

Digitalization of Public Administration in the Context of the Multiannual Financial Framework (MFF) 2021-2027 and the Implementation of the National Recovery and Resilience Plan (NRRP)

Alunica Morariu

“Stefan cel Mare” University of Suceava, Romania

alunica.morariu@fdsa.usv.ro

Abstract

An efficient European public administration that responds in a real way to the needs of both citizens and the business environment, through a better organization of activity, through strategy, transparency, reducing response time and reducing costs is imperative, precisely in the context of the challenges the current decade (generated by the COVID-19 Pandemic, the Russian-Ukrainian armed conflict, the energy sector, economic competitiveness). Increasing the quality of public administration services could also be ensured through the implementation and use of tools facilitated by information and communication technology (ICT). Thus, we propose, through this paper, to analyze the role of the Multiannual Financial Framework (MFF) 2021-2027 and the implementation of the National Recovery and Resilience Plan (NRRP) in the strategic process of digitalization of the public administration, as well as the impact of the two instruments of financial-budgetary strategy on the digitalization of public administration.

Key words: ICT, digitization, digitalization, e-government, e-governance, governmental cloud, efficiency, effectiveness, public administration

J.E.L. classification:D73, H83, D73

1. Introduction

The terms digital transformation, digitization and digitalization are increasingly identified in communication in recent years, either only from a conceptual perspective, or in a more complex formula with practical applicability, in the form of processes. Information and communication technology, the basis of the digital transformation of European governments increasingly concerned with the use of digital tools, has the opportunity to show its role and „shine” in the process of transformation and improvement of processes in public administration to respond to the needs of citizens and the business environment, through quality public services. The COVID-19 pandemic, the Russian-Ukrainian armed conflict, imbalances in the energy sector, economic competitiveness are sufficiently sound arguments for the European government to be concerned, set objectives and take measures to support citizens and the environment experienced businesses, natural and legal persons affected enough starting with the year 2020.

In this context, through this paper, we aim to capture and analyze the way Europe can find solutions to the problems faced by citizens and the business environment, in particular, through the digitalization of public administration.

Our approaches, on this plan, include the following structure: (1) Introduction, (2) Theoretical/Research Background, (3) Research methodology, (4) Digitalization of public administration in the context of the Multiannual Financial Framework (CFM) 2021-2027 and the implementation of the National Recovery and Resilience Plan (NRRP), (5) The digital component of public administration in European countries and interoperability and (6) Conclusions. Obviously, briefly, at the end, limits of the research and our future research directions are presented.

2. Theoretical background. Perspective on the exploitation of ICT with impact on the efficiency and the effectiveness of the European public administration

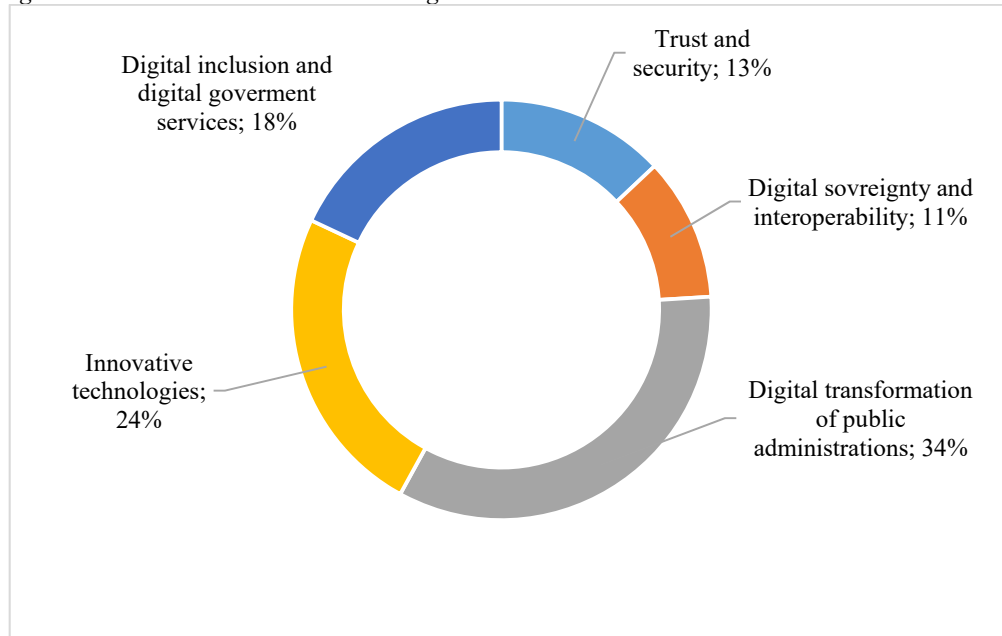
„Transparency, cost efficiency and reduction of response times, better organization of activities and the development of the capabilities, capacities, skills and abilities necessary to provide proactive responses” (Roja, A. and Boc, M., 2021) are considered the much-desired effects of the digitalization of public administration against the background of the new digital paradigm, by capitalizing on information technology and communication (ICT).

