

# Digital Educational Technologies in Economic Management: Case Studies from the Great Stone Industrial Park

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The article discusses modern digital educational technologies and their application in economic management using the example of the Great Stone Industrial Park. The author analyzes the role of digitalization in the educational process for the development of professional competencies necessary in a rapidly changing economic environment. The influence of digital technologies on the efficiency of management in industrial parks, as well as the possibility of integrating educational platforms into the system of professional training, is being investigated. Based on empirical data on the activities of the Great Stone Industrial Park, key aspects such as innovative teaching methods, the use of big data and artificial intelligence in management, as well as their impact on the strategic development of the park are discussed. In conclusion, the need to adapt educational programs to the requirements of the modern labor market and new technological realities is emphasized. Thus, the updating of educational programs with an emphasis on digital technologies not only meets the requirements of the time, but also creates the basis for the sustainable development of the Great Stone Industrial Park and its participants. This approach contributes to the formation of an advanced human resource base, which ultimately stimulates the economic growth of the state.

**Keywords:** economic management, digitalization of education, industrial park, innovative teaching methods, e-learning, vocational training, information technology, sustainable development.

**For citation:** Jingjing Fang. Digital educational technologies in economic management: case studies from the Great Stone Industrial Park // Digital Humanities and Technology in Education (DHTE 2024): Collection of Articles of the V International Scientific and Practical Conference with International Participation. November 14–15, 2024 / V.V. Rubtsov, M.G. Sorokova, N.P. Radchikova (Eds). Moscow: Publishing house MSUPE, 2024. 260–270 p.

The modern world is changing rapidly, and the economic sphere is no exception. The economy today places high demands on the professional competencies of personnel, giving preference to those who have not only knowledge, but also developed digital skills. In conditions when a person becomes a key element of the digital economy, education acquires not only the value of a public good and basic human rights, but also a strategic priority for the development of society. The changes taking place today in the labor market demonstrate that modern specialists need not only deep theoretical knowledge, but also the ability to effectively use digital tools.

Digitalization is becoming a key factor in socio-economic development, and digital educational technologies are an integral part of this process. They not only improve the quality of education, but also significantly influence the management of economic development, opening up new horizons for growth. In this context, the introduction of digital technologies into the educational process becomes not just desirable, but a necessary condition for the training of competitive professionals. It is important to understand that the digital revolution is not limited only to the technical side. It requires in-depth research in the field of digitalization of education, artificial intelligence, machine learning, cybersecurity, as well as in the field of digital business models and economics. It is necessary to create and develop research centers capable of generating new knowledge and technologies that will form the basis for future socio-economic innovations. The relevance of the study lies in the fact that educational programs not only must be adopted to market, but they, at the same times, give new opportunities for social and economic development.

The purpose of the article is to identify the impact of digital educational technologies on the management of economic processes. To achieve this goal, specific examples of the use of such technologies in the Great Stone industrial park were analyzed; an assessment of the results of the introduction of digital educational technologies and their impact on the efficiency of managing economic processes is given.

The theoretical and methodological basis of the work included: review of existing publications and research in the field of digital educational technologies and economic management; study of methods and approaches used in modern research on this topic; case method when choosing the Great Stone industrial park as a research object; collection

and interpretation of data on the digital educational technologies used in this park. Based on the research, conclusions were formulated about the importance of digital educational technologies in the management of economic processes using the example of the Great Stone industrial park, and recommendations were proposed for improving educational programs and management methods.

In the context of the rapid development of digitalization and automation of production processes, which leads to the complete or partial disappearance of a number of specialties and the emergence of an acute shortage of specialists with digital competencies, the educational system faces new challenges. The need to adapt to the new requirements of the labor market, where specialists with programming skills, big data analysis, and digital project management are in demand, is becoming key. Reforming the educational infrastructure in these conditions requires a radical revision of approaches to learning. The need to create fundamentally new educational models focused on the development of digital competencies is becoming obvious and is recognized by many specialists [1, 5, 7]. The use of digital technologies in educational activities is becoming a real practice around the world. Currently, an innovative educational environment is being created in which the use of digital technologies becomes a prerequisite, and many educational institutions are successfully using this. The provision of training centers with equipment is growing – interactive whiteboards, tablets, good computers, virtual reality glasses and much more are becoming widespread. At the same time, it is necessary to remember that digital technologies are no longer only a tool, but also a new environment for human existence. The digital educational environment provides fundamentally new opportunities – to move from classroom learning to learning anywhere and anytime; design an individual educational route, thereby satisfying the educational needs of the individual; turn students not only into active consumers of digital technologies, but also creators of new resources, etc.

In addition, digital technologies can provide access to the best educational materials from around the world, enable participation in international educational projects and exchange experiences with other students and teachers. It should also be noted that in the digital environment, the role of the teacher changes from a transmitter of knowledge to a facilitator of learning. Teachers must have digital competencies, be able to use technology to create an engaging and effective

educational environment, and motivate students to learn independently and develop critical thinking. Equally important is that digital technologies help make education more accessible to everyone, regardless of place of residence, age or financial status. Digital education can be “a tool to overcome socio-economic inequalities by providing equal opportunities for learning and development. Investment in digital education is an investment in the development of human capital, which ultimately leads to increased productivity and economic growth,” points out in his study F.J. Handley [4, p. 99].

