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Measuring the Quality and Performance of E-Government Services

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ABSTRACT

E-government plays a pivotal role in modernizing public administration by enhancing the efficiency, transparency, and overall quality of public services. In this context, evaluating the quality of e-government services is crucial for gauging user satisfaction and informing policies aimed at digital transformation. This study focuses on examining the key dimensions of e-government service quality, including accessibility, reliability, information security, interoperability, and citizen-centric design. The research methodology combines a review of specialized literature, an analysis of relevant regulatory frameworks, and a comparative assessment of selected e-government platforms. Findings reveal that service quality is strongly shaped by institutional capabilities, the digital literacy of users, and the extent of integration across public information systems. The study concludes by highlighting the importance of a comprehensive, user-focused approach to foster continuous improvement in e-services and to strengthen public trust in governmental institutions.

Keywords: e-government, service quality, public administration, digital transformation, accessibility

INTRODUCTION

The world is experiencing a profound transformation driven by advances in information and communication technology, fundamentally reshaping the interactions and operations of the economy, citizens, and public administration (Al-Kuwari, 2024). At the European level, it is widely acknowledged that integrating ICT into public services can play a crucial role in achieving the Lisbon Strategy goal of making Europe the most dynamic and competitive knowledge-based society. This includes enhancing citizens' quality of life, strengthening the single market, and alleviating administrative burdens on businesses.

Consequently, initiatives are underway to maximize the long-term benefits of e-government services already deployed across Member States. The adoption of ICT in public administration holds substantial potential to boost the efficiency and effectiveness of the public sector, both in delivering citizen-centered services and in optimizing internal administrative processes.

Moreover, the adoption of digital solutions allows administrations to become more transparent, reduce bureaucracy and ensure faster and more direct communication with citizens. In addition, these technologies facilitate the collection and analysis of data, providing the basis for informed decision-making and for the implementation of more efficient public policies that are more adapted to the needs of communities. Digital transformation is not just a simple modernization tool, but an essential strategy for sustainable development, increasing economic competitiveness and strengthening public trust in state institutions.

DISCUSSION

The key element of the e-government concept is to improve the relationship and streamline the exchange of information between the public sector, on the one hand, and citizens and the business environment, on the other.

In other words, e-government means providing public services in electronic format for citizens and the business environment, a more efficient and cheaper alternative, which allows the government to be closer to citizens and adapt its services according to their requirements.

To implement the e-government concept, a country must have adequate infrastructures of data systems, institutional and technological, a compatible legislative framework, properly trained human resources and, last but not least, strategic thinking and coordination.

Functioning as a multi-channel communication system between government, citizens, the business environment and service providers, e-government services allow administrative bodies to ensure increased access to information, centralize and integrate data and applications, streamline the decision-making process in public activity, increase revenues and reduce costs.

E-government does not only mean transposing public services into an online format; it implies a fundamental change in the way these services are delivered and managed. For the successful implementation of e-government, it is necessary to define a coherent application architecture and a predefined set of generic services and tools for the development, implementation and subsequent management of applications.

Services for citizens	Services for the business environment
Payment of taxes and fees for citizens	Payment of social security contributions
Searching for jobs through job centers	Declarations and payment of taxes
Help through social services	Declarations and payment of VAT
Personal papers	New company registrations
Car registrations	Providing data for statistics
Building permits	Customs declarations
Requests and complaints to the police	Environmental permits, including reporting
Access to public libraries	Public procurement
Requesting and obtaining certificates	-
Enrollment in universities	-
Notification of change of home address	-
Health related services	-

CONCLUSIONS

The quality of e-government services is fundamental to the effective implementation and widespread adoption of digital public services. This research emphasizes that simply offering online services is not enough; users' perception of service quality plays a crucial role in determining their satisfaction, trust, and level of engagement. Important factors affecting e-government service quality include usability, reliability, functionality, and efficiency, all of which collectively influence the overall user experience. The findings of this study also underline that e-government quality extends beyond technical infrastructure. Legal frameworks, organizational capacity, strategic planning, and multichannel communication mechanisms play a crucial role in ensuring that services are accessible, reliable, and efficient.

The use of multi-criteria decision-making and fuzzy evaluation approaches enables administrators to capture subjective assessments of quality while quantifying them for objective decision-making.

Furthermore, enhancing the quality of e-government services has broader societal and economic implications. It reduces administrative costs, optimizes resource allocation, strengthens public accountability, and facilitates the digital transformation of government institutions. As technological innovations continue to evolve, integrating artificial intelligence, big data analytics, and machine learning into e-government platforms presents opportunities for predictive, adaptive, and more personalized services.

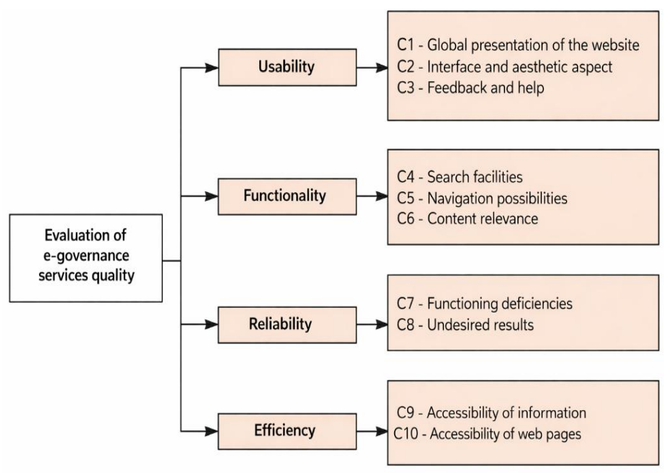
RESULTS

A public institution can make meaningful progress in implementing e-government services only if it comprehends users' attitudes and behaviors toward these services. Therefore, the concept of e-government service quality should be considered a fundamental aspect of this domain. Focusing on service quality is a key component of public administration reform, and assessing it is essential to determine whether these services achieve their intended objectives (Lee & Lin, 2005). Such evaluation allows for the identification of both strengths and weaknesses, providing a basis for improving service delivery. Moreover, a thorough assessment can inform the development of effective strategies to enhance and optimize e-government services. The study of e-government service quality is still relatively new, with research in the field typically examining both user satisfaction and the quality of the online platforms themselves (Mensah, 2019).

User satisfaction is the central variable of the model, and the cause-effect nature of these methodologies allows analyzing the impact of a certain variable on overall satisfaction. The American Customer Satisfaction Index for E-government (ACSI – E-government) uses two methods to measure and analyze user satisfaction: questionnaires and econometric modeling. Quarterly, 80,000 Americans are interviewed about the electronic services used, and 90 government websites are evaluated. Thus, the ACSI index identifies the main factors that determine user satisfaction and quantifies the relationship between them and overall satisfaction, based on the answers provided in specific questionnaires.

Another similar index is the Korean eg-CSI (Qekaj-Thaçi & Thaçi, 2023), but in this index the qualitative aspects analyzed refer to information, processes and services. The Western Norway Research Institute uses a model with 25 quality indicators and criteria for evaluating the websites of public institutions in Norway (Sá, Rocha & Cota, 2014). An interesting feature of this method is that the evaluation is not carried out by users or administrators, but by experts in the field. The European Top of the Web approach (e-Government Unit, DG Information Society, European Commission, 2004) focuses on the benefits obtained by users.

Following the evaluation, a ranking of the analyzed websites was made. The results obtained represent a start in supporting the difficult process of creating high-performance websites that meet the quality requirements of the "ordinary visitor" to the highest possible degree.



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