In recent years, terms such as digital transformation, digitization or digitalization have been used more and more in everyday language, and at least the last two are somewhat confused, this fact prompting us to initiate an approach to clarify the terminology: thus, if initially digitization meant the conversion of analog formats into digital formats, today, this digitalization refers to processes or equipping analog objects with ICT; to best understand the difference between digitization and digitalization, we emphasize that while „digitization involves transforming analog data into digital, digitalization uses digitized data and changes the way <<businesses>> and <<customers >>”, [<<governments>>and <<citizens, business environment>>] „interact, creating new digital flows with the help of digital technologies”. (The Ministry of Research, Innovation and Digitalization, 2022).

Information and communication technology, the basis of the digital transformation of governments increasingly concerned with the use of digital tools, aims to improve the interactions between governments and citizens, respectively the business environment, by simplifying procedures, the digital transformation of governments means „the continuous modernization of public administration, crossborder mobility without interruption and improved digital interactions” (European Commission (b), 2022), quality public services offered to citizens.

If not before, at least in recent years, with the COVID-19 Pandemic that began in Europe in 2020, but also in the context of subsequent challenges related to the Russian-Ukrainian armed conflict, imbalances in the energy sector, economic competitiveness, one of the main objectives of European governments aims to improve the efficiency and effectiveness of public administration, by harnessing information and communication technology (ICT) to promote innovation, sustainability and transparency for the benefit of „customers”, European citizens, natural and legal persons (European Commission (c), Federico CHIARELLI et. al., 2022). In this context, the previously indicated source allows us to present in Figure 1 the „priorities in the fields of digital policies in European countries analyzed” [„The countries studied are the 27 EU Member States, the members of the European Free Trade Association (Iceland, Liechtenstein, Norway and Switzerland) as well as Ukraine, Montenegro, Turkey and the Republic of North Macedonia”]., taking into account the 204 communications(*) regarding decisions to introduce new commitments on digital policy or to revise some of the existing between the years 2021 and 2022, as follows: leading, is the field of „digital transformation of public administrations” with 34% (69*), in second place being the field of „innovative technologies” with 24% (50*), followed by the domain „digital inclusion and digital government services” with 18% (36*), then we identify the domain „trust and security” with 13% (26*), and the domain „digital sovereignty and interoperability” registers a share of 11% (23*) priority, among the concerns of action in the fields of digital policy.

Figure no. 1 Political Communications' digital themes



Source: (European Commission (c), Federico CHIARELLI et. al., 2022)

In various contexts and from multiple perspectives on which we stopped our attention in the present research, the issue of digitalization, treated in this work, was the object of research by several authors (Androniceanu, et. al., 2022; Scupola, and Mergel, 2022; Ahna, and Chen, 2022; Margariti, et. al., 2022; Filgueiras, 2022; Profiroiu, and Negoită, 2022) who support the need for digitalization and the benefits brought by ICT, digitalization, e-government, e-governance etc. citizens, private and national, European, global institutional environment.

3. Research methodology

The approach of our research topic [„Digitalization of Public Administration in the Context of the Multiannual Financial Framework (MFF) 2021-2027 and the Implementation of the National Recovery and Resilience Plan (NRRP)"] is based on the investigation of several specialized works, which (also) due to the fact that the researched problem is of great topicality, necessity and utility, have a character as recent as possible.

For the same purpose, we have resorted to the analysis of official documents of the European Commission and the Government of Romania, the Ministry of Investments and European Projects, the Ministry of Research, Innovation and Digitization, the Authority for Digitization of Romania, and, respectively, some European/national normative acts centered on the theme of our research.

