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Platformization as a lever for transforming public services: impacts on the organizational activity of public administrations.

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Abstract

This study analyzes the role of digital platformization as a driver of organizational transformation within public administrations in Morocco in the context of the ongoing digital transformation of public services. The research aims to examine the relationship between digital platformization, the use of digital public services, digital infrastructure, and the organizational performance of public administrations. To achieve this objective, the study adopts an econometric approach based on the Autoregressive Distributed Lag (ARDL) model, using annual data covering the period 2015–2025. The empirical analysis includes descriptive statistics, panel unit root tests, cointegration analysis, and both long-run and short-run estimations in order to capture the dynamic interactions among the variables. The results reveal the existence of a significant long-run relationship between digital platformization and the organizational performance of public administrations, indicating that the expansion of digital platforms contributes to improving administrative efficiency, enhancing citizens' access to public services, and strengthening institutional coordination. Furthermore, the findings highlight the crucial role of digital infrastructure and the adoption of online public services in reinforcing the effectiveness of digital government initiatives. The main conclusion of this study is that the successful modernization of public administration in Morocco depends not only on the development of digital platforms but also on the strengthening of digital infrastructure and governance mechanisms capable of supporting the integration and interoperability of public digital services. These results provide important policy implications for promoting a more integrated, efficient, and citizen-oriented digital public administration.

Keywords: Digital platformization; Public administration; Digital government; Organizational performance; ARDL model.

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1. Introduction

The digital transformation of public administration has become a major strategic lever for modernizing public action and reshaping the functioning of governmental organizations. In this context, the platformization of public services emerges as part of a broader global dynamic of state digitalization, characterized by the integration of digital platforms that facilitate administrative interoperability, automate procedures, and improve citizens' access to public services. In Morocco, this transformation aligns with national public policy orientations aimed at strengthening administrative efficiency and modernizing the relationship between the state and citizens. Public authorities increasingly consider digital technologies as a key driver of socio-economic development and public governance improvement. Consequently, digital transformation is progressively integrated into national administrative reform strategies in order to promote transparency, efficiency, and simplification of administrative procedures.

In this perspective, Morocco has experienced a significant acceleration in the development of its digital ecosystem. According to recent statistics, internet penetration exceeds 92% of the population, representing approximately 35.5 million internet users in 2025, while the number of mobile connections reaches nearly 54.9 million, corresponding to more than 140% of the population due to multi-SIM usage. These indicators reflect the widespread diffusion of digital technologies within Moroccan society and create favorable conditions for the digitalization of public services and the emergence of a digital administration. In addition, the Moroccan government has developed several digital administrative platforms and online portals providing access to numerous public services, particularly in areas such as investment, civil status services, taxation, and social protection.

Within this framework, Moroccan public authorities have launched several structuring initiatives to accelerate the digital transformation of public administration, notably the « Digital Morocco 2030 », strategy, which aims to strengthen the digitalization of public services and improve their quality. The national public services portal currently provides access to nearly 600 online administrative services, including more than 300 services for citizens and about 200 for businesses, in a logic of integration and simplification of administrative procedures. This strategy also seeks to improve Morocco's position in international e-government rankings and enhance user satisfaction. Nevertheless, despite these advances, public administrations still face several organizational challenges, particularly regarding the interoperability of information

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systems, inter-institutional coordination, and the adaptation of organizational practices to the era of digital platforms.

The digital transformation of public action has profoundly reshaped the modes of production, management, and delivery of public services. In this context, the platformization of public services has emerged as a new form of administrative organization based on the integration of digital platforms that enable the interconnection of institutional actors, the sharing of informational resources, and the simplification of interactions between public administrations, citizens, and businesses. In Morocco, this dynamic is part of a broader set of reforms aimed at modernizing public administration, improving the quality of services delivered to users, and strengthening the transparency and efficiency of public action. However, the implementation of digital platforms is not limited to a technological transformation; it also implies a profound reconfiguration of the organizational activities of public administrations, particularly in terms of inter-institutional coordination, process management, data sharing, and digital governance.

From this perspective, platformization raises several organizational and institutional challenges for Moroccan public administrations. While digital platforms theoretically make it possible to simplify administrative procedures, improve service accessibility, and enhance administrative efficiency, their deployment may also generate challenges related to the interoperability of information systems, the adaptation of organizational structures, change management, and the development of digital skills within public institutions. Moreover, the integration of digital platforms into the administrative ecosystem transforms the modes of coordination between public institutions and redefines the relationships between the state, citizens, and economic actors. Consequently, it becomes essential to examine the extent to which platformization effectively contributes to transforming organizational practices and improving the performance of public services.

In this context, the present research aims to analyze the role of platformization as a lever for transforming the organizational activities of public administrations in Morocco. It seeks to understand the mechanisms through which digital platforms influence administrative functioning, institutional coordination, and the quality of public services. Accordingly, the central research question of this study can be formulated as follows: To what extent does the platformization of public services contribute to transforming the organizational activities of public administrations and improving the performance of public services in Morocco?

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To further explore this research problem, the study is structured around the following four research sub-questions:

1. How does the platformization of public services reconfigure organizational processes within Moroccan public administrations?
2. To what extent do digital platforms improve the efficiency and accessibility of public services for citizens and businesses?
3. What are the main organizational and institutional challenges associated with the implementation of digital platforms in Moroccan public administration?
4. How does platformization influence inter-institutional coordination and the governance of digital public services?

In the context of the ongoing digital transformation of public administration, the platformization of public services has emerged as a strategic mechanism for improving administrative efficiency, enhancing service accessibility, and strengthening coordination among public institutions. In Morocco, this transformation is part of broader public sector reforms aimed at modernizing administrative practices and promoting digital governance. However, the organizational implications of platformization within public administrations remain insufficiently explored, particularly regarding how digital platforms reshape administrative processes and institutional interactions. Therefore, this study seeks to contribute to the understanding of the organizational dynamics associated with the platformization of public services in the Moroccan context.

The main objective of this research is to analyze the role of digital platforms in transforming the organizational activities of public administrations and improving the performance of public service delivery in Morocco. More specifically, the study aims to examine how the integration of digital platforms influences administrative processes, coordination mechanisms, and the relationship between public administrations and service users. By focusing on the Moroccan case, the research intends to provide empirical and analytical insights into the structural and organizational transformations induced by digital platforms within the public sector.

To achieve this general objective, the study is structured around the following three specific research objectives:

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1. To analyze the impact of the platformization of public services on the organizational processes and operational functioning of Moroccan public administrations.

1. To evaluate the contribution of digital platforms to improving the efficiency, accessibility, and quality of public services provided to citizens and businesses.

2. To identify the organizational, institutional, and technological challenges associated with the implementation of digital platforms within Moroccan public administration.

The platformization of public services represents a major transformation in the organization and delivery of administrative services, particularly in the context of digital government reforms. By integrating digital platforms into public administration, governments aim to streamline administrative processes, facilitate data sharing, and improve interactions between public institutions, citizens, and businesses. In Morocco, the increasing adoption of digital platforms within the framework of public sector modernization strategies suggests that platformization may significantly influence the organizational functioning of administrations as well as the performance of public services.

