

## Approaching the Concept of E-Government in the Romanian Public Sector in Terms of the Degree of Digitization

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### Abstract

*The paper addresses both the topic of digitalization for the Romanian public sector and the degree of technological performance achieved by public institutions, developing at the same time a quantitative and qualitative analysis of these services. Starting from the legal framework, the form of organization and the general concepts of E-Government in the public services market, while analyzing their evolution, we presented minimalist and succinctly the progress in stages of the digital sphere, presenting at the end of the paper a thorough analysis of this field.*

**Key words:** public service, decision, local public institution

**J.E.L. classification:** G30, G38

### 1. Introduction

Public administration is the institutional basis for how countries are governed. This entity engulfs and fulfils all the requirements of society, thus operates according to its key parameters (specific processes, continuously improving policies, built-in specific programs, etc.). All this, together with other external factors and conscious efforts of public institutions, have consistently contributed to boosting the performance of administrations.

Public administration has a considerable influence on social trust and determines the factors for creating and measuring their administrative value. The current pace of social, technological and economic change requires public administrations to adapt to new realities (Ayanso, Chatterjee and Cho, 2011).

This reform of public and governmental institutions, together with the provision of improved services to citizens, has long been recognized as a major criterion for development, and ongoing efforts directed towards e-governance can be seen as one of the main goals in the evolution of the entire world.

Although the term e-government is primarily used to refer to the use of digital technologies to improve administrative efficiency, it may turn out that it produces other effects that could give rise to increased transparency and accountability of government processes.

Both socially, economically and technologically, the organizations and institutions in Romania carry out their activity, at the border between the technological field with a transformative role and the society, hereinafter referred to as human capital, which still manifests a high degree of reluctance and mistrust.

The transformations referred to concern both tangible resources and the intangible area, namely rules, legislative norms, working mode, sometimes even organizational structures and models. Thus, all these changes are generated and maintained by technologies at different stages of development and implementation.

The phenomenon of digitalization has gone through several stages globally over time, and currently we can say that its presence is found in almost all aspects of life.

At the end of 2021, the European Commission developed a study on member states on public and government services and the degree of digitization of processes existing in the territories of the 27 countries. There have been tested official websites of national institutions, the emphasis being placed in accordance with 4 important criteria: ease of access, transparency, transparency, serving across borders and focusing efforts on so-called “end customers” – service recipients.

According to the index of the digital economy and society (DESI), Romania ranks last in the ranking of the 27 EU member states. As shown in Figure 2, Romania scored below average for most indicators. In Romania, the performance of the digital sector is mainly characterized by the DESI. (The Digital Economy and Society Index (DESI), available online at: <https://digital-strategy.ec.europa.eu/en/policies/desi>).

## **2. Theoretical background**

From a European average of 68% obtained on a scale of 0%-100% regarding the percentage of maturation of digital public services, Romania obtained a score of 40% which denotes that our country has not made notable progress compared to other countries.

Considering that the study mainly followed the interaction between citizens and public institutions exclusively through the Internet network, we can conclude that this degree of use of these digital services will not lead to the migration of citizens from non-digitalized classical public services to digital public services soon. (Andrews, Thornton, Owen, Bleasdale, Freeguard, & Stelk, 2017).

The digitalization of public administration means more than creating a simple virtual space meant to replace classical public services with completely digital ones. Other highly impactful invoices are also involved in this process, such as: transparency, cost efficiency and reduction of response times.

E-Government engulfs two key components: one refers to information concepts and the second refers to all technologies regarding communication aspects. These two components support and develop the area of public services, government administrations, democratic processes, as well as relations / interactions of three major entities: the first entity is represented by the citizens of society, the second entity is represented by the micro / macro private sector and the third entity represents state specific institutions (Sheridan and Riley, 2006).

This concept has been developed over more than two decades of technological innovation and political response. The evolution of e-government will be examined in this paper around five interdependent objectives: the policy framework, improved public services, the government operations, involve citizens in this process, effective processes and administrative and institutional reform.

