

A Proposed Conceptual Framework of AI Leadership Readiness, Organizational Agility, and Institutional Performance in the UAE Public Sector

Noura Hamad Obaid Alshamsi

Fakulti Teknologi Dan Kejuruteraan Industri Dan Pembuatan, Universiti Teknikal Malaysia
Melaka, Malaysia

Wan Hasrulnizzam Wan Mahmood (Corresponding author)

Fakulti Teknologi Dan Kejuruteraan Industri Dan Pembuatan, Universiti Teknikal Malaysia
Melaka, Malaysia

E-mail: hasrulnizzam@utem.edu.my

Received: July 1, 2026 Accepted: September 4, 2026 Published: September 14, 2026

doi:10.5296/ijssr.v14i3.24040 URL: <https://doi.org/10.5296/ijssr.v14i3.24040>

Abstract

Artificial intelligence (AI) has become a strategic priority for public-sector transformation, offering opportunities to enhance decision-making, service delivery, operational efficiency, and institutional innovation. However, achieving meaningful value from AI requires more than technological adoption; it requires leadership capabilities, responsible governance, and organizational adaptability. This paper proposes a conceptual framework that explains how AI Leadership Readiness contributes to Institutional Performance through the mediating role of Organizational Agility within the UAE public-sector context. Drawing upon Dynamic Capabilities Theory, the framework conceptualizes AI Leadership Readiness as a multidimensional leadership capability consisting of AI Strategic Literacy, Data-Informed Leadership, Responsible AI Governance Orientation, and AI Change Leadership. The study develops the framework through an integrative review of literature on AI transformation, digital leadership, organizational agility, dynamic capabilities, and public-sector performance. The proposed model positions AI Leadership Readiness as an antecedent capability that enables public organizations to develop adaptive capacity, while Organizational Agility serves as the mechanism through which leadership capabilities are translated into improved institutional outcomes. The framework contributes to existing AI transformation literature by shifting attention from technology-centred perspectives toward the leadership and

organizational capabilities required for sustainable AI implementation. It also extends the application of Dynamic Capabilities Theory to the public-sector AI context by highlighting the importance of leadership readiness and agility in achieving public-value outcomes. The proposed framework provides a foundation for future empirical research and offers practical implications for UAE public-sector organizations seeking to strengthen AI-enabled transformation through leadership development, adaptive capabilities, and responsible AI governance.

Keywords: Artificial intelligence, AI leadership readiness, organizational agility, institutional performance, public-sector transformation, dynamic capabilities, UAE public sector, conceptual framework

1. Introduction

Artificial intelligence (AI) has emerged as a critical driver of public-sector transformation, enabling governments to enhance predictive analytics, automated service delivery, evidence-based decision-making, resource allocation, and administrative efficiency. However, the realization of AI value extends beyond technological adoption, as successful AI implementation requires complementary organizational capabilities, leadership competencies, governance mechanisms, and adaptive structures. Public-sector organizations must therefore develop the capacity to integrate AI responsibly while ensuring alignment with institutional objectives, regulatory requirements, and public-value expectations (Organisation for Economic Co-operation and Development [OECD], 2024; Van Noordt & Tangi, 2023).

Unlike private-sector organizations, public institutions operate within complex environments shaped by accountability obligations, legal constraints, transparency requirements, ethical considerations, and the need to maintain citizen trust. Consequently, AI adoption in government should be understood as a sociotechnical transformation involving the interaction of technology, people, processes, and institutional arrangements rather than merely a technological investment (Dunleavy & Margetts, 2025; Engstrom et al., 2020). The effective deployment of AI requires public-sector leaders who possess the ability to recognize AI opportunities and limitations, interpret AI-generated insights, establish responsible governance practices, and lead organizational change processes (Adie et al., 2024; Jobin et al., 2019).

The growing adoption of AI in government has also highlighted the importance of organizational readiness and capability development. Previous research indicates that AI implementation challenges are frequently associated with insufficient organizational capabilities, limited leadership understanding, fragmented governance structures, data-related constraints, and difficulties embedding AI into existing administrative processes (Jöhnk et al., 2021; Alshahrani et al., 2024). While existing studies have examined AI readiness, digital transformation, and technological capabilities, less attention has been given to the specific leadership capabilities required to guide AI-driven transformation within public-sector contexts (Anwar, 2026; Adie et al., 2024).

The UAE provides a significant context for examining AI-enabled public-sector transformation due to its strategic commitment to artificial intelligence, digital government, and future-oriented governance. Through initiatives such as the UAE Strategy for Artificial Intelligence 2031 and the UAE Digital Government Strategy 2025, the country has positioned AI as a strategic enabler for improving government performance, innovation, and service delivery (United Arab Emirates Government, 2024). Nevertheless, national-level AI strategies alone do not guarantee successful implementation across public organizations. Effective AI transformation requires leadership readiness, organizational agility, responsible governance, and the ability to translate strategic ambitions into operational capabilities (Al Maazmi et al., 2024; Almazrouei et al., 2024).

From a theoretical perspective, Dynamic Capabilities Theory provides a relevant foundation for understanding how organizations develop and renew capabilities in rapidly changing

environments. The theory emphasizes the ability of organizations to sense emerging opportunities, seize available resources, and transform internal processes to maintain effectiveness (Teece et al., 1997; Teece, 2007). Within the context of AI transformation, leadership readiness can be viewed as an important organizational capability that enables public-sector institutions to identify AI opportunities, make informed decisions, govern AI responsibly, and facilitate organizational adaptation (Barreto, 2010; Warner & Wäger, 2019).

