

# REDEFINING AND ADAPTING THE CONCEPT OF ORGANIZATIONAL REFORM THROUGH DIGITALIZATION IN THE EUROPEAN UNION

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**Abstract:** *The importance of this topic derives from the desire to identify a series of evolutionary aspects related to the subject of organizational reform through digitization, extremely important and topical, both in the European Union, of all member states, implicitly Romania, as well as the importance of the concept of digitization in public administration after the health crisis. "The recovery plan turns the huge challenge we face into an opportunity, not only by supporting the recovery but also by investing in our future: the European Green Deal and digitalisation will boost jobs and growth, the resilience of our societies and our health, of the environment. This is Europe's moment. Our readiness to act must rise to the challenges we all face. With Next Generation EU we offer an ambitious answer"<sup>42</sup>. (President Ursula von der Leyen, 2020).*

*New digital applications - such as virtual and augmented reality, increasingly connected and automated driving, remote operation, artificial intelligence, precision agriculture - will require speed, quality and responsiveness that can only be achieved with broadband networks of very high capacity. Thus, the "Strategic Agenda 2019-2024" of the European Council, adopted in 2019, states the need for Europe to ensure its sovereignty at the digital level.*

**Key words:** *The concept of digitization in public administration, the recovery plan, the European Green Deal and digitization, the resilience of our societies, artificial intelligence, broadband networks of very high capacity, sovereignty at the digital level.*

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<sup>42</sup> President Ursula von der Leyen's statement on the "Next Generation EU" program:  
[https://ec.europa.eu/commission/presscorner/detail/en/statement\\_20\\_957](https://ec.europa.eu/commission/presscorner/detail/en/statement_20_957)

*JEL Classification: A1; D2; O2; P0; Z1.*

## **Introduction**

When we talk about organizational reform through digitization, it is important to address the general framework created and the issue of systemic digitization within the EU, starting from the approach of theoretical concepts, the definition of the role, the importance of digitization in society. In the same measure, it is important to analyze the EU's strategic support for the central digitization projects of the Romanian central authorities, as well as a comparative analysis between Romania and Estonia, which aims to identify the main challenges facing Romania, in order to find the best solutions development, based on the success of Estonia, a reference model for us and future generations. The model under review aims to help us learn from the best, given the catalytic role of government, which is essential.

"City government will need to become even more willing to weave together limited public and private resources to achieve our community's goals." (D. Osborne & T. Gaebler, 1992) The working methodology envisages an overview of the context and a comparative research analysis of the main monitoring and control mechanism of the Digital Economy and Society Index (DESI), which represents the degree of digitization of the economy and society of each of the 27 countries of the European Union. This indicator monitors progress in each Member State to identify, monitor and implement the best solutions for economic revitalization through concerted action across the EU.

Therefore, the "strategic objective for Romania 2025" is: uninterrupted 5G coverage in all urban areas and along all major land transport routes intermediate objective for 2023, 5G connectivity is available as a true commercial service in at least one city important from each member state.

Providing at the same time a general framework of objectives and measures for Romania's strategy, in all areas of action for the implementation of the strategy.

## **1. The general framework created by the European Union**

### ***1.1. Defining the concept of digitization within the EU.***

A digital revolution is transforming the world as we know it at unprecedented speed. "Companies in the pre-digital era, to align their business, must rethink their business vision, not by updating technology, but rather by changing business strategy and corporate thinking to compete more effectively in a world technology-based, where more and more economic sectors are becoming dependent on new technologies". (David L. Rogers, 2016)

The European Union will increase its support for digital transformation in the coming years, as illustrated by the recent proposal for the Digital Europe program<sup>43</sup> (for 2021-2027) – which would be the first funding program ever dedicated solely to supporting digital transformation in the EU. Further EU action will boost innovation, encourage digital champions and the digitization of businesses, reduce existing digital divides, remove remaining barriers to the Digital Single Market and ensure an adequate legal and regulatory framework in the fields of computing and advanced data, artificial intelligence and cyber security.

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<sup>43</sup> "Digital Europe" programme: <https://ec.europa.eu/digital-single-market/en/europe-investingdigital-digital-europe-programme>

### ***1.2. The importance and role of digitization at EU level.***

The importance of digitization is becoming more and more pronounced in the EU and therefore the European Council in June 2016 called for fixed and high capacity broadband radio connectivity across Europe.

