Aspects of Digitalization within Caraș–Severin Local Communities

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Abstract

We live in a society where things change rapidly, both individuals and organizations having to keep up the pace with this constant transformation. Multitasking has become a sine qua non condition, especially if one wants to keep things at a high level. Thus, performing certain tasks remotely or with just a few clicks is a huge advantage, not only in terms of saving money, time and energy, but also by centralizing data and making related statistics. The idea of carrying out various activities using specific platforms was accelerated by the Coronavirus Pandemic, people realizing, more than ever, that some things can be done this way, simpler, faster, better and less expensive. The paper aims to present aspects regarding digitization in several localities in Caraș-Severin county, by carrying out a research that starts from elements regarding the material base, the training of human resources and the openness of citizens to these services so necessary for a functioning society.

Key words: digitalization, good governance, development, public administration

J.E.L. classification: H70, H83, O43

1. Introduction

Digitization is a phenomenon that allows an easy, remote use of the information we need, simplifying administrative procedures in order to bring citizens closer to public administration. The advantages of digital transformation regardless of the segment we refer to, represent an imperative of the future strategy in order to achieve good governance, starting from the desideratum according to which information is the oxygen of democracy (Ibrahim & Benabdelhadi, 2021). There is a vast literature in magazines with contributions in the field, related to the phenomenon of digital transformation and e-government, analysing the influencing factors that leave their mark on this desired, and it is necessary to also identify the obstacles that may arise in the digitalization path, thus preventing the objective assessment of the effectiveness and efficiency of this transformation that is so necessary today.

Before adopting the digitization strategy, we must take into account the existing resources, the social context, the specifics of the country, of the region where it is implemented, the conditions offered to citizens, their access to technology, the existing infrastructure, the organizational culture of public institutions, etc., so that we obtain the appropriate organizational strategy for the success of digitization and the creation of an approach with public value (Ibrahim & Benabdelhadi, 2021).

2. Theoretical background

Nowadays we talk about the digitization of the public service, through the use of digital technology. This article tries to present a narrative review of the specialized literature that deals extensively with the problem of the governance of digital public services. From this perspective we
can underline the study A Systematic Review of the Literature on Digital Transformation: Insights and Implications for Strategy and Organizational Change, which based on 279 articles provide a multi-dimensional framework synthesizing what is known about digital transformation. It discerned two important thematical patterns: digital transformation is moving firms to malleable organizational designs that enable continuous adaptation, and this move is embedded in and driven by digital business ecosystems. From these two patterns, the authors derived four perspectives on the phenomenon of digital transformation: technology impact, compartmentalized adaptation, systemic shift and holistic co-evolution providing managerial implications for strategy and organizational change and concluding that the nature of digital transformation is only partially covered by conventional frameworks on organizational change. (Hanelt et al., 2021)

A general review of a systematic literature on digital transformation was also within the article A systematic literature review on digital transformation. (Gebayew et al., 2018)

In Romania the digital transformation implies a change in the organizational culture, the emphasis falling on innovation and on the paradigm shift from the point of view of the professional experience of the employees. (National Agency of Public Servants, 2021)

There are operational programs dedicated to the digitization of the economy and society one of which, for the period 2021-2027, being the "Smart Growth, Digitization and Financial Instruments" Operational Program (POCIDIF) that includes 3 priorities which directly aim at the digitization of society and the economy of Romania. Both at the national and regional level, the strategic, operational and financial premises have been created to accelerate the digitization process of the economy and society. That was done either through the development of infrastructure and technical capabilities or through the development of new digitized services and solutions by increasing the level of digital skills of the population, in general, and of the economically active generations, in particular. Although the COVID-19 pandemic, strongly affected the regional economy and the daily life of citizens, it has imposed substantial adaptations and transformations of economic and social activities, especially through digitization. Somehow this pandemic situation proves out to be a good opportunity to recover some of the gaps that separate us from the other European regions.

