

НАПРЯМ 1. ЕКОНОМІКА

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DIGITAL UNIVERSITY IN THE CONTEXT OF WAR IN UKRAINE

Digital technologies are especially important in the context of the war in Ukraine when there is a need to quickly adapt the educational system to new challenges. The digital university is a new vector for the development of higher education, ensuring the continuity of the educational process even in difficult conditions. The transition from the traditional model of education to the digital one not only allows for the introduction of innovative technologies but also guarantees access to education for students from different parts of the country and the world. Distance learning, digital libraries, and interactive platforms are becoming important tools to support the learning process, ensuring mobility and efficiency in difficult times.

It is worth emphasizing that most universities have mastered new formats of knowledge transfer over the past two years, among which the most significant are:

- use of paid platforms for the implementation of educational content;
- creation of hybrid resources based on several platforms;

– use of ready-made audio materials and video tutorials for the implementation of the educational process, etc [1; 2].

It is obvious that in the context of the war in Ukraine, the digitalization of higher education is becoming not only a tool to support the educational process, but also an important factor in economic sustainability. Digital technologies change not only the educational process but also create new opportunities for the development of the digital economy, which is especially relevant in times of war. Innovations in the education sector, such as the introduction of distance learning and digital platforms, contribute to the development of new economic models that can support the country's stability and recovery in the post-war period.

Digital technologies play a key role in ensuring the continuity of the educational process and developing economic resilience in times of war, opening up new horizons for higher education and the digital economy. Researchers emphasize the fact that deep transformations in education are necessary: “The global development of the information society requires a corresponding change in the education system” [3, p. 1224]. In the context of the development of the digital economy, the formation of new competencies is of particular relevance, but the problem is much broader. It encompasses not only the development of skills and knowledge but also the revision of conceptual approaches to building educational systems to adapt them to the new challenges and opportunities that arise in the digital age.

The position of experts and scientists is that we are dealing with digital transformation, since, on the one hand, the task of forming a special environment that will ensure the training of personnel competitive in the digital economy has come to the fore [4, p. 110], and on the other hand, the need for “a digital information environment that allows the fullest use of information resources, as well as communication opportunities in this environment, to form the basis of a network virtual environment for interaction between participants in the education market [5], as well as “providing opportunities for students to build individual educational trajectories, expanding cooperation with universities in the implementation of networked educational programs using online courses,

using technology to improve the quality of education and motivate students of all forms of education, increasing the economic efficiency of educational services through the introduction of educational technologies” [2, p. 53].

Researchers include "digital fragmentation and diversification, social networks, software for creating electronic portfolios, MOOCs (massive open online courses), integrated sales systems, and digital publishing houses" [1, p. 58]. The transformation of the organizational architecture of higher education institutions based on building an information infrastructure that allows automating the educational process and involving the maximum number of participants in it comes to the fore.

In turn, the increasing number and complexity of interactions make it impossible to organize their targeted coordination without creating and using a special digital environment, which is confirmed by the vision of the digital environment as a tool that allows for the best possible management function, ensuring decision-making based on the maximum amount of information and expanding communication opportunities both within the university and with its partners.

In scientific research, the organization of digital transformation of universities is represented by different approaches, but the main directions of digitalization of the educational process, according to researchers, include: building digital infrastructure, training a new generation of teachers, modernizing educational programs and areas, creating flexible educational trajectories, integrating artificial intelligence into educational processes, and implementing the concept of lifelong learning [3; 4].

These steps ensure sustainable development and increase the competitiveness of universities in the global educational space.

Higher education institutions need to adopt a concept, target model, and roadmap for digital transformation. Existing practical cases show that at the first stages it is enough to identify five areas:

- introduction of digital educational technologies;
- development of a data-driven management system;
- implementation of individual educational trajectories;
- ensuring the development of digital economy competencies;

- digitalization of research and development activities.

We are convinced that for most higher education institutions, it is not advisable to create their own ecosystem today but rather to apply a service approach with the construction of an integrated system of metaservices. Thus, in order to implement a digital university project in modern conditions, we can formulate the following recommendations on the composition of solutions that need to be implemented in the first years of the project (Table 1).