Although prior studies have explored AI adoption, digital transformation, organizational readiness, and technological capabilities, limited research has conceptualized the leadership-level capability required to successfully guide AI transformation in public-sector organizations. In particular, the relationship between AI leadership readiness, organizational agility, and institutional performance remains insufficiently explored. Organizational agility represents an important mechanism through which leadership capabilities may be translated into adaptive actions, innovation capacity, and improved institutional outcomes (Felipe et al., 2017; Walter, 2021).

Therefore, this paper proposes a conceptual framework that introduces AI leadership readiness as a multidimensional leadership capability and examines its theoretical relationship with organizational agility and institutional performance within the UAE public sector. The proposed framework contributes to the literature by integrating AI leadership, dynamic capabilities, organizational agility, and public-sector performance perspectives into a unified conceptual model.

2. Literature Background and Research Gap

2.1 Artificial Intelligence Transformation in the Public Sector

The increasing adoption of artificial intelligence (AI) has accelerated the transformation of public-sector organizations by enabling new approaches to policy development, administrative decision-making, service delivery, and operational management. Governments worldwide are exploring AI applications to improve efficiency, enhance citizen services, strengthen evidence-based decision-making, and support more responsive governance systems (Organisation for Economic Co-operation and Development [OECD], 2024; Dunleavy & Margetts, 2025). AI technologies such as machine learning, predictive analytics, natural language processing, and automated decision-support systems provide significant opportunities for governments to improve institutional effectiveness and public value creation.

However, AI transformation in the public sector differs significantly from AI adoption in private-sector organizations. Public institutions operate within environments characterized by accountability, transparency, regulatory compliance, ethical obligations, and the need to maintain public trust. Therefore, AI implementation requires careful consideration of governance, fairness, explainability, privacy, and human oversight (Engstrom et al., 2020; Jobin et al., 2019). The successful integration of AI into government processes requires not only technological infrastructure but also organizational capabilities that enable institutions to adapt, coordinate, and manage AI-related changes effectively (Van Noordt & Tangi, 2023).

Recent research highlights that public-sector AI implementation challenges are often associated with organizational and institutional factors rather than purely technical limitations. These challenges include insufficient AI knowledge among decision-makers, limited organizational readiness, fragmented data environments, governance complexities, and difficulties integrating AI applications into existing administrative processes (Jöhnk et al., 2021; Alshahrani et al., 2024). Consequently, AI transformation requires leadership capabilities that extend beyond technology adoption toward strategic understanding, responsible governance, and organizational change management.

2.2 AI Readiness and Leadership Capability in Public Organizations

AI readiness has become an important research area in understanding the conditions required for successful AI adoption. Previous studies have examined readiness from organizational, technological, and individual perspectives, emphasizing factors such as infrastructure availability, data quality, employee skills, organizational culture, and managerial support (Jöhnk et al., 2021; Anwar, 2026). While these studies provide valuable insights into the broader conditions required for AI implementation, they provide limited attention to the specific role of leadership capability in directing AI transformation.

Leadership plays a central role in shaping how organizations interpret technological opportunities, allocate resources, establish governance mechanisms, and manage transformation processes. Digital leadership research suggests that public-sector leaders must develop strategic technology awareness, foster innovation-oriented cultures, and support organizational adaptation during digital transformation initiatives (Adie et al., 2024). However, AI introduces additional complexities because leaders must understand AI capabilities and limitations, evaluate AI-generated information, address ethical risks, and ensure that AI adoption aligns with institutional objectives and public values.

Therefore, this paper introduces the concept of AI leadership readiness as a distinct leadership capability that reflects the preparedness of public-sector leaders to guide AI-enabled transformation. Unlike general digital leadership or organizational AI readiness, AI leadership readiness focuses specifically on the leadership competencies required to understand, govern, and strategically implement AI within public institutions. This perspective is supported by research emphasizing that AI capability development involves not only technological resources but also managerial understanding, organizational learning, and capability renewal (Mikalef & Gupta, 2021; Van Noordt & Tangi, 2023).

2.3 Organizational Agility as an Enabler of AI Transformation

Organizational agility has emerged as a critical capability for organizations operating in uncertain and rapidly changing environments. It refers to an organization's ability to sense environmental changes, make timely decisions, coordinate resources, and adapt structures and processes in response to emerging challenges and opportunities (Walter, 2021). In the context of digital and AI transformation, organizational agility enables institutions to move beyond technology adoption toward continuous adaptation and innovation.

Research indicates that dynamic capabilities and organizational agility are closely connected

because both emphasize the ability of organizations to renew and reconfigure resources in response to environmental change (Barreto, 2010; Al Jabri et al., 2024). For public organizations implementing AI, agility is particularly important because AI initiatives often require changes in workflows, decision-making processes, governance structures, and employee capabilities.

The UAE public sector provides an important example of the relationship between digital transformation, agility, and institutional innovation. Research on UAE government organizations indicates that organizational structures, agility capabilities, and digital transformation conditions influence the ability of public institutions to achieve innovation and public-value outcomes (Al Maazmi et al., 2024; Almazrouei et al., 2024). These findings suggest that AI leadership capabilities alone may not directly generate improved institutional outcomes unless organizations possess the agility required to translate leadership vision into adaptive actions.

2.4 Institutional Performance and Public Value Creation

Institutional performance in the public sector extends beyond traditional efficiency measures and includes broader dimensions such as service quality, responsiveness, innovation, strategic alignment, and public value creation. Unlike private-sector organizations that primarily focus on financial outcomes, public institutions must balance operational effectiveness with societal expectations, accountability, and legitimacy (Bryson et al., 2014).