The Digital Economy and Society Index 2021 and 2022, ranks Romanian on the last positions in terms of human capital. Thus, the levels of at least elementary digital skills and at least elementary software skills place Romania in 27th places among EU member states, with a score of 30.6 pints in 2022 (the average EU score being 52.3 points). In 2021 only 31% of 16-74 year olds have at least basic digital skills (56% in the EU as a whole), while 35% have at least basic software skills (compared to an EU average of 58%). (ADR - Centru, 2021).

Figure no. 1. Digital Economy and Society Index

![Digital Economy and Society Index](Source: Digital Economy and Society Index (DESI): Shaping Europe’s digital future (europa.eu))

Although we cannot totally discuss about a legislative framework for digital public services, the relevant actors have assiduously started to collaborate and co-create solutions with other private partners, such as citizens or the academic or business sector. The clear delimitation between concepts such as digitalization, digital transformation or digitization is very well spotted with the article From digitalization to digital transformation in Romania. The authors try to present the differences
between these concepts and provides a pragmatic understanding of the definition of transformation digital.

The study deals with the topic of digital public services referring to the fragmentation identified both at the territorial level and at the decision-making level. The digital transformation can be more successful in cities, where the use accurate data and local intelligence can lead to the co-creation of impactful long-term digital solutions. Digitization refers to the conversion of analog formats into digital ones, thus digital transformation leading to the creation of a digital organization. Digital transformation cannot happen without digital skills development, the need to invest smartly in supporting digital inclusion being crucial (Durach et al, 2021). According to the article Digitization, digitalization and digital transformation, the digitization process marks the beginning of the fourth industrial revolution with significant implications in industry, economy, science and society (Tănase &Paraschiv, 2018). Last but not least we can mention the article e-Government. The impact of e-government in public administration. Challenges and liabilities of digital governance, that reveals the importance of having a citizen-centricity in any digital transformation (Anghel-Drugărín, 2022).

3. Connections between digitalization, transparency and good governance

In order for the citizens to be able to trust the rulers and, in general, the politicians, there must be transparency, a process without which civil society cannot get involved in the political life and even in the act of governance and without which there can be no talk of the modernization of public administration through easy access of citizens to complete and transparent information.

In a society considered democratic, the authorities manage the affairs of the state for and on behalf of the citizens, in line with the digital goals for 2030 of the Digital European Decade, Europe must prepare its citizens for a sustainable digital future centered on the human factor.

Therefore, the power belongs to the people, there is a need to know that public authorities have a democratic duty to decide transparently and respond to requests for information, because the information they hold belongs to the citizens.

On May 9th 2021, the European Commission presented its vision and perspectives for the digital transformation that is prefigured for Europe by 2030. The European Commission's proposal consisted of a "compass for the digital dimension of the EU", which is configured around of four cardinal points (European Comission, 2021):

- basic digital skills;
- secure and sustainable digital infrastructures;
- digital transformation of enterprises;
- digitization of public services.

The lack of transparency, as well as other shortcomings of the legislative activity, forcefully lead to the decrease of trust in the importance of normative acts of the society, which leads to an increased legislative instability. If, indeed, decision-making transparency were to apply, this could lead to greater public confidence in laws and regulations, given that they could be consulted by those interested and involved, and only then be adopted.

Transparency is considered an essential element of good governance and not just a necessity for citizens. Along history, we have a number of examples where misrule through secrecy and authoritarianism have led states to proliferate abuse, corruption and inefficiency, ultimately leading to regime failure.

Therefore, the digitization of public administration and implicit transparency provide citizens with easy access to information on issues of common interest, an aspect that must be the rule in all stages and procedures of the administrative decision, and confidentiality must be an exception regulated by law. Governments must adopt a digital transformation action plan and strategy after having previously analysed the revolutionary changes it imposes on the public sector.

