

“Problems Of E-Governance In Government Agencies And Their Solutions”

[https://doi.org/10.21272/sec.6\(1\).79-86.2022](https://doi.org/10.21272/sec.6(1).79-86.2022)

İsmayıl Muradov, ORCID ID: <https://orcid.org/0000-0003-1779-3396>

PhD Candidate, Azerbaijan Tourism and Management University, Azerbaijan

Abstract

The study summarizes a number of scientific discussions and arguments. The main purpose of the study is to improve the quality of e-services in government agencies, to study the current situation and issues related to the general situation in Azerbaijan in this area. Research and systematization of scientific sources show that there are problems with e-governance in government agencies and a number of improvements are needed. Transparent governance and the creation of citizen satisfaction in Azerbaijan is one of the priorities of the state. In this sense, the relevance of the study includes the analysis of e-governance problems in government agencies in Azerbaijan and ways to solve them. The study was conducted in the following sequence:

- General information on e-government is provided;
- In the world practice, there are a number of obstacles to the implementation of e-government in any country;
- Information was provided on what factors are important for the development of e-government information resources in e-governance;
- The current state of e-governance in government agencies in Azerbaijan has been analyzed.

The theoretical and methodological basis of the research is the perspectives of researchers, theories, scientific articles, scientific research on e-governance and its improvement. Research objects include e-government, analysis of e-government problems in government agencies and finding solutions. The research is based on scientific-theoretical approaches and empirical analysis. Research has shown experimentally and theoretically that development is impossible without e-government, and the application of e-government has become a necessity. At the end of the study, the results and recommendations of the study were given. The results of the research are useful in the development of programs, projects and proposals related to e-governance, as well as in solving research problems and overcoming existing problems in e-government. E-government plays an important role in the successful development of public administration, increasing the flexibility, efficiency and citizen satisfaction of public administration. The main purpose of e-government is to improve the quality of work and management of government agencies, to protect the rights and freedoms and interests of citizens, to ensure transparent governance.

Keywords: E-government, information inequality, online usage, technical difficulty, personnel problem, information security.

JEL Classification: H7, H83, M15, O38, Z18.

Cite as: Muradov, İ. (2022). Problems Of E-Governance In Government Agencies And Their Solutions”. *SocioEconomic Challenges*, 6(1), 78-86. [https://doi.org/10.21272/sec.6\(1\).79-86.2022](https://doi.org/10.21272/sec.6(1).79-86.2022)

Received: 18.12.2021

Accepted: 23.02.2022

Published: 29.03.2022



Copyright: © 2022 by the author. Licensee Sumy State University, Ukraine. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Introduction

In modern times, it is impossible to imagine public administration without e-government. The main purpose of e-government is to provide more efficient services to citizens, to ensure the transparent and efficient operation of government agencies and, as a result, to achieve citizen satisfaction. The essence of the research is to study the problems of e-government in government agencies, to find solutions to them and to study the current state of e-government in Azerbaijan. The main objectives of the study are to study the importance, goals and objectives of e-government, to direct government agencies to e-government, to identify ways to increase the effectiveness of e-government and to study the existing problems in this area. As a result of the study, it was determined that the problems of e-governance in government agencies are due to a lack of technological, socio-financial, organizational and human resources. Thus, the process of electronicization in many local and central executive authorities is not weak, or in this regard, these local executive authorities are left out of the process of electronicization. In order to eliminate the existing problems in Azerbaijan and improve e-governance, study and apply the experience of developed countries in this field, create and improve the activities of e-government units within government agencies, ensure access to public services as a result of e-government, training qualified personnel. Regular upgrades are recommended.

The practical significance of the research is the organization of the e-governance process in government agencies and the elimination of existing problems in this area.

In modern times, the organization of e-government in government agencies is one of the priorities of each institution. In this regard, research on e-governance is extremely relevant.

Literature Review

16 scientific literature were used in the research. The study used publications from the last 18 years.

The literature used in the study can be divided into 2 groups according to the sources of information:

1. The main directions of e-government were studied, information such as the importance, tasks and goals of e-government was noted.
2. The importance of e-government, increasing the satisfaction of citizens in public administration, the relationship between economic development and e-government were analyzed.