AI has the potential to enhance institutional performance by improving decision quality, automating routine processes, enabling predictive capabilities, and supporting more responsive public services. However, achieving these benefits requires appropriate organizational capabilities and governance arrangements. Van Noordt and Tangi (2023) emphasize that AI capability development in public organizations is closely linked to public value creation, demonstrating that successful AI implementation depends on how institutions develop and utilize AI-related capabilities.

Consequently, institutional performance should be considered an outcome of both technological capability and organizational readiness. This paper argues that AI leadership readiness may contribute to improved institutional performance by enabling organizations to develop greater agility, adapt to AI-driven changes, and effectively integrate AI into institutional processes.

2.5 Research Gap

Despite growing interest in AI adoption and digital transformation within government organizations, several important research gaps remain. First, existing AI readiness research has primarily focused on technological infrastructure, organizational conditions, or general adoption factors, with limited attention to the **leadership-specific capabilities required for AI transformation** (Jöhnk et al., 2021; Anwar, 2026). Although digital leadership research has examined leadership roles in technology transformation, the unique requirements of AI leadership—including AI strategic understanding, responsible governance, evidence-based decision-making, and AI-driven change management—remain insufficiently conceptualized

(Adie et al., 2024).

Second, existing studies provide limited understanding of how leadership capabilities translate into institutional outcomes. While AI capability and digital transformation research highlights the importance of organizational resources and capabilities, fewer studies explain the organizational mechanisms through which leadership readiness contributes to performance improvements (Mikalef & Gupta, 2021; Van Noordt & Tangi, 2023). Third, although organizational agility has been recognized as an important capability for responding to technological and environmental change, its mediating role in AI-enabled public-sector transformation remains underexplored. Existing research has examined agility and digital transformation separately, but limited conceptual work has integrated AI leadership readiness, organizational agility, and institutional performance within a unified public-sector framework (Felipe et al., 2017; Walter, 2021).

Finally, while the UAE has demonstrated strong strategic commitment toward AI and digital government transformation, further conceptual development is needed to explain how public-sector leaders can translate national AI ambitions into organizational capabilities and institutional outcomes (United Arab Emirates Government, 2024; Al Maazmi et al., 2024). To address these gaps, this paper proposes a conceptual framework that positions AI leadership readiness as a key antecedent capability, organizational agility as an adaptive mechanism, and institutional performance as the expected outcome within the UAE public-sector context.

3. Theoretical Foundation: Dynamic Capabilities Theory

3.1 Overview of Dynamic Capabilities Theory

This study is grounded in Dynamic Capabilities Theory (DCT), which provides a theoretical foundation for explaining how organizations develop, renew, and reconfigure capabilities in response to rapidly changing environments. Dynamic Capabilities Theory extends the resource-based view by emphasizing that organizational success does not depend solely on possessing valuable resources but also on the ability to continuously adapt and transform those resources as environmental conditions evolve (Teece et al., 1997).

Teece et al. (1997) conceptualized dynamic capabilities as the ability of organizations to integrate, build, and reconfigure internal and external competencies to address changing environments. Unlike ordinary capabilities that support routine operational activities, dynamic capabilities enable organizations to recognize emerging opportunities, respond to disruptions, and transform existing structures and processes to maintain effectiveness (Teece, 2007).

The theory is particularly relevant in the context of artificial intelligence (AI)-enabled transformation because AI adoption represents an ongoing process of organizational renewal rather than a single technological implementation. Organizations must continuously develop new capabilities, redesign processes, and adapt governance mechanisms to effectively integrate AI into decision-making and service delivery systems (Warner & Wäger, 2019).

3.2 Dynamic Capabilities in Public-Sector Organizations

Although Dynamic Capabilities Theory was initially developed within strategic management and private-sector contexts, its application has increasingly expanded to public-sector organizations operating in complex and uncertain environments. Public institutions must also develop the ability to sense environmental changes, mobilize resources, and transform organizational practices to achieve sustainable effectiveness and deliver public value (Piening, 2013).

However, applying Dynamic Capabilities Theory to the public sector requires consideration of the distinctive characteristics of government organizations. Unlike private firms that primarily pursue competitive advantage, public institutions operate under conditions of accountability, regulatory obligations, transparency requirements, and public-value expectations (Bryson et al., 2014). Therefore, dynamic capabilities in public organizations represent the ability to adapt and innovate while maintaining institutional legitimacy and serving societal objectives.

In the context of AI transformation, Dynamic Capabilities Theory provides a useful explanation for why some public organizations are better positioned than others to achieve meaningful AI-enabled outcomes. The successful adoption of AI requires more than access to technology; it requires the development of organizational capabilities that support learning, adaptation, responsible governance, and transformation (Van Noordt & Tangi, 2023).

3.3 Dynamic Capabilities and AI-Enabled Transformation

AI transformation introduces significant changes to organizational decision-making, operational processes, governance arrangements, and workforce capabilities. From a dynamic capabilities' perspective, organizations must develop the capacity to identify AI opportunities, evaluate their strategic relevance, and transform existing practices to capture AI-related value.

Teece (2007) describes dynamic capabilities through three interconnected processes: sensing, seizing, and transforming. These processes provide a theoretical explanation for how organizations respond to emerging technological opportunities. The sensing capability refers to the ability of organizations to identify changes, opportunities, and potential threats within their environment. In AI transformation, this involves recognizing the strategic importance of AI, understanding technological developments, and identifying areas where AI can enhance institutional performance. The seizing capability involves mobilizing resources and making strategic decisions to capture identified opportunities. Within AI-enabled public-sector transformation, organizations must establish appropriate governance arrangements, allocate resources effectively, and align AI initiatives with institutional objectives. The transforming capability refers to the ability to redesign organizational structures, processes, and routines to sustain adaptation. AI implementation often requires changes in workflows, decision-making approaches, organizational culture, and service delivery models.