From a theoretical perspective, the literature on digital governance and public sector innovation highlights that digital platforms can enhance administrative efficiency by reducing procedural complexity, improving interoperability between institutions, and enabling more integrated service delivery. At the same time, the adoption of digital platforms may transform internal administrative processes and coordination mechanisms by promoting more collaborative and data-driven forms of governance. However, the effectiveness of these platforms largely depends on institutional capacities, technological infrastructure, and the ability of public organizations to adapt their operational practices.

Based on these considerations, the present study formulates the following three research hypotheses:

H1: The platformization of public services has a positive impact on the organizational efficiency of Moroccan public administrations by improving the coordination of administrative processes and reducing procedural complexity.

H2: The implementation of digital platforms significantly improves the accessibility, quality, and responsiveness of public services for citizens and businesses in Morocco.

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H3: The effectiveness of public service platformization in Morocco depends on the level of institutional coordination, digital infrastructure, and organizational capacity within public administrations.

To analyze the impact of public service platformization on the organizational activity of public administrations in Morocco, this study adopts a quantitative approach based on the econometric estimation of the ARDL model (Autoregressive Distributed Lag). This model is particularly suitable for examining both short-term and long-term dynamic relationships between variables when they exhibit different orders of integration, while also allowing the analysis of adjustment mechanisms toward long-run equilibrium. The study relies on annual data covering the period from 2015 to 2025, a period characterized by the acceleration of digital transformation policies within Moroccan public administration. The empirical model includes a dependent variable representing the organizational performance of public administrations, along with a set of explanatory variables related to the platformization and digitalization of public services, including the development of government digital platforms, the use of online public services, the diffusion of digital technologies, and digital governance indicators. The data are mainly collected from institutional and statistical sources such as government reports, international databases, and national statistical institutions. The econometric analysis follows several methodological steps, including unit root tests, bounds cointegration tests, and the estimation of short- and long-run relationships using the ARDL model, in order to identify the effects of platformization on the organizational transformation of public administrations in Morocco.

This research article is structured into several sections in order to systematically analyze the role of public service platformization in the organizational transformation of public administrations in Morocco. The first section presents the general introduction, which outlines the context of the digital transformation of public administration, the research problem, the research questions, as well as the objectives and hypotheses of the study. The second section is devoted to the literature review, organized around several analytical axes addressing the theoretical foundations of platformization, the role of digital platforms in the modernization of public administrations, the impact of platformization on public service performance, the challenges of digital governance and institutional coordination, and the experiences of public service platformization in emerging countries, particularly Morocco. The third section presents the empirical analysis, which describes the data used, the specification of the ARDL econometric model, and the different stages of the statistical analysis, including descriptive analysis, panel unit root tests, cointegration tests, and the estimation of both short-run and long-

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run relationships. The fourth section presents the empirical results and discusses the main effects of platformization, the use of digital public services, and the development of digital infrastructure on the organizational performance of public administrations. Finally, the last section provides the conclusions and recommendations, highlighting the theoretical implications and policy recommendations aimed at strengthening digital transformation and the modernization of public administrations in Morocco.

1. Literature Review

The digital transformation of public action has generated growing interest in the academic literature, particularly regarding the role of digital platforms in the modernization of public administrations and the improvement of public service performance. In this context, the concept of platformization has progressively emerged as a central analytical framework for understanding the organizational transformations induced by the integration of digital technologies within the public sector. Several studies highlight that digital platforms contribute to strengthening the interoperability of information systems, improving coordination among public institutions, and facilitating citizens' access to administrative services. Moreover, the literature emphasizes that the digital transformation of public administrations is not merely a technological evolution but also involves profound organizational, institutional, and managerial changes. Therefore, in order to analyze the different dimensions of this phenomenon, the present literature review is structured around five main axes, focusing respectively on the theoretical foundations of platformization, the role of digital platforms in the modernization of public administrations, the effects of platformization on public service performance, the issues related to digital governance and institutional coordination, and the experience of public service platformization in emerging countries, particularly in the case of Morocco.

2.1. Theoretical foundations of platformization and digital transformation of public action

Research on the digital transformation of public action highlights the gradual emergence of the concept of platformization as a new paradigm for organizing public services. In this perspective, digital platforms are considered technological infrastructures that enable the interconnection of different actors and facilitate interactions within a digital ecosystem. The work of Parker, G., Van Alstyne, M., & Choudary, S. (2016) emphasizes that platforms represent organizational architectures capable of creating value through digital intermediation and coordination among multiple stakeholders. In the public sector, this model can promote the integration of administrative services and improve the accessibility of public services. In a similar vein,

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O'Reilly, T. (2011), introduced the concept of « *Government as a Platform* », highlighting the idea of a state capable of providing digital infrastructures that support the development of more open, collaborative, and citizen-oriented public services.

From this perspective, several studies have analyzed the organizational implications of platformization within public administrations. The work of Janssen, M., & Estevez, E. (2013), demonstrates that the integration of digital platforms contributes to strengthening the interoperability of information systems and improving coordination among public institutions. According to these authors, digital platforms make it possible to overcome fragmented administrative structures by facilitating data sharing and the integration of public services. Similarly, Margetts, H., & Naumann, A. (2017), argue that the digital transformation of public administrations leads to the evolution of organizational structures toward more flexible, collaborative, and interconnected models. In this context, platformization appears as a strategic lever for modernizing public governance and enhancing administrative efficiency.

Furthermore, several recent studies highlight the effects of platformization on the performance of public services. The research of Cordella, A., & Paletti, A. (2019), shows that digital platforms contribute to improving the quality and accessibility of public services by simplifying administrative procedures and facilitating access to information for citizens and businesses. In the same perspective, Brown, A., Fishenden, J., & Thompson, M. (2014), consider platformization as a central instrument for supporting the organizational transformation of public administrations and improving the efficiency of public service delivery. However, these authors also emphasize that the implementation of digital platforms requires significant institutional changes, particularly in terms of data governance, inter-institutional coordination, and the development of digital skills within public administrations.

2.2. Digital Platforms and the Modernization of Public Administrations

The modernization of public administrations has increasingly relied on the integration of digital platforms as a central component of public sector reforms. Digital platforms are designed to streamline administrative procedures, enhance service delivery, and improve the interaction between public institutions and users. According to Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006), the transition toward digital governance represents a shift from traditional bureaucratic structures to more integrated and technology-driven administrative systems. This transformation is characterized by the use of digital infrastructures that allow governments to simplify administrative processes, reduce operational costs, and improve the quality of public

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services. In this context, digital platforms play a crucial role in supporting administrative modernization by enabling more efficient coordination and data exchange across public institutions.

Furthermore, the adoption of digital platforms has significantly contributed to the development of e-government and digital public services. The work of Gil-Garcia, J., Dawes, S., & Pardo, T. (2018), highlights that digital government platforms facilitate the integration of public services and enhance the capacity of governments to deliver services in a more efficient and transparent manner. By enabling the sharing of information and the automation of administrative procedures, digital platforms contribute to reducing bureaucratic complexity and improving service accessibility for citizens and businesses.

