

Oum El Bouaghi University, Algeria, medfouni.djameleddine@univ-oeb.dz

Published:10/12/2025

[illegible]

Keywords: Digital Transformation, Public Service, Service Quality, Algeria Post, Gold Card.

In recent decades, the world has witnessed profound transformations in the management of facilities and the delivery of public services, driven by the rapid advancement of information and communication technologies. This has given rise to new concepts in public administration, most notably digital transformation and e-government. Consequently, governments—particularly in developing countries—have faced an urgent need to keep pace with these changes in order to provide higher-quality and more efficient public services. This

is achieved by leveraging the opportunities and capabilities offered by modern information and communication technologies to enhance administrative performance.

Digital transformation represents a shift in the vision and organization of institutions, extending beyond the mere use of modern technologies to encompass the reengineering of processes and procedures based on the available digital tools and capabilities. It constitutes an advanced stage in harnessing modern information and communication technologies to create new, more effective and efficient business models, with e-government emerging as the organizational embodiment of this transformation.

In Algeria, the efforts to digitize public facilities have been accompanied by a series of initiatives aimed at activating e-government. Public institutions, both economic and service-oriented, have introduced digital services such as the “Gold Card,” which seeks to simplify procedures and enhance the quality of services provided to users. However, these efforts continue to face challenges related to technical, legislative, and socio-cultural aspects. Between the aspirations of digital transformation—toward fulfilling the requirements of e-government—and the expectations of users/customers, a research gap emerges concerning the relationship between this digital transformation and the improvement of public service quality provided by Algeria Post to the users of the Gold Card.

This research seeks to analyze the extent to which the Gold Card has contributed to improving the quality of public services at Algeria Post from the perspective of its users in the city of Oum El Bouaghi. Accordingly, the central research question is posed as follows: **To what extent has the use of Algeria Post’s Gold Card contributed to improving the quality of public services, from the perspective of its users in Oum El Bouaghi?**

To address the central research question, it has been broken down into the following sub-questions:

- To what extent has Algeria Post utilized information and communication technologies (ICTs) to promote the Gold Card service, from the perspective of its users in Oum El Bouaghi?
- In what ways do the study sample participants make use of the Gold Card services?
- What are the main challenges or obstacles faced by the study sample in using the Gold Card?

Among **the reasons that motivated** the conduct of this study is the researcher's personal interest in issues of digital transformation and the modernization of public administration, particularly in light of the rapid developments in information and communication technologies. From an objective standpoint, the topic is closely tied to a national institutional context characterized by a dynamic momentum in digitization and the implementation of e-government as a strategic option imposed by global technological transformations and the requirements of sustainable development. Algeria Post stands out as one of the key actors in this process, notably through its pioneering digital services such as the Gold Card. Evaluating this service from the perspective of its users, therefore, becomes essential for understanding the challenges and potential gaps between the declared vision and the actual implementation. Furthermore, the scarcity of empirical studies that integrate digital transformation, e-government, and service quality within the Algerian local context grants this research topic a novel scientific dimension.

The significance of this study stems from the importance of its subject matter. Despite the recognized role of digital transformation in the development of public services, the relationship between digital transformation and public service quality –through the implementation of e-government– remains an area that requires further understanding and analysis. This is particularly relevant in light of the global trend toward digitization and the increasing use of information and communication technologies to improve the performance of public institutions. The issue gains further importance in the Algerian context, where

continuous efforts have been undertaken over the past years to modernize and digitize public administration by adopting the e-government model as a foundation for enhancing public service quality, simplifying procedures, and reducing bureaucracy.

The scientific relevance of this study lies in its attempt to connect the concepts of digital transformation, e-government, and public service quality within a comprehensive theoretical and analytical framework, while also testing this interrelation empirically from the perspective of users themselves. This dual approach grants the study both explanatory and practical dimensions. Moreover, the study contributes to addressing a knowledge gap concerning the scarcity of empirical research that evaluates digital public services from the standpoint of the end-user—particularly in regions outside major urban centers, such as the city of Oum El Bouaghi.