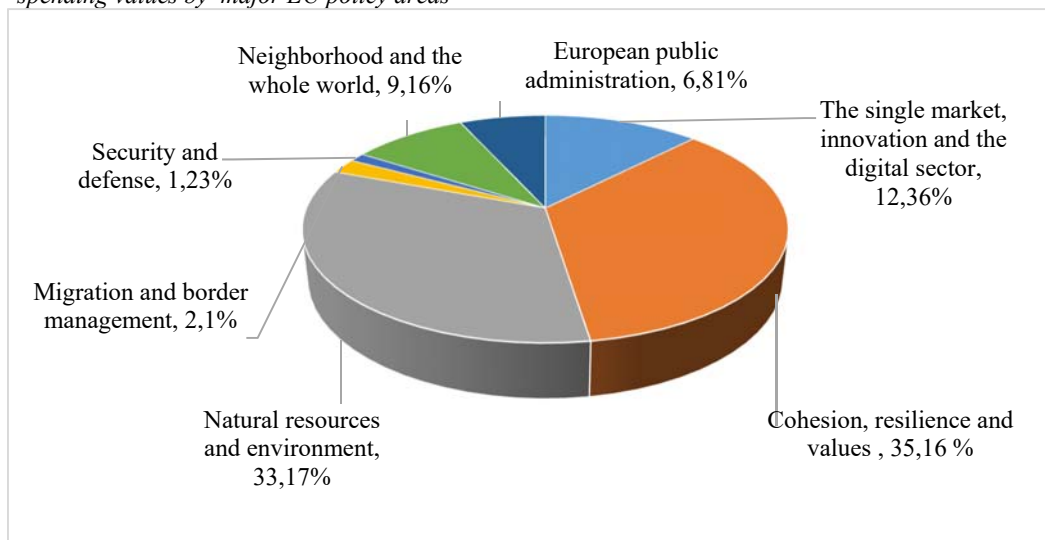
4. Findings

4.1. Digitalization of public administration in the context of the Multiannual Financial Framework (CFM) 2021-2027 and the implementation of the National Recovery and Resilience Plan (NRRP)

The EU's Multiannual Financial Framework (MFF) (2021-2027) was established by Council Regulation (EU, Euratom) 2020/2093 of December 17, 2020 which also establishes the maximum amounts that can be spent, in the period 2021-2027, for EU policies. According to the provisions of the Regulation, for the reference period, the annual budgets must respect these general ceilings for each of the major policies, with the European Parliament, the Council and the European Commission having the mission of ensuring that in each of the seven years, the budget falls within the MFF

ceilings. On the one hand, the three institutions must ensure that the general/total maximum level of expenses is respected, on the other hand, that the maximum values are respected for each of the 7 major areas which, according to the cited source, are as follows: (Council (b), 2020): €377.8 billion for Cohesion, resilience and values; €356.4 billion for Natural Resources and Environment; €132.8 billion for the Single Market, innovation and the digital sector; €98.4 billion for the Neighborhood and the whole world and €73.1 billion for the European Public Administration; €22.7 billion for Migration and border management; €13.2 billion for Security and Defense. Carrying out an analysis of the destination taken by the maximum amounts allocated to the EU policy areas, we can find that a fraction of 12.36% of the budget of €1 074 billion was distributed to the area of the Single Market, innovation and the digital sector, and another of 6.81% to the European Public Administration, highlighting that the three largest weights were identified for the following EU policy areas (Figure no. 2): (1) Cohesion resilience and values (35.16%), (2) Natural resources and environment (33.17%) and (3) Single market, innovation and digital sector(12,36%).

Figure no. 2 The multiannual financial framework (CFM) of EU (2021-2027) - Distribution of maximum spending values by major EU policy areas



Source: (Council (b), 2020)

We note that the total amount related to the CFM to which we have already referred, was exceptionally and temporarily supplemented by the Regulation establishing the European Union Recovery Instrument (EU) 2020/2094(Council (a), 2020) for the recovery of the EU after the COVID-19 pandemic, with a special emphasis, both on the modernization of the EU economy, as well as the transition to an ecological and digital future, and any other addition or modification that is not the subject of our research will be placed in the background or omitted.

