

## **СЕКЦІЯ «СУЧАСНІ ЕКОНОМІЧНІ СИСТЕМИ ТА ПУБЛІЧНЕ УПРАВЛІННЯ»**

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### **INSTITUTIONAL BARRIERS AND RISKS TO THE DEVELOPMENT OF DIGITAL COMPETENCIES OF CIVIL SERVANTS IN THE PUBLIC ADMINISTRATION SYSTEM**

The digital transformation of public administration in the 21st century is one of the key factors in increasing the effectiveness of state policy, the quality of public services and the institutional capacity of authorities. In this context, the development of digital competences of civil servants acquires strategic importance, since it is human capital that determines the ability of public institutions to adapt to technological changes, implement innovative management solutions and ensure the sustainability of digital reforms. At the same time, the practice of many countries, in particular states with a transitional administrative system, shows that the availability of digital technologies and infrastructure does not guarantee automatic improvement of the efficiency of public administration without the systematic development of digital competencies of personnel.

In modern scientific thought, the digital competences of civil servants are considered not only as a set of technical skills, but as a comprehensive

characteristic of professional capacity, covering information and analytical abilities, digital communication, work with data, management of digital processes, compliance with cyber security standards and digital ethics, as well as readiness for continuous training in conditions of rapid technological changes. It is this approach that is embedded within the European framework of digital competences DigComp [1], DigCompEdu [2] and DigCompOrg [3], which are increasingly being used as a methodological basis for the development of public service in the countries of the European Union.

At the same time, the formation of digital competences of civil servants in the public administration system faces a number of institutional barriers and risks that are systemic in nature and cannot be overcome exclusively through individual training or the implementation of separate educational programs. Institutional barriers in this context should be understood as a collection of regulatory, organizational, personnel, managerial and cultural constraints that complicate or inhibit the sustainable development of digital competences in the public sector.

One of the key institutional barriers is the fragmentation of regulatory and legal regulation of the development of digital competences of civil servants. In many countries, in particular in Ukraine, digital skills are declared as an important element of professional development, but there is no integral system of their institutionalization in professional standards, job profiles and mechanisms for evaluating the effectiveness of the civil service. This leads to a situation in which digital competences are perceived as an additional or optional component of vocational training rather than as a mandatory element of the managerial capacity of the civil servant.

An essential barrier is also the organizational inertia of public institutions, which is manifested in the preservation of traditional bureaucratic management models focused on hierarchy, formalism and low flexibility of management processes. Under such conditions, even the presence of digital skills in individual employees is not transformed into an increase in the overall digital capacity of the

organization, since there are no incentives for the introduction of innovations, interdepartmental interaction and the use of data in the process of making management decisions. This barrier is closely linked to an insufficient level of organisational digital maturity, which in European practice is seen as a necessary condition for the sustainable development of staff digital competences [4].

Personnel barriers also play a significant role in curbing the development of digital competences of civil servants. It is, in particular, about the imperfection of the personnel selection system, within which digital competences are not always taken into account as a criterion of professional suitability, as well as about limited career opportunities for employees who have a high level of digital skills. The lack of a clear correlation between the development of digital competences and career prospects reduces staff motivation for continuing digital learning and innovation activities.

A separate group is represented by the risks associated with the asymmetry of digital competences in the public administration system. They are manifested in the uneven development of digital skills between different levels of government, public administration bodies and categories of civil servants.

Such asymmetry creates risks of a digital divide within the public service, which complicates interdepartmental coordination, implementation of integrated digital services and implementation of the «digital by default» principle.

Institutional risks also include the formalization of digital learning processes, in which the improvement of digital competences is reduced to the completion of separate courses or trainings without their real integration into the professional activities of civil servants. In this case, digital learning is not accompanied by changes in management processes, organizational culture and decision-making mechanisms, which significantly reduces its effectiveness. European experience shows that overcoming this risk is possible only if individual competence development is combined with the transformation of organizational practices and management models.

Equally important are the risks associated with cybersecurity, personal data protection and the ethical use of digital technologies in public administration [5].

Insufficient level of relevant competences among civil servants can lead to an increase in the vulnerability of state information systems, violation of citizens' rights and a decrease in trust in digital public services. In this context, the development of digital competences should be considered not only as a tool for improving management efficiency, but also as an element of ensuring national security and democratic legitimacy of public power.

The analysis of institutional barriers and risks of development of digital competences of civil servants allows us to conclude that the key problem is the lack of a comprehensive state mechanism that would combine regulatory regulation, personnel policy, the system of professional development and the organizational transformation of public administration. It is this kind of mechanism that is being implemented in the countries of the European Union through the integration of the DigComp, DigCompEdu and DigCompOrg frameworks into national civil service digital transformation strategies.

For Ukraine, overcoming these barriers and minimizing the risks of developing the digital competences of civil servants requires a transition from fragmented initiatives to a systematic, institutionally anchored approach. This involves the harmonization of the national framework of digital competences with European standards, the integration of digital competences into professional standards of the civil service, the introduction of unified approaches to assessing the digital capacity of personnel and the development of organizational digital culture in public authorities.

### **References:**

1. European Commission, Joint Research Centre. (2022). DigComp 2.2: The Digital Competence Framework for Citizens. Retrieved from <https://publications.jrc.ec.europa.eu/repository/handle/JRC128415> [in EU]

2. Redecker, C. (2017). DigCompEdu: European Framework for the Digital Competence of Educators. Retrieved from <https://publications.jrc.ec.europa.eu/repository/handle/JRC107466> [in EU]
3. Kamylyis, P., Punie, Y., & Devine, J. (2025). DigCompOrg: Digitally Competent Educational Organisations. Retrieved from <https://publications.jrc.ec.europa.eu/repository/handle/JRC98209> [in EU]
4. Shliakhtina, H. V., & Orlova, N. S. (2021). Tsyfrovi kompetentnosti lidera na derzhavnii sluzhbi. Investytsii: praktyka ta dosvid, (9), 98–102. Retrieved from [http://www.investplan.com.ua/pdf/9\\_2021/16.pdf](http://www.investplan.com.ua/pdf/9_2021/16.pdf) [in Ukrainian]
5. Chumakova, H. V., & Pasichniuk, V. V. (2025). Elektronni publichni posluhy yak instrument transformatsii derzhavnoho upravlinnia Ukrainy. Stredoevropsky vestnik pro vedu vyzkum, 1(12), 45–63. Retrieved from <https://phes.com.ua/ojs/index.php/www/uk/article/view/16/28> [in Ukrainian].

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