Methodology and research methods

The research methodology includes research on the process of e-governance by Azerbaijani and foreign authors, laws of the Republic of Azerbaijan, decrees and orders of the President of the Republic of Azerbaijan, research by local and international organizations, economic and social analysis, interview, experiment, analysis, mass observation, statistics, accounting, generalization, methods such as systematization, scientific research were used.

Results

Research has shown that the implementation of e-government in government agencies is one of the key factors in ensuring stability in society, stimulating development and ensuring citizen satisfaction. Therefore, the solution of existing problems of e-governance in government agencies is extremely important.

According to research, a number of results have been achieved in Azerbaijan in order to implement electronic in government agencies and further accelerate work in these areas. Thus, the application of the electronic mechanism in government agencies in Azerbaijan is in the focus of the state. In the current period of radical socio-economic changes in Azerbaijan, strengthening discipline, building a democratic and socially oriented civil society, the formation and application of effective public administration is important. In Azerbaijan, a number of laws have been adopted and measures have been taken to address the problems of electronic government agencies and to eliminate these problems.

Discussion

A number of discussions were held on the results of the study. As a result of the research, it was found that very important measures have been taken in Azerbaijan to e-government, to take important steps to eliminate the shortage of qualified personnel, to send young people to study abroad, to increase their knowledge of innovative technologies. The results reflect the current state of e-government in Azerbaijan. According to the discussions, the results obtained are scientifically substantiated and are extremely relevant and important in solving problems in the existing field.

E-government is a qualitatively new stage in public administration. However, the establishment of e-government cannot be without problems, just as any transition to a new quality presents a series of challenges and challenges. Sometimes these problems are not so obvious, but their difficulties prevent the achievement of the goal. For example, in some government agencies, it is felt that the electronic circulation of circulating documents and archives, the definition of their legal status, the definition of interdepartmental documents for professionals and citizens, and the clarification of the rules of use are still delayed. It is important to organize trainings and exercises in organizations in order to arouse the interest of government employees and other institutions in ICT and to increase their knowledge of ICT. The occupation of part of Azerbaijan as a result of Armenian aggression did not allow the full application of the e-state network to the entire republican territory.

Part 1. Problems in e-government: Information inequality. The relatively weak development of the Internet in some regions, districts and remote villages does not allow the population to be completely harmed by the vast potential of the global network. However, one of the basic principles of e-government is to enable citizens to access the Internet from anywhere in the country. The problem of information inequality is so serious that even the UN is solving it in the context of fighting poverty. Because the poor man barely has enough money to eat and drink, he doesn't have access to other things he wants, including ICT tools and the Internet. Therefore, poverty reduction can also eliminate digital inequality [www.kitabxana.net].

One of the main problems is the high cost of modern ICT tools and software used in the construction of e-government systems, as well as the fact that equipment purchased today as a result of technical development will be considered obsolete tomorrow. ICT equipment must be constantly updated to keep up with development. In addition, significant financial resources are needed for the installation of ICT tools, networking, protection, reliability and sustainability. However, there is confidence that the costs of incorporation will be fully justified, given the nature of e-government and the achievements in government, citizen and business relations. Because when there is no obstacle in the provision of communication with the authorities, documents and other processes, transparency and convenience, the quality of work, the work of citizens, income and, accordingly, the amount of taxes paid to the state budget increase. Moreover, there is no doubt that e-government will be economically viable, given that government services will continue to be paid for during the transformation of paid services to citizens. Especially since there is already such international experience. For example, in Estonia, investment in e-government takes only 14 months, while in France e-government saves over 10 billion Euros per year. In general, the observations show that labor productivity, living standards and living standards have increased in countries that have shown close interest in developing e-government infrastructure, and the interest of foreign companies and businessmen to invest in these countries and build business knowledge is increasing [Yusifov, 2010, 30–37].

The effectiveness of e-government is established against the background of two priority criteria [Nyankina E.S, Poqodina E.S]:

1. Online access to the main e-services offered by the government;
2. The rate of use of these services by users.

Determining this ratio plays an important role in assessing the barriers and challenges associated with the implementation of e-government. In world practice, there are a number of technical, financial, organizational

and social barriers to the implementation of e-government in any country, and these problems are to some extent reflected in Azerbaijan's e-government model.

