

THE UNIVERSITY'S DIGITAL ECOSYSTEM AS AN ENVIRONMENT FOR THE DEVELOPMENT OF THE MODERN EDUCATIONAL PROCESS

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The concept of an ecosystem is not new in the academic environment. In scientific research on innovative organizations, it is viewed as a model of interaction between various participants, services, and institutional mechanisms that form a common environment for value creation and the development of innovative processes []. Digital technologies, in turn, contribute to strengthening the links between participants in such interaction and the formation of integrated digital environments within which data, knowledge, and services are exchanged [].

Scientific research identifies three main semantic clusters for the term “ecosystem” []:

- business ecosystems, which include actors, interaction networks, and strategic mechanisms for value creation;
- innovative ecosystems, which combine science, technology, and institutional mechanisms for innovation development, creating a favorable environment for the creation of new knowledge and technologies [];
- digital ecosystems based on the use of digital technologies, information platforms, and network services that enable interaction between different participants in the digital environment.

In this study, the concept of an ecosystem is considered in the context of the digital transformation of a university. The digital ecosystem of a university is an instrumental concept – a means of digital transformation that reconstructs the educational environment and changes the functional architectonics of a university [].

The digital ecosystem, as a means of digital transformation, structurally includes a number of interrelated elements. These include the digital environment, which encompasses the university's information and technological infrastructure; stakeholders; the system of relationships between them; their level of involvement in the educational process; university functions represented in digital format; a system of values and ideas related to the use of digital technologies; and digital productivity and adaptability manifested in the implementation and use of digital solutions to support the functioning of the ecosystem [].

In this sense, an ecosystem can be viewed as a form of collective interaction and joint intellectual activity, within which the actions of various participants in the

educational process are coordinated. It is based on the interdependence of structural elements, each of which performs a specific function in maintaining the integrity of the system. An imbalance between individual elements or the removal of one of them can lead to a decrease in the effectiveness of the entire ecosystem, since its viability is ensured precisely by the interaction and complementarity of its components.

A digital ecosystem in higher education institutions can only be formed if all its components – technological infrastructure, digital services, administrative management mechanisms, and participants in the educational process – actively interact with each other. In the absence of such interaction, the digital infrastructure of a university becomes merely a collection of disparate information resources and databases that do not form a holistic educational environment. That is why a digital university cannot be reduced to the mere existence of network architecture or digital representation of educational programs.

In view of the above, it is advisable to analyze the university's digital ecosystem through the prism of the organization of the admission campaign, which is the initial stage of integrating applicants into the digital educational environment of a higher education institution. Thus, in modern practice, a wide range of digital tools are used to manage the admission campaign, which ensures various aspects of the university's interaction with potential applicants (see Table 1).

Table 1 The main types of digital tools for organizing a university's admission campaign

Group of digital tools	Main tools	Functional purpose in the admission campaign
Digital information resources	Official university web portals, faculty and educational program pages, and information portals for applicants	Provide access to information about educational programs, admission rules, deadlines for submitting documents, terms of study, and organizational aspects of the admission campaign
Tools for electronic registration and document submission	Applicant's electronic accounts, online registration systems, and platforms for submitting applications and documents	Provide remote submission of documents, registration of applicants, creation of electronic applications, and storage of personal data
Digital communication tools	Social networks, chatbots, email, messengers, online consultations, webinars	Ensure prompt interaction between the university and applicants, counselling, information about the stages of admission, and responses to applicants' inquiries
Applicant data management systems	Applicant databases, application tracking systems, document verification modules, and information systems for processing admission results	Ensure automation of information processing, document verification, formation of rating lists, and control of the stages of the admission campaign
Electronic document management tools	Digital document management systems, electronic contracts, and services for confirming study intentions	Ensure the formation and processing of electronic documents, recording of decisions of the admissions committee, and legal formalization of admission

Continuation of Table 1

Group of digital tools	Main tools	Functional purpose in the admission campaign
Digital financial services	Online payments, electronic payment systems, and tuition payment services	Ensure financial transactions, payment for tuition, and confirmation of payments in a digital environment
Integrated digital admission platforms	Applicant support platforms, integrated university information systems	Combine information, communication, administrative, and financial services within a unified digital environment and provide comprehensive support to applicants

