How to Cite:
Elmoutaoukil, A., & Chokri, B. (2025). The challenges and opportunities of digital transition in public administrations in Morocco. *International Journal of Economic Perspectives*, *19*(6), 196–214. Retrieved from https://ijeponline.org/index.php/journal/article/view/1092

The challenges and opportunities of digital transition in public administrations in Morocco

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***Abstract*---**Thanks to the explosion of the Internet and the rapid development of information and communication technologies (ICT), notably digital devices such as computers, mobile phones and tablets, now accessible to a large part of the population around the world, the digital transition in the public sector has become, in the space of just a few years, a global phenomenon. The digital transition (DT), as a set of changes induced or influenced by digital technology in human life, is now attracting the attention of governments, aware of the challenges and opportunities offered by the integration and adoption of digital technology within public organizations. Morocco, attracted by the opportunities for economic and social development, has put in place dozens of plans and strategies aimed at achieving the digital transition of its public administrations. Although the effort and will are indisputable, the results obtained and the challenges remain considerable and continue to slow down the pace of this transition.

***Keywords*---**Digital transition, public sector, Morocco.

1. Introduction

Thanks to the explosion of the Internet[1] and the rapid development of information and communications technologies (ICT), including digital devices such as computers, mobile phones and tablets, now accessible to a wide range of populations around the world, the digital transition in the public sector has

[1] According to data from the National Telecommunications Regulatory Agency (ANRT), in 2018, around 74% of Moroccan households had access to the Internet, which represents around 6 million households. This proportion increased to 87.4% in 2022, with a distribution of 91.6%.

Submitted: 18 April 2025, Revised: 09 May 2025, Accepted: 21 June 2025

become, in the space of just a few years, a global phenomenon (Berman, 2012). The digital transition (DT) as a set of changes induced or influenced by digital technology in human life is now attracting attention. Governments that are aware of the challenges and opportunities offered by the integration and adoption of digital technology within public organizations (Stolterman & Fors, 2004).

In Morocco, the digital transition in public administrations is part of a modernization strategy prescribed by the high summit of the State. Indeed, the King of Morocco in a speech specified that: "electronic administration must be generalized using an integrated approach allowing different departments and various services common access to information." This determination was strengthened by the adoption of the new development model (NMD) in 2021, a new roadmap which makes digital one of the main pillars for economic and social development in the country[2].

It is also recognized that the latest health crisis due to Covid-19 played a notable role in promoting digital technology in the country (EL KHEIR & Mohamed, 2023), thus sparking a fruitful debate, particularly on the need for the success of digital transition strategies and programs put in place for years. Consequently, there was a great mobilization of public authorities to urgently succeed in the digital transition project in the public sector.

However, it is important to remember that this digital transition project is not new. In reality, over the last twenty years, Morocco has made significant investments in digital technology. Although there are no official figures yet on the overall cost of the various programs implemented since the early 2000s, it is estimated that the budget bill well exceeds 40 billion dirhams. This considerable budgetary effort demonstrates the strong desire of public authorities to exploit the opportunities offered by digital technology, both for the benefit of the public and private sectors. We are therefore seeing a strong commitment from the top of the State to digital administrations. Significant resources institutional, human, financial and legal resources were mobilized.

Thanks to these efforts, the country has made concrete progress in the digital government index. Indeed, Morocco went from 140th place in 2003, with an EDGI equal to 0.26, to 90th place in 2024, with an EDGI of 0.68 (United Nations, 2024). The majority of administrations today have websites, some allowing citizens to access services remotely without having to travel. Thus, Moroccan citizens can now make a medical appointment online, pay their water and electricity bills, pay their taxes, as well as monitor their children's schooling and their grades, among other services.

Although it is clear that the country seeks to take advantage of the opportunities offered by ICT, it still faces many challenges obstacles which limit and slow down its progress and the success of this vitally important project. This work is part of

[2] The NMD Commission considers it necessary to emphasize five important levers for initiating the model and supporting its implementation: i) digital as a lever for rapid transformation; ii) a competent and efficient administrative apparatus; iii) securing the resources necessary to finance transformative projects; vi) the contribution of Moroccans of the World (MDM), their knowledge, networks and expertise; and v) mobilizing cooperation links with the Kingdom's external partners, according to a win-win approach. 1. Digital

this perspective and aims to expose, in a precise manner, both the opportunities for economic and social development, as well as the challenges linked to the digital transition in the public sector, and more particularly within public administrations. A work of reflection which attempts to answer the following problem: **what are the opportunities enabled by the digital transition process in Moroccan public administration, and what are the issues or challenges facing this transition?**

As part of this wish, we will first address the general concepts of the digital transition of public administration. Then, we will present the history of this transition in Moroccan public administrations. Finally, in a final area, we will deal with the opportunities and challenges linked to the digital transition in Moroccan public administration.

2. The Digital Transition in Public Administrations in Morocco: History And Evolution

2.1. key dates for TN in the public sector

Although the first uses of the Internet in Moroccan public administrations only date from the beginning of the 2000s, only five years after the introduction of the Internet in the country. (Maroc Telecom Museum, 2025), for its part, the desire to modernize infrastructure was already present the day after independence, both on an institutional and regulatory level. Indeed, with the creation of the Ministry of Posts and Telecommunications in 1956, then the National Office of Posts and Telecommunications in 1984, the State committed itself to the extension and modernization of telecommunications networks, essential to an in-depth digital transformation.