Technical difficulties. The main technical barriers to e-government are the lack or underdeveloped ICT infrastructure, the lack of common standards, and the difficulties of ensuring privacy and information security. It is known that access to the Internet becomes more difficult in regions with relatively weak access to telecommunications and Internet networks.

One of the biggest obstacles to the establishment of e-government in Azerbaijan and in many parts of the world is the privacy and information security policy. Confidentiality or privacy requires that information about individuals be guaranteed to be protected. Obtaining the consent of the citizens in order to increase the confidence of the citizens in using e-government services and to share the personal information about the person with the state authorities are important issues in the implementation of e-government. Article 12 of the Law of the Republic of Azerbaijan "On obtaining information, informing and protecting information" recognizes the right of natural and legal persons to access information about them, and according to the requirements of this article, the person has the right to know. Who uses the information and for what purposes. Another normative-legal document supported by the Republic of Azerbaijan in this field is the 1981 Council of Europe Convention on the Protection of Persons Related to the Automatic Processing of Personal Data and its main purpose is to ensure respect for the privacy of private life. . The Law of the Republic of Azerbaijan "On Personal Data" (2010) also defines the rules and requirements of state regulations on the collection, processing and protection of information. As can be seen, Azerbaijan has a very strong legal framework in the field of privacy. The e-government privacy policy, guided by the principles set forth in these regulations, protects the privacy of citizens and ensures that personal information is collected and used only for legitimate purposes. However, information security remains one of the main challenges facing e-government, as there is no guarantee of protection against cyber attacks by hackers and viruses sent to the system [<https://reg.e-gov.az>].

Personnel problem: The application of ICT tools in any field requires professionals who can use these tools properly. Because e-government is a technological system on its own, training of highly qualified personnel is one of the main issues in order to ensure its protection, reliability, sustainability and periodic development. To increase the number and quality of computer science courses in secondary schools, to include additional subjects that teach both technical and theoretical problems of ICT for training strong programmers in higher education, to provide education and training in scientific and industrial fields related to foreign ICT institutions can help organize courses. According to the Ministry of Communications and Information Technologies (MCIT) of the Republic of Azerbaijan, according to the agreement reached with well-known IT companies in the United States, Sweden and other countries, Azerbaijani youth are currently studying in these organizations and receive periodic training. courses for experts [<https://reg.e-gov.az>].

Organizational issues. Problems with the implementation of e-government are more organizational in nature. Problems with organizational issues in world practice are the lack of support from government officials for the establishment and development of e-government, the existence of a layer of resistance to e-government, weak cooperation between government agencies, public and public institutions. The private sector lacks specialists in this field. s. an example can be given. It is known that one of the most important steps in the development of information and communication technologies was the adoption of the "National Strategy for Information and Communication Technologies for the Development of the Republic of Azerbaijan (2003-2012)" by the order of the great leader Haydar. Aliyev. In addition, the President of the Republic of Azerbaijan Ilham Aliyev accepted the "State Program for the Development of Communications and Information Technologies in the Republic of Azerbaijan for 2010-2012 (Electronic Azerbaijan)" and the strong state support for the establishment of the Azerbaijani model "The Year of Information and Communication Technologies" of 2013 is a clear example.

However, as e-government involves the transition from traditional to e-environment as a new phenomenon, it should be considered natural to encounter resistance. Therefore, some civil servants and officials see the innovations brought by e-government as a threat to their positions and face the fear of losing their jobs. It should be accepted that the development of ICT requires constant innovation and change, and government employees

are obligatory. It adapts to its changing roles regarding the implementation of e-Government innovations. To do this, a socio-psychological environment must be created for any civil servant to approach e-government, not through the prism of his position, but through the prism of e-government and the transformation of society as a whole into new relationships.

The lack of expert personnel in the field of e-government is one of the main obstacles to implementation. For this, the development of training programs and the organization of training should be determined as a priority [<https://reg.e-gov.az>].

