

Digital Transformation Strategies in the Kingdom of Saudi Arabia under Vision 2030

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Abstract:

This research aims to examine digital transformation strategies in Saudi Arabia within the framework of Vision 2030, by analyzing the key policies, strategic pillars, and plans adopted to accelerate the shift towards an innovative digital government. The findings reveal that Saudi Arabia represents a pioneering model in the region, focusing on digital inclusion, data governance, cybersecurity enhancement, and digital infrastructure development, which have significantly improved service quality, efficiency, and transparency. The study concludes that successful digital transformation requires the integration of technology with human resources while ensuring innovation sustainability.

Keywords: Digital Transformation, Vision 2030, Digital Policies, Digital Inclusion, Governance.

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1. Introduction

Digital transformation today constitutes one of the most defining features of the modern era, serving as the primary driver of economic development and the foundation for building smart societies. The Fourth Industrial Revolution, accompanied by artificial intelligence technologies, has created a new reality in which digitization has become a decisive factor in enhancing the efficiency of public and private institutions, strengthening competitiveness, and achieving sustainable development. Digital transformation is no longer a complementary option but rather an essential condition for states to survive and adapt to the rapidly changing global environment.

In response to this shift, many countries have adopted national digital transformation strategies aimed at developing digital infrastructure, facilitating access to public services, and promoting digital inclusion to ensure that no social group is left behind. International organizations such as the United Nations and the International Telecommunication Union have also emphasized the importance of digital transformation indicators as benchmarks for assessing progress and development across nations.

Within this global context, the Kingdom of Saudi Arabia has emerged as a leading regional model in digital transformation. Anchored in the Kingdom's Vision 2030, Saudi Arabia has adopted a comprehensive strategic framework that places digitization at its core. The Kingdom has recognized that digital transformation is not limited to upgrading technical infrastructure; rather, it encompasses restructuring policies, developing human capital, and fostering innovation in the delivery of both public and private services.

Accordingly, this study is guided by the central research question: **To what extent have Saudi Arabia's digital transformation strategies contributed to achieving the objectives of Vision 2030, and what are their main pillars and achievements?**

From this central question, the following hypotheses are derived:

- Saudi Arabia's digital transformation strategies have been built upon key pillars such as digital governance, digital inclusion, data governance, and cybersecurity.
- These strategies have positively contributed to enhancing the efficiency of government services, strengthening the digital economy, and achieving regional and international leadership.

Building on these hypotheses, the study identifies a set of objectives aimed at developing a deeper understanding of the trajectory of digital transformation in the Kingdom and evaluating its alignment with Vision 2030:

- To analyze the trajectory of Saudi Arabia's digital transformation strategies from 2006 to 2025.
- To highlight the extent to which these strategies are linked to Vision 2030 and the Sustainable Development Goals (SDGs).
- To document the most significant national digital achievements and future challenges.

To achieve these objectives, the study employs a **descriptive-analytical methodology**, relying on data collected from official sources, national reports, and international publications, which are analyzed in light of global digital indicators.

2. Theoretical Framework of Digital Transformation

2.1 The Concept of Digital Transformation

Digital transformation is considered one of the most prominent contemporary concepts that has strongly imposed itself across various economic, social, and administrative fields, driven by the accelerating technological revolution. The definitions provided in academic and managerial literature have varied, largely due to the different contexts in which the concept is applied.

Before addressing the specific definitions of *digital transformation*, it is essential to clarify the meaning of the term "*digital*" within this expression. According to Shalmo and Williams, the adjective "*digital*" refers to the way organizations conduct their business

activities. Based on this perspective, the term can be divided into three main dimensions: creating value in new areas of business, optimizing processes that directly impact customer experience, and building the core capabilities that support overall business initiatives. (Mesghouni & Djedidi , 2024, p. 4)

Accordingly, digital transformation can be defined as the use of technology to radically improve organizational performance or expand institutional scope (Westerman and others & Bonnet, , 2011) . It represents a fundamental axis for organizations worldwide, enabling them to leverage modern technologies such as data analytics, mobile computing, social networks, and embedded smart devices, alongside traditional systems like Enterprise Resource Planning (ERP). The ultimate goal of this shift is to enhance customer relations, improve internal processes, and strengthen value propositions, while keeping pace with the rapid changes imposed by the digital revolution across all sectors.