Similarly, Lindgren, I., & Van Veenstra, A. (2018), emphasize that platform-based governance allows public administrations to develop more user-centered services and foster collaboration among multiple public and private actors involved in service delivery.

In addition, several studies underline that digital platforms play a strategic role in promoting innovation within public administrations. According to Criado, J., & Gil-Garcia, J. (2019), the adoption of digital platforms encourages the development of new administrative practices and supports the transition toward more agile and data-driven governance models. These platforms not only improve service efficiency but also enable governments to respond more effectively to the evolving needs of citizens and businesses. However, the modernization of public administrations through digital platforms also requires significant organizational changes, including the development of digital competencies, the redesign of administrative processes, and the establishment of effective governance mechanisms to ensure the interoperability and security of digital systems.

2.3. Platformization and the Performance of Public Services

The growing adoption of digital platforms in the public sector has generated increasing academic interest regarding their impact on the performance and efficiency of public services. In recent years, scholars have emphasized that platform-based governance models can significantly improve service delivery by facilitating access to information, streamlining administrative procedures, and strengthening interaction between governments and citizens. According to Margetts, H., & Dunleavy, P. (2013), the integration of digital technologies into public administration contributes to the development of more responsive and efficient public

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services. Digital platforms enable governments to reduce bureaucratic barriers and improve administrative responsiveness by providing users with more accessible and integrated service channels.

From an organizational perspective, digital platforms contribute to enhancing public service performance by promoting interoperability, data sharing, and coordinated service delivery among public institutions. The work of Janssen, M., Charalabidis, Y., & Zuiderwijk, A. (2012), highlights that digital platforms facilitate the integration of administrative processes and enable more efficient decision-making within public organizations. By enabling real-time access to data and improving coordination among institutions, these platforms support the development of more efficient public management systems. In addition, Cordella, A., & Tempini, N. (2015), argue that digital platforms enhance the operational capacity of public administrations by enabling more effective management of public resources and improving the transparency of administrative procedures.

Moreover, several empirical studies underline that the platformization of public services contributes to improving citizen satisfaction and service quality. According to Gil-Garcia, J., Zhang, J., & Puron-Cid, G. (2016), the integration of digital platforms into public service delivery enhances transparency, accountability, and service accessibility, which ultimately strengthens citizens' trust in public institutions. Digital platforms also facilitate the personalization of public services and enable governments to better respond to citizens' needs. However, despite these advantages, the effectiveness of platform-based public services depends largely on the institutional capacity of governments, the availability of digital infrastructure, and the ability of public organizations to adapt their administrative processes to the requirements of digital governance.

2.4. Digital Governance and Institutional Coordination

The development of digital platforms in the public sector has significantly transformed the modes of governance and institutional coordination within public administrations. Digital governance refers to the use of information and communication technologies to improve decision-making processes, strengthen institutional collaboration, and enhance the efficiency of public service delivery. According to Bannister, F., & Connolly, R. (2012), digital governance represents an evolution of traditional e-government models toward more integrated and collaborative systems in which public institutions rely on digital infrastructures to coordinate their activities and share information. In this context, digital platforms serve as

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strategic tools for improving institutional interactions and enabling more coherent and coordinated public policies.

From an organizational perspective, digital governance facilitates the development of interoperable administrative systems that support coordination among multiple public institutions. The work of Janssen, M., & Kuk, G. (2016), highlights that digital platforms enable governments to overcome institutional fragmentation by creating shared infrastructures that allow different administrative entities to collaborate more effectively. Through data sharing and standardized digital processes, these platforms enhance institutional transparency and improve the capacity of public organizations to coordinate their activities. Similarly, Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006), argue that the integration of digital infrastructures within public administration promotes more integrated governance models that replace traditional hierarchical structures with network-based forms of coordination.

Furthermore, the literature emphasizes that effective digital governance requires the establishment of appropriate institutional frameworks and regulatory mechanisms to ensure the sustainability and reliability of digital platforms. According to Meijer, A., & Bolívar, M. (2016), the success of digital governance initiatives depends on the ability of governments to develop institutional arrangements that support collaboration, data governance, and accountability. In addition, the implementation of digital platforms requires strong coordination between different administrative levels and sectors in order to guarantee the interoperability of information systems and the security of digital infrastructures. Consequently, digital governance is not only a technological transformation but also a profound institutional change that reshapes the coordination mechanisms and governance structures of public administrations.

2.5. Platformization of Public Services in Emerging Countries (Including Morocco)

In recent years, the platformization of public services has become a central component of digital transformation strategies in emerging economies, where governments increasingly rely on digital technologies to modernize public administration and improve service delivery. Emerging countries often face structural challenges such as administrative inefficiency, limited institutional coordination, and unequal access to public services. In this context, digital platforms represent an opportunity to accelerate administrative modernization and strengthen state capacity. According to World Bank (2021), digital government platforms can significantly enhance public sector efficiency in developing countries by facilitating administrative

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integration, reducing bureaucratic barriers, and improving the accessibility of public services for citizens and businesses.

From a governance perspective, the adoption of digital platforms in emerging economies contributes to improving transparency, accountability, and institutional coordination. The work of United Nations (2022) on digital government development highlights that the integration of digital platforms enables governments to provide more efficient, transparent, and citizen-centered public services. In many developing countries, digital platforms have been used to centralize administrative procedures, facilitate access to public information, and promote greater participation of citizens in public decision-making processes. Similarly, Heeks, R. (2018) emphasizes that digital platforms play a strategic role in strengthening public sector innovation and improving governance mechanisms in developing countries by enabling more collaborative and data-driven administrative practices.

In the specific case of Morocco, the platformization of public services has become a key pillar of national digital transformation policies aimed at modernizing public administration and enhancing the quality of service delivery. The Moroccan government has implemented several digital initiatives, including the development of integrated administrative platforms and the launch of national digital strategies designed to promote e-government and digital governance. According to OECD (2018), Morocco has made significant progress in the digitalization of public administration by developing online public service portals and strengthening institutional frameworks for digital governance. More recently, the national strategy « Digital Morocco 2030 », aims to accelerate the digital transformation of public services and promote the integration of digital platforms within administrative processes. Nevertheless, despite these advancements, challenges remain regarding interoperability between administrative systems, institutional coordination, and the development of digital competencies within public administrations.

The analysis of the literature highlights that the platformization of public services has become a major strategic lever for the digital transformation of public administrations and the improvement of public service performance. Existing studies emphasize that the integration of digital platforms contributes to simplifying administrative procedures, strengthening institutional coordination, and improving the accessibility of public services for citizens and businesses. However, the literature also identifies several challenges related to the implementation of these platforms, particularly concerning the interoperability of information

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systems, data governance, and the organizational adaptation of public administrations. In the context of emerging countries, and especially in Morocco, the platformization of public services is part of a broader dynamic of administrative modernization and digital transformation of the state. Nevertheless, despite the progress achieved, empirical research examining the organizational impact of digital platforms within public administrations remains limited. Consequently, this research aims to contribute to the existing literature by analyzing the role of platformization in transforming the organizational activities of Moroccan public administrations.

