

Digital Transformation and Its Effects on Citizen Engagement: A Case Study of DGASPC 5 and Sector 5 Residents

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Abstract. *The General Directorate of Social Assistance and Child Protection Sector 5 (DGASPC 5) in Romania, like many public institutions around the world, is going through a digitization process to increase its operational efficiency and improve its relationship with its employees. The digitalization process in DGASPC Sector 5 started with the introduction of basic digital tools such as e-mail communication and electronic document management. The aim of these tools was to reduce dependency on paper-based systems and improve record keeping. In this context, digitization refers to the adoption of digital technologies to streamline processes, improve communication and provide better access to information. The main aim of the research is to determine the impact that digitization has on the relationship between the public institution and the citizens. Thus, the authors will focus in particular on their relationship with DGASPC Sector 5. Therefore, the authors' aim is to investigate how digitization and communication technology are used in the interaction between public institutions and citizens, in order to finally determine the degree of citizen satisfaction with digitization and which aspects should be improved. Furthermore, due to the fact that nowadays information is at everyone's fingertips via mobile phone or computer, citizens of sector 5 have access to online information provided by DGASPC Sector 5.*

Keywords: digitization, social assistance, public institutions, citizens.

Introduction

The main purpose of the research is to determine the impact that digitalization has on the relationship between the public institution and the citizens, thus the author will focus specifically on the relationship it has with the citizens of sector 5. Thus, the author aimed to investigate how digitization and communication technology are used in the interaction between the public institution and the citizens, in order to finally determine the degree of citizen satisfaction with digitization and which aspects should be improved.

Through this research, the authors will be able to analyze the impact of the use of the software program on the efficiency and transparency of the public institution in its interaction with the citizens and will determine the degree of satisfaction and perception of citizens regarding these services, in order to determine which aspects should be improved in this interaction. However, an important aspect that should be analyzed in this research is the challenges and opportunities of using technologies in the relationship between public administration and citizens.

The Current Stage of Digitalization in DGASPC sector 5

Information technology promotes the enhancement of relations with citizens and the efficient provision of public administration, through the efficient communication that has been realized

(Iațco, Borș, 2021, p. 55). The digitization of DGASPC Sector 5 began with the implementation of some digital elements, such as communication through email, the use of electronic documents (Neagoe, I.D. & Deselnicu, D.C. 2024).

The intent of these initiatives was to eliminate reliance on manual, paper-based systems and to improve the accuracy of record keeping. Furthermore, public institutions realized that most public policies must be made in partnership with citizens and their own employees so that gradually models and methods for governance were implemented that were specifically geared to citizens, who were found to be more responsive to the expectations of the public administration but also more open to transparent governance (Iațco, Borș, 2021, p. 56).

These and other collective goods are transferred to an information and communication society. In the same breath, SSA recognized that the use of information communication technologies (ICTs) has brought about a distinct change in the way the relationship and the use of the administration and the exercise of citizenship in relation to public power are carried out (Moore, M.H. 1995).

Digital reform in the public sector, such as at DGASPC (Directorate General for Social Assistance and Child Protection) Sector 5, is a key element in improving services, bringing transparency, and engaging with the citizenry. According to the existing data and the conclusions of the study, regarding the level of digitalization existing in DGASPC Sector 5, we can speak about the stage of adoption, the challenges, and the opportunities (Neagoe, I. D. & Deselnicu D. C. 2024).

The impact of the digitalization of DGASPC 5 on the citizens of sector 5

Research shall also focus on the manner in which certain instruments and specific technical means, such as online platforms, mobile applications, electronic services, or any other digital instruments that enable the interaction between DGASPC Sector 5 and citizens, are being utilized.

The objective of the authors is to assess the influence of the use of technologies on the efficiency and transparency of public administration and to assess the satisfaction and perception of employees in relation to these services, in order to verify what operates well and what can be improved in this relation. Despite this, it's an interesting aspect to be examined in this research how the problems and the duties of institutions are faced in the relationship with citizens of sector 5 (Neagoe, I.D. & Deselnicu, D.C., 2024).

The authors caution us against romanticizing the effects, and indeed they repeatedly emphasize that current practice has shown that they may be nullified or softened by many hurdles (Trandafir, 2021, p. 1). These barriers consist in the inability of part of social categories to benefit from the new services provided by the information society, be it because of the lack of appropriate communications infrastructure or access terminals, or of the necessary culture to use them appropriately, or for tariffs charged being hardly bearable in relation to individual revenues (Trandafir, 2021, p.1).