Digital transformation is also defined as “*the transformation associated with the changes that digital technologies can bring to a company’s business model, its products, or its organizational structures.*” (Swen & Reinhard , 2021, p. 2). It is considered one of the most comprehensive managerial challenges that incumbent firms have faced in past decades and will continue to face in the coming ones. However, the transformative power of digital capabilities cannot be fully realized unless they are accompanied by employees and leaders who possess the necessary skills. Thus, digital transformation requires the integration of both technology and human resources.

In addition, digital transformation is defined as a fundamental shift in the way organizations exploit technology to create value (Vial). When supported by artificial intelligence (AI), it entails the integration of machine learning, natural language processing, and data analytics to reimagine business models and processes. (Jun , 2025, p. 2)

Based on the aforementioned definitions, digital transformation can be conceptualized as a radical process that relies on leveraging modern digital technologies—such as artificial intelligence, data

analytics, mobile computing, and social networks—alongside traditional systems, in order to innovate new business models, enhance operational efficiency, and deliver added value to customers and stakeholders. Importantly, it is not confined to technology alone, but also requires investment in the development of human competencies capable of keeping pace with these changes and ensuring the sustainability of their outcomes.

2.2. Benefits of Digital Transformation

Today, digital transformation has become a strategic tool that enables organizations to leverage modern technological capabilities to enhance their performance and expand the scope of their operations. It is not limited to updating technical infrastructure; rather, it contributes to fundamental changes in the way services are delivered, work processes are developed, and the organization's adaptability to market dynamics is strengthened. From this perspective, identifying the key benefits of digital transformation is an essential step toward understanding its pivotal role in fostering innovation and achieving sustainable development.

The main benefits of digital transformation for both customers and organizations include the following (Sadouki, 2021, p. 103):

- Better control over time and costs, leading to improved operational efficiency.
- Enhanced innovation within the organization through the outcomes of digital technologies, enabling the delivery of entirely new services to customers.
- Strengthened competitiveness in the organizational environment and the ability to gain new market shares.
- Provision of high-quality products and services, thereby ensuring customer and societal well-being.

2.3. Pillars of Digital Transformation

The process of digital transformation is extensive, complex, and costly, requiring a set of essential pillars and core components that contribute to its successful implementation. These include (Mesghouni & Djedidi , 2024, p. 5):

- **Digital Strategic Orientation:** Defined by the institution's vision, mission, opportunities, challenges, and objectives related to digital transformation, as well as all future directions toward digitization. This relies on a thorough understanding of the ministry's internal and external work environment.
- **Digital Leadership:** Refers to the capabilities, skills, and tools of digital leadership within the ministry, along with the incentives that enable the dissemination and adoption of digital transformation.
- **Digital Organizational Values:** A set of values, beliefs, behaviors, and organizational practices that underpin the digital transformation process.
- **Digital Competencies and Talents:** Human competencies and expertise empowered by digital skills, possessing strong technical and professional specialization in this field.
- **Digital Logistical and Technical Infrastructure:** Encompasses all requirements for digital transformation, including technologies, software, applications, resources, logistical equipment, and sufficient financial capabilities.

2.4. Challenges of Digital Transformation

Despite the numerous advantages that digital transformation offers to both institutions and nations, its trajectory is not without challenges and obstacles that may hinder the achievement of its intended goals. The transition to a digital environment requires fundamental changes in infrastructure, human resources, and organizational systems, which may lead to technical, administrative, and cultural difficulties. Therefore, examining the challenges of digital transformation is a crucial step toward understanding the factors that may limit its

effectiveness and for developing more efficient strategies to ensure its success and sustainability. Among these challenges are the following (Mokhtar & Bougrires , 2022, p. 8):

- **Insufficient resources and funding:** The lack of adequate financial resources to support digital transformation initiatives, coupled with limited capacities in the local ICT sector and insufficient international support, poses significant barriers to the successful implementation of digital projects.
- **Delays in legal and regulatory frameworks:** Either intentional or unintentional delays in establishing the necessary legal and regulatory frameworks hinder progress, as these frameworks constitute the cornerstone of any successful digital transformation initiative.
- **Resistance to change:** Some employees may resist change due to concerns about potential job loss in the future, which creates cultural and organizational barriers to transformation.
- **Shortage of skilled talent:** A lack of qualified professionals with the expertise to lead and manage digital transformation programs undermines the ability to drive sustainable change.

