Citizens' Attitudes towards Electronic Administrative Services in Bulgaria

Mariela Stoyanova [1]

Abstract: The development of the processes of provision and consumption of electronic administrative services (EAS) in Bulgaria is an essential part of the digital transformation of the public sector as a whole. The aim of the publication is to examine the attitudes of part of the society in the country regarding the paperless application and receipt of services from the municipal administrations. The methods used to achieve it are GAP analysis, induction, deduction, study of secondary sources and data from conducted empirical research. As a result, by means of a comparison of the generated array of information and the synthesized analytical units, essential aspects of the relationship territorial affiliation-attitudes towards the consumption of EAS in Bulgaria are deduced.

Key words: digitization, electronic administrative services, public sector, citizens` attitudes

JEL: H7, O2

Introduction

The needs of modern society, the dynamics and constant technological development internationally, inevitably shape the digital transformation of society in the various aspects of its activity. After the prolonged physical distancing imposed in connection with the pandemic situation of 2020, these processes have significantly accelerated. While some business organizations relatively quickly took actions to increase the level of digitization of their processes, the public sector is lagging behind. The provision of electronic administrative services, as one of the main manifestations of e-government, occupy a significant place in this aspect.

Local administrations are closest to the people in terms of providing services and implementing public policies. One of the main requirements for the services they provide is that citizens have equal access to them. It is for this reason that it is extremely important that society is widely informed and strongly involved in the processes accompanying the

digital transformation of governments, especially at the municipal level. While in other countries at the level of public administration, analyzing large databases of information is on, in Bulgaria there are still problems with the implementation of electronic administrative services. The global trend is for EAS to be increasingly integrated, modern and complex compared to their predecessors (Layne & Lee, 2001). The approach that puts the citizens and their needs in the center is increasingly launched. In view of the abandonment of Bulgaria in these processes, it is of research interest to analyze the attitudes of civil society and its awareness regarding the electronic administrative services provided by the municipalities in the country.

Literature review

A retrospective look specifically at the development of e-government is given by some researchers as this provides an opportunity for a deeper analysis and

[1] Chief Assist. Dr. Mariela Stoyanova
Department of Strategic planning
Tsenov Academy of Economics – Svishtov, Bulgaria
ORCID: https://orcid.org/0000-0003-2849-288X
email: m.stoyanova@uni-svishtov.bg

identification of the current state and future prospects (Charalabidis, et al., 2019) (Chen, et al., 2006) (Baumgarten & Chui, 2009). They generally divide evolution into two main waves. The first is related to automation of processes and basic penetration of ICT in the complex internal and external processes of public structures. The second wave, for its part, already binds in closer and more interconnected way Internet resources, social networks and personal engagement of users. There is also a strengthening of the transparency and accountability of the institutions to the citizens. Other authors examine the evolution of e-government in separate generations (Komati, et al., n.d.). The common between the various views is the conclusion that the provision of electronic administrative services alone is no longer sufficient. Internationally, there is a trend towards personalization of the service according to the needs and expectations of the users. Some countries are significantly ahead of others in this regard, such as Denmark, Estonia, Sweden, which are among the leaders in the development of digital services provided to their citizens according to indices such as Digital Economy and Society Index (DESI) and Digital Government Index (DGI) (OECD, 2020) (European Commission, 2022). Synthesized key characteristics of variants of e-government generations found in the literature are presented in the table. 1.

Table 1: E-government Generations Evolution

E-government Generations	Key Characteristics
Analogue government	Face to face services
1.0 e-government	Individual service delivery
2.0 e-government	Scaling service delivery
3.0 e-government	Efficient services delivery
Digital government	Whole-of-government service delivery
Personalised digital government	Whole-of-life service delivery

Source: Author`s interpretation

Regarding the evolution of e-government, the issue of conducting a two-way relationship between institutions and service users is increasingly relevant. Inequalities are not only between the developments of various countries, in terms of the digital transformation of the public sector, but also significant differences between individuals in a society (Atkinson , 2018). This fact became particularly noticeable during the pandemic period, when some groups were marginalized due to a lack of technology or digital skills (Zheng & Walsham, 2021). Some authors consider the main problems facing the development of EAS in two directions - accessibility gaps and user gaps, with the first affecting the level of services offered by public institutions, and the second the possibility and desire of citizens to use electronic services (Negreiro, 2015). The research in this article is directed precisely to the second category in an attempt to establish the attitudes of users towards the use of electronic services. At the same time, this also provides an opportunity to identify some key user gaps of civil society in Bulgaria in the context of their skills in using EAS.