Therefore, Dynamic Capabilities Theory provides a foundation for understanding AI transformation as a process of organizational capability development rather than a purely

technological implementation process.

3.4 Dynamic Capabilities, Organizational Agility, and Institutional Performance

Organizational agility represents an important outcome of dynamic capability development because it reflects an organization's ability to respond effectively to changing environments. Agile organizations are capable of sensing changes, making timely decisions, coordinating resources, and adapting structures and processes when facing uncertainty (Walter, 2021).

Previous research suggests that dynamic capabilities contribute to organizational agility by enabling organizations to continuously renew their resources and adapt their operational approaches (Al Jabri et al., 2024). In the context of AI transformation, agility becomes particularly important because organizations must continuously adjust to evolving technologies, emerging risks, and changing stakeholder expectations.

Furthermore, dynamic capabilities are expected to contribute to improved organizational outcomes by enabling institutions to transform resources into valuable results (Teece, 2007). In public-sector contexts, these outcomes extend beyond operational efficiency to include improved service delivery, innovation capability, responsiveness, and public value creation (Bryson et al., 2014; Van Noordt & Tangi, 2023).

Accordingly, this study adopts Dynamic Capabilities Theory to explain the theoretical relationship among AI leadership readiness, organizational agility, and institutional performance. The theory suggests that leadership capabilities enable organizations to develop adaptive capacity, while organizational agility serves as the mechanism through which these capabilities contribute to improved institutional outcomes.

3.5 Theoretical Implications for the Proposed Framework

The application of Dynamic Capabilities Theory provides three theoretical foundations for the proposed conceptual framework. First, it positions AI transformation as a capability development process rather than a technology adoption process. This perspective highlights the importance of organizational and leadership capabilities in realizing AI value. Second, it extends the application of Dynamic Capabilities Theory to the public-sector AI context by recognizing that government organizations must balance innovation and adaptation with accountability, governance, and public-value objectives.

Third, it provides the theoretical justification for examining the relationship between AI leadership readiness, organizational agility, and institutional performance. The framework assumes that organizations with stronger AI-related leadership capabilities are better able to develop adaptive capacity and achieve improved institutional outcomes. Therefore, Dynamic Capabilities Theory serves as the theoretical foundation for the proposed framework by explaining how capability development enables public-sector organizations to navigate AI-driven transformation and enhance institutional performance.

4. Methodology of Formulating the Conceptual Framework

4.1 Research Design and Conceptual Approach

This study adopts a conceptual framework development approach based on an integrative review and synthesis of existing literature. Conceptual research aims to develop theoretical understanding by organizing existing knowledge, identifying gaps, defining key concepts, and establishing logical relationships among constructs rather than empirically testing relationships through primary data collection (Torraco, 2005). The literature search focused on peer-reviewed publications related to AI readiness, digital leadership, organizational agility, dynamic capabilities, and public-sector transformation. Sources were selected based on conceptual relevance and contribution to understanding AI-enabled organizational transformation.

The purpose of this study is to formulate a conceptual framework that explains how AI leadership readiness may contribute to institutional performance through organizational agility within the UAE public-sector context. Therefore, the methodology focuses on synthesizing existing theoretical and empirical knowledge related to artificial intelligence transformation, leadership capability, organizational agility, and public-sector performance.

The framework formulation follows a theory-informed approach supported by Dynamic Capabilities Theory (Teece et al., 1997; Teece, 2007). The theory provides the foundation for organizing the reviewed literature and identifying how leadership capabilities may enable organizational adaptation and performance improvement in an AI-driven environment.

4.2 Literature Review and Knowledge Synthesis Approach

The conceptual framework was developed through a structured review of literature across four interconnected research domains:

(1) Artificial Intelligence Transformation in Public-Sector Organizations

The first domain examined research related to AI adoption, AI governance, digital government transformation, and public-sector AI implementation challenges. This literature highlights that successful AI transformation requires more than technological infrastructure and depends on organizational capabilities, governance mechanisms, and institutional readiness (OECD, 2024, 2025; Engstrom et al., 2020; Alshahrani et al., 2024).

(2) AI Readiness and Leadership Capability

The second domain focused on AI readiness, digital leadership, and leadership capabilities required for technology-enabled transformation. Existing studies demonstrate the importance of organizational readiness, managerial understanding, and leadership involvement in successful AI implementation (Jöhnk et al., 2021; Adie et al., 2024; Anwar, 2026). This literature informed the development of AI Leadership Readiness as a leadership-level capability distinct from general technological readiness or organizational AI capability.

(3) Organizational Agility and Adaptive Capability

The third domain examined literature on organizational agility, dynamic capabilities, and digital transformation capabilities. These studies emphasize the importance of organizational flexibility, responsiveness, and adaptation when implementing emerging technologies (Walter, 2021; Felipe et al., 2017; Al Jabri et al., 2024). This literature supported the inclusion of Organizational Agility as an adaptive mechanism within the proposed framework.

(4) Institutional Performance and Public Value Creation

The fourth domain reviewed research related to public-sector performance, public value creation, and digital transformation outcomes. Unlike private-sector performance measures, public-sector performance includes broader dimensions such as service quality, innovation, responsiveness, and societal value creation (Bryson et al., 2014; Van Noordt & Tangi, 2023). This literature informed the conceptualization of Institutional Performance as the outcome construct.

