms/v12-i3/15064

(2) Ahmed, Y., & Gökberk, C. (2023). The impact of public governance perception on the quality of financial reporting. *Ekonomska Istraživanja – Economic Research*, 36(3), 1–20. https://doi.org/10.1080/1331677X.2023.2223264

(3) Almquist, R., Grossi, G., van Helden, G. J., & Reichard, C. (2013). Public sector governance and accountability. *Critical Perspectives on Accounting*, 24(7–8), 479–487. https://doi.org/10.1016/j.cpa.2012.11.005

(4) Ayoko, O. B. (2021). Digital transformation, robotics, artificial intelligence, and innovation. *Journal of Management & Organization, 27*(5), 831–835. https://doi.org/10.1017/jmo.2021.64

(5) Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Psychology Press. https://doi.org/10.4324/9781410617095

(6) Becker, G. S. (1964). Introduction. In *Human capital: A theoretical and empirical analysis with special reference to education* (1st ed., pp. 1–3). National Bureau of Economic Research. http://www.nber.org/chapters/c14407

(7) Bevir, M., Rhodes, R. A. W., & Weller, P. (2003). Traditions of governance: Interpreting the changing role of the public sector. *Australian Journal of Public Administration, 62*(2), 3–19. https://doi.org/10.1111/1467-9299.00334

(8) Birks, M., & Mills, J. (2015). *Grounded theory: A practical guide* (2nd ed.). Sage.

(9) Burnes, B. (2004). Kurt Lewin and the planned approach to change: A re-appraisal. *Journal of Management Studies*, 41(6), 977–1002. https://doi.org/10.1111/j.1467-6486.2004.00463.x

(10) Canadian Audit & Accountability Foundation. (2013). *Practice guide to auditing efficiency*. Retrieved from https://www.caaf-fcar.ca/images/pdfs/practice-guides/Practice-Guide-to-Auditing-Efficiency.pdf

(11) Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.

(12) Chervenkova, M. (2023, November 9). *Productivity vs. efficiency: How to master both?* Businessmap. Retrieved from https://businessmap.io/blog/productivity-vs-efficiency

(13) Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Sage Publications.

(14) Cullen, M. M., & Brennan, N. M. (2021). Grounded theory: Description, divergences and application. *Accounting, Finance & Governance Review*, 27. https://doi.org/10.52399/001c.22173

(15) Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. https://doi.org/10.2307/249008

(16) de Beer, P. T., & Keune, M. (2022). COVID-19: A prelude to a revaluation of the public sector? *Transfer: European Review of Labour and Research, 28*(1), 135–140. https://doi.org/10.1177/10242589221078710

(17) Deva, S. (1985). *Effectiveness and efficiency in public administration: A theoretical framework*. *Economic and Political Weekly, 20*(35), M94–M96. Retrieved from http://www.jstor.org/stable/4374766

(18) Deva, S. (1985). *Effectiveness and efficiency in public administration: A theoretical framework*. *Economic and Political Weekly, 20*(35), M94–M96. Retrieved from http://www.jstor.org/stable/4374766

(19) Di Giulio, M., & Vecchi, G. (2021). Implementing digitalization in the public sector: Technologies, agency, and governance. *Public Policy and Administration, 38*(2), 133–158. https://doi.org/10.1177/09520767211023283

(20) DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160

(21) Edwards, M. (2002). Public sector governance—Future issues for Australia. *Australian Journal of Public Administration, 61*(2), 51–61. https://doi.org/10.1111/1467-8500.00272

(22) Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *The Academy of Management Review*, 14(1), 57–74. https://doi.org/10.2307/258191

