Digital Performance Analysis of Public Administration: Romania's Ranking in DESI

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Abstract:
The present paper is an X-ray of the digitalization of public administration in Romania, within the context of the Decade of Digital program committed by the European Commission for the year 2030. The process of digital transformation in public administration has visibly accelerated over the past three years, with one of the favorable factors being the COVID-19 pandemic, which imposed physical restrictions on citizens and forced public administration to migrate their interactions with citizens online. The paper highlights the monitoring indicators and progress regarding Europe's digital performance, specifically analyzed for the domain of Digitalization of Public Services. For each of the five indicators, Romania's achievements are presented based on data from the Authority for Digitalization in Romania (ADR). Despite our country's significant accomplishments in this field, visible to Romanians and appreciated by citizens who use technology in their interactions with government institutions, Romania still ranks last in the EU concerning digital public services in 2023.

Keywords: *public administration, digitalization, reform, DESI indicators.*

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Introduction:

The digital society knows a sharp development, and the technologies on which it is based bring with them new methods and means of evolution. Exploring digital innovation could be an important area of research and may include: the use of digital platforms for crowdfunding, social impact measurement tools and the application of artificial intelligence to improve social impact and operational efficiency (Staiculescu, 2023:134). All sectors of life are adapted to these trends, although there are many challenges and many limits.

In the process of modernization of European states, the digitization of public administration is appreciated by the European Commission as an objective of the digital decade that will be monitored according to a series of performance and progress measurement indicators, based on the DESI exercise, a set of tools that measures Europe's digital transformation.

The 2030 Digital Decade is a European policy program that aims to achieve concrete ambitious targets by 2030 in 4 different areas:

Figure 1: Concrete objectives for 2030 of the Digital Decade program
(commission.europa.eu)
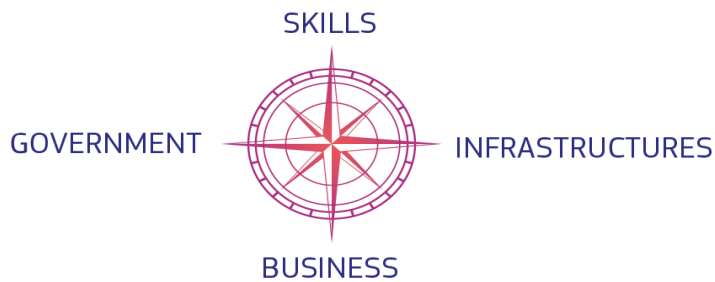
Source: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_ro

For the field of public administration, it is aimed to obtain by 2030 some
• Key public services: 100% online
• E-health services: 100% of citizens should have access to online medical records
• Digital identity: 100% of citizens should have access to electronic identification

To achieve these objectives, the European Union outlined the levers applicable at European and national level, especially monitored through DESI, created the basis for cooperation between member states and provided for various investments supported by the private sector as well, signed the European Declaration on Rights and Principles digital (digital-strategy.ec.europa.eu) which will complement the existing rights resulting from the EU Charter of Fundamental Rights and data protection and privacy legislation.

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In order to measure progress in the field of digitization, the European Commission published, on 30.06.2023, the Decision on the establishment of key performance indicators to measure progress towards the digital objectives set out in Article 4(1) of Decision (EU) 2022/2481 of the Parliament European and Council (eur-lex.europa.eu) defining 16 new indicators and recommended their inclusion in the DESI. It also recommended that they be modified and adjusted in relation to technological developments or European socio-economic changes.

Also, the Commission proposes to evaluate the achievements of the member states every two years and to analyze the possibility of reaching the objectives proposed for the year 2030, depending on which to propose new trajectories, operations and additional efforts through the completion by each state of the roadmaps that will it includes internal policies and programs and levers to achieve the country's goals in the field of digitization.

The first Report on the digitalization of Europe under the provisions of the digital decade should be published in 2023.