At the EU level, similar studies have been conducted in recent years, but on a wider scale and scope, both of the sample and of the questions asked, referring to citizens' attitudes towards digitalization in general (European Commission, 2020) (European Commission., 2017). Their results are also reflected in the E-Government Benchmark, which compares the countries in the Community based on the electronic public services provided by them by evaluating so-called life events based on

specific indicators (European Commision, 2021). Taking into account the tendency to raise the level of the general use of digital solutions, some authors reasonably emphasize the urgent need to ensure that all citizens have the skills and the opportunity to use ICT technologies to continue to be an indispensable part of the social and economic state (McDonnell, et al., 2022).

Methodology

For the needs of the research, a survey method was used to collect primary data, as the questionnaire was distributed electronically, randomly to 250 adults residing in the territory of the Republic of Bulgaria. The

questions are of a closed type and are grouped into three main categories: Contact information, Digital skills, competencies, technologies, and Electronic administrative services provided by municipalities in Bulgaria. Using the respondent method, 36 completed surveys were received. The study was conducted in the period October-November 2022. The purpose of the study is to accumulate data on the opinion and expectations of citizens regarding the provision of electronic administrative services by municipal administrations. The methodology of the empirical study is standard and is graphically presented in fig. 1
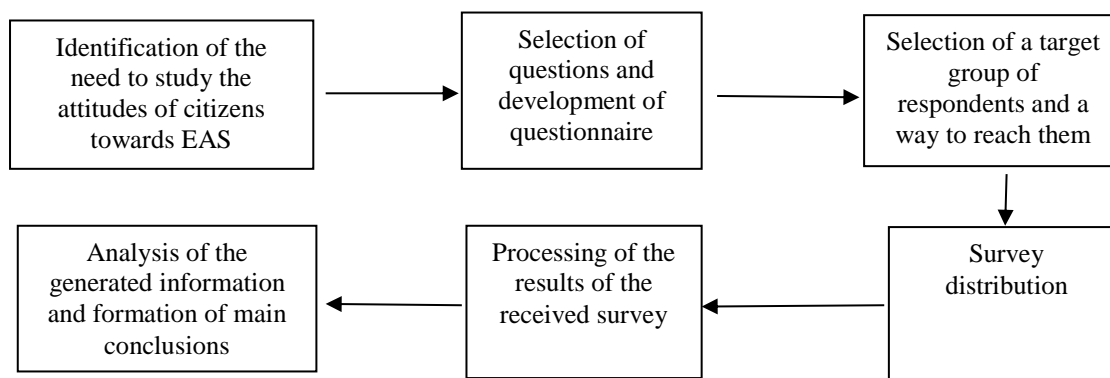
Source: Adapted from Ruskova, S. (2011). Metodika za izsledvane na potrebitelskite reakcii v usloviqta na stagniran pazar.Nauchni trudove na rusenskiya universitet, 50, 142. http://conf.uniruse.bg/bg/docs/cp11/5.1/5.1-25.pdf

Figure 1: Methodology of an empirical study of citizens' attitudes towards the consumption of EAS in Bulgaria

In the first preparatory stage of the research, the need to conduct it is identified based on a thorough literature review on the subject and expert observation of data from secondary sources. After applying GAP analysis, induction, deduction and translation, the conclusion was reached that the research of the expectations and opinions of citizens, as one of the main groups of users of EAU, is of key importance for tracking the processes of digitization of public services. The preparatory phase of the study also refers to the selection of appropriate questions, the answers of which will be used for both quantitative and

qualitative analysis. With the selection of a target group of respondents and the way to reach them, the first preparatory stage ends.