3. Saudi Arabia's Digital Transformation Efforts under Vision 2030

3.1. Digital Transformation Strategies

Digital transformation in the Kingdom of Saudi Arabia represents one of the fundamental pillars for achieving Vision 2030, as the government has placed significant emphasis on developing successive strategies aimed at building a globally leading digital government. This commitment has been embodied through a series of strategic plans launched since the mid-2000s, which have evolved gradually to focus on improving e-government services, strengthening the digital infrastructure, and developing human capital.

Over time, these strategies have advanced to incorporate cutting-edge concepts such as artificial intelligence, data governance, national digital identity, and digital inclusion. Importantly, they were not developed in isolation but were designed in alignment with the United

Nations Sustainable Development Goals (SDGs) and the requirements of the global digital economy. This reflects the Kingdom's commitment to leveraging modern technologies to enhance governmental efficiency, improve quality of life, and foster a competitive business environment.

The following section highlights the stages of development of Saudi Arabia's digital transformation strategies (<https://my.gov.sa>, s.d.):

3.1.1. The Period 2006–2010: The First Digital Strategic Plan

The Kingdom's first digital transformation strategy was launched under the leadership of the **Yesser Program**, with a primary focus on delivering high-quality e-government services to all citizens by 2010 and improving the efficiency and effectiveness of the public sector. This phase involved the development of a comprehensive roadmap for e-government, with a strong emphasis on citizen-centered services, alongside the establishment of a technical and operational framework to ensure continuity, integration, and scalability of government systems.

3.1.2. The Period 2012–2016: The Second Digital Strategic Plan

During this phase, the **Yesser Program**, in collaboration with ministries, universities, and the private sector, pursued broader efforts to strengthen an inclusive digital culture. The objectives centered on building a sustainable government workforce capable of supporting digital transformation, enhancing citizen experiences with e-services, and fostering collaboration and innovation to boost efficiency. This stage also included the advancement of e-participation, the enhancement of national shared applications, and the establishment of robust digital infrastructure coupled with effective change management in the public sector environment.

3.1.3. The Period 2020–2022: The Smart Government Strategic Plan

This stage preceded the creation of the **Digital Government Authority** and marked the adoption of an ambitious strategy aligned

with **Saudi Vision 2030** and the **Sustainable Development Goals (SDGs)**. The plan emphasized delivering a unified and intelligent government experience through citizen-centered digital services tailored to meet diverse needs efficiently. Special attention was given to strengthening the digital capabilities of government employees and leaders, as well as optimizing shared resources to reduce costs while improving service efficiency.

3.1.4. The Period 2022–2025: The National Digital Government Strategy

With the establishment of the Digital Government Authority, the National Strategy was launched, representing a turning point in Saudi Arabia's digital transformation journey. This strategy aims first to build a future-ready digital government, followed by achieving global excellence and leadership. It emphasizes the development of an integrated digital ecosystem to support government decision-making, accelerating digital growth, enforcing strong governance mechanisms, and creating innovative user experiences, while continuously monitoring performance indicators and international benchmarks.

From the previous stages, it is evident that digital transformation in Saudi Arabia was not an instantaneous process, but rather a gradual and systematic approach. It evolved from focusing on providing e-services and building digital infrastructure (2006–2010), to strengthening e-participation and fostering a culture of collaboration and innovation (2012–2016), and later to delivering an integrated smart government experience aligned with Vision 2030 and the Sustainable Development Goals (**SDGs**) (2020–2022). The current phase (2022–2025) is characterized by aspirations for global leadership through the adoption of advanced concepts such as digital governance, artificial intelligence, and data-driven decision-making.

