

DIGITALIZATION OF PUBLIC ADMINISTRATION AS A TOOL TO REDUCE CORRUPTION RISKS

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Abstract: Corruption is one of the main vulnerabilities faced by public administration, which has the effect of diminishing citizens' trust in public institutions and the efficiency with which the decision-making process is carried out. The digitalization of services offered by state institutions has become in recent years, one of the most important tools for preventing corruption risks by increasing transparency and reducing direct contact between public officials and citizens. In the context of the rapid development of digital tools, public institutions in Romania have the opportunity to become much more transparent and to offer much better quality services to citizens through the use of technology. Digitalization promises greater transparency but also, higher efficiency of public acts. Although the phenomenon of corruption cannot be completely eliminated, a number of measures can be taken to keep it under control. This article analyzes the role that digitalization has in terms of corruption risk management, also highlighting good practices from certain European Union member states. E-government models are implemented in Denmark, Finland and Estonia, these states being recognized for their high level of administrative digitalization and for their performance in the field of public integrity. This paper also examines the role of e-Government solutions in reducing corruption risks by minimizing direct interactions between public officials and citizens and increasing traceability of decision-making processes. Digitalization can significantly contribute to reducing the risks of corrupt behaviors and to strengthening decision-making transparency.

Key words: digitalization, e-Government, corruption risks, management, public administration

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1. Introduction

In an increasingly digital world, as we witness a technological revolution, the use of digital tools has become commonplace nowadays. This digital revolution has profoundly changed the way citizens interact with public administration.

Since all countries in the world are in a constant struggle with corruption, to a greater or lesser extent, it is necessary to identify and use various means to keep it under control. One of these means or tools is digitalization.

The study highlights the connection between digitalization and reducing corruption risks. The phenomenon of corruption represents an obstacle to the smooth functioning of public administration as well as to economic development and the digitalization of public administration represents one of the main methods to contain this scourge. This phenomenon „remains a serious problem for EU citizens: 68% of them believe that corruption is still

widespread in their country” (European Commission, 2022); thus, it is necessary to identify and take solutions to keep corruption under control as much as possible.

The conceptual and methodological framework is presented to more easily understand what the terms of interest in this article imply, such as public administration, digitalization and e-Government, part where we will be able to see if there is a connection between these terms. The level of e-Governance in Romania is highlighted to point out how much Romania has evolved over the years in this area and how e-Government manifests itself in this state. Also, good practices are analyzed regarding the digitalization of public administration and, especially, what is the connection between digitalization and reducing corruption risks.

At the same time, this article aims to highlight the level of digitalization at which our country is compared to other member states of the European Union and we will point out a series of measures that could be taken to further reduce these corruption risks with the help of digital tools.

2. Methodology

This study is based on different research methods such as: deduction, induction, synthesis, analysis in the field of digitalization of public administration and how digital tools can contribute to reducing corruption risks.

Regarding the information base of the research, it is represented by both international and Romanian publications, annual reports of the European Commission on the Digital Economy and Society Index, annual reports of the non-governmental organization Transparency International, as well as other informational resources.

3. Results and discussions

This paper establishes the conceptual foundations necessary for understanding the relationship between digitalization and the reduction of corruption risks in public administration. Public administration is in an interdependent relationship with the concept of public power or authority. Etymologically, the word administration comes from the Latin language "administer" which means servant, caretaker, helper. According to the Romanian dictionary, to administer means to direct, lead, govern, and the noun administration is explained as meaning "the set of administrative authorities that exist in a state, in a section or service, whose competence consists in solving administrative problems, in short, the competence of public administration consists in organizing the execution and concrete execution of laws, but also the act of organizing and carrying out management.

Digitalization has several definitions in the specialized literature, but, generically, digitalization can be defined as a process whose main role is the reformation of an organization or even an entire society, through the use of digital technology. It is easy to understand that the transposition of documents into electronic format involves a simple process of digitalization, this process has proven to be much more complex, a process that also involves a series of challenges that we will analyze in the content of this article.

E-Government is defined as a process by which the public sector reinvents itself through the previously defined tool – digitalization, therefore, there is an interdependent relationship

between digitalization and e-Government. E-Government is described as “a remarkable symbiosis between society and technology” (Iscru, 2025). This concept is closely linked to principles of efficiency, transparency and good governance.

Considering the above, we can understand that e-Government is a process through which digital tools are used to reform public administration and, implicitly, an entire society. By integrating these concepts, the paper builds a theoretical framework that explains how digitalization mechanisms can reduce corruption risks by limiting discretionary power, and strengthening institutional control.

In recent years, in the context of administrative reform, the development of e-Government in Romania has gained increasing attention. Digital transformations within state institutions support the development of e-Government. E-Government involves the use of the internet and digital technology by public institutions for use by both citizens and businesses.

