Innovative: International Multi-disciplinary Journal of Applied Technology
(ISSN 2995-486X) VOLUME 03 ISSUE 1, 2025

Current State of the E-Government Development Index in Uzbekistan

Zainalov N.R., Narzullaev U.Kh., Nasriddinova P.F., Sharipova U.B.

Samarkand Branch of Tashkent University of Information Technologies named after Muhammad al-Khwarizmi, Uzbekistan
nodirz@mail.ru

Abstract:

This article is dedicated to analyzing the state of e-government in Uzbekistan. The concept of e-government, its purpose, and its objectives are examined. An analysis of the development of e-government in the Republic of Uzbekistan is conducted based on UN data, and a comparison of the E-Government Development Index (EGDI) is provided.

Keywords: information society, e-government, information and communication technologies, electronic services, EGDI.

Introduction

The development and wide application of information technologies (IT) is a global trend of world development in the modern period. The application of these technologies is of great importance for improving the competitiveness of the economy, expanding the possibilities of its integration into the global economic system, increasing the efficiency of public administration and local self-government.

The concept of e-government, i.e. e-government, appeared in the West in the late 1990s as an idea of wide introduction of modern information and computer technologies into the work of state structures in order to improve the efficiency and transparency of the state apparatus. This concept was

complemented by the idea of a service-oriented state, i.e. the state as an organization providing services to its citizens. At present, in the context of fundamental economic and political transformations in Uzbekistan, a huge amount of work is being done to improve the interaction of all objects and subjects of society. Today, no one doubts that one of the important prerequisites for the effective functioning of the state mechanism in a developed information society is the timely provision of reliable information to the state authorities. In this sense, we can agree with the assessments of most researchers who believe that there has been a qualitative update of information and communication technologies, which have radically changed the modern political sphere, transforming its norms, institutions, while constructing its norms.

The Law of the Republic of Uzbekistan "On Electronic Government" was adopted in November 2015, which is currently one of the key tasks that is being implemented and realized to this day. Within the framework of this law, a draft Decree of the President "On measures for further development of the 'Electronic Government' system in the Republic of Uzbekistan" for 2019-2025 has been developed. The draft decree has been developed in order to create the necessary conditions for increasing international prestige, attracting investments in the national economy, developing entrepreneurial initiative, stimulating business activity of the population, further digital transformation of the country and comprehensive development of the "Electronic Government" system in accordance with the tasks defined in the Strategy of actions on five priority directions of development of the Republic of Uzbekistan in 2017-2021. Public administration reform is encouraging governments to invest in e-government projects and initiatives. The Internet and communication technologies (ICTs) enable citizens to be better informed about both policies and services provided by government in a user-friendly environment. There are many definitions of e-government services that vary in their focus and use. For example, E-government is: "The use of ICT to provide government information and services to citizens and businesses" [1]. The principle can be applied to all definitions: "e-government should provide government services online 24 hours a day and 7 days a week". It should be noted that any user can create a website, but e-government is more than a website.

Literature review.

In this section we present some approaches aimed at studying e-government. The research methods considered are based on the study of services offered, surveys and web portals. The study of scientific literature on this topic allows for a focused study of the national e-government system. We will not emphasize the strengths and weaknesses of these methods.

The use of information technology (IT) in public administration is seen in popular rhetoric as an important tool for improving efficiency, transparency, and accountability, and is often declared a necessary and sufficient condition for doing so. We examine the use of various forms of IT, such as computerization, public management information systems (MIS), digital identity and biometrics, in two social security programs in India. Using publicly available administrative data, we look at some performance indicators for the social security programs, try to understand whether and what IT interventions have been beneficial to program implementation, and comment on the extent to which IT has realized its poten- tial to increase transparency. We find, as others have found previously, that there is no automatic link between IT use and increased transparency or accountability, and that IT use can exacerbate existing power imbalances [2].

E-government in social media has received a lot of attention recently. Despite the recent call for further research on social interactions and communication aspects of e-government on social

media, there is still limited empirical evidence on why people participate in the social aspect of e-government services and how it relates to their expectations and satisfaction. The present work addresses this gap by extending expectation-confirmation theory (ECT) to the study of communication and social interactions in government Facebook groups. Results show that communication quality and responsiveness are two key elements that influence perceived level of helpfulness. These two variables, together with social interaction, had a statistically significant effect on overall expectation confirmation. Perceived usefulness and satisfaction predicted intention to continue using e-government social networking services, with satisfaction influencing such intention more than perceived usefulness. Further multigroup analysis shows that generational differences and frequency of use moderate the relationships of the extended model [3].

