

The Most Preferred Portal for the Use of E-Government Services

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Abstract This Currently, Communication is important, citizens can communicate with the state through different means. One of the access points is Central Government Portal (CGP) that serves as access to e-government services. Primary survey was aimed on the most used access points of our e-Government. The results of the survey have shown that slovensko.sk is the most used portal. On the other, other portals are also frequently used what raises a question what way of identification is more citizen friendly and whether the current state of identification is appropriate for everyone.

Keywords Digitalization, Slovensko.sk, e-Government

JEL R50, R590, H540

1. Introduction

Slovak e-Government access points include Central Government Portal - slovensko.sk, specialized portal, Integrated citizen service point (IOMO) and client centers. These access point serve natural persons as well as legal persons, who are allow to use e-Government services. The aim of primary survey was to verified which portal is the most using and defined advantage and disadvantage e-Government services. Central Government Portal (CGP) is an information system which is used for electronic communication with particular authorizes and for access to all online services through a single-entry point, especially using internet and information and communication technology (ICT). The aim of CGP is to enable citizens to communicate with authorities by means of which ICT from one access single entry point only.

The main purpose of the portal is to guide users to particular public e-service along with the use of relevant information resources. Citizens are required to have their own electronic ID (eID), any of ICT devices such as, laptop or computer, reader for eID, internet, digital skills and central government portal software. CGPI is a portal providing information about e-Government, whose services in information can be shared among citizens. Electronic mailboxes are located at the CGP at slovensko.sk. There are loads of statistics there, which identify saving money such as sending, submitting and notifying sent electronically - see Table 1. [1,2,3]

Table 1. Financial saving by means of CGP

Year	Decision sent electronically	submissions sent electronically	notification sent electronically
	Savings in [€]	Savings in [€]	Savings in [€]
2019	57 913 022	6 826 858	8 456 325
2020	79 705 215	7 382 850	5 562 769
2021	79 891 383	6 219 816	4 265 345
Total for 3 years	217 509 620	20 429 524	14 445 439

Source: Slovensko.sk[online]. [cit. 2022-4-07]. Available on the internet:< <https://lnk.sk/jwK8>>, Own processing.

Among the main benefits that the e-services bring are saving time, financial savings, availability 24/7, all the services in single place and improving public access to open government data, streamlining and improving access to current, historical and future data, streamlining the provision of information and more.[1] Specialized public administration portals by means of which messages with one or more public administrations are possible include the following portals, such as: www.ejustice.gov.sk, finančná správa, www.eznamka.sk, www.portal.minv.sk, e-sluzby.zilina.sk, npz.sk and others. [4,5]

The client center is designed to provide comprehensive services to the public in one place, so that the services are equipped efficiently, quickly and increase the comfort of

citizens. Client centers have been built in each district in Slovakia. [6]

Subsequently, IOMO serves for assisted electronic communication of legal entities and natural persons with public authorities. The Ministry of Finance of the Slovak Republic is the administrator of the IOMO information system and operation. Besides, IOMO provides assisted access to CGP and the use of e-Government services for citizens and businesses. [7]

In addition, the access points to eGovernment services consist mainly of virtual or physical. On the one hand, The Virtual access points are CGP, specialized portals, call center and so on. On the other and the physical access points are IOMO, client center and so forth. Access points are used by both natural and legal persons to use e-Government services. [6, 8]

Table 2. Access components of eGovernment architecture

Access points to eGovernment services in Slovakia
Central Government Portal – (CGP) (Including electronic mailbox)
Specialized portals - www.ejustice.gov.sk , finančná správa, www.eznamka.sk , www.portal.minv.sk , e-sluzby.zilina.sk , Národný portál zdravia (www.npz.sk) and others.
IOMO – integrated citizen service point
Other access points: single point of contact (physical or electronic), call center, client center and others

Source: [4,6,7,8], [online]. [cit. 2022-4-07]. Available on the Internet: <combination of several source>, Own processing.

Access points are slovensko.sk, national health portal and so forth. For signing up to the access points is necessary to have eID with electronic reader because it is the only way to log in. It implies that, Slovakia only has one method of signing up into Central Government Portal. However, other European countries often use so-called mobile-ID in order to make available to modern services of a state for all citizens and all age categories. [9] E-Government services has in current state of some barriers. The Slovak citizen has access to electronic services under certain conditions. That conditions are essential to be used e-Government services. [10] Unless these conditions are met, they made barriers in the use of eGovernment services. (see table 3).