In Romania, e-Government is represented by a set of digital platforms such as: Ghişeu.ro - is an online platform that can be used by citizens to pay taxes and fees for houses, land, cars, local taxes, but also EPPS - (Electronic Public Procurement System) - is an online platform used by institutions or companies for public procurement, a platform administered by the Romanian Digital Agenda Agency. Such digital platforms contribute to increasing transparency and reducing corruption risks. Also “digitalization brings benefits in local public administration both for public institutions and for civil servants and other stakeholders” (Androniceanu et al., 2022).

There are numerous benefits in terms of digitizing public administration: the most important of which we could say is that it refers to the reduction of corruption. Other benefits could consist in the fact that citizens no longer have to travel to public institutions to make certain appointments, to pay taxes or duties, thus the time and effort to carry out these activities being greatly reduced.

Thus, “the digitalization of the public sector involves: reducing the time that citizens naturally allocate to necessary usual activities, reducing costs, reducing bureaucracy, increasing accessibility to public services, improving communication with citizens” (Damaschin & Mihăilă, 2023).

It should be noted that Romania is perceived as one of the most corrupt states in the European Union, along with Hungary and Bulgaria, with Denmark, Finland, and Sweden at the opposite pole, as shown by data published by Transparency International Romania in February 2026. “Romania obtains 45 points out of a possible 100 in the 2025 corruption perception inducement ranking, 1 less than the previous year and well below the EU average of 62 points.” (Transparency International Romania, 2025). In this rank, 100 means very corrupt and 0 means not corrupt at all. Considering these, the e-Government has a very important role, among others, that of reducing corruption risks as much as possible.

At the European Union level, the European Commission monitors the digital progress of member states with the help of the Digital Economy and Society Index (DESI), based on four main pillars: the use of internet services, human capital, connectivity and the integration of digital technologies in enterprises and public administrations.

Thus, annually, the European Commission publishes the Digital Economy and Society Index through reports in order to monitor the level of digitalization of the European Union Member States. In this context, rankings are published periodically that show the situation of the EU Member States according to the level of digitalization, analyzing their progress in recent years.

Starting with 2025, the Digital Economy and Society Index was integrated into the State of the Digital Decade 2025 Report. Romania has made progress in certain areas such as the digitalization of public services, it remained below the European Union average in certain areas such as: connectivity, infrastructure, resulting in the need to take measures to improve access to modern digital infrastructure. According to the latest DESI Reports, our country is constantly warned about the slow pace of implementing digital reforms.

The state that is at the top of the ranking in terms of the degree of digitalization of public services is Estonia, which has obtained full access to the health system - E-Health, which implies that the citizens of this country have electronic medical records, files that are integrated into a national platform, which makes patient data accessible quickly and efficiently, thus being a model for other states, including our country. "Estonia focuses on digital sovereignty" (European Commission, 2025), this being the most digitalized country in the European Union. Estonia is constantly presented as a model of success in terms of digital change, currently „one of the most advanced digitalized societies in the world" (Costache, 2025).

Since the 1990s, Estonia has been investing in digital infrastructure steadily, and today this small country is a true example of an almost fully digitalized state, where public services are accessible to citizens. Digitalization requires not only technology, but also people trained to use it, and the Estonian model also includes developing personnel in the field of digital skills. In addition to Estonia, Finland and Denmark are other countries where the level of digitalization of public administration is high.

As we mentioned earlier, one of the main advantages and even roles of digitalization is represented by the reduction of corruption risks. In many countries of the world there is the so-called „counter corruption" (Iscru, 2025) which consists of offering a bribe in the context of interactions between citizens and public officials.

With the digitalization of public services, e-Government can reduce this form of corruption by introducing digital platforms and, implicitly, eliminating direct interaction between public institution officials and citizens.

With the help of digital tools, citizens receive access to an impressive volume of information and are up to date with decision-making processes, which also means that public administration carries out its activity in the most transparent way possible, thus reducing the risks of corruption. „Technology can increase transparency and accountability in public administration by providing citizens with access to information and decision-making processes" (Comăneci, 2025).

Therefore, in addition to eliminating interactions between civil servants and citizens, digitalization contributes to the transparency and traceability of decision-making processes, making it much easier to track each stage of these decision-making processes with the help of technology.

In order to ensure, as far as possible, the transparency of public acts, on March 26, 2026, the European Parliament adopted the Directive on combating corruption - 2023/0135. As its name suggests, it establishes measures to prevent and combat corruption. The objectives of the Directive include the following: to discourage corruption acts through sanctions proportional to the seriousness of the acts, to criminalize corruption acts in a harmonized manner in all European Union States, to establish measures to ensure transparency and integrity, and not only. Twenty days after its publication in the Official Journal of the EU, this Directive will enter into force and will have to be transposed into national law within 24 months.

Corruption risks can be reduced due to digitalization because the use of artificial intelligence reduces human errors, especially in situations where some "errors" are intentionally produced to mask the commission of possible acts of corruption. For example, in the case of public procurement, a civil servant may intentionally introduce errors or omit certain elements to favor a certain economic operator by losing some offers.

This error may be presented as unintentional, but in reality, a possible act of corruption may be masked. In Romania, EPPS (Electronic Public Procurement System) is the digital platform that helps reduce such "errors", although even this may have certain gaps. Although efforts have been made at the national level to promote digitalization, we encounter numerous obstacles that slow down this process.

