WEB OF SYNERGY:
International Interdisciplinary Research Journal
Volume 2 Issue 2, Year 2023 ISSN: 2835-3013
https://univerpubl.com/index.php/synergy

Digital Transformation in Uzbekistan and Strategies of Successful Transition to Digital Economy

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Article Information

Received: December 18, 2022
Accepted: January 19, 2023
Published: February 20, 2023

Keywords: *Digitalization, digital transformation, education, Uzbekistan, IT*

ABSTRACT

Rapid development of IT industry impacts all spheres of human life. If only a few decades ago the scientific world worried about informatization, now discussions are more about digitalization and digital transformation. In most cases it leads to misinterpretation of these terms in some sectors, and education is one of them. Some educational institutions in Uzbekistan accept digitalization as IT assets while it is much more beyond this perception. Educational institutions should understand that digitalization lies beyond the equipment, and usage of IT tools and digital literacy are the most important criteria in this transition. It is very important to provide systematic approach to maintain smooth transition of all industrial sectors into digital one; this is one of key approaches in effectively implementing new strategy of "Digital Uzbekistan – 2030" in the Republic of Uzbekistan. In this research paper the discussing differences between these terms, give more detailed picture of them and determine main problems of digital transformation of education sector in Uzbekistan. The analyses the main indicators that categorizes terms "digital" and "digitalization", make analysis of the educational institutions in Uzbekistan based on IT equipment and what category they belong to. Moreover, to identify what factors fuel the quick digital transformation and make some recommendations on how to provide suitable conditions for this transition.

INTRODUCTION

Development of information and communication technologies along with globalization process changed the world we live. Digital industrialization becomes one of the drivers of the economic growth in the 21 century (Gaga & Cooper, 2022) [3]. Although transition to digital world was inevitable, this process was further intensified by the pandemic. While talking about digitalization, most categories of people think about technical supplement, which are the base of the transformation, sure, people need to understand that digitalization lies beyond the hardware and software (Gandhi, 2016) [4]. I am glad that the government of the Republic of Uzbekistan accepted the importance of digital transformation, made significant steps towards it, and approved the strategy of "Digital Uzbekistan – 2030" in order to designate priority areas for development in transition to the digital economy [2].

Taking into account that the informatization process in Uzbekistan started only in the early 2000s, it can be said that a lot has been done in this area. However, there are still vast of unsolved problems and gaps which needs systematic approach in order to successfully transit to the digital world. The development of digital economy along with other fields mentioned in the

strategy like e-government, digital infrastructure, digital industry and digital education (Gaga & Cooper, 2022), is directly related to the training of personnel and the system of higher and secondary education of the Republic of Uzbekistan. The lack of specialists in IT sphere, along with the discrepancy between the curricula of higher education institutions and the requirements for specialists in the labor market, are the main problems, the solution of which determines the intensity of the further development of digitalization in all areas and the transition to a digital economy.

Although some research was conducted in the field of digital transformation all over the world, it is still remains as one of the most discussed topics in some developing countries like Uzbekistan. Specific characteristics of each country require an individual approach based on comparative analysis of qualitative and quantitative data and systematic approach to effectively maintain digital transition.

Research outcomes from McKinsey Global Institute (MGI) provide an informative evidence of the digitalization in the American economy which serve as an important information to consider for other countries. While the government of the Republic of Uzbekistan pushes the boundaries towards the digital world, it is important to understand that digitalization will affect other industries of the economy at all levels as well (McKinsey Global Institute, 2015) [6]. It is really important to understand that technology not only changes the process of businesses performed before, it serves as a tool to create totally new products and services and as a result it should force the government to reshape the economy as a whole. Significant development made in e-government, more than 300 public services provided by interactive public services portal in Uzbekistan, which combines more than 100 information systems in one e-government system (E-government Projects Management Center, 2022). Obviously, automation of daily routine works in many occupations changes the sense of these jobs and leads to reconsider their roles and create new job descriptions and characteristics. As a result, government should think about implementing new job classifications and training pathways for workers in order to help them to adapt to digital environment.