The university's current admission campaign relies on a set of multi-level digital tools that provide information support, communication with applicants, document processing, and management of administrative admission procedures. In practice, most of these functions are implemented through national or private information systems. In Ukraine, the applicant's electronic account, which operates within the Unified State Electronic Database on Education (EDBO) and provides centralized registration of applicants and submission of electronic applications to higher education institutions, plays a key role in the application process. Similar approaches to the digital organization of admissions are also used in higher education systems in other countries. In particular, the United Kingdom has a centralized platform, UCAS (Universities and Colleges Admissions Service), which provides an integrated digital environment for selecting educational programs, submitting applications, processing applicant data, and supporting the admission procedure to higher education institutions. In France, similar functions are performed by the national digital platform Parcoursup, designed to register candidates for the first year of study and coordinate the process of distributing applicants among universities and educational programs. In the Netherlands, admissions are organized through the Studielink digital system, which is used to submit applications, register for educational programs, and manage the admission process to higher education institutions. Such platforms form a centralized digital admissions infrastructure that ensures the integration of information flows, standardization of procedures, and increased efficiency in managing admission processes at the national level.

At the same time, there is a trend in global and domestic practice to move from using separate digital services to integrated admission management platforms that combine various functional modules within a unified digital environment. An example of such a solution is the EUni platform, which was developed as a digital support system for applicants and functions as part of the university's digital ecosystem. Its functionality includes the creation of an applicant's personal account, access to information about educational programs, the ability to submit and upload documents, communication with the admissions committee, the generation of education contracts, and the use of digital payment services. Through the integration of information, communication, and administrative modules, the platform provides continuous support to applicants at all stages of the admission campaign, contributing to the formation of a comprehensive digital environment for interaction between the university and prospective students.

It can be stated that the formation of a digital ecosystem at the university in the context of higher education transformation involves the integration of technological, organizational, and educational components within a unified digital environment. The use of various digital tools in the process of organizing the admission campaign indicates a gradual transformation of traditional administrative procedures into a comprehensive system of digital interaction between the university and potential applicants. Such a system ensures the availability of information, prompt communication, automation of document processing, and coordination of management processes, which contribute to improving the efficiency of the admission process and the transparency of the relevant procedures.

At the same time, the process of digitalization of the admission campaign is becoming an important stage in the inclusion of applicants into the educational environment of the university. It is at this stage that the initial interaction of future students with the digital infrastructure of the higher education institution is formed, which determines the further nature of educational communication and access to educational resources. In this context, the digital tools of the admission campaign are part of the development of the modern educational environment of the university and contribute to the formation of new models of organizing the educational process in the context of the digital transformation of higher education.

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İNKLÜZİV TƏHSİLİN TƏŞKİLİNDƏ TƏLİM TEKNOLOGİYALARININ TƏTBİQİ

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Xülasə

İnklüziv təhsil, müxtəlif bacarıqlara və ehtiyaclara malik olan tələbələrin birgə təhsil almalarını təmin edir. Bu mühitdə təlim texnologiyalarının rolu böyükdür. Təlim texnologiyaları, inklüziv təhsil mühitində fərqli öyrənmə ehtiyaclarına cavab verə bilən fərdiləşdirilmiş öyrənmə təcrübələri təqdim edir. Məs, multimedia alətləri, interaktiv proqramlar və onlayn resurslar tələbələrin müxtəlif öyrənmə stil və tempinə uyğun tədris materiallarını təmin edir.

Açar sözlər: inklüziv təhsil, cəmiyyət, texnologiya, resurs, təlim, təcrübə, mühit, bacarıq

Abstract

Inclusive education ensures that students with diverse abilities and needs learn together. In this environment, learning technologies play a major role. Learning technologies provide personalized learning experiences that can meet the diverse learning needs of students in an inclusive education environment. For example, multimedia tools, interactive programs, and online resources provide learning materials that are appropriate for the different learning styles and paces of students.

Keywords: inclusive education, society, technology, resource, training, experience, environment, skills

İnklüziv təhsil, hər bir tələbənin öz potensialını həyata keçirməsinə şərait yaradır.

İnklüziv təhsil, hər bir tələbəyə özünə uyğun təhsil alaraq inkişaf etmək imkanı verir. Bu yanaşma, xüsusilə xüsusi ehtiyacları olan uşaqların təhsil hüququnu təmin edir və onların cəmiyyətdə aktiv rol almasını təşviq edir.

İnklüziv təhsil, tələbələrə müxtəliflik və fərqlilikləri anlamağı və onlara hörmətlə yanaşmağı öyrədir. Bu, onların daha açıq fikirli və tolerant fərdlər olmasına kömək edir.

İnklüziv mühit, tələbələrin bir-biri ilə ünsiyyət qurmasını və əməkdaşlıq etməsini təşviq edir. Bu, onların sosial bacarıqlarının inkişafına və daha yaxşı birgə yaşam bacarıqlarına kömək edir.