DESI - Public Sector Digital Economy and Society Index

The Digital Economy and Society Index - DESI - includes monitoring and progress indicators on Europe's digital performance. It is calculated every year for each country and takes into account four cardinal points of analysis, four areas of reference:
- Human capital
- Digital infrastructure
- Integration of digital technology
- Digitization of public services

For the specifics of our work, we will limit ourselves to the analysis of the digitization of public services, emphasizing the interference with other fields.

The public sector is marked by increasingly advanced digital technologies and increasingly appreciated by users of public services. (Damaschin, Mihailă, 2020: 62). Using them to their maximum potential in public administration presents more and more advantages: transparency, efficiency, effectiveness, economy. The context of the Covid 2019 pandemic has accelerated the digitization of some public administration services, with some countries reaching close to 100% in online use of public services, other countries being below the European Union average. In order to reduce these disparities, the recovery and resilience plans were designed and became applicable for the financial programming period 2021-2027 as investment measures in the digitalization of the public sector for government services and processes, including e-health, e-justice, digitalization of transport, energy systems. The aim is to modernize public services for citizens and the business environment.

- To measure the performance and progress of the public sector, DESI includes the following indicators:
- E-government users – monitor the degree of internet use by citizens in their interaction with public authorities, compared to 12 months.
- Pre-filled forms - involves the application of the "One time" principle, which refers to the completion by citizens and companies of personal data for an authority, and it uses them as many times as needed without requesting them a second time.
- Digital public services for citizens – indicator that measures the accessibility of public services for citizens in the online system. Public

services are considered in relation to the most important events in a person's life. It includes partially provided services.
- Digital public services for businesses – indicator that measures the degree to which public services for businesses are interoperable.
- Open data – indicator that measures the government's commitment to data transparency, analyzed and evaluated based on four sub-indicators: 1. Transparent data policy; 2. The impact of transparent data; 3. Transparent data portal; 4. Transparent data quality.
- Use of IDs – involves the process of using personal identification data in electronic format.
- Benchmark for e-government – indicator that monitors the improvement of platforms used by citizens. The measurement considers the collection of the following data: 1. Centering on the user – provision of online services to the citizen regarding the availability of the service (Online availability: the extent to which informational and transactional services and information related to these services are provided online and can be accessed through a web portal; User Support: the extent to which online support, help functions and feedback mechanisms are available on government portals; Mobile Ease: the extent to which services are provided through a mobile-friendly program). 2 Transparency - assesses the extent to which services are transparent, services are designed with user involvement, and users can manage their personal data. 3 Key factors – electronic identification, electronic document recognition, digital mail communication. 4 Cross-border services – the same services for citizens of other European countries as for nationals.

Member countries have been monitored, in terms of digital evolution, since 2014. On the basis of DESI, country reports and state profiles are carried out to provide support to countries in identifying areas that require priority interventions. The latest report available is DESI 2022 which is based on data collected in 2021.

Romania's ranking in DESI regarding the digitization of public services

In the general ranking of European Union countries that provide digital public services, Romania has experienced an evolution since 2017, when it totaled below 10 cumulative points for all sub-indicators and until 2022, when it accumulated slightly over 20 points, still remaining the last country in EU, after Greece and Bulgaria. At the opposite pole, Estonia remains the first country in the ranking from 2017 to 2022, with more than 85 points.

In the DESI 2022 ranking regarding the sub-indicators for measuring the digitization of public services, Romania is in last place, slightly more than 20 points accumulated compared to the penultimate ranked country, Greece with almost 40 points and Bulgaria with more than 55 points.

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Figure 2: DESI 2022 ranking – digitization of public services by sub-indicators