Of interest is the proposed framework for assessing the quality of e-resources, where both the benefits and challenges of various technical, organizational, social and contextual factors of e-government are explored. Specific consideration of the interaction between political/government decision makers and pre-entrepreneurs has been explored to develop concepts of e-business and e-entrepreneurship in the digital economy. As business and government agencies utilize information and digital technologies to develop and function, there is a need to develop and understand the main performance criteria for government digital resources and e-government in general. Based on empirical research, researchers propose a system for assessing the quality of e- tronic resources for entrepreneurship [4].

An interesting result is presented in the work, where the assessment of user satisfaction with available e-government services is given. Here, the evaluation of user satisfaction with e-government services in the framework of agriculture in Greece is considered. The results identified the strengths and weaknesses of e-government services in agriculture, as well as the specific usability attributes that are more important for user satisfaction. The results of the questionnaire showed that the average level of user satisfaction is high, but it is still necessary to take measures to improve the e-government services provided by the agricultural sector [5].

Research Methodology. The methods of data comparison and analysis, methods of graphical analysis were used in the process of research.

Analysis and results. Electronic government (E-Government) in turn includes a system of electronic interaction between various government agencies (government as a subject of power) and a system of electronic public services (government as a subject of economic activity).

The main objectives of the formation of E-Government in the Republic of Uzbekistan are:

 increasing the efficiency of the activity of executive bodies of state power and management through the wide use of(ICT);

 improving the quality and accessibility of public services provided to citizens and organizations;

 simplification of procedures and reduction of terms of rendering public services, as well as reduction of administrative costs associated with the provision of these services;

 increasing the availability of information on the activities of executive bodies of state power;

 formation of a unified system of information exchange, using electronic information resources and permanent connection with the system and limited network of record of all users;

 use of the Internet and modern information technologies.

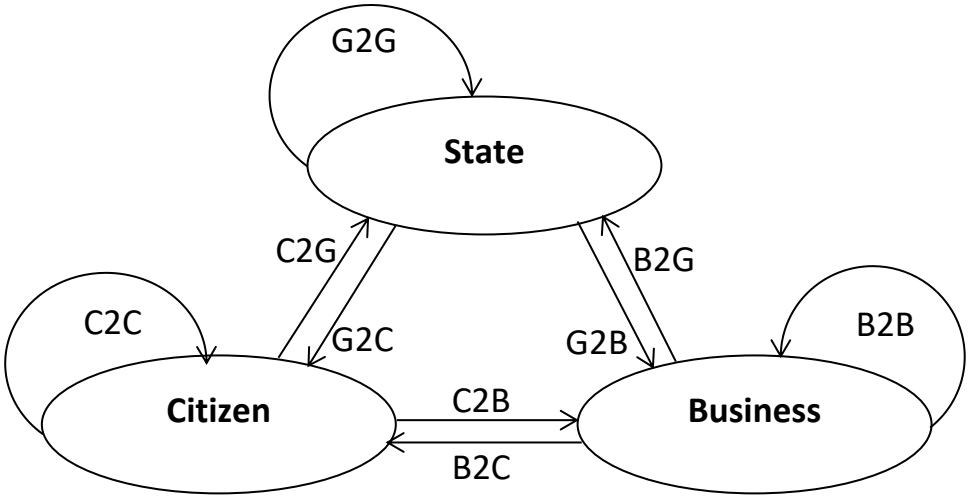

Fig. 1. Interaction of elements of public administration

According to scientists, e-government is the provision of public services to citizens, businesses, public authorities through the regulatory application of information and communication technologies. In other words, e-government is an increase in the efficiency of public administration based on transparent and accessible interaction between its elements (branches): government (G), citizens (C) and business (B).

It is known that the assessment of the level of readiness of the world's countries to use e-government is carried out within the activities of the UN Department of Economic and Social Development, which regularly publishes reports [6], representing the potential and opportunities for the development of these technologies in the countries of the world. The assessment is based on the methodology of web monitoring of government websites and analysis of statistical data. This methodology allows us to assess the presence or absence of the main features and categories of the transition to e-government.

It is characteristic that many people began to pay attention to Uzbekistan's lagging behind in international rankings of "information development", including in the e-government index formed by the UN, after the dizzying success of South Korea. Probably, the harsh assessment of inattention on the part of responsible agencies to the issues of ensuring an adequate place of the country in international ratings prompted some actions, but there were no significant changes in the UN Index for 2020, and Uzbekistan even moved from 81 to 87 place in 2020, this is due to the unsustainable development of the telecommunications structure.