PROBLEM STATEMENT

It is obvious that IT industry will never stop inventing and expanding; it is growing in exponential speed. Fueled by globalization, digitalization process needs a scrutinized planning and effective implementing strategy. The identification of important factors in such circumstances will lead to the success and help avoid basic mistakes in digital transition. The importance of this research lies in identification of the correlation between ICT shares in different economic sectors and digitalization growth in the economy of Uzbekistan (Solar, 2017) [8]. To analyze this relation, the author uses the Digital Government Maturity Model (Introducing the Gartner Digital Government Maturity Model 2.0, 2017) [5] and consider it as one of the effective tools to provide recommendations in digital transformation.

According to Digital Government Maturity Model, there are five levels of digitalization which are defined as Initial (E-Government), Developing (Open), Defined (Data-Centric), Managed (Fully Digital) and Optimizing (Smart) levels. If in the early stages of the development of the digital economy there was a need for a gradual evolutionary transition, today it can be observed that some of these levels can be equally coexisted (Di Maio, 2017).

In the first initial level of digital transformation government tries to move the vast services online and provides convenient and cost-saving government services to the public users. Statistics of Uzbekistan illustrates that majority services, if we take the exact number to the date of September 10, 2022 – it is 352 government services, are provided through e-Government platform and this number is significantly changed throughout the last period. Only for the last year government added 100 services to its interactive services. Taking into account that

transition to the online platform started in 2010, it is still in the progress and generating new interactive government services and products is in the process.

In parallel with the first level of Digital Government Maturity Model, active promotion is also observed at the second level of the model. That is, the government of Uzbekistan has adopted a number of legislative acts at the state level to ensure the transparency of open data and the active involvement of a wide range of the population into the decision-making process at the state level. Thus, in June 2022 Decree of the President of the Republic of Uzbekistan on "Measures to implement a system for increasing and assessing the level of openness of the activities of state bodies and organizations" was approved [7]. This legislation is aimed to realize the constitutional rights of citizens to freely search for and receive information, ensuring openness, transparency and accountability of the activities of state bodies and organizations, as well as determining performance indicators in the field ensuring openness and introducing a system for evaluating their activities based on advanced international standards [11].

It can be said that over the past year, preparations have been made for the implementation of the third level of the model, which requires a legal basis for its implementation. Since the third defined or data-centric level concentrates on the collecting and using statistics or data for strategic plans, it is vital to define the openness level of data and to maintain it technically. In Uzbekistan this can only be ensured by the creation of appropriate legal foundations and regulations at the governmental level. The importance of state intervention stems from the fact that a real transformation in the information sphere requires changes in business processes, since, unlike the traditional hierarchical form of top-down management, there is a direct relationship between the public and the authorities in the information space. The right legal framework is a fundamental factor that must be formed in the initial stages of the transition to a digital economy in order to ensure the successful transition to the fourth fully digitalized level of the process.

At the fourth level, where all areas of economy collect data in real time, data privacy becomes a big concern for users. The interchange of data between different business organizations occurs instantly and regularly, and therefore, it is very important to ensure that all data is used within the established laws and regulations, which is clearly accepted by all parties. Although there is better consumer services and easy interaction between organizations, the big issue is related to the data confidentiality and information security, which should be clearly negotiated and defined in the legal framework (Di Miao, 2017) and backed up by legislation [9,10].

The last fifth stage – the smart stage – implies that all governmental organizations and economic entities interact exclusively through a single information system in real time. Such interaction requires stability and continuity in the activities of all economic sectors, on the implementation of which the functioning of the entire system will depend.

The model demonstrates five levels of the maturity model of the government to efficiently perform digital transition and helps to develop transformation strategy between policymakers and business world (Di Maio, 2017) [1].

