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BENEFITS OF E-GOVERNANCE

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Keywords: digitalization, digitization, e-document, e-governance.

Introduction. Given the amount of effort invested in the development of information technology and how global digitalization has become, it is surprising that the use of paper documents and offline communication is still prevalent. Digitization of documents has proven to be more profitable than usage of paper analogues. To begin with, e-documents leave a carbon footprint three times smaller than paper documents (Nazaruk, 2020). In addition, problems with the transportation of paper documents require additional time and human resources. Lastly, in some cases paper documents and offline communication are no longer reliable. This problem is notable in every sphere, especially in government: paper usage and dependance on face-to-face communication slow down the processes and make government less productive.

Objectives. The main objective of this research is to explore how implementation of electronic governance, or e-governance for short, can change interactions in government in both internal and external connections, as well as identify the strengths and weaknesses of this government management approach over "old-fashioned" paper documentation and necessity of offline interactions. The existing examples of e-governance projects will also be reviewed in this work.

Methods. Before discussing the pros and cons of e-governance, it is important to define in which spheres e-governance has influence. There are four types of e-governance interactions: Government-to-Citizen (G2C), Government-to-Business (G2B), Government-to-Government (G2G) and Government-to-Employees (G2E).

Digitalization of G2C section lets citizens retrieve the government facilities anytime from anywhere. A good example of G2C optimization is the implementation

of online management and payment of communal services. However, not every citizen can use or have access to information technology (elderly, for instance), thus complete removal of traditional interactions will limit their abilities.

Digitalization of G2B section provides business organization with easy online access to government agencies. Example of G2B optimization in Ukraine is the distribution of online tools to businesses and FOPs (private entrepreneurs) that allow them to turn in their accounting reports remotely. The biggest issue of this method is the provision of secure transfer, as well as authenticity check of e-documentation, which might be easier with paper documentation due to existing mechanics.

Digitalization of G2G section eases the interaction between different government departments, firms, authorities, and affiliates. For instance, during the Russian invasion of Ukraine in 2022 Poland provided an electronic document for Ukrainian refugees in their mObywat app that interacted with Ukraine's Diia app (Portal Gov.pl, 2022). However, complete removal of physical documentation is yet impossible due to low security measures both for e-documents and apps. For example, in Ukraine there were confirmed cases of Diia app replicas that allowed production of fake documents on demand (Konstantinova, 2021). It would be harder to replicate physical documents due to existing multi-factor authenticity protection.

Digitalization of G2E section groups employees together and eases their work. For instance, a special program for IT-companies called Diia.City is currently in development in Ukraine (Ministry of Digital Transformation of Ukraine, 2022). This program provides special taxing policies for participants and supports with employment relations liberalization and intellectual property protection. There is one disadvantage: businesses willing to participate might not meet all the requirements right away, and the changes taken to meet them might be harmful for companies.

Results. Here are presented the most successful e-governance projects.

−   In 2018, Smart Dubai announced Paperless Strategy to completely remove paper documentation and make government 100% digital (Digital Dubai, 2018). In 2021, as planned, Dubai successfully became world's first paperless government.

−   Ukrainian e-documentation service Vchasno is used by more than 400 thousand companies, including national communal services and government authorities, which resulted in significant performance boost (Vchasno, 2022).

−   Ukrainian platform and mobile app Diia provide over 70 different services for citizens of Ukraine, as well as legal digital versions of important documents like passport and driver's license. These documents, available at any time, can be used to check in a hotel, perform bank operations, sign e-documents and more. Diia has proven to be extremely efficient during Russian invasion in 2022, providing additional services and official information from government (Iosad, Large, 2022).

Conclusion. To sum up, e-governance has proven to have many advantages. Nevertheless, it still requires improvement in security and authenticity proving mechanisms. The development of information technology gives chance for e-governance to potentially if not fully, but mostly replace old means of governance.

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DIGITAL EDUCATION IN UKRAINE

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Keywords: digital literacy, digital competence, digital intelligence, technologies.

Introduction. In 2021, the Cabinet of Ministers of Ukraine approved the Concept of Digital Competence Development until 2025. At the state level, Ukraine is starting a large-scale digitalization of all sectors of the economy and basic spheres of life, such as education and medicine, investing as much as possible in the development of digital infrastructures, innovations and modern technologies. The priority of priority spheres and initiatives of digitization of Ukraine is the spread of digital education. In the mentioned document, the concepts of 'digital literacy', 'digital competence', 'digital intelligence' are widely used, in particular, the relevance of the formation of end-to-end digital competence is indicated, when studying subjects through the use of "digital" technologies.

Diya. Digital education is an interactive online platform that helps to improve the skills of working on the Internet, which are necessary for business development, career growth or simply for self-confidence. The platform contains more than 100 hours of free educational material, divided into courses or educational blocks,