The digitization in DGASPC Sector 5 made a radical transformation, notably in front of citizens. Citizens had easier and faster access to public services via digital platforms, and the uptake of citizen-focused management models promoted citizen involvement in developing and practicing policy and governance.

The digitization in DGASPC Sector 5 has changed the relations of citizens with public companies. It increased access to services, offered greater transparency, was more efficient, and also helped to build trust, and severely at the same time, of course, engagement and collaboration. For the citizens, these brought faster reactions to their requests, less bureaucracy, and better means

to problem-solving, which resulted in a good relationship with the public administration (Neagoe, I.D. & Deselnicu, D.C., 2024).

The use of technology in the public sector has been one of the most researched areas of recent time owing to the worldwide trend of e-governance. Writers have assessed the influence of web-based applications, mobile apps, e-services, and other digital methods to improve the efficiency, transparency, and accessibility of public authorities.

The use of these information technologies is typically placed in the larger context of e-government, a term used to describe the use of information and communication technologies (ICTs) to enhance the delivery of public services and the engagement of citizens (Gil-García & Pardo, 2005; Heeks, 2006).

The following literature summarizes the main advantages of digital transformation in the public sector. First, the use of ICT applications can simplify internal administrative mechanisms, eliminate bureaucracy, and facilitate service delivery (Bannister & Connolly, 2011). The second one is that digital technologies can improve transparency by allowing citizens easier access to information and monitoring of public administration in a real-time manner (Bertot, Jaeger, & Grimes, 2010). Thirdly, e-services may activate higher levels of citizen participation and involvement that can help citizens to act in a more efficient manner towards public agencies (Sæbø, Rose, & Skiftenes Flak, 2008).

But the road to the adoption of such technologies is not smooth. So the alleged merits of the digital transformation are exaggerated and, in practice, limitations may hinder them (Trandafir, 2021). These barriers include the digital divide – the gap between those who have access to ICTs and those who do not or who have poor access, for financial, infrastructure, or digital literacy reasons (van Dijk, 2006). Moreover, high costs of digital services may exclude some social categories, especially those with a lower income (Trandafir, 2021). These difficulties illustrate the importance of the balance in the role of technology in the public administration context, especially when they face access and affordability-related issues.

Synthesis of Viewpoints

Although digital transformation in the PA promises to add significant benefits, researchers have different views on its challenges and risks. Some, like Heeks (2006), contend that for e-government initiatives to succeed, it requires large investments in infrastructure, capacity building, and reforms in regulations.

Others, such as Trandafir (2021), warn against overstating the advantages of technology, particularly in situations where structural inequalities restrict access and participation.

It is an ongoing debate in the literature: efficiency versus inclusion. However, digital instruments tend to functionally refine existing administrative processes, while at the same time, they can widen existing inequalities if implemented without equity as a fixed point of binocular vision (Bertot et al., 2010). This tension highlights the importance of taking into account both the technical and the social aspects of digital transformation.

Methodology

This is a quantitative study in approach. The research design is a questionnaire survey, and the research instrument is a self-administered online questionnaire to explore the issues sourced from the research questions and objectives.

Research questions: The main research question that motivated the author in his scientific journey is: **Q: What was the impact of Society 5.0 digitization in relation with the citizens of Sector 5 developed on the DGASPC Sector 5?**

To address this research question, the author formulated the following secondary research questions:

Secondary research question Q1: How satisfied are the citizens from Sector 5 with the technologies provided by DGASPC Sector 5?

Secondary research question Q2: How user-friendly and easy to use is the DGASPC Sector 5 website for citizens?

Secondary research question Q3: What are the major strengths and weaknesses of the online platform of DGASPC Sector 5 in the interface between the public institution and the citizens (registration form, access points and services, human resources)?

Hypotheses

Accordingly, this study reveals some research hypotheses that the authors want to test as the following:

Hypothesis H1: If the people living in Sector 5 are satisfied with the technologies deployed by DGASPC S5, they do not use these services at a higher rate.

Hypothesis H2: If consumers adopt the DGASPC Sector 5 online service over using on-site services, their processes would be faster.