This study constitutes a specialized scientific endeavor that seeks to examine how Algeria Post employs information and communication technologies (ICTs) to promote the Gold Card service, to explore the ways in which the study sample makes use of the Gold Card in their transactions, and to highlight the main challenges and obstacles encountered by the participants in using the Gold Card.

Defining key concepts is an indispensable step in scientific research, as it enables the discussion of their nature and implications from both academic and sociological perspectives.

The starting point here is the concept of **digital transformation** is defined as the process of employing information and communication technologies (ICTs) to restructure administrative and service processes within institutions, in a way that enables the achievement of efficiency and effectiveness in performance while improving the quality of services delivered to citizens (Ben Dahman, 2020, p. 18). It also refers more broadly to the change associated with the application of digital technologies across all social dimensions. (Bachir, 2023, p. 57)

With regard to the concept of **public service quality**, Philip Kotler defines a service as an intangible act or performance offered by one party to another, which does not result in the ownership of anything. The provision of a service may or may not be associated with a tangible product. (Kourichi, 2024, p. 55)

As **for public service**, it is defined as the essential needs required to preserve human well-being and ensure welfare, which must be provided to the majority of the population. The provision of such services should follow a systematic approach, whereby the interests of the majority of society serve as the primary driver of all service-related policies, with the ultimate aim of improving citizens' standard of living. (Dlal, 2018, p. 22)

The concept of **quality in services** is considered more difficult to measure than quality in goods, as what is to be assessed and examined is intangible rather than material, and is closely linked to the psychological factors and circumstances of its users. (Ben Saleh, 2023, p. 532)

In this study, **public service quality** refers to the degree of satisfaction of Algeria Post's Gold Card users in the city of Oum El Bouaghi with the actual performance level of the service provided. This is assessed in terms of ease of use, speed, reliability, responsiveness, and information availability, measured against their prior or anticipated expectations.

For the realization of our study, we relied on a set of **previous studies**, as they are considered an essential step in conducting any scientific research. No researcher can embark on a study in a vacuum; rather, it is necessary to build upon prior works that open new horizons and broaden both theoretical and practical knowledge. This, in turn, leads to a deeper understanding of the research topic. Presenting these studies represents a general methodological step in scientific research, given their usefulness in understanding how studies are designed, the methodological tools they employ, as well as the findings they have reached. Such works can be utilized in formulating the hypotheses and research questions to

be tested and answered, in addition to assisting in the interpretation and comparison of the results obtained. (Ben Mersli, 2005, p. 86)

Within the scope of our search in the university library and digital repositories, we did not find a prior study directly addressing our research topic. Therefore, we relied on related studies that examine one of the variables of interest.

First Study: Conducted by researcher Bachir Abdelhamid, entitled “**The Impact of Digital Transformation on Human Resources Management Practices in Business Organizations: A Case Study of Algérie Télécom.**” (Bachir, 2023)

The study was based on the hypothesis that the implementation of digital transformation contributes to improving the efficiency and effectiveness of human resources practices by developing management methods, simplifying procedures, and accelerating decision-making. The research aimed to analyze the impact of digital transformation on human resources management practices in Algerian business organizations, with a case study focused on Algérie Télécom.

The researcher adopted a descriptive-analytical approach, combining both quantitative and qualitative methods. A questionnaire was distributed to a simple random sample of 219 employees of the company, in addition to conducting four interviews with direct managers at Algérie Télécom agencies in Tébessa and Oum El Bouaghi.

The findings revealed a statistically significant positive relationship between the level of digital transformation in the organization and the effectiveness of human resources practices, particularly with regard to e-training, digital performance evaluation, and automated payment systems.

Moreover, the results showed that digital transformation, through its dimensions—relational digital management and transformational digital management—contributes to the changes occurring in human resources management practices within Algérie Télécom.

