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DIGITAL TRANSFORMATION OF THE KNOWLEDGE ECOSYSTEM

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Abstract

The knowledge ecosystem is defined as an environment for interaction between various subjects in the process of creating, transferring and using knowledge. All stages of a single chain (creation, transfer and use of knowledge) are interconnected, each stage interacts with others, and the ultimate goal is the use of knowledge in various spheres of social activity. An effective factor in building and increasing the effectiveness of the knowledge ecosystem is digital transformation, as a consistent process of integrating digital technologies into all aspects of creating, preserving, transferring, exchanging and using knowledge. Digital transformation radically changes the ways of organizing knowledge, significantly increases its accessibility to a wide audience, and creates new opportunities for effective interaction between all stakeholders involved in the ecosystem (people, organizations, technologies).

Keywords: knowledge chain, knowledge ecosystem, digitalization.

A knowledge ecosystem is an environment in which various entities (educational and scientific institutions, business, government, etc.) actively interact in the process of creating, transferring and using knowledge. At the stage of knowledge creation, information is collected, analyzed and synthesized, scientific research and development are implemented, as a result of which new information, innovations or ideas are generated. Subsequently, the created knowledge is transferred and scaled through communications and training, digital technologies and platforms, network communities, exchange of experience, etc. The ultimate goal of the knowledge chain is the use of knowledge in various spheres of social activity. All these stages – creation, transfer and use of

knowledge – form a single chain in which each stage interacts with the others. The use of knowledge can lead to new ideas for their improvement or to new research. For example, practical experience can indicate shortcomings in existing theories, which stimulates new research and improvement. Through the processes of knowledge transfer, collective knowledge grows, which becomes the basis for further innovation and development.

In ensuring effective chains of knowledge creation, transfer and use, it is important to integrate knowledge at each stage, to ensure its effective application and further development. The effectiveness of the knowledge ecosystem is largely determined by the system of interactions between its participants at all stages, which depends on a wide range of factors and becomes the basis of a continuous process of innovation and social progress. In modern conditions, a large-scale digital transformation is an effective factor in building and increasing the effectiveness of the knowledge ecosystem.

Digital transformation is a process that involves the large-scale use and dissemination of intelligent technologies, digital platforms and tools. Digital transformation covers all aspects of human activity, and, of course, is also becoming important for the knowledge ecosystem. The digital transformation of the knowledge ecosystem is understood as a consistent process of integrating digital technologies into all aspects of the creation, preservation, transfer, exchange and use of knowledge. Digital transformation radically changes the ways in which knowledge is organized, significantly increases its accessibility to a wide audience, and creates new opportunities for effective interaction between all stakeholders involved in the ecosystem (people, organizations, technologies).

The use of intelligent technologies such as artificial intelligence (AI) and machine learning to process and analyze large amounts of knowledge allows us to create intelligent systems for automatically obtaining new knowledge, recommendations and predictions. The latest digital technologies create extraordinary opportunities for storing and transferring knowledge. Digital platforms and tools allow us to use cloud services, online platforms for collective work and tools for storing, processing and analyzing large amounts of data. This creates common spaces for storing knowledge and facilitating access to it.

Ensuring the preservation of digital knowledge is carried out through reliable archiving and security systems to avoid information loss and protect it from cyber threats. The use of standards and protocols simplifies the exchange of knowledge between systems, allows for the seamless transfer of data and information between different platforms and organizations, thereby ensuring interoperability. An important feature of digital transformation is mobility and accessibility, as digital technologies make knowledge available anywhere and anytime through mobile applications, web platforms, and online courses, which significantly expands opportunities for learning and development. The accessibility of knowledge through the implementation of open data (open science) to a wide range of people

contributes to the creation of a knowledge ecosystem in which innovation and collective intelligence are decisive.



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