Accordingly, Saudi Arabia's digital strategies have progressed from building foundational capabilities to fostering innovation and achieving global excellence, positioning the Kingdom as a model for digital government transformation at the international level. In reviewing these strategies, it becomes clear that their success was not

solely the result of government efforts, but was closely linked to the Kingdom's ability to forge effective national partnerships with diverse stakeholders. These partnerships served as a cornerstone in translating ambitious goals into tangible outcomes, by providing technical and knowledge support, strengthening digital infrastructure, and promoting a culture of innovation and integration between the public and private sectors. Therefore, any discussion of Saudi Arabia's digital transformation strategies would be incomplete without highlighting the role of national partnerships as an essential complementary factor ensuring the sustainability and effectiveness of digital transformation in alignment with the objectives of Saudi Vision 2030.

The importance of national partnerships has been reflected in a number of initiatives launched by the Kingdom, where the Digital Government Authority (DGA) collaborated with various entities to advance digital transformation goals. For instance, the DGA partnered with universities to develop digital innovation pathways and conduct research on artificial intelligence and big data technologies, thereby contributing to human capacity building and bridging the gap between academic research and governmental application. In parallel, it worked with domestic technology companies specializing in cloud infrastructure and cloud computing providers to deliver shared platforms that support integration across government entities.

At the institutional level, agreements were signed between government agencies and the private sector in areas such as digital identity and e-services, whereby private firms operate certain infrastructure components or technical services under contractual arrangements. This approach alleviates financial and technical burdens on government entities. Furthermore, partnerships with international actors — such as technology financing institutions and digital development organizations — have become an integral part of the Kingdom's strategy to broaden the scope of knowledge exchange and global cooperation in the digital domain.

3.2.Digital Government Strategy

Digital transformation represents one of the fundamental pillars of Saudi Arabia's Vision 2030, where it is regarded as a strategic tool for achieving comprehensive national transformation. The Vision emphasizes the necessity of building a thriving digital economy founded on innovation and knowledge, which enhances government efficiency and improves the quality of life for citizens and residents.

Several bodies and institutions have been established to ensure the realization of this goal, most notably:

- **The Digital Government Authority (DGA):** Responsible for setting frameworks, standards, and advancing government digital services.
- **The Saudi Data and Artificial Intelligence Authority (SDAIA):** Playing a pivotal role in regulating data, developing AI technologies, and managing the national data infrastructure.

The National Transformation Program—one of the Vision's executive programs—has placed significant emphasis on digitalization across multiple sectors such as health, education, commerce, and government services, thereby making digital transformation a primary enabler of sustainable development and global competitiveness for the Kingdom.

Since 2006, Saudi Arabia has made remarkable progress in digitizing public services, reaching a digitalization rate of **98% by 2022**, with the remaining 2% expected to be completed by the end of 2025. Building on this, the current Digital Government Strategy has focused on the **quality, maturity, and user satisfaction** of services, employing modern measurement tools such as the **Digital Experience Maturity Index (DEMI)** and the **Digital Transformation Measurement Index**, developed in collaboration with the World Bank and other international organizations.

By the end of 2024 (<https://my.gov.sa>, s.d.):

- **Citizen satisfaction** with e-services reached **82.34%**, according to the Digital Experience Index (DXMI).

- The **average maturity level** of digital services stood at **85.04%**.

The strategy aims to achieve ambitious targets, including:

- Raising citizen satisfaction with digital services to **90% by 2025** and **95% by 2030**.
- Achieving a **90% maturity level** of digital services by 2025, rising to **95% by 2030**.

These efforts embody the Kingdom's commitment to delivering high-quality, user-centered digital services that align with the evolving needs of citizens, residents, and businesses alike.

According to the United Nations E-Government Survey 2022, the Kingdom of Saudi Arabia achieved a qualitative leap by ranking 31st globally out of 193 countries, and third among the G20 nations in the E-Government Development Index (EGDI). It was also classified within the "Very High EGDI" category for e-service development, reflecting the effectiveness of its efforts in government digital transformation (<https://dga.gov.sa>, s.d.).