Source: https://digital-decade-desi.digital-strategy.ec.europa.eu/datasets/desi-2022/charts
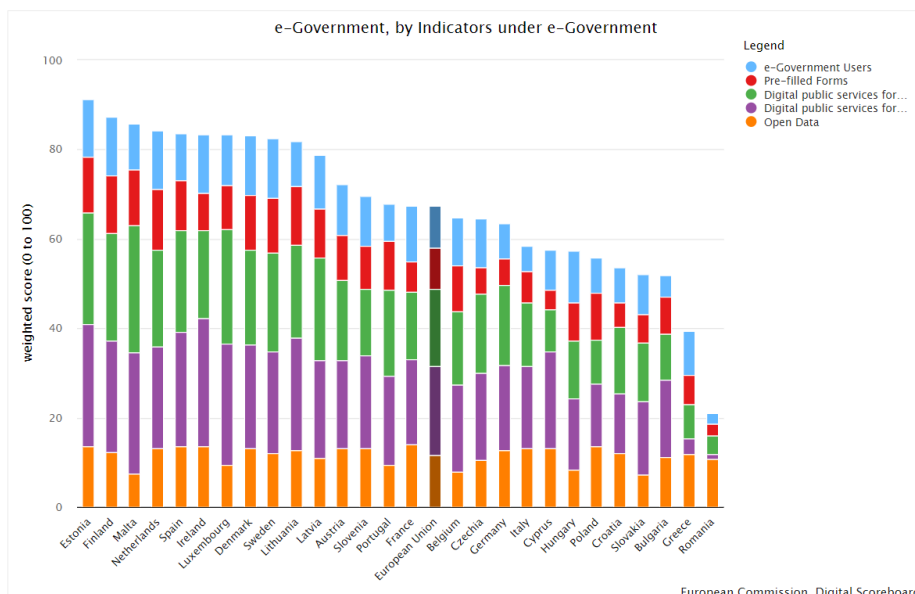
An analysis of each measurement indicator and progress in the field of digitization of public services in Romania is required by reference to the other 27 states.

- e-Government users: Thus, in 2022, Romania records a percentage of 2.39% of citizens who interact with public authorities via the Internet.

We appreciate this alarmingly low percentage, not because it is the lowest in the EU, but in relation to Romania's high degree of connectivity, to high-speed internet services that covered 87% of the country's territory and which places Romania in 6th place in the ranking , as well as the percentage of 16.7% of 16-74 year olds who used the internet in the last 12 months.

So, out of the 16.7% Romanian internet users, only 2.39% use the internet in their relations with public authorities.

For the DESI 2023 report, the percentage of internet users increased to 23.55% of Romanian citizens, but the number of those who use the internet to collaborate with public services is still very small.

One of the most well-known platforms used by particles to avoid physical interaction with the local administration and made available to individuals and legal entities is GHIȘEUL.RO, which operates on the basis of the National Electronic Online Payment System (SNEP) (https://www. giseul.ro/giseul/public/). Within this platform, in January 2023, 1 million 6 hundred thousand Romanians were registered, of which more than 1 million had activated their accounts and used the platform at the end of March 2023, and at the beginning of January 2024, just over 2 million users were registered active.

Figure 3: number of active users on the ghișeul.ro platform


Source: www.ghiseul.ro

The platform began to gain notoriety among individuals only in the last 3 years, after the Covid-19 Pandemic, although it has been operational since 2011.

Another platform used mainly by private commercial companies and other economic entities is the Public Procurement Electronic System (SEAP).

If in April 2018 (https://www.e-licitatie.ro/pub), the platform was used by 20,851 contracting authorities and 158,991 economic operators, in January 2024 209,534 accounts of individuals and 22,596 accounts of public authorities were registered .

Also, in the relationships of education providers, especially higher education, with young participants in the educational process, each person has a student account through which they communicate with the educational institution. At the level of pre-university education cycles, each student has a student account through which they have access to at least the online catalog, in the educational units where it was implemented.