This summary evaluation of e-government in democratic states and local governments will show that the largest investments and progress have been made in improving public services and improving government operations. The development of these policies has progressed on several fronts, while new political and technological issues have been added in direct proportion to the extent of evolution. The slightest progress seems to have taken place in strengthening democracy and exploring the implications of e-government for administrative and institutional reform. Governance based on digital systems will continue to evolve in the foreseeable future, providing a dynamic environment for continuous learning and action.

UNESCO describes E-Government as a combination of using information-based updated technologies with the latest communication tools and technologies, with the goal of obtaining an improved provision of information and / or services, to mitigate for citizen involvement in all decision-making processes. In this way, the government will be more accountable for its actions, more transparent in decision-making and a more effective state institution.

Also, E-Government engulfs improved leadership patterns, more efficient and transparent debating techniques, improved decision-making policies, smarter and more efficient investments, updated state-of-the-art education access, etc.

E-government is much more than a simple word or entity compared to classical governance, because it produces a change in government-citizens interactions. Thus, various new approaches regarding citizenship are being put into action, like the needs of society (its people) and its responsibility level.

It is objective is to involve, unite and empower the relationship between citizens and government. Accessing public services in a digital manner from a distance aims to increase the accessibility of public administration by a wide range of clients, like people with various mobility disabilities or other disabilities that could impede computer use.

Considering the latest status of policy improvement in regard with digitalization conditions, there are some challenges regarding some gaps / imperfections of the legal support in tackling specific problems aimed at fixing (fine tuning) the development final purposes of the digital economy.

Fixing a specific problem could be achieved by presenting the key process components of digitalization in state programs. It is mandatory to correctly identify and integrate adequate information and a specific analytical mechanism (tools) to tackle addressing accessibility issues as they emerge, as well as all sensitive transparency challenges.

E-government is a broader concept that deals with the entire spectrum of government relations and networks regarding the application techniques and usage ways of ICT, while e-government displays its limitations in development of online services. Other research would describe e-government and classical governance as completely heterogeneous / different entities (Ayanso, Chatterjee and Cho, 2011).

E-Government is a wider term that encompasses a series of well-established relationships and networks between government and society (Sheridan and Riley, 2006). Being a more controlled area in association with constant updating of online specific services for people (of society), it inflicts an increased level of awareness on government services (e-taxes, e-education, e-health).

E-Government represents a complex concept that describes the implications of modern up-to-date technology on governance approaches, takes to a higher level both the interactions between government and society (its people), and the interactions between Non-Governmental Organizations and private sector actors (Sheridan and Riley, 2006). The so-called "E-Romania" is a program of the Romanian government that aims to computerize and interconnect several public service systems.

The aim of the program is to simplify administrative procedures and reduce red tape. These also provide for the reduction of the costs of public administration and the efficiency of the governance act. The government approximates an expenditure of about 1.2 billion euros for the development of the project.

The future of society, democracy and government is digital. The digitalization of the public service should be seen as a key strategic objective for sustainable development. The results mentioned in this chapter have direct implications for policies and reforms in public administration, both worldwide and at national level.

Starting with the global analysis, by restricting statistics at European level and later at national level, a comparison was made between states. It has been demonstrated that the digitization of public administration is one of the most effective ways to reduce costs, corruption and increased efficiency in the public sector. This conclusion underlines that state administrations should develop and implement appropriate strategies and policies for integrating large-scale digital applications. The research results demonstrate that the digital transformation of public administration in EU countries continues to be influenced by a lot of factors: economic, administrative, managerial-strategic and political (Almarabeh, Majdalawi and Mohammad, 2016).

### **3. Research methodology**

The main objective of this paper is to establish citizens' perceptions on the degree of innovation, digitalization of public services and how they are perceived among citizens. The questionnaire was applied using Google Forms. It has been distributed in various social media groups. At the time of distribution, it was mentioned that the respondent must have experienced at least once the online services provided by the Romanian public institutions. This aspect was later

highlighted from the first question of the questionnaire, thus aiming to obtain as many valid and real results as possible.

The proposed questionnaire has 3 segments: customer expectations, customer perceptions and demographics, containing a total of 15 elements, divided as follows: 7 elements for the perception part, 8 elements for the expectations part and 5 elements for the demographic data. The applied E-S-QUAL model is also considered more effective because the size of the questionnaire applied is halved compared to the SERVQUAL model, thus providing more accurate answers. In the case of a larger questionnaire, respondents tend to lose interest and provide superficial answers or even not finish the questionnaire.