Within the framework of Vision 2030, Saudi Arabia aspires to build a fully integrated digital services ecosystem centered on the needs of citizens, residents, and the business sector. The strategy aims for the Kingdom to position itself among the top three countries worldwide in digital government maturity. By 2030, this transformation is expected to contribute an estimated SAR 11.4 billion cumulatively to the national GDP, in addition to generating over 26,000 new jobs. These objectives are anticipated to be realized through continuous innovation, the adoption of flexible policies, and the strengthening of partnerships across the public sector, private sector, and civil society.

In summary, Saudi Arabia's vision for digital transformation is anchored in two core strategic dimensions:

1. **Global Leadership:** Striving to be among the world's top ten digital governments.

2. **User Satisfaction:** Delivering integrated, high-quality digital services tailored to the needs of citizens, residents, and businesses.

This dual approach underscores the Kingdom’s commitment to balancing its international competitiveness with ensuring the efficiency and effectiveness of local service delivery, thereby positioning digital government as both an enabler of sustainable development and a pillar of the innovation-driven digital economy.

Table n°1 : Digital Government Strategy according to Saudi Arabia Vision 2030

Vision: One of the top 10 prominent digital governments	
Mission: Placing beneficiaries’ aspirations at decision-making core in digital government level.	
Main axis	Sub-objectives
Citizen’s satisfaction	1.1. Ensure citizens’ satisfaction with the use of digital services.
	1.2. Enhance citizen’ participation to increase the government decisions credibility.
Business reinforcement	2.1. Provide an enabling infrastructure for the private sector and related sectors to support digital transformation.
	2.2. Strengthen the competitive environment to attract local investments
Effective Government	3.1. Enhance government capabilities for digital transformation management.
	3.2. Improve the digital government service quality and efficiency.
Effective investment (Economic resources)	4.1. Reinforcing economic turnover from digital transformation investments.
	4.2.Strengthen private sector participation and develop local content in Saudi Arabic

Effective investment (Human resources)	5.1. Develop competent and empowered leaders to charge digital transformation in government entities. 5.2. Achieve the inclusive innovation concept to build a vibrant and effective digital society
Expected development	6.1. Activate the government ecosystem for digital transformation. 6.2. Strengthen international cooperation and exchange. 6.3. Develop a future vision for digital government in the Kingdom. 6.4. Develop the digital governance concept and performance measurement.

Source: Researcher's preparation based on the national platform <https://my.gov.sa>

The table highlights that achieving the Kingdom's vision of becoming one of the world's top ten leading digital governments is based on a set of initiatives and strategic pillars that translate the vision into tangible reality.

- **Citizen-Centric Approach:** Emphasis has been placed on **citizen satisfaction** through ensuring the quality of digital services and enhancing community participation.
- **Business Enablement:** Supporting the private sector and increasing the competitiveness of the local economy.
- **Effective Government Role:** Strengthening evidence-based decision-making and capitalizing on the integration of digital services.
- **Investment Promotion:** Encouraging effective investment that supports the digital economy and stimulates the development of local content.

- **Institutional Investment:** Prioritizing effective investment in the government ecosystem to ensure coordination and integration among entities, while reflecting the identity of Saudi society.

The final part of the table shows that these initiatives aim to achieve the **expected outcomes**, including:

- The activation of the digital transformation ecosystem.
- The strengthening of international partnerships.
- The institutionalization of the **green government** concept.
- The expansion of Saudi Arabia's global presence in international digital rankings.

This reflects a comprehensive approach towards achieving sustainable development and enhancing global competitiveness.