Figure 4: Distribution of the school population by development regions and educational levels, in the school/university year 2022-2023
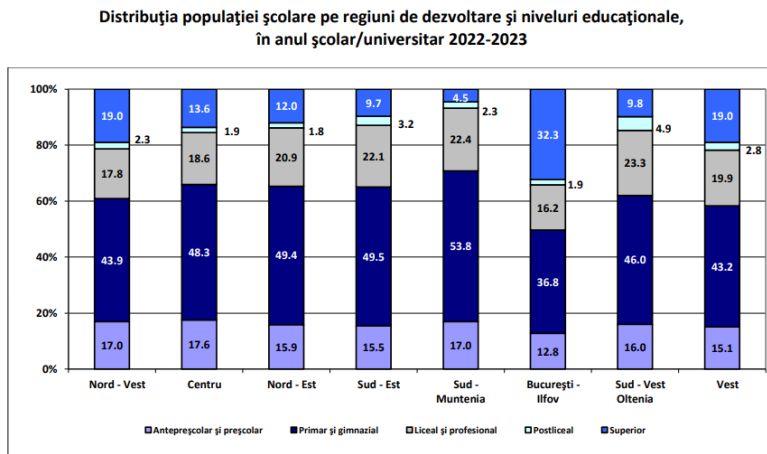

Source:https://insse.ro/cms/sites/default/files/com_presa/com_pdf/sistemul_educatio nal_2023_r.pdf

In the school/university year 2022-2023, the school population in the national education system was 3472.8 thousand pupils and students ().

Even with these conditions, the number of the population that uses the Internet in relations with public institutions ranks Romania in last place in the DESI ranking for the E-governance user indicator 2023.

Figure 5: Progress of countries on the E-Government indicator in 2023 – internet users

Source: https://digital-decade-desi.digital-strategy.ec.europa.eu/datasets/desi-2022/charts
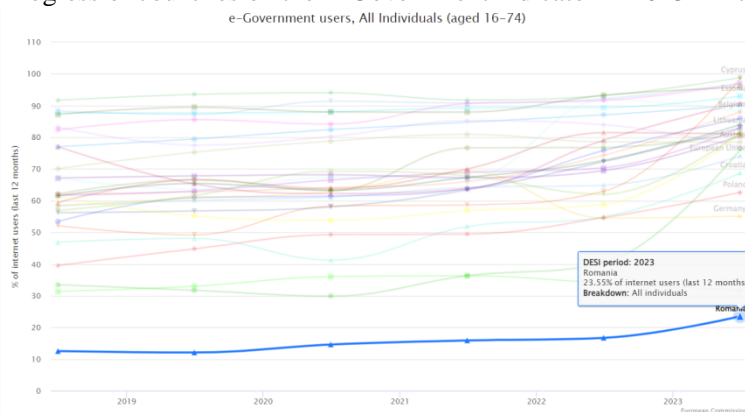
- Digital public services for citizens: in 2022, the accessibility of public services for citizens in the online system reached a percentage of 44.24% and increased by slightly over 3% in 2023, registering a percentage of 47.58% as the share of administrative procedures that can be done online for major life events (birth of a child, new residence, studies, appointment of identity documents, etc.) for citizens
- The increase is also due to the greater number of internet users compared to 2022, but also to the improvement of online platforms to satisfy various needs through online public services.
- Digital public services for businesses: in addition to natural persons as citizens of the European state, businesses are also individuals who need various public services for establishment, development, and carrying out activities. That is why the indicator is included in DESI monitoring and refers to The indicator broadly reflects the share of public services needed to start a business and carry out regular business operations that are available online to both domestic and foreign users. Services provided through a portal receive a higher score, services that only provide information (but must be completed offline) receive a more limited score. According to the 2022 ranking, Romania ranks last with a share of 42.27%, which increases slightly in 2023, up to 44.61%

Comparing the two indicators, we notice that, for the year 2023, the percentages are not very different. Even in this context, Romania is in last place, at least 20 points away from the penultimate ranked Croatia, with 30 percent compared to the EU and more than 50 percent compared to the first ranked in these indicators, namely Finland.