This commitment came to fruition in 1996 with the adoption of the strategy *Competitive Morocco*, which aimed to promote digital administration and information technologies. However, it was only after the adoption of Law 24-96 on the liberalization of the telecommunications sector in 1997 that the sector truly experienced a major turning point. This law introduced a new regulatory framework, marking a significant break in the sector, with the creation of the National Telecommunications Regulatory Agency (ANRT) and the founding of Maroc-Télécom[3].

Zaanoun (2023) sees that the beginnings of the digital transition in Moroccan public administrations were in the mid-1995s, more precisely in 1998 with the creation of the State Secretariat to the Prime Minister in charge of Post, Telecommunications and Information Technologies. This administrative entity implemented the first ICT strategy, the 1999-2003 five-year digital government plan.

According to Benkada (2024), the digitalization of public services in Morocco began in the 1990s with the first websites focused on customer experience. Since

[3] Limited company for the purpose of development and operation of telecommunications networks and services

then, the actions have continued. The diagram below (figure n°1) illustrates the key dates in the digital transition process in the public sector in the country.

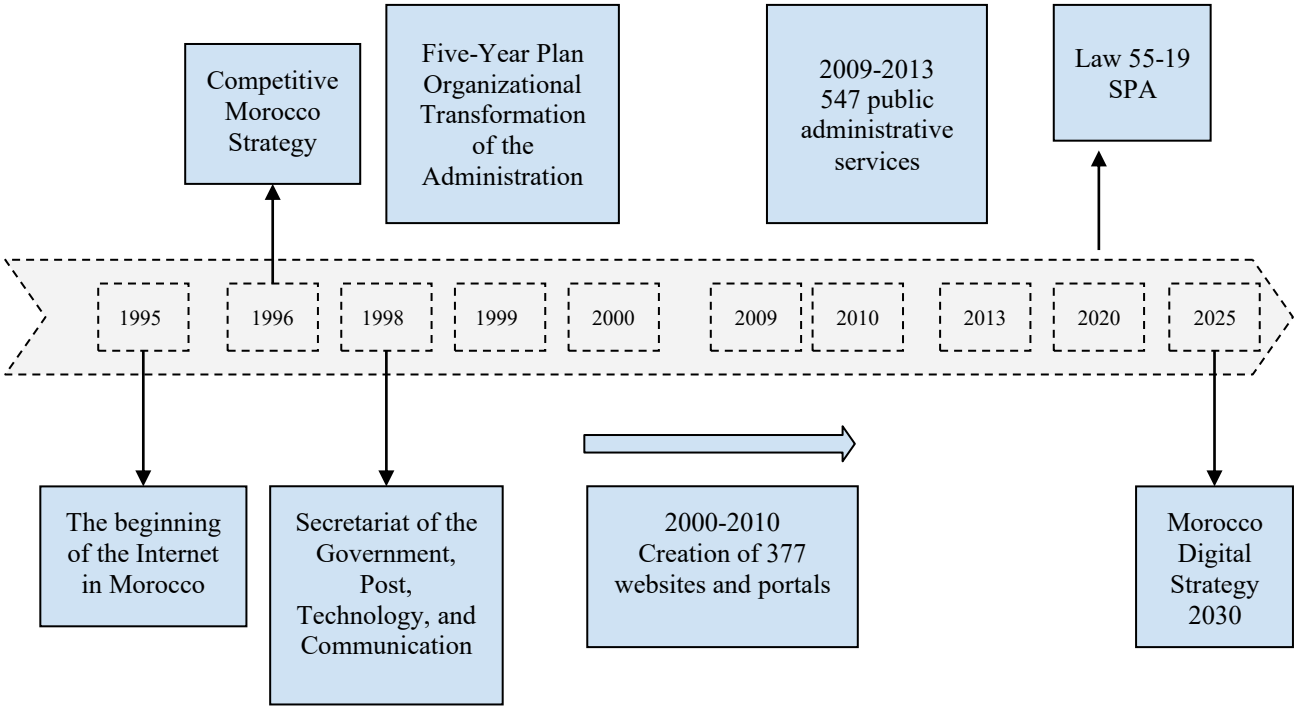

Figure 1 Key dates of the digital transition in the Moroccan public sector
Source: Authors

On the strategic level, a series of programs were implemented over these two decades, including of the "e-Morocco 2010" strategy, the 2013 digital plan, the "Digital Morocco 2020" strategy, the "Digital Morocco 2025" strategy, the online services portal, or more recently, Digital Morocco 2030 (Brahim, 2024).

In terms of governance, in addition to the establishment of the Ministry of Digital Transition which will be responsible for promoting digital technology as well as in the public and private sectors, a digital development agency in the country was also created in 2017. In order to accompany and support public administrations in the context of the digital transition, Morocco has set up numerous institutional bodies responsible for implementing strategies and plans, on the one hand, and for bringing together efforts and to unify visions, on the other hand.