This can justify the small number of questions (Souca, 2011). In turn, the expectations segment and the perception segment are divided into the 5 dimensions of the model, to facilitate our interpretation of the results and identification of gaps. The E-S-QUAL model, which was developed by Parasuraman and is the basis of this study, offers a more comprehensive approach as it supports the measurement of quality aspects both pre-and post e-service (Parasuraman, Zeitham and Malhotra, 2005).

Moreover, the dimensions of E-S-QUAL were developed by processing data provided by respondents who had previous experience. Therefore, compared to other studies that used comfort samples of students, the E-S-QUAL model has helped to provide more representative information on the quality of electronic services.

In this respect, in addition to the SERVQUA (Souca, 2011) model, the following four dimensions have also been included:

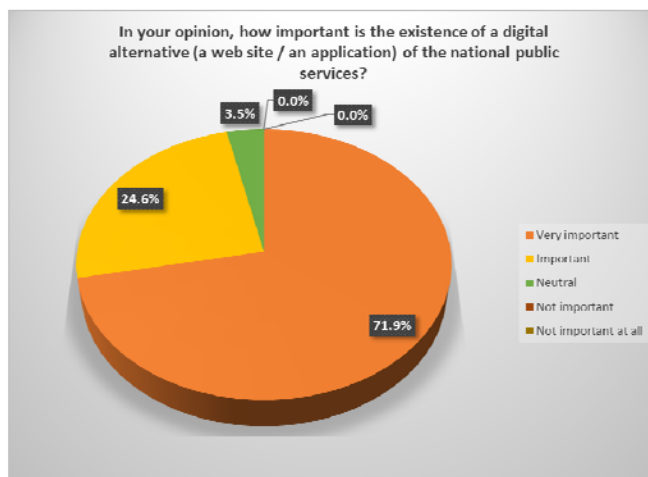
- the efficiency;
- involved;
- availability of the system;
- confidentiality.

This simplification of both questions and answers aims at the accuracy of the analysis. A series of simplified questions and answers leads to much easier and precise results, unlike a questionnaire with more complex questions and answers that could more easily mislead the respondent.

#### 4. Findings

By opening the actual analysis of the results obtained, even from the first questions, some gratifying conclusions can be deduced. For example, at the 2nd question "*In your opinion, how important is the existence of a digital alternative (a web site / an application) of national public services?*" no negative response was selected.

Figure no. 1 The importance of digital public services



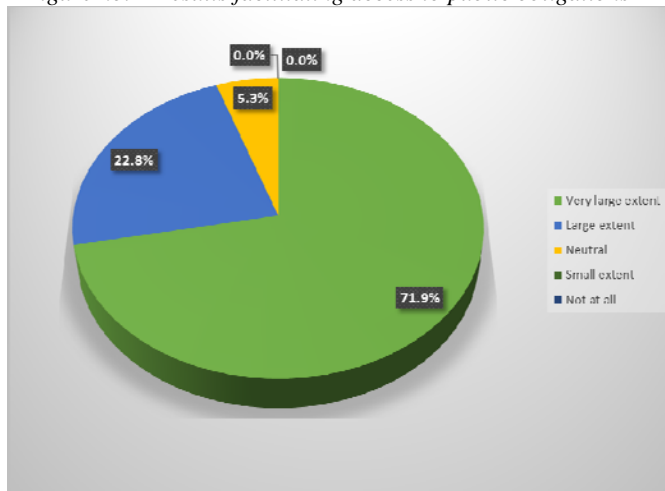
Source: Authors' own research

All the answers generated during the case study highlight a behavioral shift of online consumers and buying triggering / determination factors. Advertising on social media creates a direct link with possible consumers, so they can maximize their options for buying as everyone will choose only what's best for them based on a rigorous search in advance (see Fig. 1).

Regarding the question that refers to the extent to which individuals consider that access to civic obligations is facilitated, the percentage remained approximately unchanged. This time 2 more "neutral" answers were added.