Table 1

Recommendations for implementing solutions for a digital university project

Data-driven management systems:	Individualized educational technologies:
<ol style="list-style-type: none"> 1. Metaservice for interaction with partners. 2. Portfolio of students, research and development, and partners. 3. A digital dashboard of the university's processes and parameters. 4. CRIS systems. 5. MDM and procedures for verifying and updating data. 6. Access to high-tech software through virtual desktop technologies and centralized licensing servers. 	<ol style="list-style-type: none"> 1. Implementation of adaptive educational technologies aimed at student retention. 2. Creating an educational core in key areas of science. 3. Competitiveness of students: <ul style="list-style-type: none"> – learning technologies; – teachers; – electives; – levels of complexity of the disciplines; – project topics. 4. Recommendation services for creating and navigating individual educational trajectories.
Digital educational technologies:	Digital Economy Competencies (DEC):
<ol style="list-style-type: none"> 1. Roadmap for the implementation of electronic resources. 2. A turnkey online course creation service. 3. Approval of organizational and economic models for using online courses. 4. A single reference book of electronic resources. 5. Designer of educational programs. 6. Access to self-recording studios. 	<ol style="list-style-type: none"> 1. Implementation of continuous and differentiated training of teachers and researchers in the Digital Economy Competence (DEC). 2. Involvement of students in teaching activities. 3. Designing pilots of new educational programs or postgraduate education based on a dynamic model demanded by the competence market. 4. Service (auto-service) for building online CCEs using the CCE Data Lake, services for popular CCEs. 5. Constructor (in-house or outsourced) of the dynamic model of the CCE.

The recommendations in the table focus on the main services and solutions that are considered a priority for implementation. It is important to note that many potentially useful services were not included in this list to emphasize the need to focus resources on the most important initiatives. We did not consider those solutions that are already widely used in most higher education institutions, such as electronic document management, university website, etc.

Thus, in times of war, the digital university is gaining strategic importance as a tool to ensure the continuity of the educational process, contributing not only to preserving educational opportunities but also to strengthening the economic stability of the state. The successful integration of digital technologies into the higher education system forms the basis for the development of the digital economy and the improvement of the university structure in line with the challenges of the modern world.

References:

1. Kolodinska Ya. O., Skliarenko O. V., Nikolaievskiy O. Iu. (2022) Praktychni aspekty rozrobky innovatsiinykh biznes idei z vykorystanniam tsyfrovyykh servisiv. *Ekonomika i upravlinnia*, no. 4, pp. 53–60. DOI: <https://doi.org/10.36919/2312-7812.4.2022.53>
2. Skliarenko O.V., Yahodzinskyi S.M., Nikolaievskiy O.Iu., Nevzorov A.V. (2024) Tsyfrovi interaktyvni tekhnolohii navchannia yak nevidiemna skladova suchasnoho osvithnoho protsesu. *Innovatsiina pedahohika*, no. 68 (2), pp. 51–55. DOI: <https://doi.org/10.32782/2663-6085/2024/68.2.51>
3. Khomenko O. O., Paustovska M. V., Onyshchuk I. A. (2024) Vplyv interaktyvnykh tekhnolohii na protses navchannia i rozvytok zdobuvachiv vyshchoi osvity. *Naukovi innovatsii ta peredovi tekhnolohii*, no. 5(33), pp. 1222–1231. DOI: [https://doi.org/10.52058/2786-5274-2024-5\(33\)-1222-1231](https://doi.org/10.52058/2786-5274-2024-5(33)-1222-1231)
4. Huk P. V., Skliarenko O. V. (2022) Ekonomichna dotsilnist modernizatsii pidpriemstv z vykorystanniam avtomatyzovanykh system. *Ekonomika i upravlinnia*, no. 2, pp. 103–112. DOI: <https://doi.org/10.36919/2312-7812.2.2022.103>
5. Bobro N. S. (2024) The Role of Digital Educational Platforms in Shaping New Models of Economic Development. *Problemy suchasnykh transformatsii. Serii: ekonomika ta upravlinnia*, no. 14. DOI: <https://doi.org/10.54929/2786-5738-2024-14-11-01>