Central government portal. In order for a citizen to be able to use the electronic services of the Industrial Property Office, it is necessary to have an eID with an active BOK, digital skills, computer or laptop, network, card reader for eID and software designated by the state for the transformation of data from an electronic form into a PDF.

Table 3. Terms of use for eGovernment service

Conditions for using e-Government services	Types of electronic services that can be used for the conditions
Own an electronic ID card with (BOK)	Central Government Portal, Specialized portals
Digital skills	
Device - computer or laptop	
Network	
Card reader for eID	
Software	Central Government Portal

If a citizen wants to use all these services, it is necessary to satisfy all these conditions. Use of electronic services of specialized portals. Services can be divided into two categories, which are services without the use of eID and readers, for instance eznamka.sk, katasterportal.sk and so on. Consequently, it is necessary to use eID with a reader for the service for instance CGP, e-sluzby.zilina.sk etc. The level of digital skills of a citizen determines what services they are able to use. The IOMO service can be used without the mentioned conditions (see Table 3). [1,2,6]

The Government of the Slovak Republic has approved a new type of identity card, which will contain biometric data. The biometric data will be fingerprints and a facial image, which will be in the form of encrypted biometric data. Subsequently, all this data will be deleted from the public administration server and biometric data will be available only in the identity card. Another innovation of the eID will include NFC "near field communication" chip. the new eID holder will be able to retrieve information contactlessly. Loading the ID card by shifting should be maintained. [11,12]

Moreover, citizens will also be able to use eID as access point to health data in electronic form and it from first January 2022. Patients have to verify with the new eID. This verification will be the only way how to access to health information about oneself. Furthermore, the eID will be used to select drugs from the pharmacy, in this case citizens will not be able to use the health insurance identifier. [13] This project was made for the field of e-health. Young citizens under up to 15 years will use eID without faceless, which will only be used for the eHealth project. This eID will be valid until the age of 15, respectively until the issue of a standard identity card. [11,12]

2. Goal and methodology

The aim of the questionnaire was to identify the advantages and disadvantages that are perceived by the citizens of the Slovak Republic and also which portal is the most using out of access points. The questionnaire was created in February 2020 and conducted a survey of 296 respondents age from 19 to 70. The results of the primary survey were interpreted graphically and in writing and the values are given in percentages. Data collection for primary research was in the time interval from 10.02.2020 to 28.02.2020. Questions were answered by 201 women and 95 men by 95 percent.

The questionnaire consists of three areas: [14]

- Determining the advantages that respondents perceive when using e-Government services,
- Determining the disadvantages that respondents perceive when using e-Government services,
- What e-Government access point is most used.

The subject of the primary survey was the citizens of the Slovak Republic. There are much more 500 000 in the Slovakia, therefore for calculation was used this equation. See (2) [15] The variability of the base file "p" is 0,5. The confidence interval is 95% and the maximum permissible error range "Δ" is 5.7%.

$$\sigma = \sqrt{p * (1 - p)} = \sqrt{0,5 * (1 - 0,5)} = 0,5 \quad (1)$$

$$n \geq t_{1-\frac{\alpha}{2}}^2 * \frac{\sigma^2}{\Delta^2} = 1,96^2 * \frac{0,5^2}{0,057^2} = 296 \text{ respondentov} \quad (2)$$

Table 4. Identification table of respondents

Which age category do you belong to?	Number of respondents	Total in (number) and (%)
to 19	19	296 100 %
to 20 to 29	79	
to 30 to 39	75	
to 40 to 49	54	
to 50 to 59	43	
to 60 and more	26	
What is your economic position?	Number of respondents	Total in (number) and (%)
Employed	147	296 100 %
Businessman	73	
Student	61	
Maternity leave	7	
Retiree	6	
Unemployed	2	

Source: own processing

The largest group consists almost mainly of citizens in aged category from 20 to 39. Besides, the largest group consist entirely of the employee. The total number of responses to the questionnaire was 296.

3. Results

All paragraphs must be indented. All paragraphs must be justified alignment. With justified alignment, both sides of the paragraph are straight. Respondents had a choice of several access points and had to mark which access points they used. The graph implies that Slovensko.sk is the most used accessible place for e-Government services. Subsequently, the second accessible place is the financial administration, eznamky.sk, justice gov, etc. (See Figure 1).