"Digital transformation in electronic communications is critical to optimizing performance in all key sectors of society, across organizations worldwide, particularly in the areas of design thinking, big data and analytics, portfolio management and agile delivery." (J. Highsmith, L. Luu and D. Robinson, 2019)

## **2. The strategic technical support of the European Union for the digitization projects of the central authorities in Romania**

In order to adapt the Romanian legislation to the digitalization strategy of the European Union, the Romanian central authorities have made efforts, at the governmental level, to harmonize as well as possible the conditions for obtaining the strategic technical support of the European Union.

Therefore, through the new electronic signature legislation - GEO no. 38/2020, all public institutions are practically obliged to accept documents in electronic format from citizens. The new Technical Assistance Instrument (TSI), which is part of the "Next Generation EU" package of measures which is closely linked to the Reconstruction and Resilience Mechanism for the period 2021-2024 and has a total amount of more than EUR 864 million in the period 2021 -2027 for all member states, an allocation approximately 40% higher than in the 2017-2020 period. Among the major strategic support projects granted to Romania by the European Union, for the central digitization projects of local authorities, there is also the project: "Improving access and quality of

services for citizens"<sup>44</sup>. The project is carried out in partnership with the Association of Romanian Municipalities (AMR) and the Norwegian Association of Local and Regional Authorities (KS) - which is also a partner of the program. The project's activities aim at the establishment of an e-ICT information center which will mainly provide, through an online support office, information and advice to ACoR and AMR members on ethical issues, transparency, conflict of interest and incompatibility, conducting courses on training for local authorities representatives. The target groups are represented by 3,300 representatives of local administrations (of which 2,000 beneficiaries at commune level, 800 beneficiaries at municipality level, 300 newly elected - mayors, vice mayors and local councilors and 200 elected and heads of municipalities from 5 pilot departments, municipalities and 3 municipalities).

### ***2.1. The role of the Romanian central authorities within the EU***

Romania's role in the context of the redefinition and adaptation of the concept of systemic digitalization within the EU is a very important one, and in this sense Romania adopted in February 2015 the "National Strategy on the Digital Agenda for Romania 2020" (SNADR)<sup>45</sup>. Four areas of action are therefore defined to support the digital strategy of the EU in Romania, as follows: e-Government, ICT (Information and Communication Technology) e-Commerce and "Broadband" (Infrastructure of digital services). A recent study<sup>46</sup> estimates that the successful deployment of 5G technology could benefit approximately €113 billion per year across four industry sectors (automotive, healthcare,

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<sup>44</sup> "Next Generation EU" STI local development program: <https://dezvoltare-locala.frds.ro/en/predefined-projects/>

<sup>45</sup> Digital agenda for Romania 2020: <https://www.comunicatii.gov.ro/agenda-digitala-pentru-romania-2020/>

<sup>46</sup> European Commission: Study on the introduction of 5G technology in Europe": [https://connectcentre.ie/wp-content/uploads/2016/10/EC-Study\\_5G-in-Europe.pdf](https://connectcentre.ie/wp-content/uploads/2016/10/EC-Study_5G-in-Europe.pdf)

transport and utilities), with these benefits being widespread among businesses, consumers and society at large.

Regarding Romania's performance in the "Electronic Government" chapter, the "eGovernment Benchmark 2019"<sup>47</sup> report on the evaluation of the use of information and communication technologies in public administration, as well as the levels of cross-border interoperability and digital interaction between administrations and citizens or businesses from EU member states and eight other third countries. The report shows that Romania has an above-average level (63%; EU average 57%) of using the online channel in administrative services (Access) and a low level (40%; EU average 68%) of administrative digitization (Digitization). Degree of "Access" - describes the extent to which the online environment is used in administrative services, while "Digitization" refers to the level of digitization of public administration counters. In this direction, to support the improvement of vulnerable segments. Romania has undertaken several legislative actions to create new support mechanisms, such as Government Decision no. 89/2020 of January 28, 2020, which provides for the organization and operation of a new body, the "Authority for the Digitization of Romania" (ADR<sup>48</sup>). Under the coordination of the Prime Minister, ADR takes over the activities and structures of the Ministry of Communications and Information Society related to the fields of information technology, information society and the national interoperability framework.

## ***2.2. Comparative analysis -DESI between Romania and Estonia***

### **How prepared is the Romanian system?**

There are 5 major DESI criteria that guide the European Commission: Connectivity, Human Capital, Use of Internet Services, Integration of Digital Technology and Digital Public Services.

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<sup>47</sup> "eGovernment benchmark": <https://op.europa.eu/ro/publication-detail/-/publication/f5e4736d-f54c-11e9-8c1f-01aa75ed71a1/language-ro>

<sup>48</sup> The Authority for Digitization of Romania: <https://www.adr.gov.ro/>

Romania ranks 26 out of 27, in terms of DESI in the EU, Connectivity is at 56.2%, Human Capital 33.2%, Use of Internet Services 35.9%, Integration of Digital Technology 24.9% and Digital Public Services 48.4%<sup>49</sup>. In total, in Romania, 38% of the spectrum harmonized at the EU level was allocated for broadband radio communications services.