The prime aims of the study are:

- The evaluation of the satisfaction degree of SC Sector 5' citizens regarding those technologies made accessible by DGASPC Sector 5;
- To establish the rate of use of the DGASPC Sector 5 IT-based online information technologies;
- To determine the main strengths and weaknesses associated with the use of IT for the relationship between public administration and the citizen.

The research tool was a questionnaire. The questionnaire comprised 19 close-ended types of questions, regarded regarding the depth of how satisfied the citizens of Sector 5 are with the digitization of services within the institution. The Sector 5 population was administered the questionnaire, which contained 19 closed-ended questions with only one or more alternatives. Data were collected from September to October 2024, using Google Forms.

Data analysis and research results

This section will present the data analysis of the results collected through the application of the questionnaire.

4 To what extent do you know the digital services offered by DGASPC Sector 5?
103 responses

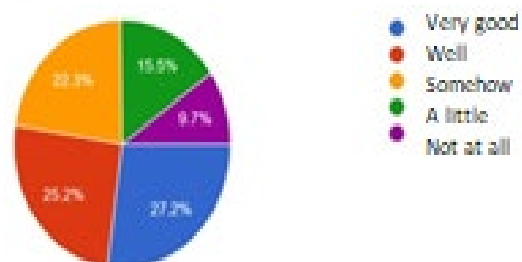


Figure 1. Question related to the degree of knowledge regarding the digitalization of DGASPC 5

Source: Authors' own research results/contribution,

Familiarity of the digital services provided by DGASPC Sector 5 by the 103 interviewed persons is illustrated in figure 1. (Answers are grouped under five headings):

- Very good: 27.2% are very familiar with DGASPC S5's digital services.
- Well: 25.2% are very familiar with these services.
- Somehow: Only 22.3% sort of know.
- A bit: 15.5% have at least some familiarity with those services.
- Not familiar at all: 9.7% are not familiar at all with digital services provided by DGASPC Sector 5.

From this, it can be seen that most respondents have some level of familiarity with the services, the most popular being 'very familiar' with the services (27.2%). Yet a substantial number aren't that well-versed, and some don't even have much of an idea (22.3%). At the same time, a smaller share also are not too familiar (15.5%) or not at all familiar (9.7%) with these digital services, indicating that better information or training on digital services may be necessary.

5. Have you used any of the digitization system DGASPC Sector 5?
103 responses

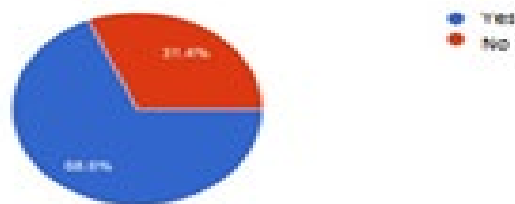


Figure 2. Have you used any of the digitization system DGASPC Sector 5?

Source: Authors' own research results/contribution.

The spread shows that most of the respondents are, at some level, familiar with the digital services of the DGASPC Sector 5, around (68.6%) are probably already regular or less regular users. However, a substantial percentage of users (31.4 percent) use these services infrequently or have not done so at all, indicating that some users may require greater awareness, training, and support to take full advantage of these digital tools. This distribution calls for ongoing promotion work to standardize the usage of digital services and maybe enhance their user experience, a factor that may tend to enhance them in greater numbers.

The analysis of this chart provides us with an understanding of the knowledge and frequency of the access to the digital services of DGASPC S5, identified by the survey participants. The authors further details these services by breaking down the percentages:

- Most are already familiar with digital services (68.6%) and, of these 68.6% who declared being at least somewhat familiar with the digital services provided by DGASPC S5, many are, it is very likely, frequent or occasional users of such services. This familiarity implies that the digital interventions are accessible and also material that is familiar to many, which may facilitate access to social care for most users.
- “We could have non-users – those who rarely or never use them – with almost a third (31.4%) of people that do not use digital services to a significant extent, so there are a proportion of the population who might not be maximizing their use of these apps.” This group could be less digitally literate or unaware that digital options even exist, or they may encounter other obstacles, like limited internet access or lack of devices.

Research questions

The main research question from which the author started the scientific approach is:

Q: How has the digitization of the DGASPC Sector 5 institution influenced the relationship with the citizens of sector 5?

To get the answer to this research question, the author constructed the following secondary research questions:

Secondary research question Q1: How satisfied are the citizens from Sector 5 with the technologies provided by DGASPC Sector 5?