(23) Georgiou, M. N. (2015). Public sector, governance effectiveness and economic growth: An empirical analysis. https://doi.org/10.2139/ssrn.2570873
(24) Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Publishing Company
(25) Hwang, J., & Akdede, S. H. (2011). The influence of governance on public sector efficiency: A cross-country analysis. *The Social Science Journal, 48*(4), 735–738. https://doi.org/10.1016/j.soscij.2011.04.002
(26) Jang, H., & Han, S. H. (2021). User experience framework for understanding user experience in blockchain services. *International Journal of Human-Computer Studies, 158*, 102733. https://doi.org/10.1016/j.ijhcs.2021.102733
(27) Janssen, M., & van der Voort, H. (2016). Adaptive governance: Towards a stable, accountable and responsive government. *Government Information Quarterly*, 33(1), 1–5. https://doi.org/10.1016/j.giq.2016.02.003
(28) Jensen, M. C., & Meckling, W. H. (2019). Theory of the firm: Managerial behavior, agency costs and ownership structure. In *Corporate Governance* (pp. 77–132). Gower.
(29) Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative Health Research, 19*(11), 1632–1641. https://doi.org/10.1177/1049732309350879
(30) Kalimullah, N. A., Alam, K. M. A., & Nour, M. A. (2012). New public management: Emergence and principles. *BUP Journal*, 1(1), 1–22
(31) Kaminski, J. (2011). Diffusion of innovation theory. *Canadian Journal of Nursing Informatics*, 6(2). Retrieved from https://cjni.net/journal/?p=1444
(32) Klijn, E. H., Koppenjan, J., Spekkink, W., & Warsen, R. (2015). *Governance networks in the public sector* (1st ed.). Routledge. https://doi.org/10.4324/9781315887098
(33) Kulshreshtha, P. (2008). Public sector governance reform: The World Bank's framework. *International Journal of Public Sector Management, 21*(5), 556–567. https://doi.org/10.1108/09513550810885831
(34) Lincoln, Y. S. (2009). Ethical practices in qualitative research. In D. M. Mertens & P. E. Ginsberg (Eds.), *The handbook of social research ethics* (pp. 150–169). Sage
(35) Lingard, L., Albert, M., & Levinson, W. (2008). Grounded theory, mixed methods, and action research. *BMJ*, 337, a567. https://doi.org/10.1136/bmj.39602.690162.47
(36) Locke, E. A., & Latham, G. P. (2013). Goal setting theory, 1990. In E. A. Locke & G. P. Latham (Eds.), *New developments in goal setting and task performance* (pp. 3–15). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9780203082744
(37) Lopes, A. V., & Farias, J. S. (2020). How can governance support collaborative innovation in the public sector? A systematic review of the literature. *International Review of Administrative Sciences, 88*(1), 114–130. https://doi.org/10.1177/0020852319893444
(38) Mandal, J., & Parija, S. C. (2014). Informed consent and research. *Tropical Parasitology, 4*(2), 78–79. https://doi.org/10.4103/2229-5070.129143
(39) Mangham, G. (2024, April 2). What is good governance in the public sector? *Azeus Convene*. https://www.azeusconvene.com/en-gb/articles/what-is-good-governance-in-the-public-sector
(40) Manzoor, A. (2014). *A look at efficiency in public administration: Past and future*. *SAGE Open, 4*(4), 1–5. https://doi.org/10.1177/2158244014564936
(41) Matnenko, N. (2020). Digital transformation of the public of the economy. *Scientific Journal Economic System*, 13(3), 32–44. https://doi.org/10.29030/2309-2076-2020-13-3-32-44
(42) McKinsey & Company. (2024). What is digital transformation? https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-digital-transformation
(43) Miller, T., Birch, M., Mauthner, M., & Jessop, J. (2012). *Ethics in qualitative research* (2nd ed.). Sage
(44) Mudey, M. H., & Arshad, R. (2024). Corruption impedes good governance in Somalia's public sector. *Journal of Financial Crime*. Advance online publication. https://doi.org/10.1108/jfc-07-2024-0225
(45) Mustapha, W. N., Hamidun, N. H., Amer, N., & Hashim, R. (2004). Change management in public sector. *Journal of Administrative Science*. https://jas.uitm.edu.my/images/2004_DEC/1.pdf
(46) Negri, C., & Dincă, G. (2023). Public sector's efficiency as a reflection of governance quality: A European Union study. *PLOS ONE, 18*(9), e0291048. https://doi.org/10.1371/journal.pone.0291048
(47) Oman Vision 2040 Implementation Follow-up Unit,(2024). *Oman Vision 2040*. https://www.oman2040.om/uploads/publication/20231105221146-2023-11-05publication221143_.pdf
(48) Organisation for Economic Co-operation and Development. (2025). *Digital government*. https://www.oecd.org/en/topics/digital-government.html
(49) Organisation for Economic Co-operation and Development. (2025). *Governance*. https://www.oecd.org/en/topics/policy-areas/governance.html
(50) Organization for Economic Co-operation and Development (2023). *More resilient public administrations after COVID-19: Lessons from using the Common Assessment Framework (CAF) 2020* (OECD Public Governance Policy Papers, No. 14). OECD Publishing. https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/04/more-resilient-public-administrations-after-covid-19_4d50e035/8d10bb06-en.pdf
(51) PEFA Secretariat. (2016). Framework for assessing public financial management. Washington, DC: Author. https://www.pefa.org/sites/pefa/files/news/files/PEFA-Framework_English.pdf
(52) Rajab, A. (2023). Improving the financial situation...a pillar of growth and sustainability. *Al-Watan*. Retrieved from https://www.alwatan.com/details/508829
(53) Rogers, E. M. (1983). *Diffusion of innovations* (3rd ed.). Free Press
(54) Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press
(55) Roseth, B., Reyes, A., & Yee Amézaga, K. (2021). *Public services and digital government during the pandemic: Perspectives of citizens, civil servants, and government institutions*. Inter-American Development Bank. https://doi.org/10.18235/0003122