It is estimated that it will create 250,000 jobs and generate revenues of €4.7 billion. In other words, all other EU countries are digitizing faster than Romania.

Estonia ranks 7th out of 27 EU member states in the European Commission's DESI 2020 report. Connectivity is at 51.9%, Human Capital at 66.7%, Service Utilization at 65.4%, Digital Technology Integration at 41.1% and Digital Public Services at 89.3%. In terms of digital public services, Estonia ranks 1st in the EU as can be seen from the analysis of the indicators, thanks to a vision of technological autonomy combined with a business philosophy used in the private sector that is oriented towards performance, efficiency and profitability.

Estonia has well-developed e-government and e-health systems, all central government digital services, as well as municipalities offering online<sup>50</sup> services in the X-Road technology platform<sup>51</sup>.

The goals of Estonia's current national broadband plan, Digital Agenda 2020, are not in line with the goals of the Gigabit Society. Regarding Estonia's ambition for 5G connectivity, Estonia published its 5G roadmap in March 2019.

The country would like to achieve 5G connectivity in major cities by 2023 and along transport corridors by 2025. A group dedicated 5G task force has been established at the ministry level.

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<sup>49</sup> Commission Decision (EU) 2019/235: EU countries are ready for 5G: [https://www.parlament.gv.at/PAKT/EU/XXVII/EU/02/35/EU\\_23525/imfname\\_10985550.pdf](https://www.parlament.gv.at/PAKT/EU/XXVII/EU/02/35/EU_23525/imfname_10985550.pdf)

<sup>50</sup> Statistics on e-government services in Estonia, which are available in the Catalog of State Services: <http://mkm-itaio.github.io/catalogue/>.

<sup>51</sup> Estonian environment based on X-Road / X-tee software with distributed architecture: <https://e-estonia.com/solutions/interoperability-services/x-road/>

The authorities have also pledged to cooperate on 5G corridors with Latvia and Lithuania within the Via Baltica project.

## **Challenges and solutions**

*How can we improve the pace of development?*

There is no simple strategic way to deal with the multidimensional nature of digital change. "Even the wisest leaders can become disoriented as change is driven by digitization, leaving almost nothing safe." (Graham W., Raskino M. 2015)

It is in vain to have the best IT experts if the rest of the population is not connected to technology. Our parents and grandparents look at technology with reluctance: paying by card, shopping online, reading the news, and all this is largely foreign to them.

IT experts are too few and too little connected to the proper functioning of the "city", and citizens do not trust the use of online technology.

## **Conclusions**

Therefore, we can conclude that the redefinition and adaptation of the concept of systemic digitization within the EU and implicitly in Romania, can only be achieved through a common effort for the central digitization projects of the central authorities in Romania. Digitization is a huge opportunity and challenge for the current generation, revolutionizing the world of work, business structures and value chains, as well as innovation and market structures. The adoption of the Interoperability Law and its implementation by all public bodies involved would be a first step towards improving digital public administration. Moreover, the acceleration of the expansion of the distribution network ("backhaul") in "white areas, systemic interoperability and digital services, common problems in the European Union can be achieved through the Agency for Digitization of Romania created for better monitoring and control of the implementation of the Strategy National



Digital Agenda, considering the EU's 5G strategic goal for 2025. The challenge of digitization in public administration is huge, and yet it is achievable if we approach the problem systematically." This challenge can seem absolutely overwhelming! asked, how do you eat an elephant?...that is, when a challenge seems so big, where to start, I answer: One byte at a time and invite a lot of friends." (Peter A. High, 2009) Thanks to the EUR 750 billion Next Generation EU instrument, as well as specific increases in the long-term EU budget for the period 2021-2027, the total financial capacity of the EU budget will reach EUR 1.85 trillion. Together with the three major safety nets for workers, businesses and states, which were approved by the European Council on 23 April 2020 and which together constitute a package of EUR 540 billion, these exceptional measures taken at EU level would exceed EUR 1290 billion EUR.

Consequently, the redefinition and adaptation of the concept of organizational reform through digitization in the European Union and in Romania is based on solid support and has already registered considerable progress, achieved in the European Parliament and in the Council. The Commission now proposes to mobilize a strengthened EU budget to support repairing the immediate economic damage and social problems caused by the corona virus pandemic, to start the recovery and to prepare a better future for the next generation.

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