The second stage of the empirical research begins with the process of distributing the survey electronically, for which purpose a link to the ArcGis platform was used, in which the received responses were accumulated. After processing the results, which were formed from 36 individually generated survey cards, the information was analyzed using a standard scientific approach. As a result, key aspects forming basic knowledge about the expectations and attitudes of citizens towards

the provision of electronic public services by municipal structures were identified.

Results and discussion

The results of the conducted empirical research, for the purposes of this article, were generated based on a survey distributed to 250 adults in the territory of the Republic of Bulgaria, of which 36 declared their commitment. The low level of the number of respondents creates a prerequisite to assume that the topic of electronic administrative services is still not sufficiently recognizable in the country. Accelerated digitization processes in other areas such as online sales, social networks, remote work mode, communication, etc. create a higher engagement among citizens compared to the consumption of EAS.

The profile of the respondents is about 58% female and about 52% in the age range of 31 to 40 years old. The level of education obtained is mostly secondary and master's, with 41%

and 38%, respectively. The majority of respondents (78%) reside in Northern Bulgaria.

Figure 2 shows the results of the question "For what purpose do you use the Internet most often?" with about 38% of respondents stating that they use the Internet mainly for work, and the smallest group - about 5% for communication. There is a preference among users to use a mobile phone as a device to access the Internet (70%), which clearly shows the need to direct the government's efforts to the development of mobile applications for the provision of electronic administrative services. At the moment, the main part of the proposed EAUs are accessible through web-based platforms, but not through applications. Examples in this regard of countries like Denmark can be useful to include and engage precisely the citizens who prefer to work through mobile applications (Ministry of Foreign Affairs of Denmark, 2022)
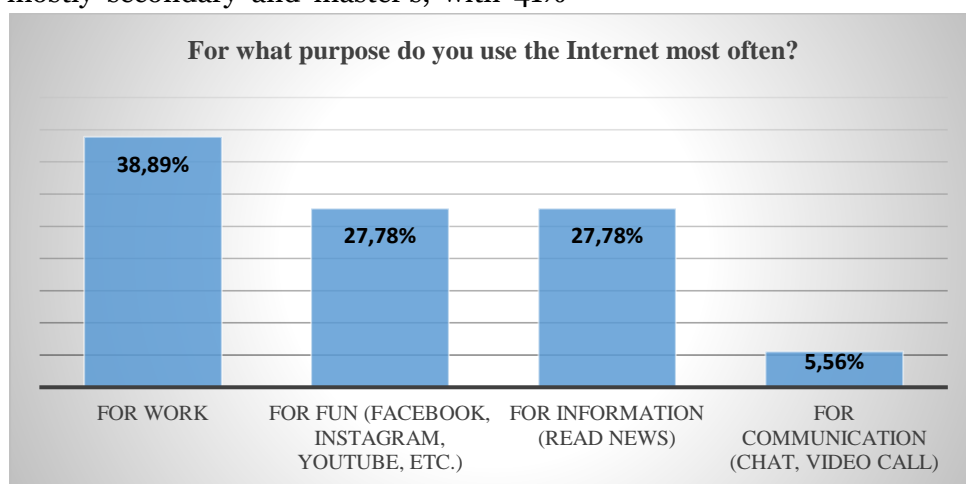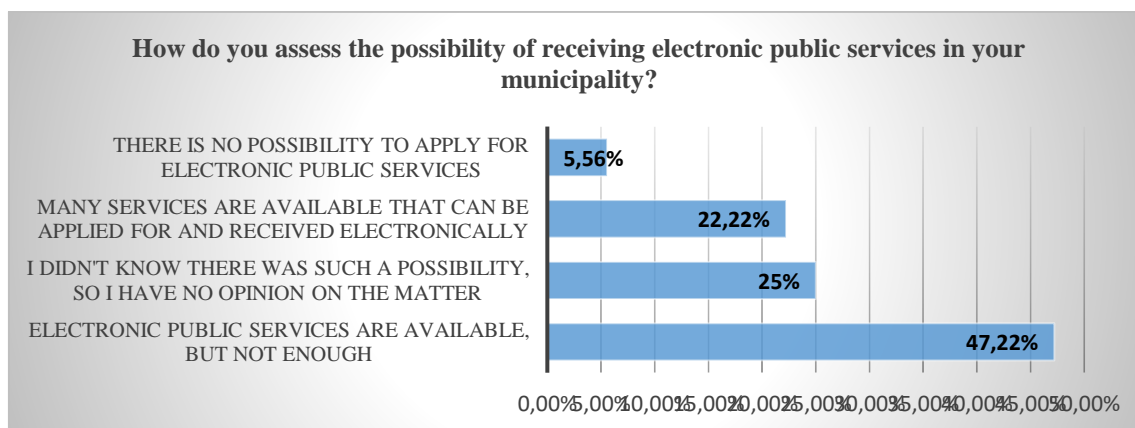