2.2. The bodies responsible for TN and achievements

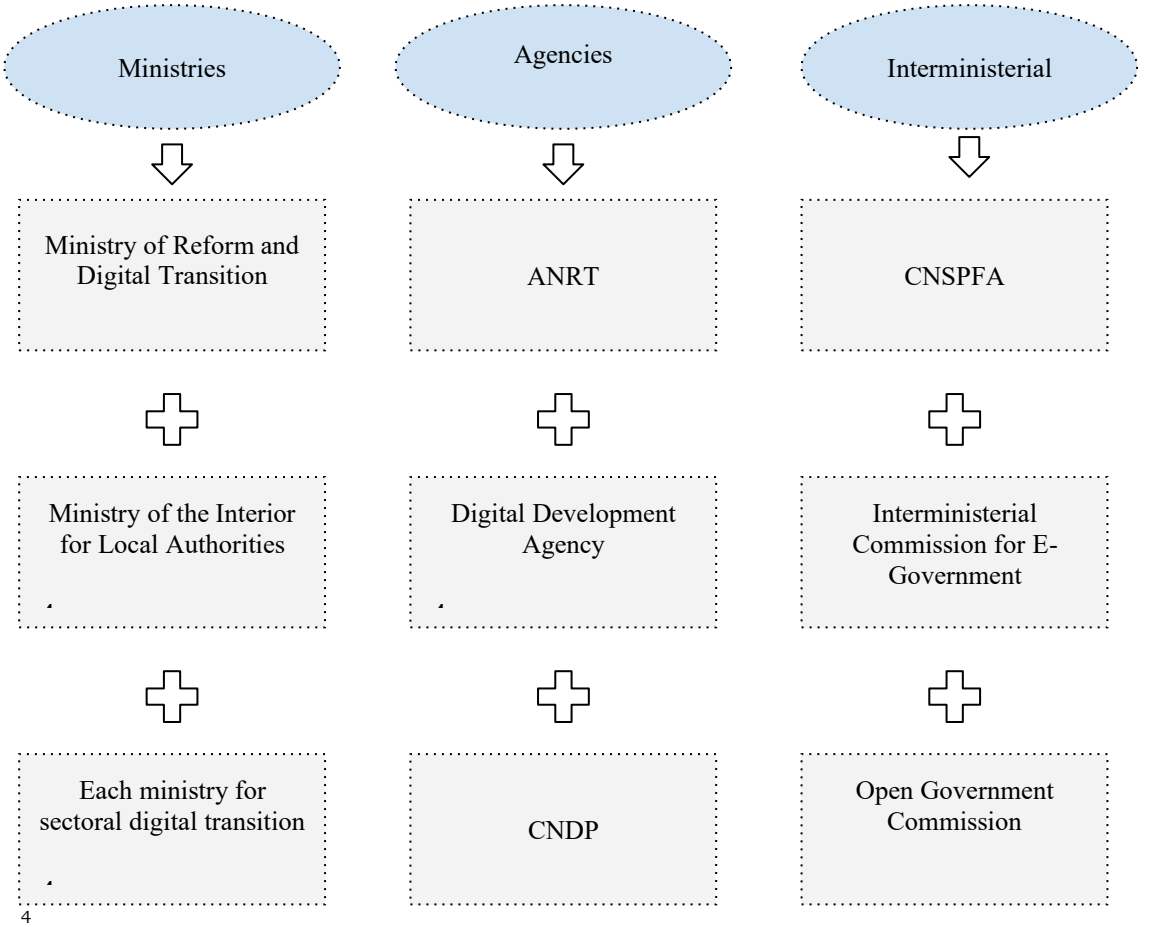

Figure 2 Actors responsible for the digital transition project in Morocco
Source: authors

According to Zaanoun (2023), today, the record of achievements shows remarkable progress, particularly in the field of digital administration. In this regard, we can cite the equipping of national courts with digital infrastructure and information systems, as well as the establishment of several online platforms and services, in particular:

- The Mahakim portal (mahakim.ma)
- The public services portal (service-public.ma)
- The public services geolocation portal (maps.service-public.ma)
- The "Idarati" portal dedicated to administrative procedures
- Online tax payment services (vignette, IR, IS, VAT, etc.)
- The "PortNet" one-stop shop

[4] CNDP: National Commission for the Protection of Personal Data
CNSPFA: National Commission for the Simplification of Procedures and Administrative Formalities

- RAMED monitoring
- The “Chikaya” portal dedicated to complaints
- The “TELMIDTICE” platform for distance learning
- The digital order desk

These initiatives are part of a dynamic of modernization of digital public services and improvement of their accessibility for citizens. Likewise, the various plans and strategies have resulted in the establishment of more than 377 online sites which offer more than 547 public services (Zaanoun, 2023).

In terms of digital infrastructure, Morocco has made remarkable progress. Thus, according to the ICT (Information and Communication Technology) Development Index, developed by the International Telecommunications Union (ITU), Morocco achieved a score out of 100 of 85.1 in 2023 and a score of 86.8 in 2024 (Int’l Telecommunication Union, 2024).

3. The Concept of the Digital Transition in the Public Sector in Morocco: Definitions And Objectives

3.1. The concept of the digital transition

From the outset, it is essential to mention that there is a weak consensus, not to say confusion, among authors, specialists and even among official publication institutes[5] regarding the terminology to use when dealing with digital issues in the public sector. Indeed, the literature on this subject is divided between the use of terms such as “digital transition”, “digital transformation”, “digitalization” and “digital transition”. Most often, although they manifest differences, these concepts are used interchangeably (Mohamed, 2023).