3.3.Classification of Digital Transformation Initiatives under Saudi Vision 2030

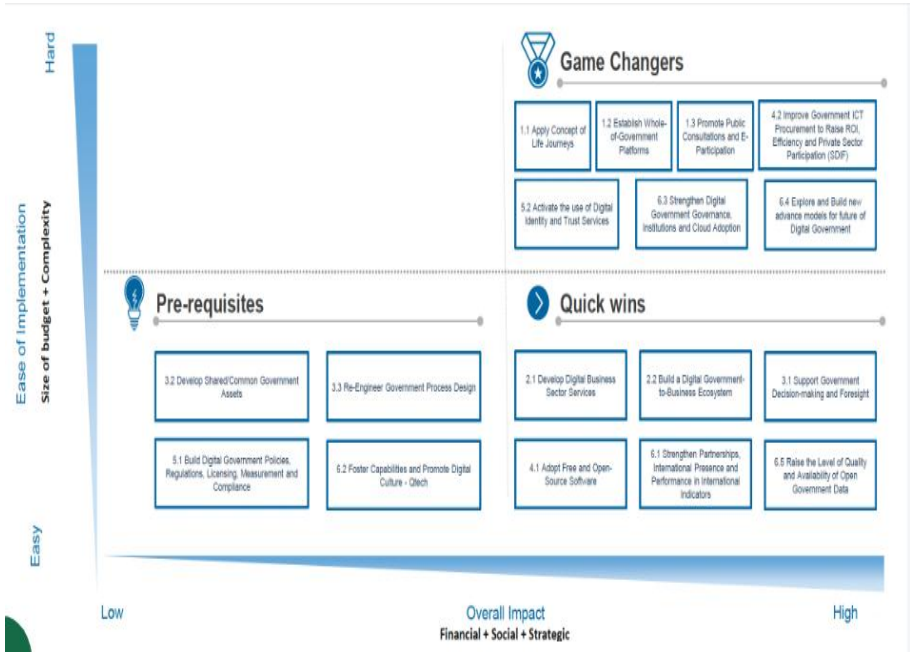
Digital transformation constitutes a fundamental pillar of modern development strategies, as nations strive to leverage digital technologies to enhance governance efficiency and strengthen the competitiveness of their national economies. In this context, the Kingdom of Saudi Arabia, through Vision 2030, has attached particular importance to digital transformation as a strategic driver for achieving sustainable development and as a means to improve the quality of services delivered to individuals and institutions.

To ensure effective implementation, the government has adopted a **classification framework for digital initiatives** based on two key dimensions:

1. **Ease of implementation**, and
2. **Magnitude of financial, social, and strategic impact.**

This classification enables the identification of initiatives with profound impact, alongside those that deliver quick wins or represent essential prerequisites for the success of the transformation process. The following figure illustrates this classification.

Fig.1. Classification of Digital Transformation Initiatives According to Saudi Vision 2030



Source: Researcher’s preparation based on the national platform <https://my.gov.sa>

The figure illustrates the **strategic framework for governmental digital transformation in Saudi Arabia under Vision 2030**, where digital initiatives are classified along two fundamental dimensions: (i) the degree of ease of implementation and cost, and (ii) the level of financial, social, and strategic impact.

Through this classification, it becomes evident that some initiatives represent **major transformation drivers (Game Changers)**. For instance, the adoption of the “**Life Journeys**” concept, which focuses on addressing citizens’ needs throughout their life course, as well as

the development of integrated government platforms and the enhancement of cloud computing infrastructure. These initiatives have a profound impact on the efficiency of public services despite requiring substantial investments and complex efforts.

Conversely, there are **Quick Wins**, which emphasize improving digital services directed at businesses and citizens in ways that are relatively easy to implement and deliver rapid results. Such initiatives enhance trust in digital transformation and foster its sustained adoption.

Meanwhile, **Pre-requisites** form the foundational basis for this transformation. These include **re-engineering governmental procedures, developing digital policies, and building institutional capacities**.

This categorization reflects a balanced approach that combines strategic ambition with implementation pragmatism, thereby ensuring a well-calibrated progression towards establishing a leading digital government at both the regional and global levels (<https://www.mcit.gov.sa>, s.d.).

3.4. Other Strategic Pillars of Digital Transformation under Saudi Vision 2030

The Digital Government Strategy represents one of the core pillars in achieving the objectives of Saudi Vision 2030, as it is built on promoting digital innovation and harnessing advanced technologies to enhance the efficiency and sustainability of government services. Within this framework, several fundamental enablers have emerged as the foundation for successful digital transformation, most notably digital inclusion, data governance, and the national digital identity, given their central role in promoting transparency, expanding social participation, and ensuring the reliability of digital transactions.