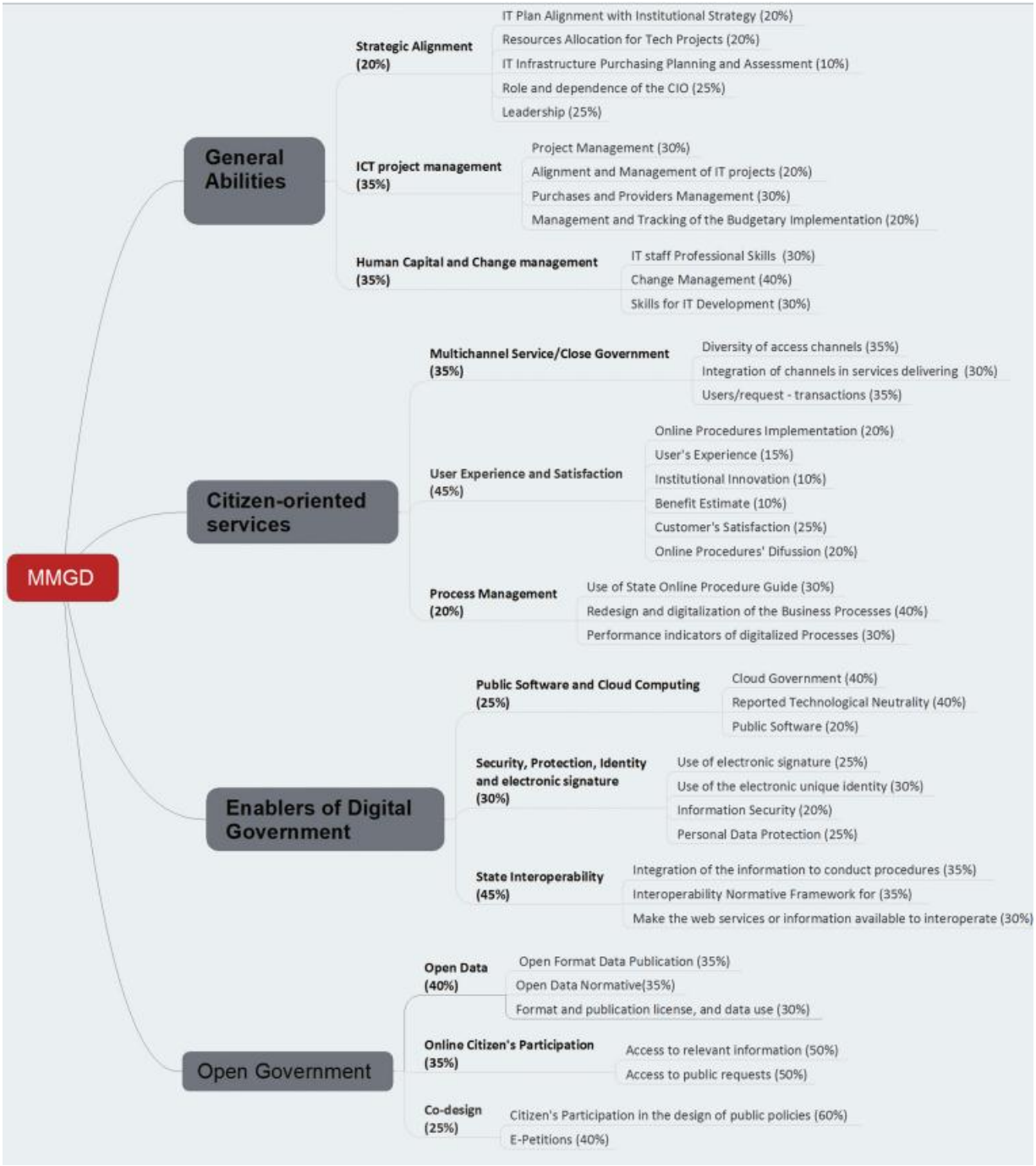

Figure 1. Structure the MMGD

Level 1 — Initial (E-Government)

At this level, the focus is on moving services online for user convenience and cost savings, but data and its uses are siloed and extremely limited. “If the organizational view is that a high percentage of online services or mobile access represents a modern digital government, then more education and advocacy is needed to show what real digital government looks like, and its benefits,” said Di Maio. “To make the case for advancement, create case studies explaining how digital transformation will ease or remove high-priority pain points for the organization.”