4.3 Identification and Conceptualization of Core Constructs

Based on the literature synthesis, three core constructs were identified for the proposed conceptual framework: AI Leadership Readiness, Organizational Agility, and Institutional Performance. AI Leadership Readiness was identified as the antecedent construct, representing the preparedness of public-sector leaders to understand, govern, and strategically lead AI-enabled transformation. Given the limited attention to leadership-specific AI capabilities in existing research, this construct is conceptualized through four dimensions: AI Strategic Literacy, Data-Informed Leadership, Responsible AI Governance Orientation, and AI Change Leadership. Together, these dimensions reflect the leadership capabilities required to guide responsible and effective AI transformation in public institutions (Adie et al., 2024; Jobin et al., 2019; Jöhnk et al., 2021; Mikalef & Gupta, 2021).

Organizational Agility was identified as the mediating construct, representing the organizational capability to adapt structures, processes, and practices in response to AI-driven changes. Agility enables organizations to respond to uncertainty, coordinate resources, and continuously adjust to evolving technological and environmental demands (Walter, 2021; Al Jabri et al., 2024).

Institutional Performance was identified as the outcome construct, reflecting the broader objectives of AI-enabled public-sector transformation. It encompasses operational effectiveness, service improvement, innovation capability, responsiveness, and strategic alignment. This perspective recognizes that public-sector performance extends beyond efficiency to include the creation of public value and improved institutional outcomes (Bryson et al., 2014; Almazrouei et al., 2024).

4.4 Framework Development Process

The proposed conceptual framework presented in Figure 1 was developed through a systematic process involving three sequential stages: (1) identification of the research gap, (2) selection and conceptualization of the core constructs, and (3) establishment of the theoretical

relationships among the identified constructs. The first stage involved identifying the research gap through an extensive review of existing literature on artificial intelligence adoption, digital transformation, organizational readiness, leadership capability, and technological transformation in public-sector organizations. Although previous studies have examined AI adoption challenges, digital maturity, organizational readiness, and technological capabilities, limited attention has been given to the specific leadership capabilities required to successfully guide AI-driven transformation within public institutions. Existing research has emphasized the importance of organizational and technological conditions for AI implementation; however, the role of leadership preparedness in developing strategic AI understanding, ensuring responsible AI governance, and facilitating organizational change remains insufficiently conceptualized. This gap provided the rationale for introducing AI Leadership Readiness as a distinct leadership-level construct within the proposed framework.

The second stage involved identifying and integrating the key constructs that represent the essential components of AI-enabled public-sector transformation. Based on the synthesis of the literature, the framework incorporates three central constructs: AI Leadership Readiness as the antecedent construct, Organizational Agility as the mediating construct, and Institutional Performance as the outcome construct. These constructs were selected because they represent the interconnected dimensions required for transforming AI potential into organizational value. AI Leadership Readiness reflects the leadership capability required to understand, govern, and strategically implement AI initiatives; Organizational Agility represents the adaptive organizational capability required to respond to AI-driven changes; and Institutional Performance represents the institutional outcomes expected from effective AI-enabled transformation.

The third stage focused on establishing the conceptual relationships among the identified constructs through the integration of theoretical foundations and empirical insights from previous research. As illustrated in Figure 1, the framework proposes that AI Leadership Readiness contributes to Institutional Performance both directly and indirectly through Organizational Agility. The framework assumes that leaders with greater AI readiness are better positioned to develop organizational capabilities that support adaptation, innovation, and transformation. Through enhanced Organizational Agility, public-sector institutions can more effectively translate leadership capabilities into operational improvements, responsive decision-making, and AI-enabled service enhancement. Accordingly, Organizational Agility is positioned as the mechanism through which AI Leadership Readiness is transformed into improved Institutional Performance.

Overall, the framework development process integrates leadership capability, organizational adaptability, and institutional outcomes into a unified conceptual model. The proposed framework provides a theoretical explanation of how public-sector organizations in the UAE may develop the necessary capabilities to achieve effective AI-enabled transformation while addressing the complexities of governance, adaptation, and public-value creation.

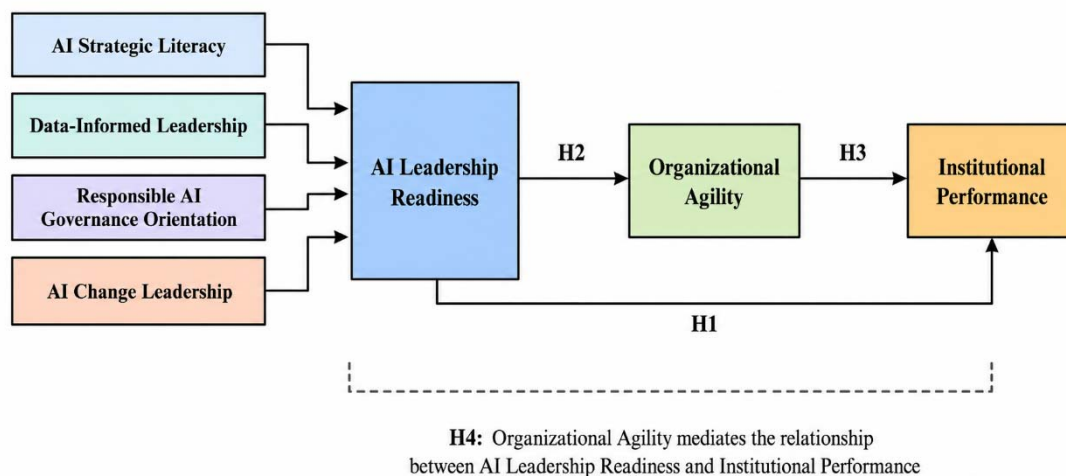


Figure 1. Proposed conceptual framework of AI leadership readiness, organizational agility, and institutional performance in the UAE public sector

4.4.1 Research Propositions of the Proposed Framework

Based on the framework structure presented in Figure 1, this study proposes four theoretical relationships among AI Leadership Readiness, Organizational Agility, and Institutional Performance. The proposed relationships are derived from the theoretical foundation of Dynamic Capabilities Theory and supported by existing literature on AI transformation, leadership capability, organizational adaptation, and public-sector performance. The propositions explain how leadership readiness enables public organizations to develop adaptive capabilities and achieve improved institutional outcomes.