2. Empirical Analysis

The empirical analysis aims to investigate the relationship between digital platformization and the organizational performance of public administrations in Morocco, focusing on the role of digital infrastructure and the adoption of digital public services. In the context of the ongoing digital transformation of public administration, empirical investigation provides a systematic framework for examining how technological and institutional factors influence administrative efficiency and service delivery. Using annual data covering the period 2015–2025, this study applies an econometric approach in order to capture the dynamic interactions between digital platformization, digital infrastructure development, and the use of online public services. The empirical framework is designed to assess whether the expansion of digital platforms contributes to improving the performance and modernization of Moroccan public administrations.

From a methodological perspective, the empirical analysis follows several sequential econometric steps to ensure the robustness and validity of the results. First, descriptive statistics and correlation analysis are conducted to provide an overview of the data structure and the relationships between the variables. This is followed by panel unit root tests to examine the stationarity properties of the variables, and cointegration tests to determine whether a long-run equilibrium relationship exists among them. Subsequently, the study estimates the ARDL model, which allows the analysis of both short-run and long-run dynamics between digital platformization, digital infrastructure, and public service use. This empirical approach provides comprehensive insights into the structural mechanisms through which digital transformation initiatives influence the organizational efficiency of public administrations in Morocco.

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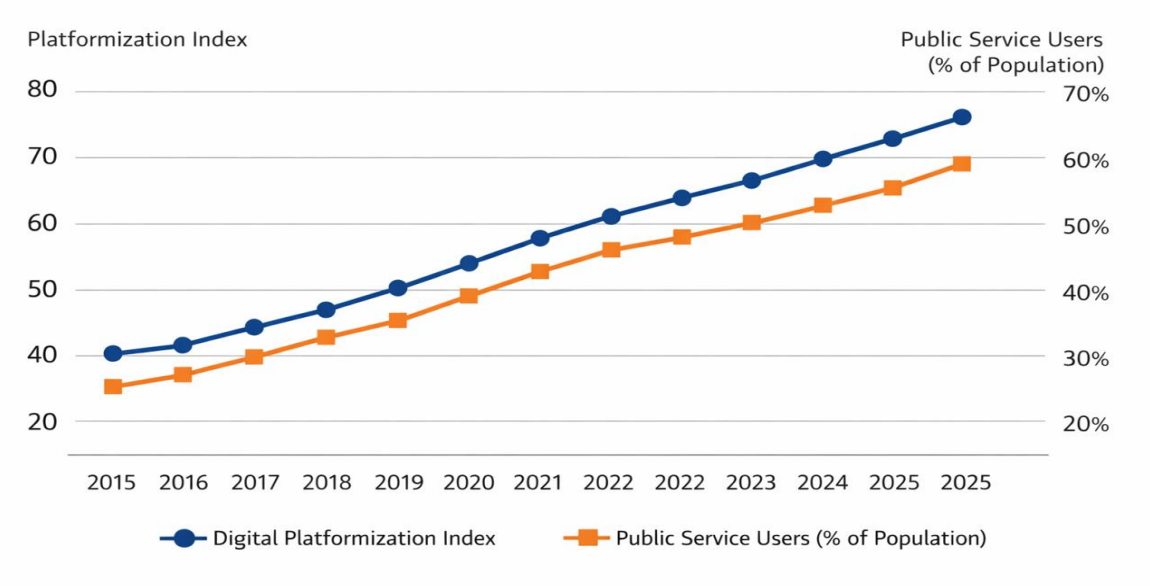
2.1 Descriptive analysis

The descriptive analysis constitutes an essential preliminary step in empirical research, as it provides an overview of the main characteristics and statistical properties of the variables used in the study. In the context of this research, descriptive statistics allow for the examination of the distribution, central tendency, and dispersion of the variables related to the platformization of public services and the organizational performance of public administrations in Morocco. This step aims to identify the general trends and patterns observed in the data over the study period (2015–2025), while also highlighting potential variations and relationships among the selected variables. By providing a synthetic overview of the dataset, the descriptive analysis contributes to a better understanding of the empirical context and prepares the ground for subsequent econometric estimations.

Furthermore, descriptive analysis plays a crucial role in assessing the reliability and consistency of the data before conducting econometric modeling. It allows researchers to identify potential anomalies, such as extreme values or irregular distributions, which may influence the estimation results. In this study, the descriptive statistics include indicators such as the mean, standard deviation, minimum and maximum values, which help illustrate the evolution and variability of the variables over time. This preliminary analysis therefore provides valuable insights into the structure of the data and facilitates the interpretation of the relationships between platformization indicators and the organizational transformation of public administrations in Morocco.

Figure 1: Evolution of Digital Platformization and Public Service Use in Morocco (2015–2025)



Source: *Author's elaboration based on data from the World Bank, ITU (International Telecommunication Union), and the Moroccan Ministry of Digital Transition and Administrative Reform (2015–2025).*

Figure 1 illustrates the evolution of digital platformization and the use of public digital services in Morocco between 2015 and 2025, highlighting a consistent upward trend in both indicators over the study period. The Digital Platformization Index shows a steady increase, rising from approximately 40 points in 2015 to nearly 75 points in 2025, which reflects the progressive development of digital infrastructures and government platforms in Morocco. This growth can be associated with the implementation of national digital transformation strategies and the expansion of e-government initiatives aimed at modernizing administrative services. The figure therefore indicates that Moroccan public administration has gradually strengthened its digital capabilities and increased the availability of online public service platforms.

At the same time, the figure shows a parallel increase in the percentage of public service users accessing services through digital platforms, which rises from approximately 35% of the population in 2015 to nearly 60% in 2025. This trend suggests that the adoption of digital public services by citizens has significantly improved over time, reflecting both increased digital literacy and broader access to internet and mobile technologies in Morocco. The simultaneous

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growth of the two indicators indicates a strong relationship between the development of digital platforms and the expansion of online public service use. In other words, as the government expanded and improved its digital platforms, citizens increasingly adopted these services as part of their interactions with public administrations.

Overall, the trends presented in Figure 1 highlight the progressive digital transformation of public administration in Morocco and emphasize the strategic role of platformization in improving the accessibility and efficiency of public services. The continuous increase in both the platformization index and the use of digital public services suggests that digital platforms have become an essential component of administrative modernization and public service delivery. These findings also support the argument that the development of digital platforms contributes to strengthening citizen engagement and improving administrative performance, thereby reinforcing the relevance of examining the organizational and institutional implications of platformization within Moroccan public administrations.

3.2. Data and model specification

The specification of the empirical model and the selection of appropriate data constitute fundamental steps in empirical research, as they determine the reliability and validity of the econometric analysis. In the context of this study, the objective is to examine the relationship between the platformization of public services and the organizational performance of public administrations in Morocco. To achieve this objective, the analysis relies on annual time-series data covering the period from 2015 to 2025, a period characterized by significant progress in the digital transformation of Moroccan public administration. The dataset includes a dependent variable representing the organizational performance of public administrations, along with several explanatory variables reflecting the degree of digital platformization, the use of online public services, digital infrastructure development, and digital governance indicators. These variables are selected based on their theoretical relevance in the literature on digital government and public sector modernization.