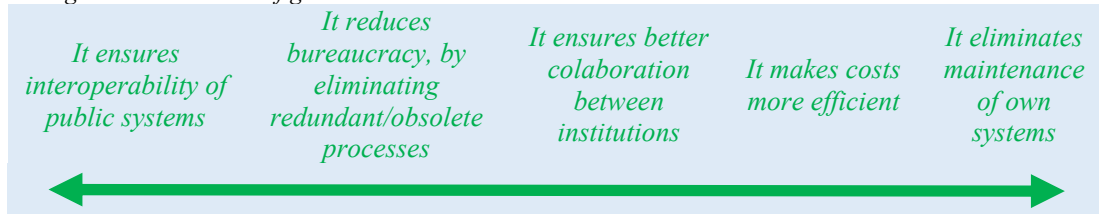
In the context of the period we are going through, the European Commission appreciates that digital technologies represent a major growth potential for Europe, committing that both citizens and businesses and not least the public administration will benefit from the digital transformation, adopting and facilitating solutions innovative for citizens, businesses and for increasing the efficiency of public services including, by improving access to them. Faster, cheaper and better services are desired internationally, through the E-government process, which aims to simplify administrative processes, improve efficiency, accessibility, ease of use, promote good ethical practices, as well as prevent and reduce corruption. The Commission offered and offers support for the digitalization of administrations through various methods, technologies and tools, such as: the design of e-governance systems in an optimal administration framework and artificial intelligence. (European Commission (a), 2022)

At the level of Romania, there have been multiple concerns and initiatives embodied in strategic documents, regarding the issue of digitalization, the digital development being on the rise. In this sense, we exemplify: Romania's governance program 2021-2024, public policy in the field of e-government, Romania's National Recovery and Resilience Plan (NRRP):

- Romania's governance program 2021-2024 aims for the digitalization field: ▪ optimizing the digital interaction of the citizen and the business sphere with state institutions and authorities; ▪ increasing the degree of accessibility and quality of public services; ▪ debureaucratization with the direct involvement of the government; ▪ standardization and digitalization at the level of administrations; ▪ digitalization, simplification and debureaucratization of public services in the administration; ▪ automation of processes and interactions, through the use of ICT for data management; ▪ ensuring administrative procedures in correlation with e-government system; ▪ increasing the number of public services accessible online; ▪ introducing electronic „domicile” and „identity” for each citizen etc.(Romania's Government, (a) 2020).
- The public policy in the field of e-government 2021-2030 which was adopted on June 3, 2021 by the Government of Romania, is considered a strategic document for digital governance and the management of electronic public services, and this represents for the next 10 years: ▪ the roadmap of the digitalization of public services; ▪ a periodic monitoring-evaluation-adjustment mechanism; ▪ „a support tool for programming and negotiation with the European Commission for the 2021-2027 financing exercise from European funds” and „a support tool for programming and negotiation with the European Commission for the exercise of financing 2021-2027 from European funds and ▪ an instrument to substantiate the digitalization measures of the National Recovery and Resilience Plan (NRRP) – PNRR”. (General Secretariat of the Government of Romania, 2021)
- Romania's National Recovery and Resilience Plan (NRRP), approved by the EU Council on October 28, 2021, includes, in its second part, two components of interest for this research, namely: 7 – Digital transformation and 14 – Good governance. For the Digital Transformation Component, a budget of €1,884.96 million is provided, and for the Good Governance component, we have identified the value of €165.60 million (The Ministry of Investment and European Projects, 2022). For the digitalization component, as it follows from the PNRR, the following are targeted:
 - Development of the architecture and implementation of the governmental cloud system;
 - Creating an eHealth and telemedicine system;
 - Digitalization of the judicial system, digitalization in the field of the environment, work and social protection, public procurement (through the implementation of the electronic forms), the NGO sector, public service management...;
 - Electronic identity card;
 - Qualified digital signature;
 - Implementation of the support system for the use of communication services;
 - The assurance of cyber protection;
 - The development of government security system;
 - Increasing resilience and cyber security for internet services provided to public authorities;
 - Creating, both for the society and for the economy, of new cyber security skills;
 - for civil servants, ensuring the development of advanced digital skills;
 - increasing the number of digital skill development hubs;
 - digital transformation for public administration;
 - technology in order to automate processes in public administration;
 - ensuring the framework for the improvement /retraining of companies' employees.

At this level, „the government cloud is the fundamental deliverable of the investments in Romania's digital transformation from the National Recovery and Resilience Plan (NRRP), which will bring together the central public administration institutions in a single, secure and consolidated IT architecture.” (Authority for the Digitalization of Romania, (a), 2022.) Figure no. 3 shows the role of the governmental Cloud.