Undoubtedly, mass registration and providing access to information on public services, which were carried out during 2016-2020 on the Single Portal of Public Services, played a positive role in assessing Uzbekistan's position in the sub-index of e-services development. At the same time, Uzbekistan's actual position in the UN Index for 2020 is not so high, but quite significant.

The e-government development index includes three main indicators such as: online service, ICT infrastructure, and human capital. Table 1 shows the e-government development index of Uzbekistan for the last 10 years.

In 2020, according to the UN ranking, the Republic of Uzbekistan ranked 87th, down 6 positions in the ranking compared to the previous year.

Table 1

E-Government Development Index of the Republic of Uzbekistan from 2010 to 2020.

Year	Position	E-Government Development Index (EGDI)	Online service	ICT infrastructure	Human capital
2020	87	0,6665	0,7824	0,4736	0,7434
2018	81	0,6207	0,7917	0,3307	0,7396
2016	80	0,5434	0,6884	0,2463	0,6954
2014	100	0,4695	0,4488	0,2333	0,7264
2012	91	0,5099	0,4967	0,2075	0,8255
2010	87	0,4498	0,1284	0,0282	0,2931

Based on this table, it can be noted that Uzbekistan's e-government has experienced both rises and declines from 2010 to 2020. However, as of today, its indicators remain at an average level compared to other countries worldwide. This suggests that the country is not yet fully prepared to transition to a higher level of e-government utilization. Despite the growth in the EGDI, a decline in ranking has been observed (Table 1) over the past four years. This can be explained by the fact that other countries have begun to surpass Uzbekistan, resulting in the country's ranking dropping from 80th place in 2016 to 87th place in 2020.

To compare the growth rate of the EGDI with countries that are ahead of Uzbekistan, the following formula is used:

Growth Rate (2020) = EGDI (2020) / EGDI (2018)

Table 0.

EGDI Growth Rate

Position	Country	Tempo
87	Uzbekistan	1,07
29	Kazakhstan	1,1
36	Russia	1,03

As seen from Table 0, Uzbekistan has a stable growth rate; however, its low initial EGDI value prevents it from securing a high ranking in this index. To gain a deeper understanding of this issue, let us examine the EGDI growth rates of Uzbekistan and Kazakhstan (Table 1).

Table 1.EGDI Growth Rates of Uzbekistan and Kazakhstan

Country		2010	2012	2014	2016	2018	2020
Uzbekistan	Tempo	1,1087	1,1336	0,9207	1,1574	1,1422	1,0737
	Position	87	91	100	80	81	87
Kazakhstan	Tempo	1,1760	1,2269	1,0641	0,9954	1,0478	1,1024
	Position	46	38	28	33	39	29

From the table we can conclude that 2014 is a year of strong downward decline. Further growth, although it is better than in Kazakhstan, but it was not enough.