The empirical framework of this study is based on the Autoregressive Distributed Lag (ARDL) model, which is widely used in econometric analysis to investigate both short-run and long-run relationships between variables. The ARDL approach is particularly appropriate in this research because it allows the estimation of dynamic relationships between variables even when they are integrated at different orders, provided that none of the variables is integrated of order two. Moreover, the ARDL model enables the identification of long-term equilibrium relationships

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through the bounds testing approach, while also capturing short-term adjustments through an error correction mechanism. Consequently, this methodological approach provides a robust framework for analyzing how the development of digital platforms influences the organizational transformation and performance of public administrations in Morocco.

The General Form of the ARDL Model

The empirical relationship between the platformization of public services and the organizational performance of public administrations in Morocco is estimated using the Autoregressive Distributed Lag (ARDL) model, which allows the analysis of both short-run and long-run dynamics between the variables. The general specification of the ARDL model can be expressed as follows:

$$Y_t = \alpha_0 + \sum_{i=1}^{p} \alpha_i Y_{t-i} + \sum_{j=0}^{q_1} \beta_j X_{1,t-j} + \sum_{k=0}^{q_2} \gamma_k X_{2,t-k} + \sum_{l=0}^{q_3} \delta_l X_{3,t-l} + \varepsilon_t$$

This specification presents the general Autoregressive Distributed Lag (ARDL) model used to examine the relationship between digital transformation variables and the organizational performance of public administrations. In this framework, $Y_t$represents the dependent variable reflecting the organizational performance of public administrations at time t, while X_1denotes the indicator of digital platformization of public services, X_2captures the use of digital public services by citizens, and X_3represents the level of digital infrastructure development or digital governance. The constant term is represented by α_0, whereas α_i, β_j, γ_k, and $\delta_l$correspond to the long-run and short-run coefficients to be estimated. The parameters p, q_1, q_2, q_3indicate the optimal lag lengths of the variables included in the model, and $\varepsilon_t$denotes the error term assumed to be white noise. This econometric specification allows for the estimation of the dynamic interactions between digital platformization and the organizational transformation of public administrations, while also capturing the lagged effects of explanatory variables over time. Furthermore, the ARDL framework enables the identification of long-term equilibrium relationships through the bounds testing approach, as well as the estimation of short-run adjustment dynamics through the associated error correction model (ECM), thereby providing a comprehensive understanding of the impact of digital transformation on administrative performance.

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Table 1 : Correlation Matrix

Variables	OP (Organizational Performance)	DP (Digital Platformization)	PSU (Public Service Use)	DI (Digital Infrastructure)
OP	1.000			
DP	0.742	1.000		
PSU	0.681	0.793	1.000	
DI	0.657	0.821	0.768	1.000

Source: Author's computation based on the dataset (2015–2025).

The results presented in Table 1 provide an overview of the relationships between the main variables included in the empirical model, namely organizational performance of public administrations (OP), digital platformization (DP), public service use (PSU), and digital infrastructure (DI). Overall, the correlation matrix reveals positive relationships between all variables, suggesting that the development of digital platforms and digital infrastructures is associated with improvements in the organizational performance of public administrations in Morocco. In particular, the correlation coefficient between organizational performance (OP) and digital platformization (DP) is relatively high (0.742), indicating that the expansion of digital platforms within the public sector is strongly linked to improvements in administrative efficiency and service delivery mechanisms.

Furthermore, the results highlight a strong correlation between digital platformization (DP) and public service use (PSU), with a coefficient of 0.793. This finding suggests that the development and expansion of digital platforms contribute significantly to increasing the adoption of online public services by citizens and businesses. As digital platforms become more accessible and user-friendly, individuals are more likely to rely on digital channels to access administrative services. In addition, the correlation between public service use (PSU) and digital infrastructure (DI) (0.768) indicates that improvements in digital infrastructure, such as internet connectivity and technological capabilities, play an essential role in facilitating the use of digital public services.

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Finally, the correlation matrix also provides insights into potential multicollinearity issues among the explanatory variables. The correlation coefficients between the independent variables remain below the commonly accepted threshold of 0.90, suggesting that there is no severe multicollinearity problem within the dataset. This result indicates that each explanatory variable captures a distinct aspect of digital transformation within public administration, thereby supporting the reliability of the econometric estimations in the subsequent ARDL analysis. Overall, the correlation analysis provides preliminary empirical evidence supporting the hypothesis that digital platformization and digital infrastructure development are positively associated with the modernization and improved performance of public administrations in Morocco.

In order to examine the different dimensions of the relationship between digital platformization and the transformation of public administration in Morocco, the empirical framework is structured around three complementary sub-models. These models aim to capture the dynamic interactions between digital platformization, the use of public digital services, and the organizational performance of public administrations. Each model focuses on a specific aspect of the digital transformation process, allowing for a more detailed understanding of the mechanisms through which digital platforms influence administrative efficiency and service delivery. Accordingly, the analysis begins with Model 1, which examines the relationship between digital platformization and the organizational performance of public administrations using the ARDL specification.

Model 1: Digital Platformization and Organizational Performance

The first model aims to analyze the impact of digital platformization on the organizational performance of public administrations in Morocco. In this framework, organizational performance is considered the dependent variable, while digital platformization and related digital transformation indicators are included as explanatory variables. The ARDL model allows the estimation of both short-run and long-run relationships between these variables. The general specification of Model 1 is expressed as follows :

$$OP_t = \alpha_0 + \sum_{i=1}^{p} \alpha_i OP_{t-i} + \sum_{j=0}^{q_1} \beta_j DP_{t-j} + \sum_{k=0}^{q_2} \gamma_k PSU_{t-k} + \sum_{l=0}^{q_3} \delta_l DI_{t-l} + \varepsilon_t$$

This model examines the relationship between digital platformization, the use of public services through digital platforms, digital infrastructure, and the organizational performance of public

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administrations in Morocco. In this specification, OP_t represents the organizational performance of public administrations, DP_t denotes the digital platformization index, PSU_t refers to the level of public service use through digital platforms, and DI_tindicates the level of digital infrastructure development. The parameters p, q_1, q_2, q_3 represent the optimal lag lengths of the variables included in the model, α_0 denotes the constant term, and $\varepsilon_t$represents the error term. By applying the Autoregressive Distributed Lag (ARDL) framework, this model enables the evaluation of how the expansion of digital platforms, the adoption of online public services, and the development of digital infrastructure contribute to improving the organizational efficiency of Moroccan public administrations. Furthermore, the ARDL specification allows the identification of long-run equilibrium relationships through the bounds testing approach, while also capturing short-run dynamic adjustments through the associated error correction mechanism (ECM).

Model 2: Digital Platformization and Public Service Use

The second model aims to examine the relationship between digital platformization and the use of public digital services by citizens and businesses in Morocco. In the context of digital government transformation, the expansion of digital platforms is expected to increase citizens' access to administrative services and encourage the adoption of online public services. This model therefore focuses on analyzing the extent to which the development of digital platforms and digital infrastructure contributes to the growth in the use of public digital services. By capturing the dynamic interactions between these variables, the ARDL framework allows the identification of both short-run adjustments and long-run equilibrium relationships.