In conclusion, it can be confirmed that those who attach great importance to the digital sector are also insofar as they frequently use and enjoy the benefits of Romanian digital public services.

Figure no. 2 Results facilitating access to public obligations

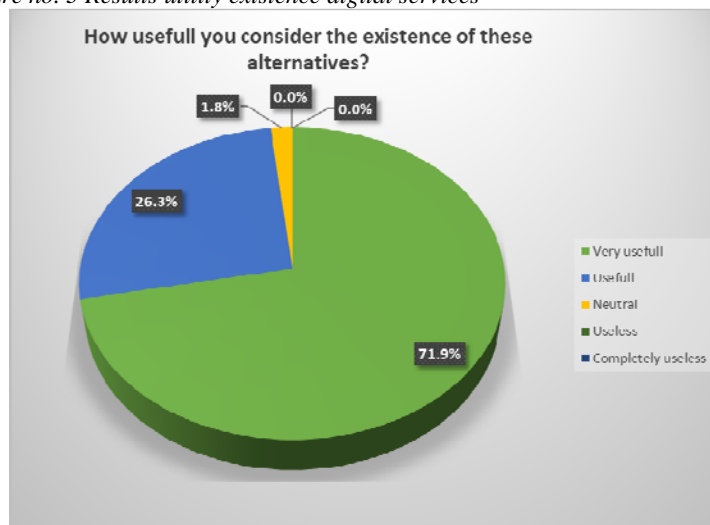


Source: Authors' own research

Analyzing the grades awarded on a scale from 1 to 5 (where 5 represented "very good" and 1 "very bad"), most respondents gave the grades 3-4, which was not good enough, this means that their expectations have not been fully met.

The result of this question can also be interpreted as the need to improve services is still needed, and the efforts of the authorities for modernization must not be stopped.

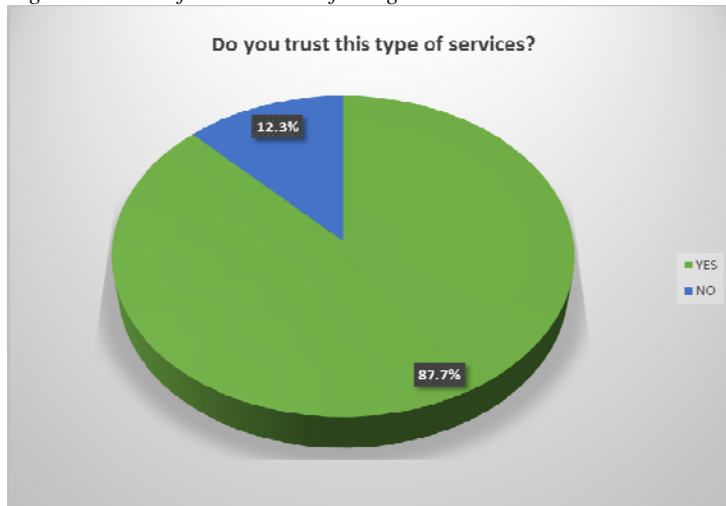
Figure no. 3 Results utility existence digital services



Source: Authors' own research

Continuing in this manner can be analyzed and results of the question "Do you trust this type of service?". From the total of 57 responses, 50 provided an affirmative answer, while the remaining 7 respondents still show reluctance to this topic. From this result it can be inferred that the institutions have not yet managed to reach the opportune threshold by which all the fears of society are covered. This can also be justified on the other hand by the poor transparency offered.

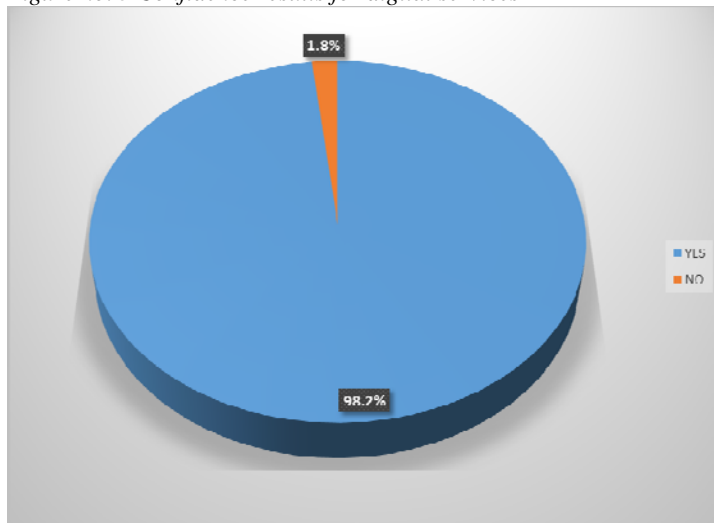
Figure no. 4 Confidence results for digital services



