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BOOSTING IT INNOVATIONS IN PUBLIC SECTOR OF UKRAINE

The last decades brought rapid technological transformation, reshaping economies, governance models, and public service delivery worldwide. Countries that effectively leverage these advancements within their public sectors can provide more efficient, transparent, and responsive services to their citizens. Ukraine stands at the forefront of this digital revolution, embracing cutting-edge IT solutions to modernize the public sector and improve its relationship with the society.

Ukraine's determination to promote innovation in the public sector is commendable, despite the ongoing challenges facing the country. This ambition has been driven by a recognition that digitalization and IT-driven practices hold the key to enhancing governance, optimizing public resources, and fostering a transparent, accountable state. Ukraine has become a global leader in digital IDs and digitalization of public services, setting a benchmark for other countries transitioning to a digital-first approach.

The importance of fostering IT innovations in Ukraine's public sector extends beyond the realm of technology - it has implications for national security and social stability. By integrating advanced IT innovations, Ukraine can strengthen its public institutions, ensure transparent decision-making processes, and improve the quality of life for its citizens.

Next, we are going to take a look the current state of the Ukrainian IT infrastructure in the public sector (AS IS), the boosters that are necessary for the further development of IT innovations in the public sector (Boosters for IT innovations), and what we need to do to ensure that these boosters are really effectively influence the development of the usage of IT innovations in the public sector of Ukraine [1].

Digital Country - is the large process of digitalization of public services, with the main goal to make 100% of them available online. "Diia" application is the main flagship product of the project. Application already has more than 21,7 million users by now — over 70 government services are available online. Mobile application "Diia" allows Ukrainians to access 14 digital documents (ID card, foreign biometric passport, student card, driver's license, vehicle registration certificate, vehicle insurance policy, tax number, birth certificate, IDP certificate) and 21 services in total. Ukraine has become the first country with a digital ID that is valid and can be used everywhere within the country and the fourth in Europe to launch a digital driving license. All digital documents in "Diia" now have the same legal force as their plastic or paper counterparts [1];

Healthcare Services Digitalization - the flagship of this innovative direction is "Helsi" - the largest medical information system in Ukraine, created for patients, doctors, public and private medical institutions. It is currently used by over 1,300 healthcare institutions (72% across Ukraine) and 49,000 doctors from various levels of healthcare across Ukraine [2].

Electronic document management - in this direction the flagship is the service "Vchasno" - an instant electronic document exchange service that allows you to sign, send, receive and store documents online. "Vchasno" does not require any special software, only a browser and access to the Internet. The "Vchasno" service is designed for companies, entrepreneurs and individuals, helping to simply and quickly sign, exchange and store documents online [3].

Online banking - both state and private banks in Ukraine provide a wide range of banking services through user-friendly mobile applications. Currently, online banking is also deeply integrated into public sector systems, which has provided opportunities for the comprehensive implementation of the providing of public services [4].

Global IT trends - developing of new information technologies in the world cannot bypass Ukraine. In order to stay in trend, as well as constantly move towards the development of the public

sector, we must constantly develop our knowledge of new technologies. Currently, it is important to research and consider the effectiveness of using the capabilities of Artificial Intelligence (AI).

“Citizens are our clients” - the practice of perceiving citizens as clients of the public sector is not new. Nevertheless, as we know, the quality and quantity of needs and requirements of clients change from year to year. In order to continue to take care of this demand at a high level, it is necessary to continue to develop the philosophy “citizens are our clients”. In the long term perspective, this philosophy itself is an important booster for the implementation of IT innovations in the public sector.

Cybersecurity - technological innovations themselves create challenges for security systems. Cybersecurity is perhaps the most important part in the overall innovative development, so we must constantly improve our knowledge and achievements in this area, because cybersecurity is a component not only of the safe and effective functioning of the public sector, but is also a component of national security.

Challenges caused by the full-scale war - the full-scale invasion of Russia has faced Ukraine with unprecedented challenges. Meanwhile, these tragic events have led to the need to think through and implement new ways to support the functioning of the public sector in order to provide citizens with the full range of necessary services. Digital government services, electronic document management, healthcare system digitization, as well as other online services, have enabled the Ukrainian community to withstand the most difficult periods of full-scale invasion. Innovations continue their accelerated development in the conditions of full-scale war, which also continues to present new challenges to the Ukrainian public sector [5].

Improving skills and understanding of processes - an important task today is to accelerate the improvement of skills of public employees of various levels, who are responsible for the providing of public services. It is important to ensure an understanding of modern technological processes and innovations by public employees of various levels, and they should also be involved in them. It is necessary to work on understanding the need to implement IT innovations, prospects and effective impact, both directly on the work of public employees, the quality of service providing, and the level of satisfaction of a citizen as a client from receiving these public services.

Implementing of management practices of technology companies - the management experience of leading IT companies has long proven its effectiveness, namely:

- personnel management
- task management;
- effective service providing;
- experience of working with clients

The implementation of this experience will provide an opportunity to bring the efficiency of the functioning of the Ukrainian public sector closer to the level of efficiency of leading technology companies.

Using the capabilities of AI - artificial intelligence technologies made a significant breakthrough in 2023, and set a sustainable trend for the coming years. Global technology companies such as Apple, Alphabet, Microsoft, X and others have already implemented, or are in the process of implementing, their own developments in the field of artificial intelligence in their products. Artificial intelligence has an extraordinary potential for use in the public sector in Ukraine. Therefore, the development of a methodology for the implementation and usage of artificial intelligence in the Ukrainian public sector is an important task in the coming years.

Improving cybersecurity - as already noted, the implementation of new technologies creates new security challenges. Information circulating in the public sector is extremely sensitive, so its security should be priority No. 1. It is especially worth considering that the implementation of artificial intelligence technologies may also be the most important challenge for the Ukrainian cybersecurity system [6].

The future of Ukraine's public sector lies in its ability to adapt and innovate through IT advancements. The "Diia" application, "Helsi" medical system, "Vchasno" document exchange

service and online banking services are exemplifying the transformative potential of digital solutions. By staying attuned to global IT trends, enhancing cybersecurity, overcoming wartime challenges, and investing in workforce skills and AI capabilities, Ukraine can position itself as a leader in digital public service innovation. Ultimately, these advancements will pave the way for a more resilient, efficient, and citizen-focused public administration system.

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