

Digital Transformation Monitoring System of Civil Servants with Information Systems of Electronic Government of Republic of Uzbekistan

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Digital transformation monitoring system of civil servants with information systems of e-government of Uzbekistan

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Abstract. This article discusses the issue of digital integration of the system for evaluating and monitoring the activities of civil servants in Uzbekistan with the information systems of the "e-government" system of the Republic of Uzbekistan. The article lists and analyzes the recent work on digitalization in Uzbekistan. In particular, the analysis of the Strategy "Digital Uzbekistan - 2030" adopted in 2020 and the implementation of its priorities will play an important role in enhancing the digital transformation. It also examines the experience of developed countries in the implementation of digital transformation and makes sound recommendations based on them.

Keywords: state personalization centre, monitoring system, complex of information systems, civil servants, digital transformation, electron government systems, monitoring system, Strategy "Digital Uzbekistan -2030".

INTRODUCTION

In recent years, the country has been implementing large-scale reforms aimed at increasing the efficiency of the civil service [1]. The rapid process of modernization in Uzbekistan requires a new approach to adapting the knowledge and skills of management to the changing conditions, their professional development. In order to effectively solve management tasks, managers need to be able to continuously improve their professional skills. This requires improving the system of management staff development not only at the national level, but also at the regional level. In this process, on the one hand, there is a need to create new opportunities, on the other hand, to systematize existing opportunities and use them effectively.

The society we live in today is unimaginable without information and communication technologies (ICT). In the last 10 years, new terms have begun to enter our lives, including e-government, digital integration, e-government services, e-commerce, open government, social networking and more. It should be noted that now, whether we like it or not, the automation of the processes of the national economy and government, that is, the introduction of ICT in it, is becoming a modern requirement.

This can be seen in the policies pursued by the whole world. We all know that countries around the world have a global ranking on the implementation of ICT. Examples of such rankings are the UN E-Government Development Index [2], the Open Government Data Index [3], the Statistical Capacity Index and others. Work to identify and update these ratings is ongoing and will be published worldwide.

The pandemic has shown that our lives are closely linked to ICT technologies. The Government of Uzbekistan is working hard to develop the ICT sector. An example of this is the Strategy "Digital Uzbekistan - 2030". The strategy clearly defines what needs to be done in Uzbekistan by 2030 in the field of digitalization, especially in the field of e-government. Nowadays In Uzbekistan created many complex information systems of e-government, but process creating information systems we must learn experiences of development countries which Extonia, Danish, Singapore, South Korea and others.

Digital Transformation and Public Service Delivery in Brazil article analyzes the digital transformation process of public services in the Brazilian federal government. Based on a survey with 85 federal organizations, 1,740 public services are examined according to different factors that explain why a certain public service is digitalized [4].

The Estonian e-government infrastructure and its success rest on two main pillars, both introduced in 2001, that essentially create a digital state and digital citizens: the data infrastructure X-Road and a compulsory national digital ID. X-Road is an interoperability platform for existing decentralized databases and a data exchange layer that can be used by public and private sector actors. It is independent of platforms and architectures and provides secure interoperability for data exchanges and identification of trusted actors in digital service delivery. The digital ID makes it possible for citizens to be identified digitally and to use digital signatures. Together, X-Road and the digital ID make it possible to digitally sign any contract, access essentially any public service such citizens' digital medical history, order prescriptions, file taxes, vote, and others [5].

In reviewing the Danish case, this paper differentiates between Governance and eGovernment. Governance, or e-Governance, encompass all processes of governing and decisions made in relation IT and technology use, whether undertaken by a government, market or network, whether over a family, tribe, formal or informal organization or territory and whether through laws, norms, power or language. By comparison, eGovernment is the use of ICT and its application by government for the provision of information and public services to the people, that is the daily implementation of the decisions made as part of the governance of a country or an organization [6].

MAIN PART

It is known that a civil servant is an employee who performs a certain function in accordance with his position in the civil service.

It is important to classify civil servants according to the scope of their official powers, which include the division into officials, operational and support technical staff [7].



FIGURE 1. Types of official powers of civil servants

Depending on the length of service after entering the civil service, it is possible to allocate civil servants appointed to the civil service for an indefinite period, for a certain period, with a fixed probationary period.

Class levels (titles, qualification levels, career levels) are also a criterion for the division of civil servants and their peculiarity is that they are personally assigned to each civil servant on the basis of the results of a qualification examination or certification, taking into account his personal services.

Everything related to the activities of civil servants is usually regulated by the social (ethical, organizational, technological, etc.) and legal norms of the civil servant and arises on the basis of relevant legislation in connection with the change of civil position.