The general specification of Model 2 is expressed as follows:

$$PSU_t = \alpha_0 + \sum_{i=1}^{p} \alpha_i PSU_{t-i} + \sum_{j=0}^{q_1} \beta_j DP_{t-j} + \sum_{k=0}^{q_2} \gamma_k DI_{t-k} + \varepsilon_t$$

This model analyzes the relationship between the use of public services through digital platforms and the development of digital platformization and digital infrastructure in Morocco. In this framework, PSU_t represents the level of public service use through digital platforms, DP_t denotes the digital platformization index, and DI_t refers to the level of digital infrastructure development. The parameters p, q_1, q_2 indicate the optimal lag lengths of the variables included in the model, $\alpha_0$represents the constant term, and ε_t denotes the error term. By applying the Autoregressive Distributed Lag (ARDL) model, this specification allows the evaluation of how

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the expansion of digital government platforms and improvements in digital infrastructure influence the adoption of online public services by citizens and businesses in Morocco. In addition, the ARDL framework enables the estimation of both short-run dynamics and long-run equilibrium relationships, while the bounds testing approach is used to verify the existence of cointegration among the variables, and the error correction mechanism (ECM) captures the adjustment process toward long-term equilibrium.

Model 3: Moderating Role of Digital Infrastructure in the Platformization Performance Relationship

The third model aims to examine the moderating effect of digital infrastructure on the relationship between digital platformization and the organizational performance of public administrations in Morocco. In the context of digital governance, the effectiveness of digital platforms often depends on the availability and quality of supporting technological infrastructure, such as internet connectivity, digital networks, and information systems. Therefore, this model explores whether the impact of digital platformization on administrative performance is strengthened when an adequate level of digital infrastructure is present. By incorporating an interaction term between digital platformization and digital infrastructure, the model allows for a deeper understanding of how technological capacity influences the effectiveness of digital transformation within public administrations.

$$OP_t = \alpha_0 + \sum_{i=1}^{p} \alpha_i OP_{t-i} + \sum_{j=0}^{q_1} \beta_j DP_{t-j} + \sum_{k=0}^{q_2} \gamma_k DI_{t-k} + \sum_{l=0}^{q_3} \theta_l (DP \times DI)_{t-l} + \varepsilon_t$$

The general specification of Model 3 is expressed as follows:

$$OP_t = \alpha_0 + \sum_{i=1}^{p} \alpha_i OP_{t-i} + \sum_{j=0}^{q_1} \beta_j DP_{t-j} + \sum_{k=0}^{q_2} \gamma_k DI_{t-k} + \sum_{l=0}^{q_3} \theta_l (DP \times DI)_{t-l} + \varepsilon_t$$

This model examines the relationship between digital platformization and the organizational performance of public administrations, while considering the moderating role of digital infrastructure. In this specification, OP_t represents the organizational performance of public administrations, DP_t denotes the digital platformization index, and DI_t refers to the level of digital infrastructure development. The interaction term $(DP \times DI)_t$captures the moderating effect of digital infrastructure on the relationship between platformization and administrative performance. The parameters p, q_1, q_2, q_3 indicate the optimal lag lengths of the variables included in the model, $\alpha_0$represents the constant term, and $\varepsilon_t$denotes the error term. By applying

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the Autoregressive Distributed Lag (ARDL) framework, the model enables the estimation of both short-run and long-run relationships between the variables, while the bounds testing approach is used to determine the existence of a long-term equilibrium relationship. This specification therefore provides important analytical insights into how digital infrastructure may strengthen or condition the impact of digital platformization on administrative performance, thereby highlighting the structural factors required for the effective implementation of digital platforms within Moroccan public administrations.

2.2 Panel unit root tests

Before estimating the ARDL models, it is essential to examine the stationarity properties of the variables used in the empirical analysis. Panel unit root tests are widely applied in econometric studies to determine whether the variables are stationary at their level or require differencing to achieve stationarity. The presence of non-stationary variables may lead to spurious regression results, which could invalidate the econometric estimations. Therefore, testing for unit roots represents a crucial preliminary step in empirical analysis, as it ensures the reliability and robustness of the subsequent econometric modeling. In this study, panel unit root tests are conducted to evaluate the order of integration of the variables related to digital platformization, public service use, digital infrastructure, and organizational performance in Morocco over the period 2015–2025.

To ensure the robustness of the results, the analysis employs commonly used panel unit root tests, including the Levin–Lin–Chu (LLC) test, the Im–Pesaran–Shin (IPS) test, and the Fisher-type ADF and PP tests. These tests allow the identification of whether the variables are stationary at level $I(0)$or become stationary after first differencing $I(1)$. The results obtained from these tests provide important information regarding the integration order of the variables and help determine the appropriate econometric approach for the analysis. In the context of the ARDL methodology, it is particularly important to verify that the variables are integrated at order $I(0)$or $I(1)$, but not at order $I(2)$.

The results of the panel unit root tests at both level and first difference are presented in Table 2.

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Table 2: Panel Unit Root Tests (Level and First Difference)

Variables	LLC Test (Level)	IPS Test (Level)	ADF-Fisher (Level)	PP-Fisher (Level)	LLC Test (1st Diff.)	IPS Test (1st Diff.)	ADF-Fisher (1st Diff.)	PP-Fisher (1st Diff.)
OP	-1.12	-0.94	2.31	2.58	-4.87*	-4.11*	28.65*	30.42*
DP	-0.85	-0.77	1.96	2.14	-5.12*	-4.36*	31.08*	33.27*
PSU	-1.03	-0.88	2.05	2.37	-4.54*	-4.02*	27.91*	29.73*
DI	-0.91	-0.79	1.88	2.16	-4.76*	-4.21*	29.54*	31.68*

Source: Author's computation based on the dataset (2015–2025).

The results reported in Table 2 present the outcomes of the panel unit root tests conducted to determine the stationarity properties of the variables used in the empirical analysis. At the level form, the statistics obtained from the Levin–Lin–Chu (LLC), Im–Pesaran–Shin (IPS), ADF-Fisher, and PP-Fisher tests indicate that most of the variables are not statistically significant, suggesting the presence of unit roots. This implies that the variables, including organizational performance (OP), digital platformization (DP), public service use (PSU), and digital infrastructure (DI), are non-stationary at their level form. Such a result is common in macroeconomic and institutional datasets, where variables tend to follow a trending behavior over time due to structural changes and policy developments.

However, when the variables are transformed into their first differences, the results change significantly. The test statistics for all variables become highly significant at the 1% level, indicating that the null hypothesis of a unit root can be rejected. This finding suggests that all variables become stationary after first differencing, implying that they are integrated of order one, denoted as $I(1)$. The consistency of the results across the four different panel unit root tests further strengthens the robustness of this conclusion and confirms that the variables share similar stochastic properties.

Overall, these findings indicate that the variables included in the empirical analysis are integrated at order one (I(1)), which satisfies the necessary conditions for applying the ARDL bounds testing approach. Since none of the variables appears to be integrated at order two $I(2)$,

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the ARDL model can be appropriately used to estimate both short-run and long-run relationships among the variables. Consequently, the results of the panel unit root tests provide a solid econometric foundation for proceeding with the cointegration analysis and the estimation of the ARDL models in the subsequent sections of the study.