Source: Author`s research

Figure 2: Results of question „For what purpose do you use the Internet most often?"

Despite the stated more professionally oriented nature of the respondents in the research, in response to the question "How do you assess the possibility of receiving electronic public services in your municipality?" (see fig. 3) 25% of the respondents said that they are not enough informed about the possibility of using EAS

and have no opinion. The results of the question indicate a very significant problem related to communication between municipal administrations and citizens. The lack of sufficiently effective channels and ways to reach adequate and timely information to the public largely hinders the use of EAS.

How do you assess the possibility of receiving electronic public services in your municipality?

- THERE IS NO POSSIBILITY TO APPLY FOR ELECTRONIC PUBLIC SERVICES: 5,56%
- MANY SERVICES ARE AVAILABLE THAT CAN BE APPLIED FOR AND RECEIVED ELECTRONICALLY: 22,22%
- I DIDN'T KNOW THERE WAS SUCH A POSSIBILITY, SO I HAVE NO OPINION ON THE MATTER: 25%
- ELECTRONIC PUBLIC SERVICES ARE AVAILABLE, BUT NOT ENOUGH: 47,22%
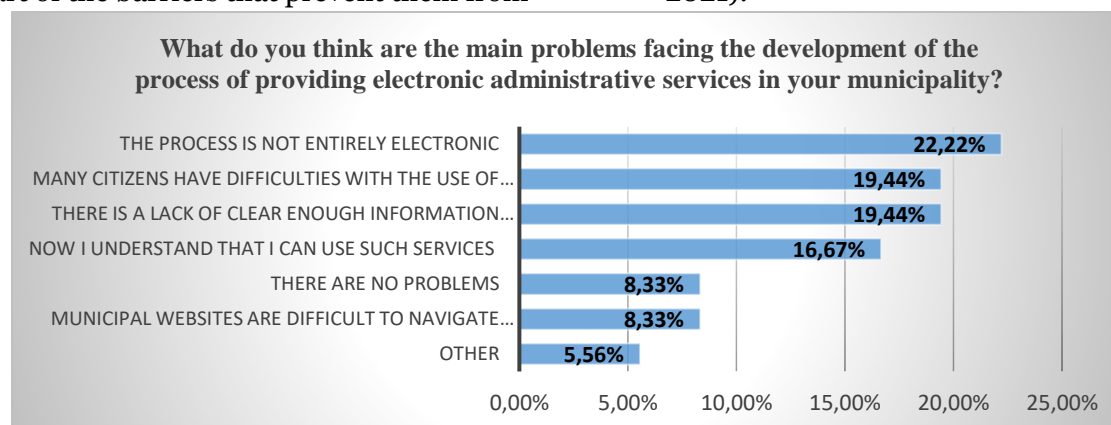
Source: Author`s research

Figure 3: Results of question „How do you assess the possibility of receiving electronic public services in your municipality?"

Fig. 4 shows that respondents point out as one of the main problems facing the development of the process of providing electronic administrative services namely the lack of sufficiently clear information, about 19% of the respondents. The lack of a fully digital process, on the other hand, was indicated by about 22% of respondents. The question "Do you think there is a need to be informed in more detail about the possibilities and ways through which the municipality provides electronic services?" received a categorical answer, with about 91% of the respondents saying that they need more information about these processes.

In this regard, the respondents shared that part of the barriers that prevent them from actively using EAS are related to the lack of a unified mechanism for their provision, the low level of trust in the security of their personal data on the network and the presence of some additional requirements for certain services such as the presence of an electronic signature. The latter is connected, apart from more specific knowledge, and with a certain financial burden, which is at the user's expense.