The social and legal status of a civil servant is a measure established and guaranteed by the state for the correct and possible behavior of the employee in the field of civil service relations. With the change in the relationship of public services, the social and legal status of the civil servant also changes (for example, promotion, dismissal, dismissal, resignation, retirement, etc.).

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In monitoring and evaluating the performance of a German civil servant, his conduct outside the service shall be recognized as a misconduct and shall be prosecuted if it affects the trust or respect for the civil servant or the interests of the public institution [8].

There is also a unique system in the UK for evaluating the performance of civil servants. According to him, the establishment of a system for evaluating the performance of civil servants will be carried out by ministries and departments on the basis of instructions of the central government. It should be noted that the activities of 3,700 high-ranking officials are directly assessed by the Cabinet of Ministers [8].

In the Japanese civil service, most organizations and institutions have a special system of "lifelong hiring". This system requires the employee to be hired by a single organization for a long period of time (until retirement). His position and salary will directly depend on the duration of the internships without breaks [8].

The civil service in Singapore is one of the most effective public services in Asia, with a well-established mechanism for promotion to a higher level of service based solely on human potential. Such service activity is achieved by modern logistics, strong motivation of executives to adhere to discipline and diligence, with the proper organization of public service, creating a good basis for their pursuit of excellence, enthusiasm, initiative and constant innovation. Civil servants are required to study 100 hours a year to improve their skills [8].

The results of the evaluation system help the government body to make decisions in the entire personnel system.

qualification assessment of a civil servant the level of professional education, work experience or work experience in the specialty, training, professional knowledge and skills of a civil servant who meets the qualification requirements for civil service; assessment of professional qualities - an assessment of the compliance of professional qualities provided to civil servants in the performance of official duties with the model of professional qualities for the position of civil service;

evaluation of the performance of the civil servant - an assessment of the ability of the civil servant to achieve the goals, perform tasks and complete the plans with the required quality in a timely and organizationally optimal manner.

FIGURE 2. Basic elements of civil service evaluation [9]

Types of assessments and their main features are [10]:

- criteria-based assessment is an annual assessment conducted in accordance with the criteria set by the state (A1);

- extraordinary appraisal - appraisal of professional qualities of a special civil servant and efficiency of professional activity of a civil servant (A2);

- assessment in the formation of human resources (A3);

- assessment of the qualifications and professional quality of the civil service to fill vacancies (A4);

- assessment based on the results of a civil servant's test (A5).

The importance of the results of the individual elements of the assessment in calculating the final value varies depending on the type of integral assessment. When calculating the final value of the assessment, it is recommended to determine the following weights of its elements, depending on the type of integral assessment [9]:

TABLE 1. Weight indicators of evaluation elements

Nº	Types of assessment	Weight indicators of evaluation elements		
		Qualification assessment	Professional quality assessment	Evaluating the effectiveness of professional activities
1.	A1	0,2	0,3	0,5
2.	A2	0,2	0,3	0,5
3.	A3	0,8	0,2	_
4.	A4	0,8	0,2	—
5.	A5	0,2	0,4	0,4

The general mathematical model of the estimate is calculated according to the following formula:

$$K_b = B_M * P_M + B_{KF} * P_{KF} + B_{FS} * P_{FS}$$

(1)

There are $B_{M,}B_{KF}$, B_{FS} – assess the qualifications of the civil servant accordingly (B_M) , an assessment of his professional qualities (B_{KF}) and assessing the effectiveness of professional activities accordingly (B_{FS}) .

 P_{M} , P_{KF} , P_{FS} – weight indicators of complex evaluation elements. The sum of the weights is 1.

The results of the assessment of the level of development of professional qualities should form the basis of an individual plan of professional development of a civil servant, as well as taken into account in the organization of additional professional training for civil servants and other activities.

Assessing the effectiveness and efficiency of a civil servant's professional service is an assessment of the civil servant's ability to achieve goals, complete assignments and complete plans in a timely manner with the required quality with organizational, humane acceptable use.

After this evaluation and monitoring we must give this civil servants qualification certificate, which the government body to make decisions in the entire personnel system.

At the same time, The Academy of Public Administration under the President of the Republic of Uzbekistan has developed an information system for monitoring the activities of civil servants and digitizing their activities. This information system is intended to continuously improve the skills of civil servants.

This means that the system organizes professional development courses, in which the level of activity is assessed through the tasks, assignments, tests and other criteria. The results of these assessments will form a certificate of professional development in the prescribed manner. This certificate is very important for the professional development of civil servants. All these processes are carried out through the distance learning portals of the Academy of Public Administration.