Level 2 — Developing (Open)

Level 2 is not necessarily subsequent to level 1. E-government and open government programs often coexist, with different leadership and priorities. Open government often takes the form of public-facing programs intended to promote transparency, citizen engagement and the data

economy. Examples we see today are nascent open data initiatives, often in the context of smart city programs such as the Copenhagen Data Exchange.

Level 3 — Defined (Data-Centric)

On this level the focus shifts from simply listening to citizen or user needs to proactively exploring the new possibilities inherent in strategically collecting and leveraging data. The key performance indicators here are "how much of our data is open?" and "how many of our applications are built on open data?" It's tempting at this point to engage in vanity projects or skip ahead before the proper groundwork is laid; it's paramount to remain focused on designing and implementing data-centric strategies and processes.

Level 4 — Managed (Fully Digital)

By this level, the organization, agency or department has fully committed to a data-centric approach to improving government, and the preferred approach to innovation is based on open data principles. Data flows regularly across organizational boundaries, leading to easier interactions and better services for constituents. It's possible at this stage to encounter privacy-related backlashes, as citizens can be uncomfortable with how their data is being collected and used. Therefore, it is important to ensure that data is used within existing norms and regulations, and that this is clearly communicated.

Level 5 — Optimizing (Smart)

At this point, the process of digital innovation using open data is embedded deeply across the entire government, with buy in and leadership from the top tier of policymakers. The innovation process is predictable and repeatable, even in the face of disruptions or sudden events that require rapid responses.

Discussion

These research recommendations hopefully will make its contribution to Uzbekistan's economy to meet international standards and increase its competitiveness among Central Asian countries.

References

1. Di Maio, A. (2017, November 6). 5 Levels Of Digital Government Maturity. Gartner. Retrieved September 24, 2022, from https://www.gartner.com/smarterwithgartner/5-levels-of-digital-government-maturity
2. Digital Uzbekistan 2030 strategy envisages several breakthrough measures for the country's development. (2021, Jun 29). Uzbekistan National News Agency (UzA) Retrieved from https://www.proquest.com/newspapers/digital-uzbekistan-2030-strategy-envisages/docview/2545969554/se-2

   (2020). E-Government Projects Management Center. Retrieved November 9, 2022, from https://e-gov.uz/en
3. Gaga, L., & Cooper, B. (2022, January 17). ??? ??? - YouTube. Retrieved November 9, 2022, from https://isrs.uz/en/page/pdf/eldor-aripov-strategia-cifrovoj-uzbekistan-2030-predpolagaet-rad-proryvnyh-dla-strany-mer
4. Gandhi, P. and oth. (2016, April 1). Which Industries Are the Most Digital (and Why)? Harvard Business Review. Retrieved September 24, 2022, from https://hbr.org/2016/04/a-chart-that-shows-which-industries-are-the-most-digital-and-why
5. Introducing the Gartner Digital Government Maturity Model 2.0. (2017, July 20). Gartner. Retrieved September 24, 2022, from https://www.gartner.com/en/documents/3764382

6. McKinsey Global Institute. (2015, December 1). Digital America: A tale of the haves and have-mores. McKinsey. Retrieved September 24, 2022, from https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/digital-america-a-tale-of-the-haves-and-have-mores
7. President of Uzbekistan put forward important initiatives to develop the digital economy in the SCO space. (2022).
8. Solar, M. (2017, 08 04). Correlation Between ICT Investment and Technological Maturity in Public Agencies. Electronic Government, 10428. Springer. https://citations.springernature.com/item?doi=10.1007/978-3-319-64677-0_34
9. Таджибаева, Д. (2017). Обеспечение национальной безопасности в информационной сфере. Review of law sciences, 1(1).
10. Таджибаева, Д. (2017). Ensuring national security in the information sphere. Юридик фанлар аҳборотномаси, (1), 56-61.
11. УП-154-сон 14.06.2022. О мерах по внедрению системы повышения и оценки уровня открытости деятельности государственных органов и организаций, 2022.