Social and financial difficulties. One of the biggest social problems in implementing e-government is the inability of the population to use e-government services due to low income, lack of necessary IT knowledge or Internet access. However, the problem is not only with the level of provision of the population with computers and technical equipment. In order to benefit from the services offered by e-government, it is important for the effectiveness of e-government to raise public awareness on information and communication technologies and increase public interest in access to information. Since the process of establishing e-government in Azerbaijan is at an early stage of development, the vast majority of the population has little knowledge of the essence of e-government, its services and benefits. The widespread use of computers in public places, libraries, universities and schools and shopping centers can play an important role in solving this problem. The Republic of Azerbaijan has taken serious steps in this direction and the President of the Republic of Azerbaijan Ilham Aliyev's "State Program for Informing the Education System of the Republic of Azerbaijan" dated June 10, 2008 "for 2008-2012" was approved. Within the framework of the State Program, information and communication technologies were provided to the country's secondary schools and every 20 students a computer rate was provided.

One of the main obstacles to the implementation of e-government relates to financial difficulties. Providing financial support to e-government requires efficient use of available budget resources. Therefore, initiating e-government is costly for many countries. The need to maintain and use computer systems and the constant introduction of new technologies and software puts the e-government project in a dilemma. This is a deterrent for government agencies, as hardware and software require significant investments in training and courses. However, this factor almost loses its importance when compared to the advantages of e-government.

Part 2: Although the e-government system has been established in Azerbaijan, there are some problems. As these problems arise, solutions are sought and the system develops. In order to ensure the development of e-government information management in e-government, the following factors should be considered [<http://modern.az/az>]:

1. **To provide general access to the Internet.** Residents of the European Union and the United States access the Internet mainly through their home computers, while in Azerbaijan only 40.9% access the Internet through their home computers, while the rest use schools, Internet cafes and work Internet. Therefore, this fact should be taken into account while providing citizens with easy access to e-government portals.

2. **There should be no limited funding.** In many countries, a convenient and cost-effective way must be found, as financing this project requires more funding than renovating the entire infrastructure. The Romanian experience is considered the best. Here, government agencies connect small and medium businesses via the Internet, and e-procurement and tenders are the best options. Using this system saved up to 50%.

3. **Improving the quality of administrative information systems.** Virtual interaction of society with state institutions, of course, depends on the quality, completeness and integrity of the information systems of various executive bodies. The interconnection of systems, the adoption of common standards for information resources, the provision of opportunities for information exchange at the horizontal level, the simple search for publicly available information resources are important issues in the development of e-government.

4. **To create additional motivation to use the Internet.** Research conducted by the World Bank in Estonia shows that even the availability of an advanced Internet access system does not guarantee that citizens can apply

to government agencies. Therefore, any motivational measure can be created to use this system. For example, taxpayers who regularly pay taxes online may receive a certain percentage discount.

5. Accelerate the electronicization process of municipalities and improve the quality of electronic data.

The e-government portal provides interaction between government agencies, citizens and legal entities. Although most government agencies are already integrated into the e-government portal, there is still no innovation from municipalities. Municipalities should provide full information about the activities of the municipalities, submit the reports of the municipality members to the voters at least every 6 months, and publish all meeting minutes on the website unless otherwise stated. However, despite all this, the electronicization of municipalities is still delayed. With the electronicization of municipalities, municipalities should apply modern information and communication technologies in their local self-government activities, provide large-scale Internet services to citizens and other institutions, ensure interoperability with computer networks of employees within the institution, and exchange information. relevant institutions. The advantage of municipalities' access to the portal is that the information or response to the objection of the citizen living in the region is published by the municipality on the municipality's website. In this case, there is no need to apply to the municipality, the necessary information will be obtained from the portal. Here, both the citizens and the municipality do not waste time, there is no need to stand in line, the citizen does not encounter bureaucracy, efficiency is ensured. Since citizens should not encounter bureaucracy in the municipality, all work should be transparent. Before the integration of municipalities to the portal, the municipalities themselves should be made electronic and then this system should be integrated. The e-municipality program should be implemented in 3 stages: 1) full computerization of municipalities, creation of websites, development of the implementation of financial-budgetary computer programs in local self-government; 2) electronic document circulation process, front office electronic process should be carried out in municipalities; 3) electronic tools should be completed [Azadov E, 2004].