Second Study: Research by Karima Ayad The Impact of E-Service Quality on Customer Satisfaction: A Study on a Sample of Customers of Algeria Post in Skikda. (Ayad, 2021)

This study addressed, in its problematic, the concept of e-service quality as one of the modern research areas that emerged with the rise of information and communication technologies. Nowadays, institutions strive to develop their services and attract their audience and customers. Among these institutions is *Algeria Post*. The study was launched from the following main research question:

Does the quality of e-services provided by Algeria Post in the municipality of Skikda affect customer satisfaction?

The study relied on the **descriptive method** to cover the theoretical aspect and clarify the concepts of the subject, while incorporating the **analytical method and statistical tools** to serve the applied dimension.

The study population consisted of customers of Algeria Post who use its official website. Given the large size of the population, the researcher restricted the sample to Algeria Post offices in Skikda province, where a **random sampling technique** was applied.

Main Findings:

- The most frequently used e-services are: **balance inquiry**, followed by **electronic payment devices**, **bill payments**, and **money transfers**.
- Customers of Algeria Post expressed satisfaction with the different dimensions of e-service quality offered on the website, with **ease of use** being the most significant dimension for them.
- The sample indicated overall satisfaction with the quality of e-services provided by Algeria Post's website, confirming a **positive correlation between the dimensions of e-service quality and customer satisfaction**.
- A positive relationship was also found between **educational level** and the level of interest in obtaining Algeria Post's e-services.

- The study sample expressed their willingness to shift toward e-services, given the advantages and the enhancement of service quality they provide.

The study benefited from previous research in guiding the current work toward identifying **knowledge and application gaps**, formulating hypotheses, and testing the research instrument in a way that ensures the achievement of its objectives. Special attention was paid to the **field aspect** of the study related to the impact of the *Gold Card* in improving the quality of public service.

The study is grounded in the theoretical framework of **structural functionalism**, which explains how organizational structures within an institution interact, and how each structure contributes to the performance of specific functions that maintain the equilibrium and stability of the overall system. According to this perspective, any transformation affecting one of the structures constituting the general framework is not neutral; rather, it necessarily entails a redistribution of functional roles among the remaining organizational components, with the aim of adapting to the new reality.

By analogy, digital transformation can be understood as a profound structural change within public institutions, one that compels traditional administration to evolve toward more flexible and responsive electronic models. This shift represents a functional adaptation to the demands of a constantly changing digital environment.

Structural functionalism is considered one of the most prominent and influential theories in sociology. It draws its foundations from the ideas of a group of both classical and contemporary sociologists in Western capitalist societies. Their ideas were formulated primarily to understand and analyze the structure and functions of social systems, institutions, and organizations. (Omar, 2006, p. 256)

The theory is based on the following assumptions:

- Society is viewed as a system composed of interrelated elements.

- In its dynamics, society tends toward achieving balance, which is ensured by the interaction of its elements/units. Any disruption of this balance prompts social forces to act in order to restore it.
- Recurrent activities within society contribute to the attainment of equilibrium and stability.
- Recurrent activities in society are deemed essential for its continued existence. These activities represent the set of functions that society assigns to repetitive practices in order to meet its needs. (Makawy & El-Sayed, 2009, pp. 124–125)

Returning to the focus of our study, the transition from the traditional environment of service provision to digital models is not assessed merely by the introduction of technology itself, but rather by the extent to which this transformation contributes to reshaping the functions of the institution in a way that enhances the quality of services delivered to citizens. In this regard, e-administration emerges as an intermediary structure that undertakes the reorganization of resources, the adaptation of processes, and the reengineering of service delivery methods by harnessing the potential of modern information and communication technologies.

Drawing upon the assumptions of structural functionalism, the effectiveness of this change can only be achieved through a certain degree of integration between the system (digital transformation) and the targeted functions (service quality). This necessitates an understanding of the relationship between these components as an interactive chain, where no element can be separated from the others without affecting the system as a whole.

The application of structural functionalism to the subject of this study can be summarized as follows:

- The institution is viewed as an integrated system composed of interrelated organizational and functional structures—such as administrative frameworks,

human resources, and technological infrastructure—where any change in one component affects the others.