However, Morocco seems to favor the French-speaking version of the concept, namely: “digital transition”. This becomes even more evident with the name adopted by the main actor responsible for digital power in the country, namely “the Ministry of Digital Transition…” and also by the creation of a commission called “The National Commission for Digital Transition”.

The digital transition is a major change that affects all aspects of life: work, entertainment, education, etc. In the public sector, this change results from all the modernization strategies and initiatives undertaken by public authorities, leading to the integration and adoption of digital technology. (Alvarenga et al., 2020). First, the process of integrating digital technology into public administration involves adapting procedures, systems and behaviors to accommodate this new element. Then, adoption refers to the acceptance and engagement of stakeholders in this progressive change in public administration.

In other words, the concept of digital transition refers to a transformation of tools and mentalities in favor of digital solutions offered by ICT, in order to ensure the operation and management of public services. Although the provision of online

[5] The Ministry of Digital Transition; the Digital Development Agency; National Commission for Digital Transition.

public services (e-government) constitutes the cornerstone of the digital transition in the public sector, other levels are also affected. These include artificial intelligence (AI), Big Data, Internet of Things, etc.

If many authors, such as Alvarenga, Matos, Godina or Matias, consider that the digital transition (DT)in the public sector is a voluntary action by governments, Caron (2021) considers it a constrained and imposed choice which results from the growing habit of individuals and companies to digital solutions provided by the private sector. Likewise, public administration employees, whether they belong to national and international financial institutions, businesses, local elected officials, civil society or other sectors, are accustomed to effective, fast and secure digital solutions. Thus, public administration must follow the change.

Benkada agrees with the comments of these authors by emphasizing that the digital transition in the public sector is a logical and expected response to the need to modernize management practices considered obsolete to respond to current economic and social challenges. By integrating innovative approaches (Benkada, 2024a). It is therefore very clear that the digital transition in public services is strategic and urgent.

3.2. The objectives of DT in the public sector

In her article entitled: "The digitalization of public service: a priority for economic and social development in Morocco", the author Aziza BENKADA highlights Morocco's vision for digital in the public sector, a vision according to which a digital public administration is seen as a strategic priority to simulate the economic and social development of the country.

According to Steve & al. (2022), digital technology in public administrations is not reduced to the digitization of bureaucratic and communication tasks but must deeply influence a larger number of services. In other words, the digital transition in public administrations as a progressive process aimed at the generalization of digital solutions for all activities:

- Strategic and governance activities;
- Regulatory and legislative activities;
- Operational and administrative activities;
- Control and audit activities;
- Social and public service activities;
- Communication and transparency activities.

In addition to providing public services with the digital tools essential to digital administration, DT involves the construction of a new framework establishing new ways of working with the different stakeholders, the construction of new service delivery frameworks and the creation of new forms of relationships (Bégon, 2021). This effort to pursue changes must allow the public administration to achieve the expected objectives or make profits. According to Steve and al. (2022), the benefits of the digital transition in public administrations result in gains in efficiency and effectiveness, in the improvement of the administration-citizen relationship and as well as in the creation of value.

In the public sector, the DT aims to make public administration more efficient by offering services adapted to the needs of citizens, while transforming the relationship between government and citizens into one of transparency, collaboration and participation.

Still with this in mind, the digital transition represents a change in the delivery of public services (Wicked, 2021), moving from a traditional administration to a progressively digital administration. This involves configuring government functions and administrative structures to be more focused on user needs. Digital transition strategies in the public sector aim to integrate new technologies into the various State services, local authorities and social security organizations (Belhassani, 2023). In other words, the operation and provision of public services must be done using digital solutions offered by new technologies.

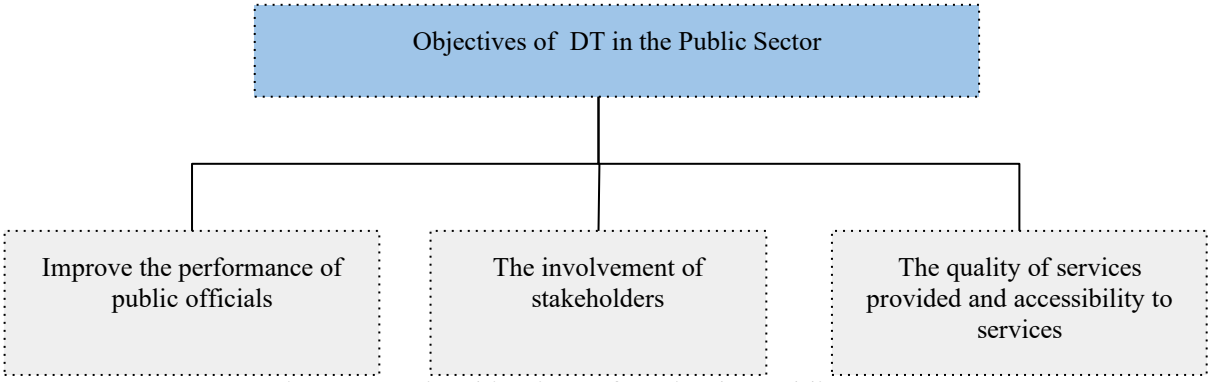

Figure 3 Main objectives of DT in the public sector
Source: authors

The digital transition via dematerialization offers public administration numerous advantages. In his work entitled “The dematerialization of public spending and digital transformation in Morocco: State of the art” TAHTAH discusses in detail the advantages of the digital transition via dematerialization. He specifies that the latter allows limited paper consumption, a significant reduction in costs, improves the speed of access to information and limits the risk of deterioration or loss of data.