We find with amazement that the enthusiasm for digitization generated by the pandemic is no longer at the same levels, although the great digitization projects await their implementation. However, in order to be able to take advantage of the opportunities conferred by the digital transformation strategy, a clear set of laws is needed to regulate this issue in detail. On a closer look, we find that the legislation is not adapted to the alleged needs of the digital transformation and there is increasingly intense talk of the act that "will block the digitization of Romania for 20-30 years",
because the state wants to centralize all digitization software of public institutions under the umbrella of a single authority (Deacu, 2022). "On March 17th, the Authority for the Digitization of Romania (ADR) launched for public debate a draft emergency ordinance by which it prepares to operationalize the Government Cloud, a project meant to replace the IT systems of ministries and public authorities, which will be financed with 500 million euros from the National Recovery and Resilience Plan (PNRR)". The government cloud will bring many digitalization benefits through the interoperability of public systems, making it easier for citizens to access all public services by using forms available in the cloud. (European Parliament, 2021)

This is why decision-making transparency and access to information of public interest constitute basic principles of public administration in democratic states allowing the improvement of the quality of public services, facilitating transparency and responsibility, as well as the profitability of the provision of public services and the functioning of the governing act in the interest of citizens, of the law, leading, therefore, to the increase of life standards quality.

Another crucial idea is forwarded by the European Transparency Initiative, which was debated by the representatives of the European Union in 2005, being adopted in the same year. The actual concept of the EIT was created "as a response to the need to reconnect Europe with its citizens and cover both the gaps, physically and mentally, because of which people hardly understand what Europe does and why it matters " (Popescu, 2007).

The European Transparency Initiative (ETI) is established with the intention of promoting transparency in policy making by: increasing access and openness to EU institutions; making the EU institutions accountable to the public; awareness about the use of the EU budget.

When the administration meets the citizens with information, considered as national assets, about what was happening within it, that process is called transparency. This publicly accessible information about activities, policies and decisions tells us that the public administration is transparent.

Involving citizens in the decision-making process generates a series of advantages. At the same time, the degree of involvement of citizens leads to greater accountability of public officials, with citizens having the right to be held accountable. Towards officials as well as a full and optimal functioning of the public administration. The wishes and aspirations of citizens are respected so that the public administration can receive full trust in front of the citizens. A study carried out by the Irish Presidency of the Council of the European Union within the European Network of Public Administration - EUPAN shows that social media tools have grown considerably in public administration.

4. Research methodology

In order to see the level of digitization within Caraș-Severin’s towns and communes, we conducted a survey based on a questionnaire, applied to all 78 UATs of the county.

The main objective of the research was to study the level of digitization in the Mayor’s Offices of Caraș-Severin county.

To achieve the objective, a questionnaire was created and distributed within the UATs of Caraș-Severin, in the online environment. The period of the survey was November - December 2022, addressing people from the UATs in Caraș-Severin county.

The structure of the questionnaire is complex, comprising both closed questions with single or multiple answer options, and questions based on measurement scales, with respondents giving a score for the proposed criteria, according to the Likert scale, from 1 to 5.

The questionnaire consisted in a number of 22 questions, of which 18 were about content and 4 about identifying the respondent, the studied sample consisting of 31 respondents. Of these, 83.9% were from rural areas, and 16.1% from urban areas. Regarding the number of inhabitants of the respondents' UATs, 77.4% of the UATs have a number of inhabitants between 1000-5000, 12.9% have below 1000 inhabitants, 3.2% have over 40,000 inhabitants, like those with a number of inhabitants between 5001-10000, 10001-20000. The respondents are from localities such as Anina, Oravița, Ocna de Fier, Turnu Ruieni, Glimboca, Măureni, Fărlugi, Slatina Timiș, Bucoșnița or Băuțar.
5. Findings

The personnel who responded to the applied questionnaire hold the positions of mayor (41.9%), deputy mayor (9.7%), secretary general (19.4%), and others are civil servants (16.1%). There were also respondents who hold the position of public administrator, advisor, IT administrator or specialty inspector (3.2%).