The first proposition examines the direct relationship between AI Leadership Readiness and Institutional Performance. AI Leadership Readiness represents the capability of public-sector leaders to understand AI opportunities, make informed decisions, establish responsible AI governance practices, and guide organizational transformation. Leaders with higher levels of AI readiness are expected to enhance institutional performance by ensuring strategic alignment of AI initiatives, improving decision-making quality, supporting innovation, and contributing to more effective and responsive public service delivery.

H1: AI Leadership Readiness positively influences Institutional Performance.

The second proposition focuses on the relationship between AI Leadership Readiness and Organizational Agility. Successful AI transformation requires public organizations to develop adaptive capabilities that enable them to respond effectively to technological changes, emerging challenges, and evolving stakeholder expectations. AI-ready leaders are expected to strengthen organizational agility by promoting organizational learning, encouraging flexibility, supporting resource reconfiguration, and facilitating changes in structures and processes necessary for effective AI implementation.

H2: AI Leadership Readiness positively influences Organizational Agility.

The third proposition examines the relationship between Organizational Agility and Institutional Performance. Organizational agility enables public-sector institutions to respond rapidly to uncertainty, redesign operational processes, coordinate resources effectively, and integrate emerging technologies into existing practices. Organizations with stronger agility capabilities are better positioned to transform AI initiatives into improved operational effectiveness, innovation capacity, responsiveness, and public-value outcomes.

H3: Organizational Agility positively influences Institutional Performance.

The fourth proposition investigates the mediating role of Organizational Agility in the relationship between AI Leadership Readiness and Institutional Performance. While AI Leadership Readiness provides the strategic vision, governance orientation, and leadership capability required to initiate AI transformation, Organizational Agility represents the mechanism through which these capabilities are translated into organizational actions and performance outcomes. Through enhanced agility, public-sector organizations can effectively adapt processes, implement AI initiatives, and maximize the value generated from AI-enabled transformation.

H4: Organizational Agility mediates the relationship between AI Leadership Readiness and Institutional Performance.

Collectively, these propositions establish the theoretical logic of the proposed framework by positioning AI Leadership Readiness as the foundational leadership capability, Organizational Agility as the adaptive mechanism, and Institutional Performance as the expected outcome of AI-enabled public-sector transformation. The proposed relationships provide a basis for future empirical research to examine how leadership capabilities influence organizational adaptation and performance outcomes within the UAE public-sector context.

5. Discussion of the Proposed Framework

The proposed conceptual framework provides an integrated perspective on how public-sector organizations can develop the capabilities required to achieve AI-enabled transformation. By positioning AI Leadership Readiness as the antecedent construct, Organizational Agility as the mediating mechanism, and Institutional Performance as the outcome construct, the framework explains how leadership capabilities can be translated into organizational adaptation and improved institutional outcomes.

5.1 AI Leadership Readiness as a Driver of AI Transformation

The framework positions AI Leadership Readiness as a foundational capability that enables public-sector organizations to effectively navigate AI transformation. While previous research has emphasized technological infrastructure, organizational readiness, and AI capability, this framework highlights the importance of leadership preparedness as a critical but underexplored factor in AI implementation (Jöhnk et al., 2021; Adie et al., 2024).

AI transformation requires leaders who are capable of understanding AI opportunities and

limitations, interpreting AI-supported information, establishing responsible governance practices, and guiding organizational change. Therefore, AI Leadership Readiness extends beyond technical awareness by incorporating strategic, governance, decision-making, and change-management capabilities.

The four dimensions proposed in this framework which are AI Strategic Literacy, Data-Informed Leadership, Responsible AI Governance Orientation, and AI Change Leadership that represent complementary leadership capabilities required to support responsible and sustainable AI adoption. AI Strategic Literacy enables leaders to recognize the strategic value of AI, while Data-Informed Leadership supports evidence-based decision-making. Responsible AI Governance Orientation ensures that AI adoption aligns with ethical principles, transparency, and public-sector accountability, whereas AI Change Leadership facilitates organizational acceptance and transformation (Jobin et al., 2019; OECD, 2025).

5.2 Organizational Agility as the Mediating Mechanism

A central contribution of the proposed framework is the positioning of Organizational Agility as a mediating mechanism between AI Leadership Readiness and Institutional Performance. Although leadership readiness is essential for initiating AI transformation, leadership capability alone may not generate improved institutional outcomes unless organizations possess the ability to adapt and implement change effectively.

Organizational agility enables institutions to respond to technological developments, redesign processes, coordinate resources, and adjust operational practices in response to changing demands (Walter, 2021). This perspective aligns with Dynamic Capabilities Theory, which suggests that organizations achieve transformation by developing capabilities that allow them to sense opportunities, seize resources, and transform existing processes (Teece, 2007).

In the context of AI transformation, agile organizations are better positioned to experiment with AI applications, integrate new technologies into existing workflows, overcome implementation challenges, and continuously improve their operational practices. Therefore, Organizational Agility provides the organizational pathway through which leadership readiness can be converted into meaningful transformation outcomes.