For some authors, DT in the public sector refers to the use of information technologies and electronic tools to improve, personalize, and automate the provision of public goods and services to citizens and businesses through the standardization of administrative procedures (Andal-Ancion et al., 2003; Alvarenga et al., 2020).

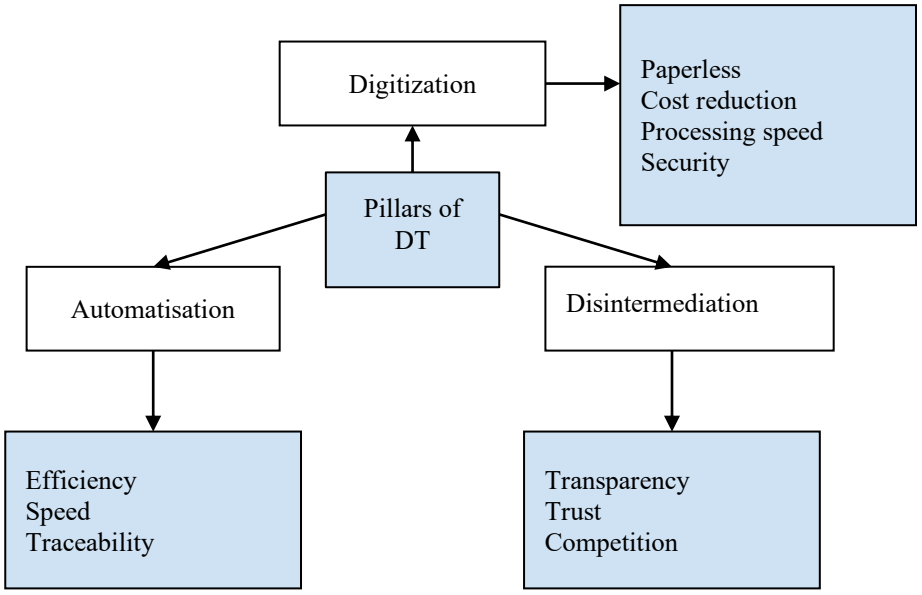

Figure 4 Pillars of DT in the public sector
Source: authors

3.3. Morocco's vision for DT

The Ministry of Digital Transition in Morocco considers the digital transition in the public sector, particularly within public administrations, as the result of numerous actions and strategies covering a variety of elements, ranging from investment in e-government and electronic administration, to digital inclusion, including connectivity and digital talents. The aim is to offer fully digital public services. According to Zaanoun (2023), this policy allows an increasingly dematerialized provision of public services through several digital portals and applications.

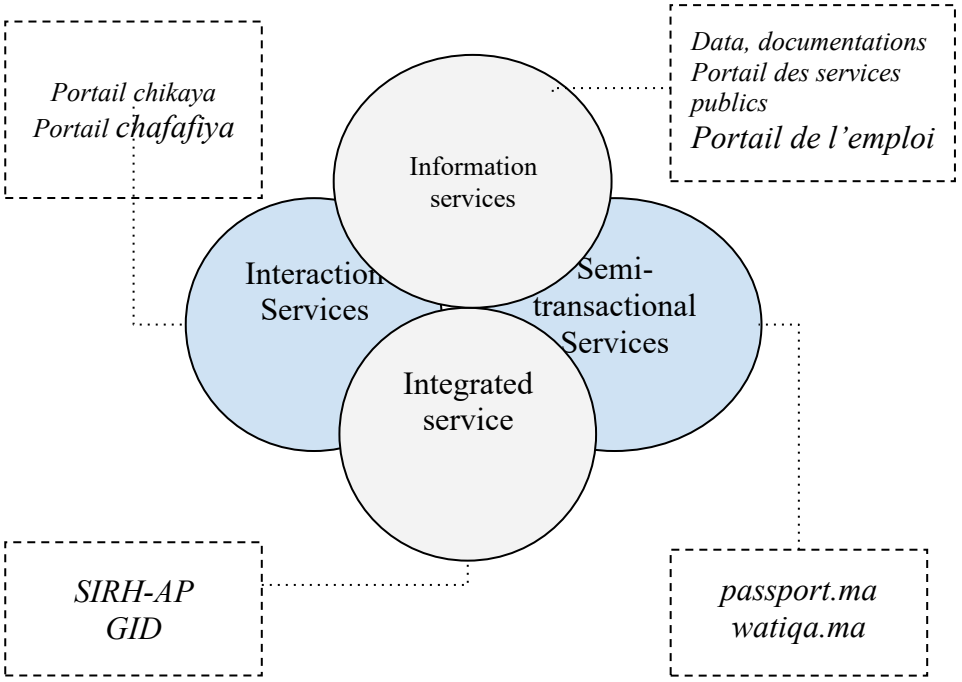

Figure 5 Online service levels
Source: authors

Another important point of view, which falls within the framework of national definitions of the digital transition, is that of the Economic and Social Council. This constitutional body considers digital technology as a new revolution disrupting the boundaries between the physical world and the digital world, to the point that, tomorrow, all productive activities will have a digital or digital component (CES, 2021). Public administration is also affected by this change because it provides services essential to economic and social activities.