- Through its daily activities, Algeria Post seeks to achieve organizational equilibrium ensured by the interaction of its components. Any disruption of this balance—such as the challenges accompanying digital transformation—compels other units and resources to adapt in order to restore it.
- Recurrent administrative procedures and processes, whether in their traditional or electronic forms, contribute to stability and ensure the continuity of public service.
- These recurring activities are essential for the institution's continuity, as management assigns their functions and roles to meet the needs of beneficiaries. With digital transformation, such activities take on new forms based on information and communication technologies, thereby enhancing the quality of services delivered.

This study falls within the scope of **descriptive-analytical research**, which aims to examine phenomena as they exist in reality, analyze their components, and uncover their dimensions and interrelationships, without interfering in their natural course or controlling their independent variables. (Al-Zuhairi, 2019, p. 112) To address the research problem and its related questions, we adopted a methodological approach consistent with the nature of the study—descriptive with an analytical-explanatory dimension. Specifically, we relied on the survey method in order to identify the current situation, its conditions, and its trends regarding the impact of digital transformation on improving the quality of public service, with a particular focus on Algeria Post as an applied case study, through the use of the Gold Card.

The **survey method** is also among the most appropriate approaches for descriptive studies, as it aims to record, analyze, and interpret the phenomenon in its current state after collecting the necessary data about it. This is achieved by examining its constituent elements

through systematic methodological procedures designed to obtain accurate data. (Abdel-Hamid, 1993, p. 122)

The research population comprised users of the Gold Card service of Algeria Post in Oum El Bouaghi province. Due to the large size of this population and the initial difficulty in identifying and enumerating its members – attributable to the institution’s inability to provide official user statistics – we resorted to sampling. Specifically, purposive sampling was adopted, defined as “a method in which units are deliberately selected according to the characteristics or attributes identified by the researcher, in a way that serves the objectives of the study” (Hussein, 1995, p. 241).

Data collection was carried out at the Automated Teller Machines (ATMs) located within Algeria Post offices, where direct contact was established with Gold Card users. Notably, the study faced considerable challenges in obtaining users’ consent to participate, as their cooperation in responding to the questionnaire was difficult to secure. Ultimately, the study sample consisted of 62 respondents.

The questionnaire was developed through several stages, (Al-Abd & Azmi, 1993, pp. 15, 20) beginning with the deconstruction of the key concepts – namely digital transformation, e-administration, and public service – into measurable indicators such as transaction security, ease of use, and system updates, among others. These indicators were then grouped into measurable dimensions, with each dimension encompassing a set of indicators from which questions could be formulated. This process allowed for the precise identification of the data required to cover the themes of the questionnaire. The items were then carefully worded to ensure clarity and accuracy, taking into account the characteristics of the respondents while avoiding ambiguity or suggestive phrasing. The types of questions – closed, open-ended, or a combination of both – were also selected in alignment with the objectives of the study.

The questionnaire was structured around three main sections. The **first section** focused on the demographic data of the study sample. The **second section** examined Algeria

Post's use of information and communication technologies in promoting the Gold Card service, aiming to assess the institution's level of engagement with digital channels, its promotional strategies, and the extent to which messages reached beneficiaries. This section included eight questions, comprising both closed-ended and multiple-choice items, to capture this crucial aspect of the study. The **third section** addressed the extent to which the respondents used Gold Card services and included seven questions of similar formats (closed-ended and multiple-choice). Finally, the questionnaire concluded with a **fourth section** designed to measure the respondents' perceptions of the challenges and obstacles they encountered in using the Gold Card, which comprised twelve questions.

After finalizing the design of the questionnaire, it was submitted to a panel of experts in scientific research for validation, with the aim of ensuring its academic rigor and obtaining the necessary feedback for improvement. at this stage, attention was given to verifying the **face validity** of the instrument by ensuring that its items comprehensively covered all dimensions under investigation and that their wording was clear and appropriate to the respondents' level of understanding. Subsequently, a **pilot test** was conducted on a small sample of 12 individuals from the target population to verify the clarity, accuracy, and suitability of the questionnaire items.