3.4.1. Digital Inclusion

Digital inclusion constitutes a cornerstone of Saudi Arabia's digital transformation strategy under Vision 2030. It aims to ensure that all segments of society — including vulnerable groups, people with

special needs, and residents of remote areas — benefit from both public and private digital services. Digital inclusion goes beyond the mere provision of technological infrastructure, encompassing the development of citizens' digital skills and the promotion of digital literacy. This broader scope enables fairer participation in the digital economy and helps bridge the digital divide. Such an approach reflects the Kingdom's commitment to social equity, while simultaneously supporting the achievement of related Sustainable Development Goals (SDGs).

3.4.2. Data Governance

Data governance represents the fundamental regulatory pillar of digital transformation. Saudi Arabia seeks to build an integrated national data management system based on the principles of quality, transparency, and reliability. The objective of this governance framework is to ensure the optimal use of data in evidence-based policymaking, to strengthen public policies, and to enhance privacy protection and information security. In this way, data becomes a strategic asset that contributes to governmental efficiency and fosters innovation, aligning with the principle of the data-driven economy, which forms a cornerstone of the future economy.

3.4.3. National Digital Identity

The national digital identity serves as the cornerstone of the Saudi digital government. It provides every citizen and resident with a unified and secure identity to access various public and private services. This identity simplifies administrative procedures, reduces bureaucracy, and accelerates service delivery, while also strengthening trust between citizens and state institutions by ensuring reliability and security. Furthermore, the digital identity empowers individuals as beneficiaries and active partners in the digital ecosystem, reflecting Vision 2030's overarching aim of building an inclusive and secure digital society.

Recent digital indicators highlight Saudi Arabia's notable progress toward achieving Vision 2030 objectives. By the end of 2023–2024, Internet penetration reached approximately 99% of the total population, providing a robust foundation for digital inclusion and universal access to e-services (Saudi , 2023). According to the Communications, Space & Technology Commission, 99.4% of users rely on mobile phones as their primary access point to the Internet, underlining the pivotal role of digital identity and mobile-enabled government applications (<https://www.cst.gov.sa>, s.d.).

In terms of digital experience quality, the Kingdom recorded a Digital Experience Maturity Index (DEMI) score of 86.7% in 2025, placing it in the “advanced” category. Similarly, the overall efficiency of websites and digital content index stood at 71.40% in 2024 (<https://dga.gov.sa>, s.d.), reflecting the progress of data governance and growing user satisfaction. Additionally, the new Statistics Law enhanced the protection of data confidentiality and prevented misuse, thereby reinforcing citizen trust in government institutions. At the international level, Saudi Arabia has also excelled in transparency and e-participation indices, showcasing its commitment to digital inclusion and effective, reliable governance practices.

In sum, the integration of digital inclusion, data governance, and the national digital identity forms a comprehensive framework that enables Saudi Arabia to move beyond the digitization of services toward establishing a smart government founded on transparency, efficiency, and active participation. This holistic approach strengthens the Kingdom's position as a global leader in digital transformation by 2030.

3.4.Core Digital Transformation Policies in the Kingdom of Saudi Arabia under Vision 2030

While the strategic pillars of digital transformation in the Kingdom serve as overarching guidelines that chart the course of digital change, the core policies translate these pillars into regulatory, legislative, and practical frameworks that ensure the realization of the intended

objectives. This interconnection is evident in the case of the Digital Inclusion Policy, which simultaneously acts as a strategic pillar and an operational tool for achieving digital equity and universal accessibility.

The following section presents the most significant core policies of digital transformation in Saudi Arabia, highlighting their objectives, underlying principles, and key achievements.

Table n°2 : Principal policies of digital transformation in Saudi Arabia according to Vision 2030

Policies	Aims	Pillars	Achievements
Digital government policy	•Building an integrated digital government that relies on innovation and emerging technologies to deliver highly efficient services for citizens and residents	• Democratic governance • Beneficiary focus, bureaucracy reduction procedures.	• Launch of <i>Nafath</i> platform for digital identity, <i>Etimad</i> platform for government financial services, <i>Efaa</i> platform for monitoring contractual commitments.
Data and AI policy	•Reinforcing the big data and artificial intelligence utilization for government decision-making improvement and services enhancement.	• Transparency • Data sharing among entities • Privacy protection ▪ Leveraging AI	• Establishment of (SDAIA) by (Saudi Data & AI authority. ▪ The national open data platform development. • Adoption of data protection regulations.
Cyber security policy	• Guarantee a secure digital environment that protects national digital infrastructure and	• Proactive prevention • Rapid response. • National capabilities	• National Cybersecurity Authority Establishment. • Development of specialized