6. E-government security. If the identification of the citizen with documents during registration on the e-government portal is a commendable action, the work does not end there. After registration on the portal, information security and citizen information must be provided. Because in the future, citizens' information and operations will be explained more broadly on the e-government portal and the possession of such information by another person as a result of a cyber attack may completely bankrupt that citizen or business [Trifalenkov I.A, 2004].

E-problems can arise from security breaches in two ways:

- destruction of the system from the inside (this can be done by people with internal access to the system);
- External threat (external interference in this system mainly by cybercriminals); It can also lead to suspension of access to the system due to natural factors (for example, deletion of information due to magnetic waves, natural disasters, etc.).

In order to provide stronger security for e-government, it is recommended to use "owner's sound wave" technology at the request of the citizen. Because the sound wave is the same as a person's handprints and corneal structure. Sending a handprint through a computer is difficult, given that the scanner of the retinal structure is very expensive, the "owner's sound wave" technology is more efficient than others, and almost any computer can take a sample of a human sound wave. Another security measure is protection against viruses. Currently, 10-15 viruses are produced per day, and this number is growing exponentially. For the security of "e-government", any world-famous antivirus company must sign a contract and post it on this site. For example, the email site www.mail.ru is protected by the antivirus company Kaspersky Lab, which creates a sense of security for users.

7. Establishing a special state duty to monitor the realization of the constitutional right of citizens to access information in Azerbaijan, as in Western countries. For example, in the United States this position may be called "Chief Information Officer", in the United Kingdom "E-envoy" and in Azerbaijan "Electronic Controller".

The foundation of modern information and communication technologies in Azerbaijan was laid by the Great Leader Heydar Aliyev. The development of information and communication technologies and the creation of a national information infrastructure in Azerbaijan cover three periods. Successful work done in all three periods and the policy followed in this field are associated with the name of the National Leader. These works, which were established by the Great Leader in Azerbaijan and calculated for the future, are successfully carried out by President Ilham Aliyev. Thanks to the political will, determination and practical activity of the head of state, much has been done in the field of transition to an information society and the construction of e-government in our country. So the Internet is expanding with each passing year, the scale of application of IT in education, health, science, industry and services is growing. Special attention is paid to the creation of the national ICT infrastructure in Azerbaijan. The country has now established and successfully operates the Internal Information and communication, product and service market. The number of computers in all areas of public life is constantly increasing. Informing of production, agriculture, economics, public administration, banking and other fields is constantly expanding.

As you can see, there are problems and expectations. But the prospects are greater and more accessible. We can believe that the results of our success in the field of ICT, the introduction of the latest 5G technology to our country and the launch of Azerbaijan's first telecommunication satellite into orbit will further develop the technical and intellectual infrastructure of e-government. It will always be at the service of citizens, making a valuable change in the field of knowledge.

Conclusion

The main purpose of e-government is to reduce the "distance" between civil servants and citizens in the provision of social services and to make these relations more transparent. Widespread use of e-services by government agencies, increasing their number and quality, and increasing citizens' satisfaction with services are among the means of achieving this goal. The creation of e-government eliminates procrastination and corruption in government institutions. Azerbaijan, like developed countries, has chosen the path of democracy, has clearly set itself the goal of creating and shaping an open and transparent society, has established a legal and normative state, a society that respects human rights.

In modern times, the role and status of electronic in government agencies is growing. Electronicity in government agencies regulates the relations between civil servants, civil servants and civil servants, ensures the development of social, economic, social and legal spheres of the state and plays a special role in the development of management activities. Electronicization ensures the successful implementation of public policy and is one of the main principles of a democratic state. In recent years, radical socio-economic reforms in Azerbaijan, legislative social measures, restoration of the financial situation of democratic citizens, the role and harm of e-governance in government agencies has increased significantly.