Following the analysis of the respondents' answers, the study reached the following key findings:

- The Gold Card service enjoys widespread interest and continued use among the majority of subscribers, indicating individuals' readiness to embrace digital transformation and align with the plans of Algerian institutions and the government, given the advantages that facilitate procedures and simplify daily life.
- Direct human communication—particularly through family and social relations—played a greater role in users' adoption of the service compared to the official promotional channels employed by Algeria Post.

- The results revealed the limited effectiveness of Algeria Post's digital campaigns in raising awareness of the service, highlighting the need to revisit communication strategies and enhance the institution's digital presence to achieve greater impact.
- A functional gap was identified in the performance of promotional content, as it failed to fulfill its primary role of presenting the service and addressing users' concerns. This gap disrupts institutional communication and creates a disconnect between the system (the institution) and its members (beneficiaries). Algeria Post must therefore reconsider its promotional strategies in alignment with audience characteristics and institutional policies, within the broader framework of the state's digital transformation agenda.
- Traditional communication channels, such as posters and direct advertising, were found to be more effective in introducing customers to the Gold Card compared to digital means. This reflects the limited exploitation of electronic channels in marketing, underscoring the necessity of strengthening digital promotion to attract a wider range of users.
- The study highlighted underutilization of the Gold Card's technological capabilities, which undermines the primary goal of digital transformation—improving the quality of public service. This shortfall is partly due to users' weak digital literacy, which calls for national strategies to combat digital illiteracy through training programs that enhance users' ability to interact with digital services. Furthermore, a lack of trust in some electronic transactions, due to fears of fraud and scams, hinders full adoption. This underscores the need to strengthen cybersecurity measures and build digital trust.
- The Gold Card has not yet evolved into a comprehensive tool for facilitating electronic transactions but is primarily used as an alternative to traditional cash withdrawal. This limits its potential impact on improving public service quality.

Achieving digital transformation as a strategic option for enhancing public service requires raising awareness of the practical benefits of digital services, launching digital literacy programs, and improving cybersecurity measures to foster digital trust.

- The findings clearly indicate that the main challenge lies not in the availability of the service itself, but in the level of digital trust and user adoption. This highlights the importance of conducting regular surveys to identify users' opinions on Algeria Post's services in order to address weaknesses and strengthen areas of success.
- The Gold Card has proven its technical reliability and stability. However, optimal utilization remains contingent on improving network coverage and upgrading the digital infrastructure to ensure service continuity and quality—an essential condition for the success of Algeria's digital transformation project.
- The majority of respondents reported regular use of the Gold Card, particularly for cash withdrawals and bill payments, despite occasional technical difficulties and weak network coverage. This demonstrates that the service has become part of users' daily practices, though infrastructure enhancement remains crucial for sustained effectiveness.
- Most respondents perceived the Gold Card as a secure service, reflecting Algeria Post's success in building technical trust among users. Nevertheless, this trust requires continuous reinforcement through innovation and enhanced cybersecurity protection.
- A strong reliance on traditional behaviors in bill payment persists, contradicting the objective of reducing paperwork and waiting lines that digital transformation aims to achieve. Digital transactions represent one of the significant impacts of technological advancement.

- The results of the second dimension confirmed that the success of digital transformation depends not only on infrastructure provision but also on user adoption, which requires awareness programs and robust cybersecurity guarantees to foster trust and encourage wider use.
- Awareness of the importance of electronic services provided by the Gold Card varied significantly among users, due to several barriers, including weak infrastructure, lack of trust, and the absence of a comprehensive national or institutional strategy to eliminate digital illiteracy.
- Respondents expressed overall satisfaction with the continuity of Gold Card services, considering service availability as one of the key indicators of digital service quality. This reflects an important advantage of digital services—the provision of uninterrupted service—which simplifies transactions and enhances user satisfaction.
- Algeria Post has succeeded in building a positive image of its digital product, despite the operational challenges users face. The implementation of the Gold Card is not viewed merely as a technical tool but as a strategic choice to improve public service quality.
- User satisfaction when utilizing the Gold Card demonstrates the institution's success in leveraging modern communication technologies to enhance user value and engagement in the digital transformation process. This sense of satisfaction is a key element in evaluating service quality, as meeting users' expectations fosters loyalty toward the institution.
- The findings affirm Algeria Post's efforts to adopt modern technologies to improve its services. However, greater efforts are still needed to address the technical, social, and cultural barriers hindering broader adoption. Achieving a comprehensive positive image depends on overcoming these challenges.