According to El Haj (2020), the digital transition is a global process aimed at rethinking the practices, mentalities and operating models of organizations through the use of digital technologies. This is therefore an inclusive and revolutionary change in public administration, as well as a break with traditional administrative models focused on enormous paperwork and heavy and costly bureaucratic procedures which slow down performance and reduce the performance and confidence of citizens and businesses in public administration. TAHTAH (2022) shares the same definition by specifying that the digital transition in the public service consists of integrating technologies to improve efficiency, transparency and accessibility to administrative services.

According to IBRAHIM & BEN ABDELHADI (2023), the digital transition in public services in Morocco requires two stages: first, the generalization of electronic services, which allows citizens and businesses to quickly and efficiently access administrative services and information, then the promotion of access to the Internet, which remains a determining factor in the success of this extremely important project. Furthermore, a third factor seems of crucial importance for the

digital transition in public services for the kingdom: the capacity of both users (citizens and businesses) and civil servants to engage in the use of these solutions (ELKHALKHALI et al., 2023).

Public administration and digital technology are closely linked. This link is evident from Ouboumlik and Touhami (2024) in the capacity of technologies to change the way public services are delivered and managed. However, this change goes beyond having a positive internal impact on administrations, extending to a much more comprehensive socio-economic influence, thereby creating opportunities for society and the economy.

4. The Socio-Economic Opportunities of the Digital Transition in Public Administrations in Morocco

For many specialists, digital technology is considered to be the fourth industrial revolution which provides significant economic and social opportunities (Xu et al., 2018). A revolution that began in the middle of the 20th century with the invention of computers, followed by the development of the internet, telecommunications and digital tools. In the world of public administrations, beyond practical aspects, digital technology has enabled more than ever radical changes in the operation and performance of public services. Transparency, cost reduction, improvement in the quality of interactions between citizens and the administration are, among others, the main opportunities for this change.

Literature review suggests that there is a positive link between digital transition and public sector efficiency (IBRAHIM & BEN ABDELHADI, 2023). Indeed, the digital transition in the public sector improves the degree of transparency and clarity of all decisions taken, operations executed and services provided. Thanks to the great traceability of information systems (who does what and when), reporting systems (monitoring performance indicators), the digital management of archives and documentation as well as public service portals, the deadlines and quality of services provided by administrations have evolved significantly.

Indeed, there is a strong theoretical consensus on the presumed positive role of digital technology in simulating growth, investment, employment and political and social stability. In this sense, Aziza BENKADA, researcher in public law, returns to this question by specifying that: “the transition to a digital public administration is seen as an essential lever to stimulate the economic and social development of the country.”(Benkada, 2024). The author is also categorical on the significant potential of digital technology in the public sector to improve governance, promote social inclusion and strengthen citizen trust in public institutions.

As is the case in the private sector, digital technology in the public sector contributes to the reduction of production, administration and transaction costs. Consider the case of declaration and payment of taxes, electronic declaration and online payment contribute to the reduction of transaction costs to very high levels. This is particularly the case in Quebec with a reduction in transaction costs of around 97%, and a reduction of 66% with the barcode system (Algan et al., 2016).

- Digital transition and business climate

Digital is also good for business, as it contributes to the simplification of administrative procedures, the reduction of processing times, as well as the reduction of operating costs. The most important thing is the consecration of the principles of transparency, particularly in terms of access to public markets. On this last point, Daif and Erradi (2021) clarified that the process of dematerialization of public procurement (PM) in Morocco - via the public procurement portal - would ensure transparency, access to PM, the fight against corruption, and would increase awareness as well as competition.

- Digital transition and economic growth

In this wake, there is an abundant literature presuming the positive role of digital transition and digitalization in the simulation of economic growth (Mićić, 2017; Parviainen et al., 2017). In an empirical study carried out in 2018 on the Impact of Information and Communication Technology Infrastructure on Economic Growth, it was concluded that a 1% increase in the use of ICT infrastructure contributed to GDP per capita growth of between 0.0767% and 0.396% (cited by (Mohamed, 2023)).

- Digital transition and productivity and efficiency gains

According to the Economic and Social Council, the digital transition in public administrations, particularly through dematerialization, could save 718 million working hours per year, or a saving equivalent to 1% of the country's annual GDP (more than 10 billion dirhams). This will contribute to the reduction of budgetary charges linked to personnel expenses. Likewise, the digital transition, by reducing the workload, allows civil servants and public administration agents to concentrate on tasks with higher added value.

- Digital transition and transparency gains

Digital technology in public administrations is synonymous with the standardization of administrative procedures and the reduction of direct interactions with civil servants. This leads to greater transparency and fewer gray areas, thereby helping to limit the risks of corruption.

- Digital transition and knowledge sharing

The use of digital tools by public administrations facilitates exchanges between civil servants and between different services. This means sharing knowledge and experiences as well as a high degree of interaction with external stakeholders.