Discussions and Suggestions

The study summarizes the research and analysis of e-governance problems in government agencies and their solutions, and concludes that in recent years in Azerbaijan, significant work has been done in this direction and successful results have been achieved. At present, the formation of an e-government system that meets world standards in governance, ensuring transparency in this area is one of the main priorities of public policy. It should be noted that as a result of the steps taken in Azerbaijan in recent years in connection with e-government, information transparency, legal responsibility and accountability in government agencies have been strengthened. As a result of the research, the following problems related to e-governance were revealed in Azerbaijan:

- Low level of public awareness of e-governance;
- weak technological, socio-financial and human resources related to e-governance;
- Citizens are unaware of the e-services available in government agencies, as well as their inability to use some services without going to government agencies;

For the development of e-governance in Azerbaijan and the elimination of existing problems in this area, it would be expedient to implement the following measures:

- Study of international experience in the field of e-governance and its application;
- Preparation of reports on the activities of e-government units;
- Improving the activities of the department dealing with e-governance in local and central executive authorities;
- Training of qualified personnel to improve the existing human resources;
- Continuous education of citizens about e-services.

Research shows that the elimination of existing problems related to e-governance in government agencies in Azerbaijan, which has entered a new stage of development, will give impetus to the development of social, economic and legal spheres.

Funding: self-funded.

Author Contributions: conceptualization, İsmayıl Muradov; data curation, İsmayıl Muradov; formal analysis, İsmayıl Muradov; funding acquisition, İsmayıl Muradov; investigation, İsmayıl Muradov; methodology, İsmayıl Muradov; project administration, İsmayıl Muradov; resources, İsmayıl Muradov; software, İsmayıl Muradov; supervision, İsmayıl Muradov; validation, İsmayıl Muradov; visualization, İsmayıl Muradov; writing – original draft, İsmayıl Muradov; writing – review & editing, İsmayıl Muradov.

References

1. Azadov E., Bagirzade M., Ahmadov F., Mehtaliyev A., Fatullayev A. (2004). *Azerbaijan municipalities: initial experience, key issues and development perspectives*. [Link].
2. Yusifov F.F. (2010). Monitoring the information society: Current problems and solutions. *Problems of the information society*, 30–37. [Link].
3. Nyankina E.S., Pogodina E.S. (2012). *E-government Perspectives*. [Link].
4. Trifalenkov I.A. (2014). *E-government: protection of personal data*. Moscow. [Link].
5. From the speech of President İlham Aliyev at the opening of the first plenary session of the International Investment Forum "Emergency Ukrainian Round Table", 16.06.2005-ci il. [Link].
6. R.Mehdiyev (2008). *In defining the strategy of the future: The line of modernization*. East-West publishing house, 56 p. [Link].
7. Mehdiyev, R. (2006). Ideas leading to civil society. *Azerbaijan newspaper*, 7 p. [Link].
8. Hasanov, M. (2016). Municipal governance system in Azerbaijan: Successes and Development Perspectives. *Journal of Public Administration: Theory and Practice*, N-4 (56), 159 p. [Link].
9. Rehimli, R. (2016). Dynamics of innovative development of civil service in modern Azerbaijan. *Journal of Public Administration: Theory and Practice*, N-4 (56), 107 p. [Link].
10. Haqverdiyev, B. (2016). Socio-psychological bases of civil service efficiency. *Journal of Public Administration: Theory and Practice*, N-4 (56), 168 p. [Link].
11. İmran, A. (2007). Management. [Link].
12. Ahmedov, İ., Aslanlı, K., Ahmedov, Ş. (2008). *Dictionary of Public Financial Terms*, 146 p. [Link].
13. Legal literature, (2001). *Law of the Republic of Azerbaijan on Civil Service*. [Link].
14. Habibova, Z. (2016). From Human Capital to Human Potential. *Journal of Public Administration: Theory and Practice*, N-2(54), 207 p. [Link].
15. Qurbanova, G. (2016). Organization and management of the system of retraining and advanced training of civil servants. *Journal of Public Administration: Theory and Practice*, N-4, 56, 77 p. [Link].
16. Tortop, N. (2003). *Public Relations*. Judicial Publishing House, Ankara. [Link].
17. <https://reg.e-gov.az/Upload/MeqaleFiles/66.doc>
18. www.kitabxana.net/files/books/file/1259213904.doc
19. <https://reg.e-gov.az/Upload/MeqaleFiles/135.doc>
20. <https://reg.e-gov.az/Upload/MeqaleFiles2014/307.docx>
21. <https://reg.e-gov.az/Upload/MeqaleFiles/135.doc>
22. <http://modern.az/az/news/43620#gsc.tab>