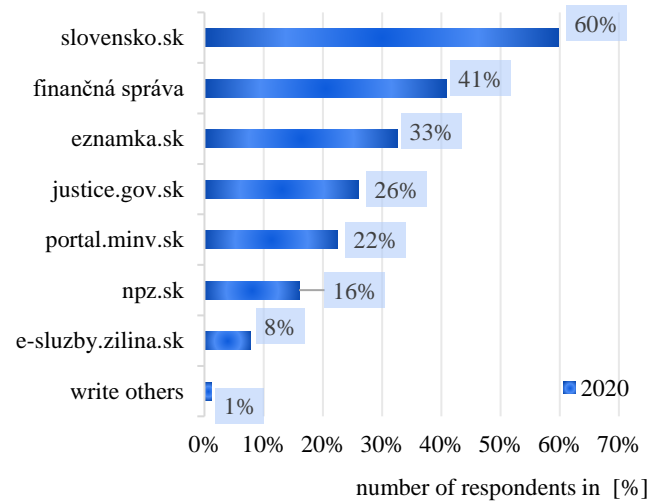


Figure 1. Place of use of e-Government services (Source: Author, Own processing)

IOMO services were used by 81 respondents out of a total of 296 respondents. In relative numbers, this represents 23% of respondents. It follows that 78% of respondents did not use this service. This means that citizens prefer and are focused on online electronic state services. Another area was which service is used the most from CGP and specialized portals.

Table 5. Used e-Government services

Used e-Government services Total number of responses: 595	Absolute frequency of response	Relative response rate	Relative number of respondents
Electronic vignettes for motorways	98	16%	58%
Filing tax returns	77	13%	46%
Finance (slovensko.sk)	65	11%	38%
E-prescription	63	11%	37%
Housing (slovensko.sk)	59	10%	35%

Transport (slovensko.sk)	47	8%	28%
Citizen and state (slovensko.sk)	43	7%	25%

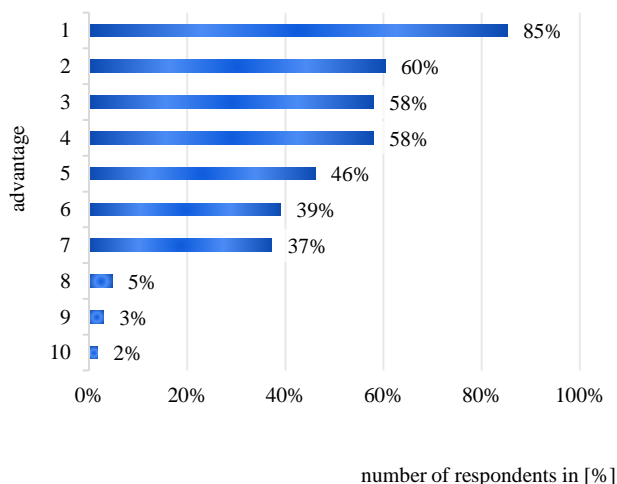
Source: Author.

Table 6. Continuation of Table 5

Used e- Government services Total number of responses: 595	Absolute frequency of response	Relative response rate	Relative number of respondents
Registration of motor vehicles	34	6%	20%
Processing of personal documents	31	5%	18%
Processing of electronic accounting documents	19	3%	11%
Electronic medical book	17	3%	10%
Notification of change of residence, address	17	3%	10%
Travel (slovensko.sk)	14	2%	8%
Payment of fines, interest and penalty interest	8	1%	5%
Others	3	1%	2%
Together	595	100%	-

Source: Author.

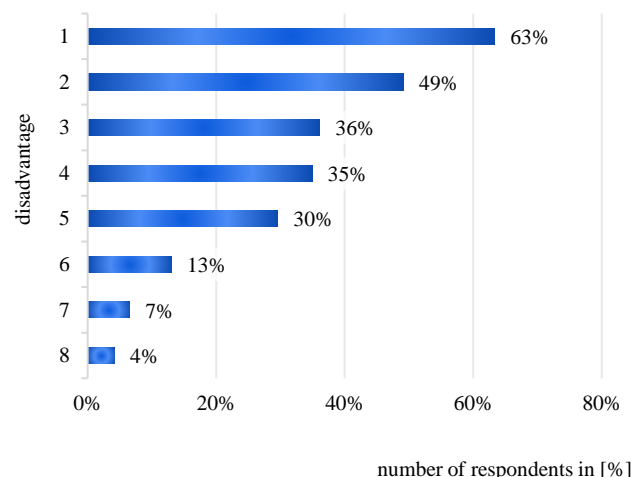
The results from Tables 5 lead to the conclusion that the most used service is the Electronic vignettes for motorways. In addition, tax filing and financial administration services



are the second most commonly used services. If we count services such as finance, housing, transport, citizen and state, etc. The largest number of services is used by means of CGP.