The international good practices examined during the research clearly emphasize the key importance of a single electronic ID to be provided free of charge to all citizens, as is the case in Estonia and Denmark for example (European Commission, 2021) (Pappel, et al., 2021).


What do you think are the main problems facing the development of the process of providing electronic administrative services in your municipality?

- THE PROCESS IS NOT ENTIRELY ELECTRONIC: 22,22%
- MANY CITIZENS HAVE DIFFICULTIES WITH THE USE OF…: 19,44%
- THERE IS A LACK OF CLEAR ENOUGH INFORMATION…: 19,44%
- NOW I UNDERSTAND THAT I CAN USE SUCH SERVICES: 16,67%
- THERE ARE NO PROBLEMS: 8,33%
- MUNICIPAL WEBSITES ARE DIFFICULT TO NAVIGATE…: 8,33%
- OTHER: 5,56%

Source: Author`s research

Figure 4: Results of question „What do you think are the main problems facing the development of the process of providing electronic administrative services in your municipality?"

The questions asked in the questionnaire, in addition to establishing what the citizens expect from the administration regarding the EAS, also aim to identify to what extent they are prepared for active participation in these processes. It was in this connection that their opinion and self-assessment was asked for the question "How do you rate your digital skills?". About 67% answer that they have very good skills and use them actively on a daily basis, about 28% say that they do it satisfactorily, but not at a professional level, and only about 5% say that they use technology mainly for entertainment.
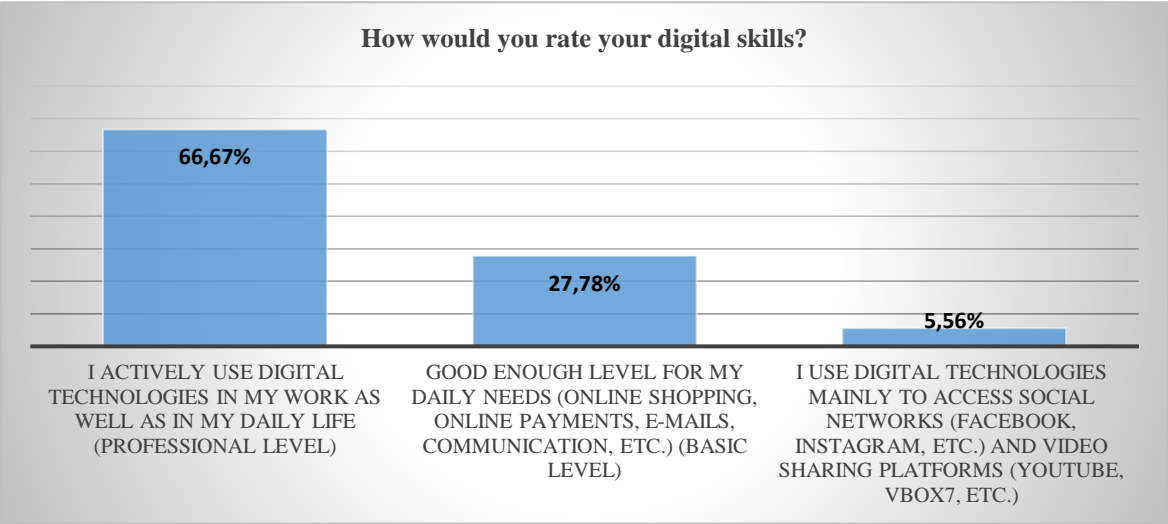
Source: Author`s research

Figure 5: Results of respondents' self-assessment of digital skills

Despite the advantages that the respondents outline in using EAS, such as speed and saving time, not a small part of them state that they prefer counter services - about 68%. The main reasons for this are the need for personal assistance and consultation when filling out documents and the insufficiently well-developed electronic services that are offered.