As is the case in most areas, challenges also arise in preventing corruption risks through the use of digital tools. These include: cybersecurity can encounter gaps, public institutions can show resistance to change, digital infrastructure can require high costs, high costs for training staff in public institutions.

Regarding cybersecurity, the City Hall of Timișoara, the Local Police, and the Fiscal Directorate of this municipality were the target of a cyber attack in the summer of 2024. Workstations and servers were attacked by software created to encrypt data. The effects of this cyberattack consisted of affecting electronic public services, including the fact that the payment of fees and taxes was temporarily interrupted, and online notifications to the Local Police were suspended for a short period of time. The aim of the attack was to encrypt and block the city hall's computer system. It is a form of crime (ransomware) where the attackers then demand huge sums of money to unlock the systems.

Although the authorities initially claimed that there were no indications of the collection of personal data by the attackers, a cybersecurity expert later found out that certain data extracted from the databases of the aforementioned institutions, such as scanned diplomas or identity cards, were already being put up for sale on a Telegram channel. It was discovered that a small part of the institution's data had been compromised. Considering this, although digitalization entails numerous advantages that help reduce corruption risks, it can itself present loopholes that can even amplify the emergence of corruption risks.

In recent years, Romania has made considerable progress in terms of the digitalization of public administration, as mentioned in the reports prepared by the European Commission regarding our country. Romania has received repeated warnings because it has a slow pace in terms of implementing digital reforms. This can also be explained by the fact that there is a certain level of resistance to change in certain public institutions.

Resistance to change in public administration may also be due to the high costs of training public institution staff in the use of digital tools. Many citizens are reluctant to use digital public services for several reasons, such as: either they are used to old methods or due to lack of information.

4. Conclusions

The main advantage of digitalization is represented by the reduction of corruption risks by ensuring transparency, traceability and efficiency of the fulfillment of public acts. In addition to the fact that digitalization is currently in full expansion in public administration, the phenomenon of corruption is at a fairly high level, at least in Romania, as revealed by data published by various specialists in the field, such as those from Transparency International.

Although digitalization is often presented as an effective tool for reducing corruption risks, it is inevitably accompanied by challenges. This tool involves both benefits and risks associated with its use. By analogy, like a medicine administered by a doctor for a certain condition, it can generate adverse effects on other organs of the human body, just as digitalization contributes to increasing the transparency of administrative processes, at the same time, it can generate cyber risks for example. As can be seen from the EPPS reports, we can notice that Romania has quite a bit to catch up with before it reaches the level of Estonia in terms of digitalization of public administration.

Although this phenomenon cannot be completely eliminated, it can be kept in check with the help of an important tool - digitalization, even if using this tool requires overcoming various challenges. Public institutions should carry out campaigns to educate citizens in the digital field, to highlight the advantages of digital services and the methods of using them.

Therefore, digitalization is one of the important tools that can be used in the fight against corruption, a fight that has as implicit objectives increasing citizens' trust in public institutions, economic development, and improving public services.

5. References

- Androniceanu, A., Georgescu, I., & Kinnunen, J. (2022). Public administration digitalization and corruption in the EU member states: A comparative and correlative research analysis. *Transylvanian Review of Administrative Sciences*, 18(65 E), 5–22. <https://doi.org/10.24193/tras.65E.1>
- Comăneci, A. M. (2025). Technological revolution and changes in public administration. *Student Papers on Smart Cities and E-Governance (SPoSC&EGOV) Repository*, 2(1). <https://scrd.eu/index.php/spr/article/view/52>
- Costache, G.-L. (2025). Digitalization of Romanian public institutions: Benefits and obstacles. *Student Papers on Smart Cities and E-Governance (SPoSC&EGOV) Repository*, 3(2). <https://scrd.eu/index.php/spr/article/view/678/662>
- Damaschin, R., & Mihăilă, M. G. (2023). Digitalization of public administration in Romania in relation to European trends. *Smart Cities International Conference (SCIC) Proceedings*, 8, 47–64. <https://scrd.eu/index.php/scic/article/view/326/291>

European Commission. (2022). *Eurobarometer on corruption highlights serious concern among EU citizens and businesses*. https://romania.representation.ec.europa.eu/news/eurobarometrul-privind-coruptia-evidentiaza-o-preocupare-serioasa-randul-cetatenilor-si-al-2022-07-13_ro

European Commission. (2025). *State of the Digital Decade 2025 report (Annex 24, COM(2025) 290 final)*. <https://digital-strategy.ec.europa.eu/ro/library/state-digital-decade-2025-report>

Iscru, A.-C. (2025). Barriers in the digitalization of Romanian public administration. *Student Papers on Smart Cities and E-Governance (SPoSC&EGOV) Repository*, 2(1). <https://www.scrd.eu/index.php/spr/article/view/532/627>

Transparency International Romania. (2025). *Corruption Perception Index 2025*. <https://www.transparency.org.ro/ro/tiropage/indicele-de-perceptie-coruptiei-2025>