The literature is unanimous on the benefits of the digital transition in the public sector on the economy and society. In reality, exploiting the economic and social opportunities offered by new information and communication technologies, and more particularly by digital technology, appears to be a determining factor in the development of national digital transition strategies in the public sector in Morocco.

5. Current Challenges of Digital Transition In Moroccan Public Administrations

Despite the efforts made around thirty years ago, the digital transition project in Moroccan public administrations remains confronted with difficulties. Indeed, several anomalies, weaknesses or constraints have been identified, whether by official reports from national and international organizations, by experts or by academic researchers in the field.

Generally, the main challenges can be summarized according to three axes: the achievement axis, the digital divide axis and the strategic axis. Let us first start by taking stock of the digital transition in Moroccan administrations.

5.1. Challenges related to achievements

Despite the efforts made, both on the budgetary and financial level and on the managerial level (Zaanoun, 2023) and which have led to notable advances, particularly in terms of online services6, Statistics and rankings of digital transition in the public sector show that the country has a relatively modest ranking on a global scale. As such, according to Huawei's government connectivity index, Morocco ranked 60th out of 79 countries in 2020, with below-average performance on the four technological factors:

Table 1 The four technological factors

High speed	CLOUD	AI	internet of things
Score a 2020: 39 Average: 62	Score a 2020: 42 Average: 42	Score a 2020: 21 Average: 30	Score a 2020: 24 Average: 40

Source: (Huawei, 2020)

In the same perspective, the United Nations digital indices show that the country, although it is making progress, is moving at a relatively slow pace.

Table 2 ENDED & EPI

2018	2020	2022	2024
ENDED: 0.5214 EP: 0.7753	EGDI: 0.5729 EP: 0.5119	EGDI: 0.5915 EP: 0.2727	EGDI: 0.6841 EP: 4384

Source: ONU

[6] The Court of Accounts reports that in terms of online services, progress has been made in certain areas such as taxes, customs and foreign trade as well as land conservation.

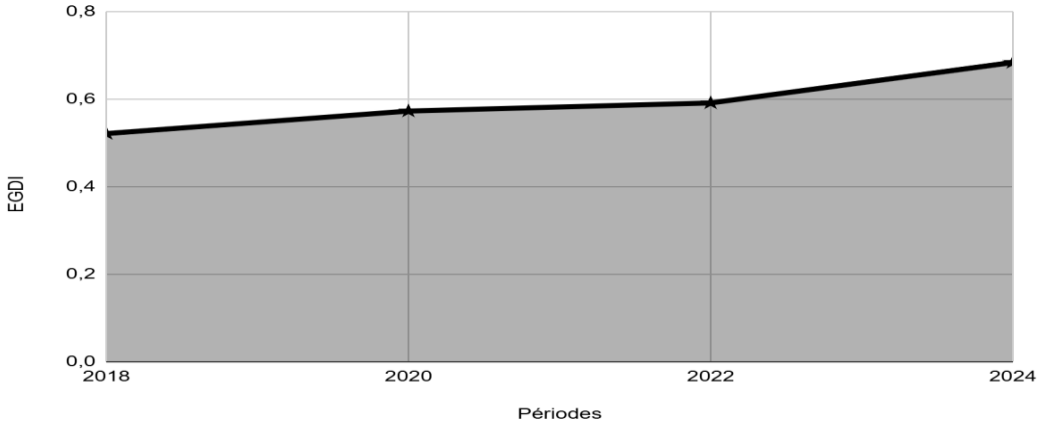

Figure 6 Evolution of EDGI - Morocco
Source: ONU

In a report published by the Economic and Social Council (CES) on the issue of digital transformation in Morocco, it was reported that the country continues to face multiple constraints and weaknesses hindering the success of this project. These include the following difficulties:

- ➔ A delay in the implementation of previous digital transformation policies in several sectors, such as administration, health and education;
- ➔ A delay in the structural digital transformation of various sectors of industry;
- ➔ The low production of national, cultural and educational digital content, which forces our fellow citizens to consume mainly products of foreign origin;
- ➔ A lack of local technological players, who could have been the winners of this crisis;
- ➔ The absence of a clear policy on public data governance and a national artificial intelligence roadmap.

As for the digital transition in the public sector, the report is categorical: “At the administration level, digitalization is partial, especially when it comes to services provided to citizens” (CES, 2021, p.18). On the other hand, the report recalls that the majority of sites and portals offer, in most cases, basic and poorly updated information. Benkada (2024) returned to this point, specifying that public administrations are far from a generalized digital transition and that many administrations are content to use their portals to only provide information. This situation completely diverges from the vision adopted for the digital transition in the country, a vision which requires an immediate transition to completely digital online services which do not necessarily require travel to administration offices.

The Court of Accounts singled out online public services, highlighting a preponderance of interactional and semi-transactional services to the detriment of transactional online services and integrated services, which allow an end-to-end

online transaction to be carried out, involving one (transactional) or several (integrated) institutions and ensuring electronic delivery of the service.

On the other hand, according to Zaanoun (2023), one of the main challenges facing the digital transition process in Morocco is the existence of a digital gap in terms of access to digital administrative services. According to this author, the digital gap or digital exclusion is the result of lack or low internet speed in certain areas qualified as white areas. This has a very negative impact on access to digital administrative services, particularly by the most deprived populations.