*Figure no. 2. The position held by the respondents within the UATs*

![Position held by respondents](chart)

*Source: Realised by authors*

As regards the existence of the web pages and the presence on the social networks of the Mayor’s Offices, the situation is somewhat gratifying. 93% of respondents stated that their organizations have a website/URL, only 3.2% currently do not have such a system and the same percentage state that they intend to have one in the near future.

*Figure no. 3. Existence of a website/URL in the Mayor’s Offices*

*Figure no. 4. The existence of a Facebook/Instagram account in the Mayor’s Offices*

![Existence of website/URL](chart)

![Existence of Facebook/Instagram](chart)

*Source: Realised by authors*

As for the presence on the social networks Facebook, Instagram, etc., 71% of the respondents state that they are connected with the community also through these methods, 22.6% declare they currently have no such preoccupations, and 6.5%, although they are present on these networks, intend to become more active in the near future.
The respondents believe that the pandemic contributed to the digitization of the administrative system (51.6%), only 6.5% considering that it greatly influenced the mentioned aspect. Almost a third of the respondents (32.3%) declared that the Coronavirus pandemic influenced the digitization process to a certain extent (fig. no.5).

Furthermore, it should be noted that the respondents believe to a very high extent (41.9%) and to a high extent (35.5%) that digitization influences decision-making transparency, only 22.3% being of the opinion that it has a relative impact on it (fig. no 6).

The subjects believe that the human resources in the organizations in which they work are to a certain extent (41.9%) prepared to access various databases/software or special platforms, and just over a third (35.5%) believe that they are prepared to a high extent measure. On the other hand, only 12.9% declare that the human resource is very prepared in this regard, and 9.7% state that it is prepared to a low extent for accessing various databases/software/platforms (fig.no 7).

Also related to human resources, the respondents declare that the current skills of the employees in the organizations they belong to, related to the use of IT equipment, are at a high (45.2%) and medium (48.4%) level, only 6.5% of them being of the opinion that the human resource has low skills in this regard.

Respondents largely believe (45.2%) that employees under 45 have higher skills in using IT equipment, 16.1% of them strongly believe this. 29% of respondents believe to a certain extent that younger employees have higher skills in the use of IT equipment, and 9.7% believe to a low extent that younger employees (under 45) have higher skills in the use of IT equipment (fig. no 8).
Moreover, as regards the human resource in the organization, the subjects also identified some barriers that slow down the development of its skills. Thus, 61.3% of the interviewees identify the reluctance of human resources to change as an obstacle in the development of skills, 51.6% identify the lack of funding for carrying out specialization courses, the purchase of modern IT equipment, 41.9% choose the limitations given by the equipment currently used, and 32.3% consider the low interest of employees responsible for streamlining activities as a barrier. On the opposite pole, only 3.2% believe that old age of employees or the fear of losing their job due to the efficiency of processes represent obstacles in the development of the skills of the staff in the organization they belong to (fig. no. 9).

Unfortunately, only 25.8% of respondents stated that trainings for the development of digital skills were held in their organization in the last 5 years, 71% stating that no such courses were held in their organization. 3.2% specified that they do not know the situation regarding this aspect (fig. no. 10). However, it should be noted that almost half of the people surveyed would be willing to pay for digital skills development courses from their own sources. Almost 1/3 of the subjects are undecided regarding the mentioned subject, and 19.4% would not be willing to pay for such courses from their own sources. (fig. no. 11)
As for the provision of the organization with IT equipment, 80.6% of the respondents and 19.4% respectively consider it very important and important (fig. no. 12).

At the time of the questionnaire application, the autumn of 2022, 74.2% of the subjects considered that the endowment with IT equipment of the organization to which they belong is at an average level, 19.4% considered it at a high level and only 6.5% were of the opinion that the organization it is equipped with IT equipment at a very high level (fig. no. 13).