Figure 6: DESI Ranking 2023: Digital public services for itizens/businesses

Source: https://digital-decade-desi.digital-strategy.ec.europa.eu/datasets/desi-2022/charts
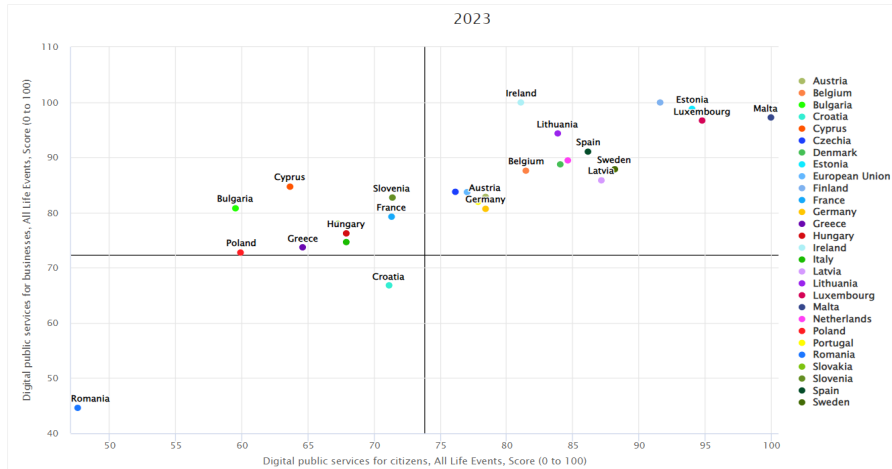
According to the Electronic Single Contact Point Information System - PCUe, established by Law no. 49/2009 on the freedom of establishment of service providers and the freedom to provide services in Romania (Law no. 49/2009) which aims to carry out by the providers some remote procedures and formalities regarding access to the service activities of of them: declarations, notifications, applications necessary to obtain authorizations, applications for registration in the registers, other than the application for authorization, PCUe is designed as a catalog of all public services provided at the level of the central and local public administration in Romania, which includes the public services offered of 16 ministries and 33 subordinate institutions, offering a total of over 2300 public services and over 6000 procedures.

The areas of interest are very varied, from cross-border and national services to hobby or leisure services, for both citizens and businesses.

Returning to the tax payment service, giseul.ro, this platform interconnects several state institutions, such as the institution of the mayor and the local council, with ANAF, the traffic police, the judicial police, public utility providers and home insurance providers , so that all taxpayers, by registering in the platform, can pay various fees and taxes, fines, invoices in the online system.

Figure 7: Types of public services accessible on giseul.ro (www.ghiseul.ro)

Sours: Figure www.ghiseul.ro

If 10 years after the establishment and start of use of the platform, 492,990 users were registered and 1,416,226 transactions had been made, in October 2023 the system had 1,925,445 users and over 1 billion 700 million lei collected, and in March 2024 the number of accounts that appear in the gişeul.ro system is 2155988 active users and

786,756,747 lei collected (Voinea R, 2023: 270). This evolution registered at a high rate proves the increase of citizens' interest in using online services, due to the awareness of the benefits brought by these services.

- Pre-filled forms: considering the increase in the use of online public services by citizens and businesses, and for this indicator, Romania has a significant increase compared to 2022, from 19.05% and the last place, up to 40.74 in 2023 and ranking in second last place, ahead of Croatia. For this indicator, Romania registers the highest growth in the EU, followed by Cyprus and Greece. Even in this context, Romania is at the bottom of the ranking. The EU average for this indicator is 68.18%. In the leading place is the Netherlands with a percentage of 94.01% of the amount of data that is filled in beforehand in the online forms of public services, the percentage being in a slight increase compared to that of 2022.

Steps for de-bureaucratization include accepting copy after e-mail bulletin, eliminating legalized copies of documents, providing e-mail addresses for electronic communication with citizens, making available alternative payment methods for public services, in addition to paying in cash at the counter. These are possible through the creation of the legislative framework at the national level. Thus, the Adoption of Emergency Ordinance no. 38/2020 regarding the use of documents in electronic form at the level of public authorities and institutions confers safety and legality on the activity of public institutions and authorities by electronic means (Baesu, 2021:215).

Other measures: Ex officio publication of information and forms or request models related to all public services provided, in electronic format, on the single electronic contact point, managed by the Digital Agenda Agency of Romania; Eliminating the requirement to submit legalized copies of documents; Requesting the extract from the criminal record from the competent police units with the express consent of the person, where the public institution/authority requests the criminal record; The obligation to use mainly electronic means for communication with the beneficiaries of public services, if the beneficiary has an email address and agrees to communicate it; The obligation to offer alternative payment methods for public services provided for a fee, either by card payment or through other payment systems.