5.3 AI Leadership Readiness and Institutional Performance

The framework proposes that AI Leadership Readiness contributes directly to Institutional Performance by enabling leaders to strategically align AI initiatives with organizational objectives. Public-sector AI transformation requires leadership capable of ensuring that AI investments contribute to improved service delivery, operational effectiveness, innovation, and public value creation.

Existing research suggests that AI capability development is closely associated with organizational ability to create value from AI technologies (Mikalef & Gupta, 2021; Van Noordt & Tangi, 2023). However, the proposed framework extends this perspective by emphasizing that leadership capability represents an essential foundation for transforming AI

potential into institutional outcomes.

Within the UAE public-sector context, where government organizations have established ambitious AI and digital transformation strategies, leadership readiness becomes particularly important for translating national-level strategies into organizational-level capabilities and outcomes (United Arab Emirates Government, 2024; Al Maazmi et al., 2024).

5.4 Organizational Agility and Institutional Performance

The framework further proposes that Organizational Agility positively contributes to Institutional Performance. Agile public-sector organizations are better able to respond to environmental changes, improve operational processes, enhance service delivery, and foster innovation.

Unlike private-sector performance models that often emphasize competitive advantage and financial outcomes, public-sector performance incorporates broader dimensions including efficiency, responsiveness, institutional effectiveness, and public value creation (Bryson et al., 2014). Therefore, organizational agility provides public institutions with the flexibility required to achieve sustainable performance improvements in an increasingly complex digital environment.

Research on organizational agility and digital transformation supports the view that adaptive capabilities enable organizations to better utilize emerging technologies and improve innovation outcomes (Felipe et al., 2017; Al Jabri et al., 2024). Accordingly, the proposed framework considers agility as an essential capability for maximizing the institutional benefits of AI transformation.

5.5 The Mediating Role of Organizational Agility

The proposed framework's main theoretical contribution lies in explaining how AI Leadership Readiness may influence Institutional Performance. Rather than assuming that leadership capability automatically produces improved outcomes, the framework argues that organizational agility serves as the mechanism through which leadership capabilities are transformed into institutional value.

This mediating relationship extends existing AI transformation literature by integrating leadership capability with organizational adaptation. AI-ready leaders provide strategic direction, governance, and transformation leadership; however, organizational agility enables institutions to operationalize this capability through adaptive processes, resource coordination, and continuous improvement.

This perspective is consistent with Dynamic Capabilities Theory, which emphasizes that organizational performance improvements result from the ability to transform capabilities into adaptive actions (Teece et al., 1997; Teece, 2007).

5.6 Implications for the UAE Public Sector

The proposed framework provides important implications for UAE public-sector organizations pursuing AI-enabled transformation. While national AI strategies provide

strategic direction, successful implementation requires public institutions to develop internal leadership and organizational capabilities.

The framework suggests that public organizations should invest not only in AI technologies but also in leadership development programs that enhance AI understanding, responsible governance awareness, evidence-based decision-making, and change leadership capabilities. Furthermore, organizations should strengthen agility-related capabilities by promoting flexible structures, continuous learning, cross-functional collaboration, and adaptive processes.

By integrating leadership capability, organizational agility, and institutional performance, the framework provides a holistic perspective for understanding how UAE public organizations can move from AI adoption toward sustainable AI-enabled transformation.

5.7 Summary of the Framework Contribution

Overall, the proposed framework contributes to the literature by positioning AI Leadership Readiness as a critical leadership capability for public-sector AI transformation and by identifying Organizational Agility as the mechanism through which this capability contributes to Institutional Performance. The framework extends existing AI readiness and digital transformation research by incorporating leadership, adaptation, and performance perspectives into a unified model.

Future empirical research can build upon this framework by validating the proposed relationships and examining how AI Leadership Readiness dimensions influence organizational agility and institutional outcomes across different public-sector contexts.

6. Conclusion

Artificial intelligence is increasingly reshaping the future of public-sector organizations; however, achieving meaningful AI-enabled transformation requires more than technological adoption. Public institutions must develop the leadership capabilities, governance mechanisms, and adaptive organizational capacities necessary to effectively integrate AI into their operations and create sustainable institutional value. This paper proposed a conceptual framework that explains how AI Leadership Readiness may contribute to Institutional Performance through the mediating role of Organizational Agility within the UAE public-sector context.

Drawing upon Dynamic Capabilities Theory, the proposed framework conceptualizes AI Leadership Readiness as a critical leadership-level capability that enables public-sector leaders to understand AI opportunities, make informed decisions, establish responsible governance practices, and lead organizational transformation. The framework further positions Organizational Agility as the mechanism through which leadership capabilities are translated into organizational adaptation, allowing institutions to effectively respond to AI-driven changes and achieve improved outcomes.

The framework contributes to existing literature in several ways. First, it extends AI readiness research by shifting attention from primarily technological and organizational factors toward

the leadership capabilities required to guide AI transformation. Second, it advances the application of Dynamic Capabilities Theory within the public-sector AI context by highlighting how leadership capabilities and organizational agility support institutional adaptation. Third, it provides a context-specific perspective for the UAE public sector, where national AI strategies require corresponding organizational capabilities to translate strategic ambitions into practical outcomes.

From a practical perspective, the framework suggests that public-sector organizations should not focus solely on AI infrastructure and technological investment but should also develop leadership capabilities related to AI strategic understanding, evidence-based decision-making, responsible AI governance, and change management. Strengthening organizational agility is equally important to ensure that institutions can effectively adapt processes, coordinate resources, and maximize the value generated from AI initiatives.

Although this paper provides a theoretically grounded conceptual framework, empirical validation is required to examine the proposed relationships and assess the applicability of the model across different public-sector contexts. Future research may operationalize the proposed constructs, evaluate the relationships among AI Leadership Readiness, Organizational Agility, and Institutional Performance, and explore how different institutional environments influence AI-enabled transformation outcomes.