- The third dimension of the results confirmed that most users are satisfied with the Gold Card and feel valued as beneficiaries of Algeria Post services. Their satisfaction is closely linked to trust, loyalty, and willingness to continue using the service. This indicates that digital transformation extends beyond its technical aspects to strengthen users' psychological and emotional engagement, which is a positive indicator of public service quality. The results therefore align with the objectives of digital transformation in improving public service quality by reducing paperwork, simplifying transactions, and ensuring user satisfaction.

CONCLUSION:

The findings of the study revealed that Algeria Post's Gold Card service constitutes one of the most significant practical steps in the digital transformation of public institutions in Algeria. It has contributed to simplifying transactions and facilitating individuals' daily lives. However, the optimal utilization of its services continues to face a set of technical, organizational, and cultural challenges. Addressing these challenges is essential for consolidating the digital transformation project as a strategic option for improving public service quality and strengthening citizens' trust in state institutions, in line with global trends toward more effective and transparent governance.

In light of the above, improving the quality of public service at Algeria Post within the framework of the digital transformation project through the Gold Card requires the adoption of a series of practical measures, most notably:

- Implement national digital literacy programs designed to raise awareness and enhance the technical competencies of diverse social groups, ensuring inclusive participation in the digital transformation process.
- Establish a robust cybersecurity framework that not only guarantees digital trust but also safeguards beneficiaries from potential risks such as fraud, identity theft, and cyber-attacks.

- Develop and refine communication and digital marketing strategies at Algeria Post to make them more responsive to users' expectations and needs, thereby fostering stronger engagement and service adoption.

Bibliography List :

Abdel-Hamid, M. (1993). *Audience studies in media research* (1st ed.). Alam Al-Kutub.

Al-Abd, A. A., & Azmi, Z. A. (1993). *The statistical method and its applications in opinion and media research* (1st ed.). Dar Al-Fikr Al-Arabi.

Al-Zuhairi, M. (2019). *Research methods: Concepts, foundations, and applications*. Dar Al-Fikr Al-Arabi.

Ayad, K. (2021). The impact of e-service quality on customer satisfaction: A study on a sample of customers of Algeria Post in Skikda. *Journal of Economic Studies and Research in Renewable Energies*, 8(2), 109–134.

Bachir, A. (2023). The impact of digital transformation on human resource management practices in business organizations: A case study of Algérie Télécom [Doctoral dissertation, University of Larbi Tebessi, Tebessa].

Ben Dahman, N. (2020). The impact of digital transformation on improving the quality of public service in Algerian public administrations [Master's thesis, Badji Mokhtar University, Annaba, Algeria].

Ben Mersli, A. (2005). *Research methods in media and communication sciences* (2nd ed.). Diwan of University Publications.

Ben Saleh, M. (2023). The role of applying e-government in improving the quality of services in Algerian public institutions. *Economic Notebooks Journal*, 14(2), 526–538.

Boumaiza, S. (2006). The impact of media on values and behaviors among youth: An exploratory study in the Blida region [Doctoral dissertation, University of Algiers].

Dlal, K. (2018). E-government and its role in improving public service: A case study of the Ministry of Interior and Local Communities in Algeria [Doctoral dissertation, University of Algiers 3, Algeria].

Hussein, S. M. (1995). *Studies in research methodologies: Media research* (2nd ed.). Alam Al-Kutub.

Kourichi, S. (2024). E-government as an approach to achieving public service quality in Algeria [Doctoral dissertation, University of Algiers 3, Algeria].

Makawy, H. I., & El-Sayed, L. H. (2009). *Communication and its contemporary theories* (8th ed.). Egyptian-Lebanese House.