Figure 2. Advantages of e-Government for respondents

The authors identified advantages and disadvantages. Each number represents an advantage that the respondents marked. 10 (Other than listed benefits), 9 (ease of use), 8 (quality services), 7 (environmental protection), 6 (reduction of administrative burden), 5 (saving of financial resources), 4 (speed), 3 (availability 24 / 7), 2 (minimum physical



attendance of the office), 1 (time saving).

Figure 2. Disadvantages of e-Government for respondents

Each number represents a disadvantage which the respondents marked. The least marked answer was number 8 (do not see any disadvantage), 7 (do not list), 6 (absence of personal contact), 5 (possible risk of personal data), 4 (necessity of personal visit to the office (retrofitting), 3 (User complexity), 2 (Low digital literacy of citizens), 1 (Low level of information of services, etc.)

The results of the survey show that the negatives experience with the services had 6% of respondents only. There are some reasons, why respondent did not use e-Government services. Negative factors can cause for instance: system outages, service implementation, forgetting login data, complicated way of logging in to these services and the like.

The results of the survey imply, that time savings, minimal physical office visits and the availability of e-Government services 24/7 are key aspects, why respondents use these services. Time is an important aspect of official buildings because there are big lines in this time which are on certain days and hours for up to several hours or the customer does not equip the service, which leads to frustration and a negative image on public administration. However, these shortcomings could be eliminated with e-Government services.

Outcomes

To summarize, the first part of the article identified the access points of e-Government in Slovakia and the main accessories for using. There is a trade-off between using specialized access point and Central Government Portal. Besides, this paper also identified physic access point which is IOMO and so on. Furthermore, the article explains that citizens must have digital skill in order to use some e-Government services such as from CGP, National Health Portal. Hence, the login to CGP plays an important in using e-Government services in order to improve the number of the users. The previous fact affects what age categories and how often make use of the modern e-Government services. The article has shown that the eID and the reader for eID are necessary so that the citizen can use the services through slovensko.sk. Slovakia has no other means of login. Other data were drawn on primary research. The outcomes show, that slovensko.sk is the most used portal and access point of all. In addition, the most used service is electronic stamp and financial management services. However, the most used services were from the portal Slovensko.sk. Framework of primary research exposed the advantages and disadvantages of e-Government services in Slovakia. The main advantages of e-Government services are time saving, availability 24/7, financial savings and so forth. Moreover, the main disadvantages of e-Government services are low level of information of e-services or low digital literacy of citizens and so on.

4. Conclusions

In the end, the work was divided into main 2 parts. In short, at the first part of the work was identified e-Government access points in Slovakia. Furthermore, conditions for making use of e-Government services and innovation in the field of eID. On the other hand, to establish which access point is the most using we had to do primary survey. Therefore, the second part of the article evaluates the primary survey which identification of the most used public administration portal.

Although this article focuses on e-Government access points, the article describes eID innovations. The State will upgrade the eID and based on that may change the way to login which will be user friendly. Slovakia have to come with up a new way to login for instance Mobile ID. [16]. Especially, much progress has been made in recent years, mainly by reason of the impact of digitalization and new ICT. Unlike other counties, Slovakia must innovate this area and be more transparency. In last years, use of ICT increases and changes in this area affect behavior of people and the way they work and communicate, yet the Slovakia should utilize new technologies [15-17]. Slovakia should concentrate on the creation of Mobil-ID, which could lead to an increase of the use of services through Slovenska.sk. To solve this

problem, state have to invest to new modern technology at once. Interestingly, in many countries, AI strategies are beginning to be used and implemented in public administration to increase the efficiency of processes and eliminate, for example, duplication of contributions, etc. A great deal of countries with a high level of e-Government digital index have more options to log in to the state portal or almost most services digitized. For instance, Estonia has modernized the state portal and created a so-called life events that facilitate exploitation [15,16]. To some extent, data decentralization is common in many countries. The good examples are countries as Estonia and Denmark in order to protect user data and eliminated cyber-attacks.

The digital content of the portal consists of information and electronic services themselves. The goal of the CGP is similar to other countries. However, the method of login or access to services is different. [16,17] The main purpose of the portal is to guide users to particular public e-service along with the use of relevant information resources and simplify communication with the state for all citizens, which is not possible at present. This is due to the fact that the state does not use state-of-the-art. The use of the CGP is essential for saving resources as well as for increasing state trust.

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