Source: Authors' own research

According to the previous question, it can be added to this specific topic: "Do you want to expand/modernize these alternatives of public institutions in the future?"

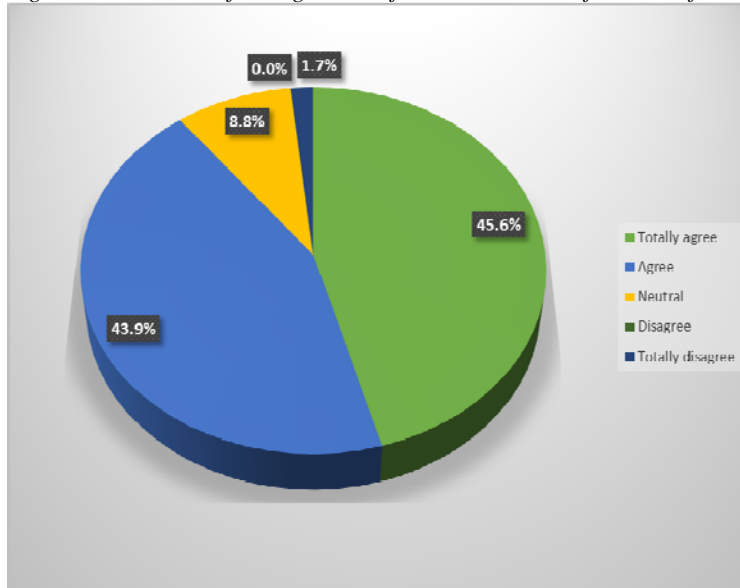
Figure no. 5 Confidence results for digital services



Source: Authors' own research

Next, keeping the line of the idea, follows the question "Do you agree with the allocation of larger amounts of funds from the public budget in order to develop these digital alternatives?".

Figure no. 6 Results of the agreement for the allocation of amounts from the state budget



Source: Authors' own research

The answers to this question keep the same order, and the prevailing idea remains unchanged – society still feels the need for modernization and evolution of digital public systems. The percentage is still positive, which means that resentment is generic and does not differ in different ways.

## 5. Conclusions

For a public institution to be successful, to give confidence to the citizens who serve it, the level of satisfaction of the beneficiaries must also be considered. Among such types of public service organizations, the satisfaction of beneficiaries is very much related to the quality of the services offered and the time it takes to meet the needs of citizens.

It is confirmed that there are differences between expectations and perceptions, the differences being to the detriment of the service provider. The biggest problems were noted in the modernization of these digital processes, which should no longer be an impediment to the development of society, especially in the context of the pandemic, the report said, but sometimes it raises certain obstacles.

In Romania there is not enough emphasis on the diversification of digital processes, although the opportunities could be multiple. Although our country benefits from a very fast internet network compared to other European countries, they are not yet sufficiently exploited. In this case, not only the lack of infrastructure justifies, but also the lack of budget funds for investment that leads to the low quality of services offered by public institutions.

The research carried out should be continued not only at a theoretical level, but also at a practical level.

Public institutions should seek the satisfaction of beneficiaries, to maximize opportunities and even reduce costs and environmental impact. Overall, we can say that the services offered by the Romanian public institutions have not reached the expectations of the beneficiaries and they are not fully satisfied with the quality of the services offered, on the contrary, they want to improve them.

By recognizing the problem and increasing efforts for continuous improvement, the difference between perceptions and expectations can be significantly reduced, thus providing higher quality services than the current level. Ideally, customer perceptions will later exceed their expectations.

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