It seems that most of the respondents (38.5%) consider that the funds they would need for the appropriate endowment with IT equipment of the organization are between 20,000 and 50,000 lei, 29% believe that they would need amounts between 50,000 and 80,000 lei, and 19% of the respondents would need amounts over 80,000 lei for an appropriate endowment.

At the opposite pole, with a weight of 6.5%, are the respondents who believe that they would need amounts below 20,000 lei for an appropriate endowment, but also those who declare that the organization they belong to has all the necessary IT equipment (fig. no.14).
The budget allotted for the IT equipment for endowing the organization, according to the respondents, would be intended for desktops/laptops/all in one in proportion of 74.2%, for multifunctionals (51.6%), for printers, scanners, copiers in proportion of 48.4%, and for other types of equipment - 22.6%. Only 6.5% of the respondents believe that it is not necessary to purchase IT equipment because the organization they belong to already has all the necessary equipment.

When it comes to the dedicated applications and the support activities for which they are used, most respondents (87.1%) state that they use them for accounting services, human resources (58.1%), urban planning (29%), document archiving (19.4%) or management (16.1%). Dedicated applications are used the least for logistics activities (6.5%) or public procurement and civil status and social assistance services (3.2%) - fig. no.16. Also, a number of services provided by the Mayor’s Offices show a higher or lower degree of digitization. Thus, according to the answers of the respondents, the least digitized services are requesting, tracking and obtaining various documents, obtaining authorizations/agreements/notices, but especially online appointments. Although still at a low level, according to the respondents, the payment of fiscal obligations, as well as the registration and tracking of the status of the resolution of requests/notifications, are somewhat more digitized.
We know that it is not enough for Mayor’s Offices to offer digitized services, but citizens must also support it by opening up about the use of various platforms to access public services. Thus, from the centralized answers, it seems that the availability of citizens to use various platforms is at a medium level (61.3%), 16.1% consider the availability of citizens to access the platforms low and 9.7% think it very low. Only 12.9% believe that citizens would be willing, to a high extent, to use various platforms to access the services provided by the Local Public Administration (fig. no. 17).

Figure no. 17. Respondents' perception about the availability of citizens regarding the use of various platforms

![Figure 17](image)

Source: Realised by authors

In this respect, some of the Mayor’s Offices would have ongoing programs to educate citizens in order to use IT equipment (6.5%), and over a quarter intend to hold such courses in the future (25.8%).

So, in order to have the desired results in terms of digitization, the involvement of both parties is needed: the service provider, on the one hand, and their beneficiary, on the other hand. The way in which they manage to find the middle way to create a win-win relationship depends on the level of education of the beneficiary, but also on good communication from the Mayor’s Offices. Digitization can simplify our lives, but it can also complicate it if we fail to adapt, in a minimal way, to the demands of the 21st century.

6. Conclusions

Society is constantly evolving, and each of us must keep the pace. This applies to all entities, from individual to individual, from individual to organization. If the two sides fail to find a common denominator to solve the various issues, the problems, already enough, will multiply and make our lives even more difficult.

All the changes that have come over time have had the role of facilitating our various activities. Thus, if we have moved from the manual performance of various tasks to mechanization, evolution taking its course, in the 21st century it is the time of computers, of artificial intelligence, so it is time to use technology properly.

In the idea of facilitating activities, digitization is present everywhere around us. We are one click away from buying a trip to the other side of the world, buying plane tickets, clothes, household appliances, making a payment to an acquaintance or accessing other services that are available through the Internet. Everything is interconnected, and if we know how to use this to our advantage, we will enjoy more free time, and also benefit from the ease of purchases.

Our study proves once again that digitalization can make our work easier and allows us to access various services in a moment, however there should be availability and openness within each of us. If LPAs make digitized services available, it is up to us to use them to our advantage.

7. References


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