- Open data: The indicator measures the way in which the service process and expectations are clarified, users are informed and involved in policy and service design processes and can manage their personal data held by government organizations. Romania ranks penultimate and has seen an insignificant evolution since 2022, from 41.02% to 43.82% in 2023.

For this indicator, among the 28 states, Poland has a 14 percent evolution, the rest of the states having an almost linear path.

Although, for this indicator, the increase in the ranking is not spectacular, at the national level, Romania adopts Law no. 179/2022 on open data and the reuse of public sector information with applicability from June 17, 2022, which transposes into national legislation the provisions of Directive (EU) 2019/1024 on open data and the reuse of public sector information. In the sense of the law, open data means data in an automatically processed format that can be freely used, reused and redistributed by anyone for any purpose (law 179/2022).

The law provides, in the annex, the list of thematic categories of data sets with high value in the economic and social field, in the field of health, education, public administration, property, agriculture, statistics, environment, research and sport. These data are made available free of charge, with certain exceptions expressly provided by law and can be processed automatically;

In the field of public administration (law no. 179/2022), the law provides for a series of open data that can be processed automatically and that can contribute to increasing the benefits in the economic field, the environment and innovative services, including the generation of income. The following are open data within the meaning of the law: structured data that are the basis of public procurement, the distribution of public money, the register of loans and guarantees granted by the state; register of protocol, travel and accommodation expenses of dignitaries and high-ranking civil servants; records of claims, securities and state bonds (value, maturity); structured data that form the basis of the annual report on strategic/major projects initiated by the Government; structured data that form the basis of the annual studies on the rate of the poor population, by counties/localities; structured data on public expenditures made at the local level; strategic directions, metrics and criteria for measuring urban development; evaluation of schools. All these data are corroborated with the data expressly provided in the provisions of art. 5 of Law no. 544 of October 12, 2001 regarding Liberal access to information of public interest.

Conclusion

By analyzing Romania's positioning within the DESI indices, we can obtain a complex picture of the country's progress in terms of digital transformation and e-government development. These assessments can provide important clues about the directions in which Romania can improve its efforts to remain competitive in today's digital economy and society. (Manda, 2021: 47)

This evolution was influenced by several factors, such as the health crisis: The COVID-19 Pandemic imposed physical restrictions, which forced the public administration to migrate interactions with citizens to the online environment and the constant digitization efforts: both at the level of the central public administration , as well as the local one, efforts were made to digitize services.

In addition to the internal achievements imposed by the analyzed contexts, the EU states also cooperate in other fields. As an example, in an attempt to simplify judicial cooperation in criminal matters among themselves, the member states have chosen to abandon the difficult way of cooperation by administrative means specific to extradition by introducing in the matter of the European arrest warrant the procedure of reporting in the SIS system (DUMITRESCU. L , 2011: 149)

According to the data of the Authority for the Digitization of Romania (ADR), at the time this material was created (March 2024), the official results (https://www.adr.gov.ro/rapoarte/) registered quantifiable are presented as follows:

- Almost 2.5 million active users on Ghiseul.ro.
- Over 200,000 entities registered on the SEAP (Electronic Public Procurement System) public auctions platform.
- More than 8,300 public institutions present on e-guvernare.ro, the National Electronic System (SEN) through which all taxpayers can submit their ANAF Declarations.

- Over 5,300 procedures and formalities for access to central and local administration services, available through the electronic Single Contact Point.
- About 1.8 million requests submitted on aici.gov.ro. This intermediate mechanism allows the registration of documents addressed to public institutions that do not have their own online registration system.
- More than 1.7 million transport authorizations issued through SIAE (Electronic Assignment Information System in Transport).

ADR marked every important result recorded, including the launch of the National Interoperability System and the first version of the National Catalog of Public Services, which inventoried a total of over 2500 services.

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