Conclusion

The development of e-government in Bulgaria, in the provision and consumption of electronic administrative services, still faces serious challenges that prevent the more intensive development of these processes. On the one hand, the need for a more active policy for the development and enrichment of EAS and ways of providing them to users can be considered. On the other hand, there are identified deficits on the part of citizens, both in terms of their trust in the protection of their personal data in the Internet space, and their uncertainty related to taking actions that are not so recognizable to them. The aspects in which it is key to make more efforts are related to improving communication between institutions and citizens, developing a unified mechanism for access to electronic services and guaranteeing the inviolability of the flow of information. Today's dynamic conditions and the development of technology, as well as the progress of some countries in their processes of digitization of the public sector, inevitably build an ecosystem in which adaptation to these circumstances is key to the development of each country.

Acknowledgements

References

1. Atkinson , A., 2018. *Inequality : What Can Be Done?*. Cambridge, Massachusetts: Harvard.

2. Baumgarten, J. & Chui, M., 2009. E-government 2.0. *McKinsey Quarterly, 4(2)*, pp. 26-31.

3. Charalabidis, Y., Loukis, E., Alexopoulos, C. & Lachana, Z., 2019. *The Three Generations of Electronic Government: From Provision to Open Data and to Policy Analytics*. San Benedetto Del Tronto, Italy, Electronic Government: 18th IFIP WG 8.5 International Conference, EGOV 2019.

4. Chen, Y. N., Chen, H. M., Huang, W. & Ching, R. K., 2006. E-government strategies in developed and developing countries: An implementation framework and case study.. *Journal of Global Information Management,* 1(14), pp. 23-46.

5. European Commision, 2021. *eGovernment benchmark 2021*. [Онлайн] Available at: https://digital-strategy.ec.europa.eu/en/library/egovernment-benchmark-2021 [Отваряно на 2022].

6. European Commission., 2017. *Special Eurobarometer 460: Attitudes towards the impact of digitisation and automation on daily life,* неизв.: European Commission..

7. European Commission, 2020. *Eurobarometer 503:Attitudes towards the Impact of Digitalisation on Daily Lives 2019,* неизв.: European Commission.

8. European Commission, 2021. *Digital Public Administration factsheet 2021 Denmark*. [Онлайн] Available at: https://joinup.ec.europa.eu/sites/default/files/inline-files/DPA_Factsheets_2021_Denmark_vFINAL.pdf [Отваряно на 2022].

9. European Commission, 2022. *The Digital Economy and Society Index (DESI)*. [Онлайн] Available at: https://digital-strategy.ec.europa.eu/en/policies/desi [Отваряно на 11 2022].

10. Komati, F., Abboud, J., Hassouneh, W. & Amin, S., н.д. *The Journey to Digital Government 5.0*. [Онлайн] Available at: https://www.pwc.com/m1/en/publications/documents/the-journey-to-digital-government-part-one-1.pdf [Отваряно на 11 2022].

11. Layne, K. & Lee, J., 2001. Developing Fully Functional E-government: A four-stage model. *Government Information Quarterly,* 2(18), pp. 122-136.

12. McDonnell, A., Verdin, R. & O`Reilly, J., 2022. *EU Citizens' attitudes to digitalisation and the use of digital public services: Evidence from Eurobarometers and eGovernment Benchmark,EUROSHIP Working Paper No. 12,* неизв.: European Commision.

13. Ministry of Foreign Affairs of Denmark, 2022. *The key to Denmark's digital success*. [Онлайн] Available at: https://denmark.dk/innovation-and-design/denmarks-digital-success [Отваряно на 2022].

14. Negreiro, M., 2015. *"Bridging the digital divide in the EU." EPRS-European Parliamentary Research Service, ENPE 573.884, Briefing*. [Онлайн] Available at: https://www.europarl.europa.eu/RegData/etudes/BRIE/2015/573884/EPRS_BRI(2015)573884_EN.pdf [Отваряно на 2022].

15. OECD, 2020. *Digital Government Index 2019*. [Онлайн] Available at: https://www.oecd.org/gov/digital-government/digital-government-index-2019-highlights.pdf [Отваряно на 2022].

16. Pappel, I., Tsap, V. & Draheim, D., 2021. The e-LocGov Model for Introducing e-Governance into Local Governments: An Estonian Case Study. *IEEE Transactions on Emerging Topics in Computing 9, 2*, p. 597–611.

17. Zheng, Y. & Walsham, G., 2021. Inequality of what? An intersectional approach to digital inequality under Covid-19. *Information and Organizations,* 1(31).