	data from cyber threats and attacks.	constructing • International cooperation.	threat monitoring centers, enforcement of mandatory protection systems for public and private entities.
Digital inclusion	• Ensure that all segments of society, including people with disabilities and the elderly, have fair and easy access to digital services	• Equity in access. User-friendly interfaces development. • Multilingual support. • Empowerment of people with disabilities	• Multilingual government digital services provision. • Special applications for people with disabilities. • Nationwide internet coverage exceeding 99%
Digital Infrastructure Policy	• Building an advanced digital infrastructure that supports the digital economy, government, and commercial services.	• Spreading 5G networks. • Mega data centers, cloud computing. • Internet of Things (IoT).	• Ranking Saudi Arabia among the top countries globally in 5G penetration. • Expansion of local data centers. • Launching the smart cities initiatives such as <i>NEOM</i>

Source: Researcher's preparation based on the national platform gov.sa

From the table, it is evident that the listed policies are not isolated; rather, they represent an **integrated** framework that strengthens the Kingdom's capacity to achieve its digital objectives. The Digital Government Policy has emerged as a central foundation, emphasizing

a citizen-centric approach and the simplification of procedures, which is reflected in centralized platforms such as Nafath and Etimad.

Meanwhile, the Data and Artificial Intelligence Policy marked a qualitative leap towards transforming data into a strategic national asset, while ensuring protection and transparency through the efforts of the Saudi Data and Artificial Intelligence Authority (SDAIA).

In parallel, the Cybersecurity Policy serves as a robust line of defense that ensures the sustainability of digital transformation by enabling proactive protection and building national capabilities. On the other hand, Digital Inclusion reflects the human dimension of transformation, as it emphasizes equitable access for all segments of society, a factor that has contributed to achieving very high global internet coverage rates.

Finally, the Digital Infrastructure Policy constitutes the technical backbone that supports all other policies, enabling the deployment of 5G technologies and data centers, in addition to supporting smart city projects such as NEOM.

Accordingly, this framework strikes a balance between the institutional, technical, human, and security dimensions, positioning the Kingdom to achieve remarkable accomplishments both locally and internationally in the field of digital transformation.

4. Conclusion

This research concludes that digital transformation represents one of the most critical pillars of comprehensive development in the modern era, serving as a strategic tool for restructuring government services, achieving efficiency and transparency, and enhancing citizen participation. By tracing the experience of the Kingdom of Saudi Arabia in this field, it becomes evident that the Kingdom has adopted a gradual and well-structured path towards digital transformation—from the initial strategic plans to the launch of the National Digital Government Strategy—reflecting a clear commitment to achieving the objectives of Vision 2030.

The study demonstrates that the Kingdom has given particular importance to digital inclusion, data governance, and the national

digital identity, in addition to establishing fundamental policies that strengthened digital infrastructure and cybersecurity. These efforts contributed to building a more mature and competitive digital environment both regionally and globally. Furthermore, the findings revealed that adopting a participatory approach—bringing together government institutions, the private sector, and society—was a decisive factor in the success of the digital transformation journey in the Kingdom. This approach accelerated the pace of achievement, broadened access to digital services, and enhanced trust in the digital ecosystem.

In light of the above, it can be argued that the Saudi Arabian experience in digital transformation represents a leading model that other countries can benefit from, particularly in its ability to combine national strategic ambitions with the practical needs of society.

- Recommendations

- **Enhance investment in developing digital human capital** to ensure the sustainability of digital transformation.
- **Continue improving digital infrastructure** in line with the requirements of innovation and advanced technologies.
- **Expand digital inclusion** to cover all social groups and geographical areas, thereby reducing the digital divide.
- **Support international and regional partnerships** to exchange experiences and best practices in the field of digital transformation.
- **Promote societal awareness** of the importance of digital transformation to ensure active individual engagement in the digital ecosystem.

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