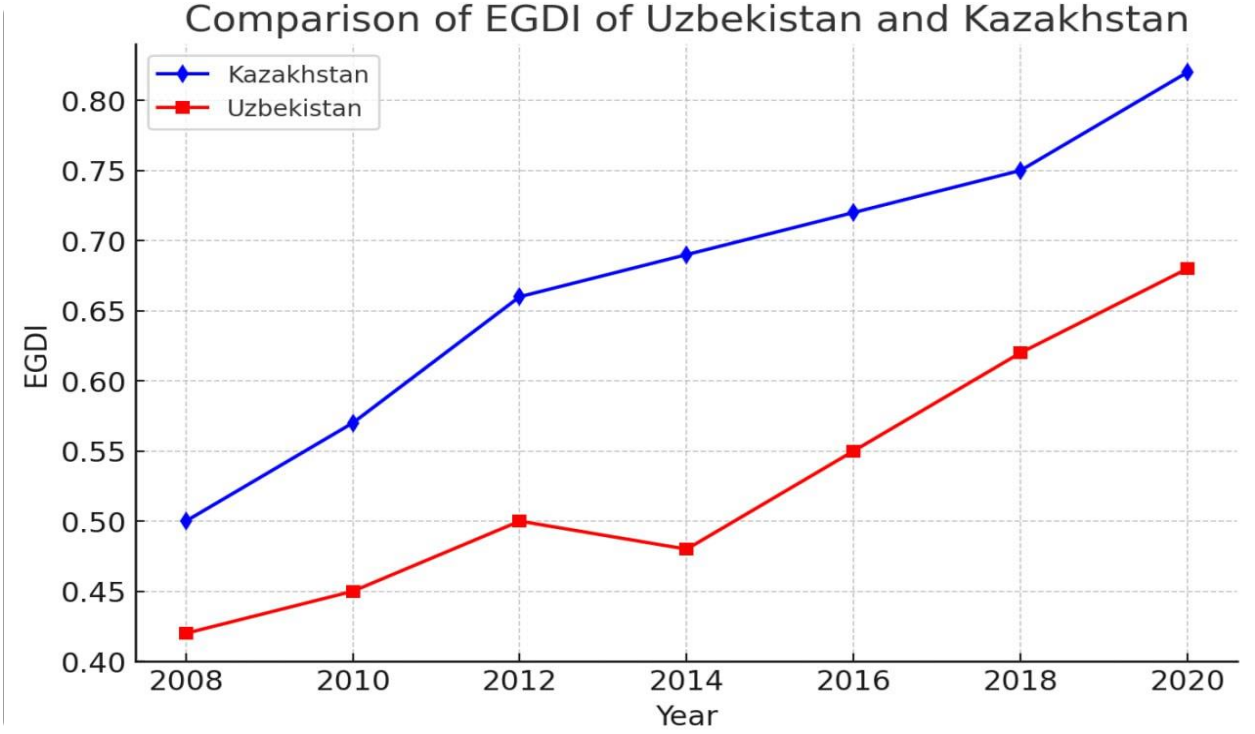

Fig.1. Comparative analysis of the level of e-government development in Uzbekistan (bottom) and Kazakhstan (top)

Changes in the pace of EGDI development in 2014 are related to the fact that the UN methodology for the survey of official websites changed quite significantly, in which the criteria related to modern trends in the development of e-governments were introduced and expanded (multi-channel and mobility, user orientation, provision of services on life situations, use of a wide range of tools to involve citizens in the governance processes, etc.). And Uzbekistan was not ready for this. And Kazakhstan turned out to be in a favorable position, as they had these criteria taken into account.

Conclusion and suggestions.

In the Republic of Uzbekistan, the main obstacle to the introduction of e-government is the lack of a full-fledged electronic document flow and regulations for electronic public services, as well as the lack of readiness of the population to use electronic services and the Internet. The introduction of e-government is also hampered by the strong bureaucracy in public authorities, which the creation of e-government is aimed at eliminating.Denmark ranks first in the EGDI ranking in 2020 with a score of 0.9758, so studying the experience of this country, along with South Korea, Estonia and Finland, can serve as an action program for the next year.The EGDI index, which is updated every two years, is calculated on the basis of three indicators of each country: development of electronic services, development of human capital and development of telecommunication infrastructure during the two years preceding the rating update.

The best result among the CIS countries in EGDI-2020 was demonstrated by Kazakhstan, which ranked 29th. Belarus ranked 40th, Armenia - 68th, Ukraine - 69th, Moldova - 79th. At the same time, while Kazakhstan has the third result in the CIS countries, Estonia, which closed the top three world leaders and gave way to Denmark and South Korea.

Full-fledged implementation of e-government in Uzbekistan is possible if the following conditions are met: preparedness of the population to use e-services with a low level of computer literacy; low tariffs for the use of Internet services, which does not allow certain categories of citizens to have access to e-government; ensuring the security of information systems and confidentiality of information.

The introduction of e-government will lead to positive changes in the government's relations with all users: citizens, executive bodies of state power, state organizations, civil servants and business representatives.

Uzbekistan has the necessary conditions and potential for the full-fledged functioning of e-government: a sufficient legal framework, but the introduction of e-government, contrary to the direct instructions of the President of the Republic of Uzbekistan is rather slow.

Analysis of the existing trends in the development of e-government allows us to make the following suggestions:

1.The management system lags behind in its psychological development, which hinders the transition to new technologies of public administration.

2.It is necessary to raise the level of training of civil servants.

3.Updating of information and technological forms and methods of the state apparatus.

4.The use of ICT in governance should not detach the government from the people.

5.The development of ICT should be in the direction of expansion and strengthening of production processes.

6. Administrative and electronic reforms in management are essential for the development of information technology.

7. The system of training at the highest level of specialists in the information technology sphere and professional development of relevant managers should be radically reorganized.

8. It is necessary to ensure their access to information on the activities of executive authorities through Internet sites.

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