(56) Sahin, I. (2006). Detailed review of Rogers' diffusion of innovations theory and educational technology-related studies based on Rogers' theory. *Turkish Online Journal of Educational Technology*, 5(2), 14–23
(57) Sanina, A., Balashov, A., & Rubtcova, M. (2021). The socio-economic efficiency of digital government transformation. *International Journal of Public Administration*, 46, 85–96. https://doi.org/10.1080/01900692.2021.1988637
(58) Smith, C. L., & Brooks, D. J. (2013). Governance framework. In *Security Science*. Elsevier.
(59) Song, Z., Mishra, A. R., & Saeidi, S. P. (2023). Technological capabilities in the era of the digital economy for integration into cyber-physical systems and the IoT using decision-making approach. *Journal of Innovation & Knowledge, 8*(2), 100356. https://doi.org/10.1016/j.jik.2023.100356
(60) Southwick, S. M., Bonanno, G. A., Masten, A. S., Panter-Brick, C., & Yehuda, R. (2014). Resilience definitions, theory, and challenges: Interdisciplinary perspectives. *European Journal of Psychotraumatology*, 5(1), Article 25338. https://doi.org/10.3402/ejpt.v5.25338
(61) Strauss A., Corbin J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Sage Publications
(62) Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Sage Publications
(63) Strauss, A., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Sage Publications
(64) Tang, D. (2021). What is digital transformation? *EDPACS, 64*(1), 9–13. https://doi.org/10.1080/07366981.2020.1847813
(65) Taylor, C., Spacco, J., Bunde, D., Zeume, T., Butler, Z., Barnas, M., Bort, H., Maiorana, F., & Hovey, C. (2018). Promoting the adoption of educational innovations. *Proceedings of the 23rd Annual ACM Conference on Innovation and Technology in Computer Science Education*, 368. https://doi.org/10.1145/3197091.3205847
(66) Urquhart, C. (2019). Grounded theory's best kept secret: The ability to build theory. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of current developments in grounded theory* (pp. 89–106). SAGE Publications
(67) Vigoda, E. (2003). From responsiveness to collaboration: Governance, citizens, and the next generation of public administration. *Public Administration Review, 63*(5), 500–511. https://doi.org/10.1111/1540-6210.00235
(68) Zimmerman, M. A. (2013). Resiliency theory: A strengths-based approach to research and practice for adolescent health. *Health Education & Behavior*, 40(4), 381–383. https://doi.org/10.1177/1090198113493782