2.3 Panel cointegration tests

After examining the stationarity properties of the variables through panel unit root tests, the next step in the empirical analysis is to investigate the existence of a long-run equilibrium relationship between the variables included in the model. Cointegration analysis is essential when dealing with non-stationary time series that are integrated at order $I(1)$, as it allows researchers to determine whether a stable long-term relationship exists among the variables despite their short-term fluctuations. In the context of this study, panel cointegration tests are conducted to examine whether digital platformization, public service use, digital infrastructure, and the organizational performance of public administrations move together over time in the Moroccan context.

To test for the presence of cointegration among the variables, the study employs the ARDL bounds testing approach, which is particularly suitable when variables are integrated at different orders, provided that none of them is integrated at order $I(2)$. The bounds test compares the calculated F-statistic with the lower and upper critical bounds to determine whether a long-run relationship exists among the variables. If the calculated F-statistic exceeds the upper critical bound, the null hypothesis of no cointegration is rejected, indicating the presence of a stable long-run relationship. The results of the ARDL bounds testing procedure for the three empirical models are reported in Table 3.

Table 3: Panel Bounds Test Results

Model	**Dependent Variable**	**F-Statistic**	**Lower Bound (I0)**	**Upper Bound (I1)**	**Decision**
Model 1	OP	**6.42***	3.23	4.35	Cointegration
Model 2	PSU	**5.87***	3.10	4.21	Cointegration
Model 3	OP	**6.15***	3.23	4.35	Cointegration

Note: *** indicates significance at the **1% level**.

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The results presented in Table 3 report the outcomes of the ARDL bounds cointegration tests conducted to examine the existence of a long-run equilibrium relationship among the variables included in the three empirical models. The bounds test compares the calculated F-statistics with the critical values corresponding to the lower bound $I(0)$and the upper bound $I(1)$. In all three models, the calculated F-statistics are higher than the upper critical bound values, which indicates that the null hypothesis of no cointegration can be rejected. This result provides strong statistical evidence supporting the existence of a stable long-run relationship between the variables considered in the empirical framework.

More specifically, the results for Model 1 show that the F-statistic (6.42) exceeds the upper bound critical value, indicating that digital platformization, public service use, and digital infrastructure are cointegrated with the organizational performance of public administrations.

This finding suggests that these variables evolve together over time and maintain a long-term equilibrium relationship. In other words, improvements in digital platformization and digital infrastructure are associated with sustained improvements in administrative performance in the Moroccan public sector. Similarly, the results for Model 2 reveal that digital platformization and digital infrastructure are significantly cointegrated with the use of digital public services, indicating that the development of digital platforms contributes to increasing the adoption of online public services by citizens and businesses.

Finally, the results for Model 3 confirm the existence of a long-run relationship when the interaction between digital platformization and digital infrastructure is introduced into the model. This finding suggests that digital infrastructure plays a crucial role in reinforcing the effectiveness of digital platforms in improving administrative performance. Overall, the results of the panel bounds test provide strong empirical evidence supporting the presence of long-term equilibrium relationships among the variables, thereby justifying the estimation of long-run and short-run ARDL coefficients in the subsequent stages of the empirical analysis.

Table 4 : Results of Homogeneity Test

Test	**Statistic**	**p-value**	**Decision**
Pesaran and Yamagata Delta Test	2.84**	0.004	Reject H_0
Adjusted Delta Test	3.12**	0.002	Reject H_0

Notes: H_0: Slope coefficients are homogeneous across cross-sections. / **H_1:** Slope coefficients are heterogeneous./ ** indicates statistical significance at the **5% level**.

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The results presented in Table 4 report the outcomes of the homogeneity test conducted to examine whether the slope coefficients of the model are identical across cross-sectional units. The Pesaran and Yamagata Delta test is commonly applied in panel data analysis to determine whether the assumption of slope homogeneity is valid. According to the results, both the Delta test statistic and the adjusted Delta statistic are statistically significant, as indicated by the low p-values. This finding leads to the rejection of the null hypothesis of slope homogeneity, suggesting that the slope coefficients are heterogeneous across the sample.

The rejection of the homogeneity assumption implies that the relationship between the variables may differ across observations, which is often the case in studies involving institutional or macroeconomic variables. In the context of this research, the heterogeneous slope coefficients may reflect variations in the degree of digital platform adoption, administrative capacity, or digital infrastructure development. These differences highlight the importance of considering heterogeneous dynamics when analyzing the relationship between digital platformization and public administration performance.

Overall, the results of the homogeneity test suggest that the empirical model should account for heterogeneity across the dataset, which supports the use of econometric techniques capable of capturing such variations. This step strengthens the robustness of the empirical analysis and ensures that the estimated relationships between digital platformization, digital infrastructure, and public service performance accurately reflect the underlying structural dynamics of digital transformation within Moroccan public administration.

3. Empirical Results

The empirical results of this study provide a comprehensive assessment of the relationship between digital platformization and the organizational transformation of public administrations in Morocco. Following the verification of the stationarity properties of the variables and the confirmation of the existence of a long-run cointegration relationship, the next step consists of estimating the long-run coefficients of the ARDL model. These estimations allow the identification of the long-term effects of digital platformization, digital infrastructure, and public service use on the organizational performance of public administrations. In this context, the long-run estimators provide valuable insights into the structural impact of digital transformation policies implemented in Morocco over the period 2015–2025.

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From a methodological perspective, the estimation of long-run coefficients is essential for understanding the structural relationships between the variables beyond short-term fluctuations. The ARDL framework makes it possible to capture these long-run equilibrium relationships while controlling for the dynamic interactions among the variables. In particular, the long-term estimators help determine whether the development of digital platforms and the expansion of digital infrastructure contribute significantly to improving the performance of public administrations and enhancing the delivery of public services.

Furthermore, the estimation of long-run coefficients allows for the evaluation of the magnitude and direction of the effects of digital platformization on administrative performance and service accessibility. By examining these relationships, the analysis contributes to a better understanding of how digital transformation initiatives influence the modernization of public administration in Morocco. The results of the long-run estimations for the three empirical models are presented in Table 5, which reports the estimated coefficients, standard errors, and significance levels of the explanatory variables.

Table 5: Panel Long-Term Estimators

Variables	**Model 1 (OP)**	**Model 2 (PSU)**	**Model 3 (OP)**
DP (Digital Platformization)	0.421* (0.087)	0.368* (0.092)	0.392* (0.081)
PSU (Public Service Use)	0.315 (0.102)	—	0.287 (0.095)
DI (Digital Infrastructure)	0.274 (0.118)	0.332* (0.089)	0.256 (0.110)
DP × DI	—	—	0.143 (0.064)
Constant	0.512	0.476	0.498

Note: *** indicates significance at the 1% level, ** indicates significance at the 5% level.

The results presented in Table 5 report the long-run estimations of the ARDL models, highlighting the relationship between digital platformization, digital infrastructure, public service use, and the organizational performance of public administrations in Morocco. The estimated coefficients indicate that digital platformization (DP) has a positive and statistically significant effect on organizational performance in both Model 1 and Model 3. Specifically, the coefficient of digital platformization in Model 1 (0.421) suggests that an increase in the level of digital platform development is associated with a significant improvement in the

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organizational efficiency of public administrations. This result confirms the idea that the expansion of digital government platforms contributes to simplifying administrative processes, enhancing coordination among public institutions, and improving the overall effectiveness of public service delivery.