In addition to connectivity issues, the absence of equipment such as smartphones, tablets, and computers on the one hand, and the lack of mastery of digital tools on the other, are factors contributing to the digital divide in the country.

5.2. On the legislative and regulatory level

According to Bras (2007) the telecommunications sector in Morocco is based on a major law (Law No. 24-96 relating to Post and Telecommunications, promulgated by dahir of August 7, 1997) and will be amended several times. A law which aims to "provide the telecommunications sector with an effective and transparent regulatory framework promoting fair competition for the benefit of users of telecommunications networks and services" (Preamble).

Several more substantial measures have come over the years to complete the regulatory and legislative framework, notably Law No. 55-1 of November 4, 2004, three decrees of July 13, 2005, etc. Added to this are the 2013 law on cybersecurity, the 2017 law relating to the electronic exchange of legal data, the 2013 law relating to the protection of personal data and most recently, in 2019, law no. 55-19 relating to the simplification of administrative procedures.

Although the adoption of Law 24-96 on the liberalization of the telecommunications sector in 1997 constituted a major turning point in the way the telecommunications sector operated in Morocco, promising attractive achievements such as the development of telephone infrastructure and mobile services, the opening of the market to competition and lower prices, the reality appears to be different. Indeed, this system, based on liberal principles, has created an oligopoly situation, with only four operators, of which the historic operator "Maroc Télécom" retains virtual domination. In addition, accessibility to telecommunications services remains problematic in certain areas, barriers to entry persist for new operators, and pricing is considered high in relation to the quality of the services provided.

5.3. On a strategic, managerial and governance level

According to the opinions of the Economic and Social Council , the digital transition in Morocco's public sector results from multiple strategies with divergent visions, implemented by various actors. In other words, each organization, ministry, and public institution operates independently. This reflects a virtual absence of centralized managerial leadership capable of

overseeing and guiding policy choices and, above all, unifying strategic and planning efforts in the field of digital transition within public administrations.

This situation leads to a low degree of complementarity between the different strategies adopted over the years. Worse still, the continuity and completion of the plans and strategies adopted are not always assured. Thus, according to the report of the Court of Accounts on the digital transition strategy in Morocco in 2013, out of 89 digital services programmed, only 42 were put in place, or less than 50% of the objectives. In addition to the low completion rate of the programs, the report questions the degree of complementarity between them.

According to Zaanoun (2023), the problem of governance of digital transition strategies is the result of the absence of coordination tools between the different actors concerned as is the case in other countries such as France which has the Interministerial Delegation for Digitization and Information and Communication Systems.

This problem of governance of the digital transition project in the public sector is the result of a lack of a unifying strategy for all the efforts deployed by the State in this direction. Thus, we see digital administrations at several speeds. Each ministry or each public entity makes progress depending on the importance and resources allocated to the digital transition (Court of Accounts, 2023).

Digital bureaucracy is a form of Weberian bureaucracy that relies on specialization, hierarchy and efficiency, with clear procedures. However, it implies that digital administration operates slowly, without allowing for an improvement in public services. A phenomenon that reflects the low degree of maturity of the digital transition is due to several factors. In Morocco, Zaanoun (2023) clarified that digital bureaucracy results from a trio of factors:

- The seniority of civil servant profiles,
- An obsolete or undefined digital administration,
- A semi-digital administration.

On the other hand, it seems to us that the causes of digital bureaucracy, which remains a phenomenon threatening the effectiveness of the digital transition in public administrations in Morocco, are not only the result of factors intrinsic to administrations. Indeed, the digital skills of citizens, particularly in rural areas, play a determining role in this regard. Hence the interest in innovative solutions aimed at accompanying and supporting citizens with limited digital skills to allow them to easily access the digital solutions offered by the administration.

The digital transition in Morocco does not only depend on the implementation of technological solutions. Indeed, this change goes beyond the technical effort to lead to the establishment of an internal organizational culture (emanating from the internal users of the organization) and the taking into account of external users (citizens and businesses). On the other hand, according to Benkada (2024), the problems of digital infrastructure, data security, digital governance and digital inclusion constitute the main constraints facing a successful digital transition in the kingdom.

6. Conclusion

The digital transition in the public sector in Morocco is an ambitious project implemented for several years by the government through around ten programs, plans and strategies. The ultimate objective is to guarantee a sustainable digital transition, bringing the administration closer to the citizen and based on the principles of efficiency, transparency and trust.

Morocco considers the digital transition as a change induced by the introduction and adoption of ICT in the operation and management of public services, with the objective of improving the performance of public agents, the involvement of stakeholders, as well as the optimization of online services and their accessibility. The literature seems unanimous on the positive role of digital technology in improving the performance of public services, as well as in establishing the principles of competition, transparency, trust and the fight against corruption. There is a positive link between the integration of digital solutions in public services, economic growth and the stimulation of economic and social development.

Morocco can benefit from digital technology; nevertheless, it remains faced with numerous challenges. These mainly concern the development of a digital divide in the country, a low completion rate of adopted projects and strategies, a multi-speed digital administration, a lack of coherence in the governance of digital transition projects, as well as difficulties in accessing Internet networks in certain geographical areas, etc.

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