Figure no.3 The Role of governmental Cloud



Source: (Authority for the Digitalization of Romania, (a), 2022.)

4.2. The digital component of public administration within European countries and interoperability

According to the Directorate General for Informatics at the level of the European Commission, as it results from the content of the State-of-play report on digital interoperability 2022, we find that the countries participating in the study (EU member states, states of the European Free Trade Association and Ukraine, Montenegro, Turkey and the Republic of North Macedonia) are concerned with the digital transformation of public administration acting to a greater or lesser extent to provide electronic public services and to promote digital inclusion, and as regards Romania(European Commission (c), Federico CHIARELLI et. al., 2022), this:

- is among the 24 European countries (AT, BE, BG, HR, CY, CZ, DK, FR, EL, IS, IE, IT, LV, LT, LU, ME, PL, PT, RO, SI, ES SE, TR, and UA) concerned with promoting and investing in innovative technologies, having both artificial intelligence and high-speed broadband connectivity on the digital development agenda, already taking important steps in this regard;
- together with other 12 European countries (AT, HR, CY, DK, FI, DE, IT, LV, LU, MT, PL and SE), it has adopted legislation initiatives in this field that it has implemented and/or is in the process of implementing; for example, one of the most recent legal norms adopted by Romania (Authority for Digitalization of Romania, (b), 2022) is the ordinance of governmental cloud(Government of Romania, (b) 2022), this mainly regulating the attributions of The Authority for Digitalization of Romania;
- against the backdrop of the COVID 19 Pandemic but not only, along with 19 other states in Europe (BE, HR, CY, CZ, DK, FR, EL, IE, IT, LI, LU, ME, NO, PL, SI, ES, SE, CH and UA) it developed the necessary infrastructure for the provision for electronic public services to citizens;
- besides other 13 European countries (AT, HR, FI, FR, DE, HU, IT, LT, SK, SI, SE, CH and UA) it was concerned with research and development in the public administration of innovative technologies based especially on Artificial Intelligence (AI) for the provision of voice-assisted public services;
- regarding secure electronic means of identification of citizens, together with 15 other countries in Europe (AT, BG, HR, CY, DK, FI, EL, LV, LU, NO, SK, SI, SE, CH and TR), it has adopted infrastructure security initiatives that ensure electronic identification/eID/eIDAS, through the identity card, passport and electronic signature;
- regarding data sovereignty or digital sovereignty, as well as regarding interoperability, together with 7 other European states (HR, CY, DK, HU, PL, SI and SE), it has implemented initiatives to increase the use of interoperability, but also of open data in public administration.

5. Conclusions

Our paper focuses on a series of aspects regarding the digitalization of public administration in the context of the Multiannual Financial Framework (MFF) 2021-2027 and the implementation of the National Recovery and Resilience Plan (PNRR), then highlighting the digital component of public administration in European countries and the interoperability problem.

In this context, we revealed that digital technologies represent a major growth potential for Europe, as faster, cheaper and better services are expected to appear through the E-government process, which aims to simplify administrative processes, improve efficiency, accessibility, ease of use, promotion of good ethical practices, as well as prevention and reduction of corruption. Moreover, the Government Program of Romania 2021-2024 aims at important objectives for the field of digitization, from the optimization of digital interaction of the citizen and the business sphere with state institutions and authorities, standardization and digitalization at the level of administrations, digitization, simplification and debureaucratization of public services in administration, when entering the electronic „domicile” and „identity” for each citizen. Emblematic, in the sense of what we have presented, is the government cloud, respectively that fundamental deliverable of the investments in Romania's digital transformation from the National Recovery and Resilience Plan (PNRR), which will bring together in a single, secure and consolidated IT architecture, the central public administration institutions in Romania.

Some studies that I have referred to show that EU member states, states of the European Free Trade Association and Ukraine, Montenegro, Turkey and the Republic of North Macedonia are particularly concerned with the digital transformation of public administration acting to a good extent to provide public services electronics and to promote digital inclusion.

With reference to *Limits of the research*, these are given by the fact that the work is not exhaustive. As a result, we appreciate that our *Future research directions* must take into account that this work is only a starting point in the creation of more complete scientific articles, given the importance of the topic we have chosen for research, and which we believe will further present high interest for a multitude of researchers.

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