Secondary research question Q2: How user-friendly and easy to use is the DGASPC Sector 5 website for citizens?

Secondary research question Q3: What are the major strengths and weaknesses of the online platform of DGASPC Sector 5 in the interface between the public institution and the citizens (registration form, access points and services, human resources)?

Assumptions

Testing of hypothesis H1. This is in accordance with the theoretical and empirical presumption 1, that citizens in sector 5 that are satisfied with the technologies provided by DGASPC S5 will use the services more. This assumption is likely in view of the fact that it derives from behavioral psychology and citizen satisfaction theories, which imply a significant association between satisfaction and use frequency, respectively.

Applies (further) to, among others, the customer satisfaction theory of rational decision-making – if people are satisfied with a product, they will (likely) continue to use it. Positive attitudes towards a product enhance buyer satisfaction and increase the likelihood of repetitive buyer behavior. Meanwhile, happy customers find services more valuable and are encouraged to repeatedly use them by establishing habits, relying on technologies that serve users' needs and form habits. It's simple: If you build tools that citizens find useful, they'll use them in their daily lives.

DGASPC Sector 5 will increase trust, confidence, and belief that technology would be easy to use, useful and accessible if such technologies were available. People are more satisfied when custom-made tools are designed to meet the particular requirements of a place, so they are more likely to get involved and stay involved.

Testing of hypothesis H2. If people use more the DGASPC Sector 5 website and not (only) the services in person, then things go faster, and this is indeed true for a number of well-known reasons of digital transformation and making things efficient in service delivery.

Digital efficiency vs. IRL efficiency: Automation is clearly a time saver on its own, as online workflows are frequently automated—saving time by reducing repetitive, manual processes. For instance, filling out forms on the web reduces the data entry and validation effort, and this can help to make administrative tasks faster.

Online: The online aspect of digital platforms means we get instant access to resources and tools, instead of waiting for appointments or for staff being available. High utilization of the website reduces the traffic in the premises of the Institution and thus, decreases the number of people in the waiting area (traffic in the Institution and in the waiting area is reduced), staff can concentrate on important work and not waste time on travel (go and come back), people do not have to go to the Institution (time saving) for the people and for the staff.

High usage across a large population of citizens means that feedback represents diverse experiences, leading to more comprehensive improvements and benefits on a broad scale. The opinions and suggestions of citizens have formed the basis for repeated updates to the official DGASPC Sector 5 website.

Limitations of the study

The study has two main limitations: a first limitation is related to access to information, which was restricted because certain data is secret or off-limits for public interest on the connection that exists between the inhabitants of Sector 5 and DGASPC Sector 5. The study faces limitations on access to some data since there is confidential or private interest not public.

Another limitation is that it is not possible to include all the citizens of Sector 5 to analyze the usage of technologies in the relationship that takes place between DGASPC Sector 5 and citizens.

These constraints deserve to be highlighted, which make the comparison impossible to do due to the relations of DGASPC Sector 5 with the citizens of Sector 5. The limited availability of confidential data and the lack of the possibility to survey the entire population may have led to underreporting and/or bias in results.

Conclusion

After conducting the study, we could see that they encompass both young persons and older people benefiting from the services provided by DGASPC Sector 5. The author concentrated on the use of the technology in the citizen-DGASPC S5 interaction, and we observed that, in spite of the age, the online services are always an alternative option for solving one question from the citizens.

The growth of technologies and internet use, in particular, through the introduction of online services, resulted in streamlining response times and limiting the queues at counters - the most frequently used services are benefits, allowances, incentives, home heating benefits, energy benefits and services for the disabled. Hence, residents of sector 5 are users of DGASPC Sector 5 services, above all of the family-based part.

Moreover, as everyone has access to information now, from a simple mobile phone or a computer, the inhabitants of sector 5 also have access to the online information provided by DGASPC Sector 5, as the case may be informative press releases, an informative of public interest and any other kind of information pertaining to decision-making transparency. But even though society is mostly digitized and well informed of and acquainted with information and computers technology, there is a part, of society or groups of people, that do not have enough knowledge of how to use the internet or computer or are not capable to create an account in this platform. While technologies are more and more involved in requests and communications between citizens and the public institution, services are still sometimes accessed online by citizens of sector 5 as regards DGASPC Sector 5. But there were natives of the 5th district who had no problem in connecting to the site set up by DGASPC 5.

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