Now, through the Civil Service Development Agency, the monitoring of documents received in the prescribed manner on the basis of the results of training, retraining and additional training of civil servants.



FIGURE 3. Relationships between portals

There are created following information systems:

- my.dba.uz The portal of the educational process of the Academy of Public Administration contains a list of subjects in the advanced training courses for civil servants, as well as the mastering scores obtained from them;
- my.mehnat.uz Unified National Labor System of the Republic of Uzbekistan;

- test.argos.uz Unified electronic information-analytical system of the civil service of the Civil Service Development Agency under the President of the Republic of Uzbekistan;
- mo.argos.uz Qualification system of the Civil Service Development Agency under the President of the Republic of Uzbekistan.

Currently, digital transformation with my.dba.uz, mo.argos.uz, test.argos.uz and my.mehnat.uz work is underway. However, work is underway to implement digital integration with the portal my.dba.uz. This digital integration will solve the problems associated with the certification of civil servants. It is known that every civil servant has at least one year. Must complete an hour-long refresher course and provide documentation of the results.

The experience of developed countries shows that the development of information systems in the country through a single platform and their digital integration initially requires great difficulties and funding. In the implementation of digital integration, all industry representatives have to work together as one. In fact, the introduction of ICT in the management process should be convenient for all those who use it.

We have seen from the experience of developed countries that the money invested in the digital transformation is justified, and their state is devaluing its currency by sharing their experience with other countries.

In turn, this work in Uzbekistan will be very fruitful. The Strategy "Digital Uzbekistan - 2030" also sets a goal to increase the share of ICT services to 5.6% of GDP by 2030. Implementing this, in turn, will require a great deal of labor, as well as highly qualified civil servants.

So, I think that the state will benefit from the improvement of systems that combine information on the indicators of their mastery and training in the training of competitive personnel with high education and qualified competencies, and help them to grow professionally. In turn, the correct implementation of the digital transformation between information systems will reduce the human factor, while helping to ensure the arrival of masters of their work in positions in the public administration system. This will greatly contribute to the socio-economic development of the country.

CONCLUSION

In this article, we have considered the automatic exchange of information about the certificate only between my.dba.uz and mo.argos.uz. In fact, it is necessary to carry out automatic digital integration of data on other types of activities of civil servants.

In particular, other information, such as the benefits and rewards received by the civil servant from the organization, should be automatically exchanged between information systems on a regular basis without human intervention. As former German vise-chancellor Gerhard Schroeder put it, "Information should run, not people."

As we have seen above, the experience of Estonia, Danish and Brazil shows that the proper integration of digital information systems can save a significant amount of money in the state budget.

REFERENCES

- Decree of the President of the Republic of Uzbekistan No. PF-5843 of October 3, 2019 "On measures to radically improve the personnel policy and the system of civil service in the Republic of Uzbekistan." https://lex.uz/docs/4549998.
- 2. https://publicadministration.un.org/egovkb/data-center
- 3. https://opendatainception.io/).
- 4. Fernando Filgueiras, Flávio Cireno and Pedro Palotti. Digital Transformation and Public Service Delivery in Brazil. Latin American Policy—Volume 10, Number 2. 2019 Policy Studies Organization. Published by Wiley Periodicals, Inc. Pages 195–219.
- Rainer Kattel and Ines Mergel. Estonia's Digital Transformation. Mission Mystique and the Hiding hand. Great Policy Successes. Edited By Mallory E. Compton Paul 'T Hart. Oxford University Press. 2019. Pages 143-160.
- Morten Meyerhof Nielsen. Governance lessons from Denmark's digital transformation. Research (dg.o 2019), June 18, 2019, Dubai, United Arab Emirates. ACM, New York, NY, USA, 6 pages. <u>https://doi.org/10.1145/3325112.3329881</u>.
- 7. Public service: textbook and workshop for academic bachelor's degree / E. V. Okhotskiy. Moscow: Yurayt Publishing House, 2019 .-- 340 p.

- 8. Legal basis of civil service reform in the Republic of Uzbekistan: roundtable materials. -Tashkent: Baktria press, 2015. 156 p.
- 9. Methodical tools for the implementation of the system of complex assessment of professional activity of the state civil service (including general assessment). Moscow, 2013.246 p
- 10. Rakhmanov K.S., Maxmanov B.Q. The role of the model of the system of assessment of professional activity of civil servants in public administration // Materials of the Republican scientific-practical conference on the "Priorities of public administration and digitization of the economy". Academy of Public Administration under the President of the Republic of Uzbekistan. Tashkent 2020 y. May 15. 8-11 pages.