Overall, this study provides a foundation for understanding how public-sector organizations can develop the leadership and adaptive capabilities required to achieve responsible and effective AI transformation. The proposed framework offers a pathway for future research and practice by emphasizing that successful AI adoption depends not only on technological capability but also on leadership readiness, organizational agility, and the ability to create sustainable institutional value.

References

- Adie, B. U., Tate, M., & Valentine, E. (2024). Digital leadership in the public sector: A scoping review and outlook. *International Review of Public Administration*, 29(1), 42–58. <https://doi.org/10.1080/12294659.2024.2323847>
- Al Jabri, M. A., Shaloh, S., Shakhoor, N., Haddoud, M. Y., & Obeidat, B. Y. (2024). The impact of dynamic capabilities on enterprise agility: The intervening roles of digital transformation and IT alignment. *Journal of Open Innovation: Technology, Market, and Complexity*, 10, Article 100266. <https://doi.org/10.1016/j.joitmc.2024.100266>
- Al Maazmi, A., Piya, S., & Araci, Z. C. (2024). Exploring the critical success factors influencing the outcome of digital transformation initiatives in government organizations. *Systems*, 12(12), Article 524. <https://doi.org/10.3390/systems12120524>
- Almazrouei, F., Elias Sarker, A., Zervopoulos, P., & Yousaf, S. (2024). Organizational structure, agility, and public value-driven innovation performance in the UAE public services. *Heliyon*, 10(13), Article e33261. <https://doi.org/10.1016/j.heliyon.2024.e33261>
- Alshahrani, A., Griva, A., Dennehy, D., & Mäntymäki, M. (2024). Artificial intelligence and

decision-making in government functions: Opportunities, challenges and future research. *Transforming Government: People, Process and Policy*, 18(4), 678–698. <https://doi.org/10.1108/TG-06-2024-0131>

Anwar, R. A. (2026). *Assessing public-sector readiness for artificial intelligence in Egypt*. Master's thesis, The American University in Cairo. AUC Knowledge Fountain. Retrieved from <https://fount.aucegypt.edu/etds/2724/>

Barreto, I. (2010). Dynamic capabilities: A review of past research and an agenda for the future. *Journal of Management*, 36(1), 256–280. <https://doi.org/10.1177/0149206309350776>

Bryson, J. M., Crosby, B. C., & Bloomberg, L. (2014). Public value governance: Moving beyond traditional public administration and the new public management. *Public Administration Review*, 74(4), 445–456. <https://doi.org/10.1111/puar.12238>

Dunleavy, P., & Margetts, H. (2025). Data science, artificial intelligence and the third wave of digital era governance. *Public Policy and Administration*, 40(2), 185–214. <https://doi.org/10.1177/09520767231198737>

Engstrom, D. F., Ho, D. E., Sharkey, C. M., & Cuéllar, M. F. (2020). *Government by algorithm: Artificial intelligence in federal administrative agencies* (Public Law Research Paper No. 20-54). New York University School of Law. <https://doi.org/10.2139/ssrn.3551505>

Felipe, C. M., Roldán, J. L., & Leal-Rodríguez, A. L. (2017). Impact of organizational culture values on organizational agility. *Sustainability*, 9(12), Article 2354. <https://doi.org/10.3390/su9122354>

Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1, 389–399. <https://doi.org/10.1038/s42256-019-0088-2>

Jöhnk, J., Weißert, M., & Wyrski, K. (2021). Ready or not, AI comes—An interview study of organizational AI readiness factors. *Business & Information Systems Engineering*, 63, 5–20. <https://doi.org/10.1007/s12599-020-00676-7>

Madan, R., & Ashok, M. (2025). Making sense of AI benefits: A mixed-method study in Canadian public administration. *Information Systems Frontiers*, 27(3), 889–923. <https://doi.org/10.1007/s10796-024-10475-0>

Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. *Information & Management*, 58(3), Article 103434. <https://doi.org/10.1016/j.im.2021.103434>

Organisation for Economic Co-operation and Development. (2024). *Artificial intelligence, data and digital government: Challenges and opportunities for public sector transformation*. OECD Publishing.

Organisation for Economic Co-operation and Development. (2025). *Governing with artificial intelligence: Public sector transformation and responsible AI*. OECD Publishing.

Piening, E. P. (2013). Dynamic capabilities in public organizations: A literature review and research agenda. *Public Management Review*, 15(2), 209–245. <https://doi.org/10.1080/14719037.2012.708358>

Tangi, L., Rodriguez Müller, A. P., & van Noordt, C. (2026). Exploring the challenges for artificial intelligence adoption and implementation in EU public administrations: Results from a case study analysis. *Digital Government: Research and Practice*, 7(1), 1–22. <https://doi.org/10.1145/3776547>

Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)

United Arab Emirates Government. (2024a). *UAE Digital Government Strategy 2025*. UAE Government.

United Arab Emirates Government. (2024b). *UAE Strategy for Artificial Intelligence 2031*. UAE Government.

Van Noordt, C., & Tangi, L. (2023). The dynamics of AI capability and its influence on public value creation of AI within public administration. *Government Information Quarterly*, 40(4), Article 101860. <https://doi.org/10.1016/j.giq.2023.101860>

Walter, A. T. (2021). Organizational agility: Ill-defined and yet fundamental concept. *International Journal of Organizational Analysis*, 29(5), 1189–1212.

Warner, K. S. R., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, 52(3), 326–349. <https://doi.org/10.1016/j.lrp.2018.12.001>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).