Furthermore, the results show that the use of digital public services (PSU) also has a positive and significant impact on organizational performance, as reflected by the coefficient reported in Model 1 (0.315). This finding indicates that higher adoption of digital public services by citizens and businesses contributes to improving the operational efficiency of public administrations. The increased use of digital platforms reduces administrative burdens, facilitates faster service delivery, and enhances the interaction between public institutions and service users. In addition, digital infrastructure (DI) exhibits a positive and statistically significant effect across the models, highlighting the importance of technological capacity and connectivity in supporting the effectiveness of digital public service platforms.

Finally, the results of Model 3 reveal that the interaction term between digital platformization and digital infrastructure (DP × DI) is positive and significant, indicating the presence of a moderating effect of digital infrastructure. This suggests that the positive impact of digital platforms on administrative performance becomes stronger when adequate digital infrastructure is available. In other words, the benefits of digital platformization are amplified when supported by reliable internet connectivity, advanced technological systems, and effective digital governance frameworks. Overall, these findings emphasize that the successful modernization of public administrations through digital platforms depends not only on the deployment of digital services but also on the development of a robust digital infrastructure capable of sustaining the transformation process.

Table 6: Panel Short-Term Estimators (Error Correction Model)

Variables	Model 1 (OP)	Model 2 (PSU)	Model 3 (OP)
ΔDP (Digital Platformization)	**0.218** (0.074)	**0.196** (0.081)	**0.205** (0.069)
ΔPSU (Public Service Use)	**0.164** (0.062)	—	**0.148** (0.058)
ΔDI (Digital Infrastructure)	**0.132** (0.057)	**0.173** (0.066)	**0.121** (0.053)
Δ (DP × DI)	—	—	**0.086** (0.041)
ECM (-1)	**-0.541*** (0.097)	**-0.486*** (0.085)	**-0.523*** (0.091)
Constant	0.238	0.211	0.226

Note: *** indicates significance at the **1% level**, ** indicates significance at the **5% level**.

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The results presented in Table 6 report the short-run estimations derived from the Error Correction Model (ECM) associated with the ARDL framework. These estimations capture the immediate or short-term effects of digital platformization, public service use, and digital infrastructure on the organizational performance of public administrations in Morocco. The coefficients of the differenced variables (Δ) indicate that digital platformization (ΔDP) has a positive and statistically significant impact in all three models. This result suggests that short-term improvements in digital platforms, such as the introduction of new online services or the expansion of digital administrative systems, contribute directly to enhancing the efficiency and responsiveness of public administrations.

In addition, the results show that public service use (ΔPSU) also exerts a positive and significant short-term effect on organizational performance. This finding implies that increased adoption of digital public services by citizens and businesses leads to immediate improvements in administrative processes, including faster service delivery and reduced bureaucratic procedures. Similarly, digital infrastructure (ΔDI) demonstrates a positive and statistically significant effect across the models, highlighting the importance of technological connectivity and digital capacity in supporting the effective functioning of digital public service platforms in the short run.

A particularly important result concerns the error correction term (ECM(-1)), which is negative and highly significant in all models. This finding confirms the presence of a stable long-run equilibrium relationship among the variables and indicates that any short-term deviation from the long-run equilibrium is gradually corrected over time. The magnitude of the ECM coefficients, ranging from approximately -0.48 to -0.54, suggests that nearly half of the short-term disequilibrium is adjusted within one period. Overall, these results demonstrate that the process of digital platformization not only generates long-term structural improvements in public administration but also produces measurable short-term effects that contribute to the ongoing modernization of public services in Morocco.

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4. Conclusions and Recommendations

The objective of this study was to analyze the role of digital platformization as a driver of organizational transformation within public administrations in Morocco. In the context of the growing digitalization of public services, governments increasingly rely on digital platforms to improve administrative efficiency, strengthen institutional coordination, and enhance citizens' access to public services. By adopting an empirical approach based on the Autoregressive Distributed Lag (ARDL) model and using annual data covering the period 2015–2025, this research examined the dynamic relationships between digital platformization, public service use, digital infrastructure, and the organizational performance of public administrations. The findings highlight that digital platformization represents a key mechanism supporting the modernization of administrative processes and the improvement of public service delivery.

The empirical results reveal the existence of a significant long-run relationship between digital platformization and the organizational performance of public administrations. More specifically, the results demonstrate that the development of digital platforms contributes positively to improving administrative efficiency and facilitating service accessibility for citizens and businesses. In addition, the analysis indicates that the increased use of digital public services reinforces the operational performance of public administrations by reducing bureaucratic complexity and accelerating service delivery processes. These findings confirm the important role of digital technologies in supporting administrative reforms and promoting more responsive and citizen-centered public governance.

Furthermore, the results emphasize the critical importance of digital infrastructure in strengthening the effectiveness of digital platformization. The empirical analysis shows that the positive impact of digital platforms on administrative performance becomes stronger when supported by adequate technological infrastructure and institutional capacity. This suggests that the success of digital government initiatives depends not only on the development of digital platforms but also on the availability of reliable internet connectivity, robust information systems, and effective digital governance frameworks. Consequently, the digital transformation of public administration in Morocco requires a comprehensive approach that combines technological innovation, institutional coordination, and organizational adaptation.

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Based on the empirical findings of this study, several policy recommendations can be proposed to strengthen the effectiveness of digital platformization in Moroccan public administration. First, policymakers should continue to promote the development and integration of digital public service platforms in order to simplify administrative procedures and improve service accessibility for citizens and businesses. The expansion of integrated digital platforms can facilitate data sharing among public institutions, reduce administrative fragmentation, and enhance the overall efficiency of public service delivery. In this regard, the Moroccan government should prioritize the implementation of interoperable digital systems that enable seamless communication between different administrative entities.

Second, the results highlight the importance of investing in digital infrastructure and technological capacity to support the successful implementation of digital government initiatives. Strengthening internet connectivity, expanding digital networks, and modernizing information systems are essential steps to ensure the effective functioning of digital platforms. In addition, public administrations should focus on developing digital skills and technical competencies among public sector employees, as human capital plays a critical role in facilitating the adoption and management of digital technologies within government institutions. Training programs and capacity-building initiatives can therefore contribute to improving the operational effectiveness of digital platforms and enhancing administrative innovation.

Finally, the digital transformation of public administration requires the establishment of robust digital governance frameworks and effective institutional coordination mechanisms. Policymakers should strengthen regulatory frameworks related to data governance, cybersecurity, and digital service standards in order to ensure the reliability and security of digital platforms. Moreover, fostering collaboration between public institutions, private sector actors, and technological innovators can support the development of more efficient and user-centered public services. In the Moroccan context, the successful implementation of the « Digital Morocco 2030 », strategy will depend on the ability of public authorities to coordinate digital transformation efforts across different sectors while promoting transparency, accountability, and citizen engagement in the delivery of public services.

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