One more aspect of the problem should be pointed out. Expert forecasts, including studies within the framework of UNESCO, indicate that digitalization will affect up to 50% of all work processes by 2036 [8]. This will lead to a reduction in the workforce, as well as a reduction in the number of jobs that require routine skills. Therefore, adult learning is an important aspect of digitalization of education that requires special attention. There is a wide range of digital technologies that can be used in the educational process in the training and retraining of specialists:

- Learning management systems (LMS) – allow you to organize the educational process online, providing students with access to educational materials, assignments, tests, as well as the opportunity to communicate with the teacher and other students.
- Video conferencing allows you to organize online lessons, lectures, seminars and other educational events in real time.
- Mobile applications provide students with access to study materials, online courses, tests and other educational resources anytime and anywhere.
- Artificial intelligence is used to personalize the educational process, analyze student data, and select individual training recommendations.
- VR and AR technologies make it possible to create interactive learning environments in which students can explore virtual objects, conduct experiments and gain practical skills.

In this situation, centers for advanced training and mass retraining of personnel, created based on digital technologies, become an integral part of solving the problem of providing the economy with specialists with the necessary competencies. They provide an opportunity to gain new knowledge and skills adapted to new labor market requirements.

Among them, as indicated in the study by S. Dias-Trindade and A. Ferreira, the key ones are:

- Digital literacy is the possession of basic knowledge and skills in working with information technology, including the use of digital tools, searching and processing information, and safe behavior in the Internet space.
- Critical thinking is the ability to analyze information, identify fake news, recognize manipulation, and form your own opinion.
- Creativity and innovative thinking – the ability to generate new ideas, find innovative solutions, and adapt to rapidly changing conditions.
- Teamwork – the ability to interact effectively in groups, solve problems together, share information and experience.
- Professional competence is the acquisition of highly specialized knowledge and skills in the chosen field, including in the field of information technology, digital design, software development [2, p. 165].

Analysis of the use of digital technologies in the training and retraining of specialists made it possible to create a holistic model that integrates various aspects of this process. This model includes:

1. Advanced training and retraining of the workforce.
  - Online courses and platforms. Digital platforms such as Coursera, Udemy, edX provide access to a wide range of courses, allowing workers to improve their skills and learn new skills that are in demand in the modern world.
  - Gamification. Modern apps and games make learning more accessible, interactive and interesting, increasing motivation and learning efficiency.
  - Virtual and augmented reality. Virtual and augmented reality open up new opportunities for hands-on learning by enabling simulations and realistic learning scenarios.
2. Development of new industries and innovations:
  - STEM Education. Digital technologies make it possible to effectively teach adults the basics of science, technology, engineering and mathematics, which is a key factor for the development of innovative industries.
  - Creation of new professions. The development of digital technologies and artificial intelligence leads to the emergence of new professions that require specific knowledge and skills. Digital

- educational technologies are helping to train specialists for these new fields.
- Stimulating entrepreneurship. Online courses and resources provide access to knowledge and tools for creating startups, promoting entrepreneurial development.
3. Improving management efficiency.
- Data analysis and forecasting. Digital technologies make it possible to collect, analyze and interpret large volumes of data, which helps make more effective management decisions.
  - Process automation. Using artificial intelligence and machine learning allows you to automate routine tasks, freeing up time for more creative and productive work.
  - Improved communication. Digital platforms and tools facilitate communication between various economic entities, increasing the speed and efficiency of information exchange.
4. Creation of new business models.
- Online training. Digital educational technologies open up new business opportunities in the education sector. Online courses and platforms make it possible to provide educational services on a scale previously unavailable.
  - Personalized learning. Digital technologies make it possible to create personalized training programs tailored to the needs of each individual, increasing the effectiveness of learning.
  - Lifelong learning. Digital technologies provide access to lifelong learning, allowing people to continually improve their skills and adapt to changing labor market demands.
  - Specialization and retraining. Retraining centers offer programs focused on specific professions in demand in the digital economy. For example, training specialists in working with artificial intelligence, data analytics, cybersecurity, mobile application development, and Internet marketing.
  - Modular training. Flexible training programs that allow you to gain new knowledge and skills in individual modules are ideal for people who want to learn new competencies without having to take a break from work.

It is important to note that this model not only expands opportunities for self-education, but also provides support in group interaction, which is critical for adult audiences. In addition, “the introduction

of a holistic model of training and retraining of specialists, relying on digital educational technologies, creates opportunities for constant updating of content and the formation of a feedback system,” points out I. Robert [6]. This allows you to quickly respond to changes in the industry, introduce new knowledge and skills, which is important in a rapidly changing labor market. Ultimately, a holistic model for the use of digital technologies in education serves as the basis for increasing the competitiveness of specialists and their professional growth.

Let us note that the introduction of digital technologies in education should not be limited to simply replacing traditional teaching methods with digital ones. The key aspects of the successful integration of digital technologies into the educational process are:

- Selecting suitable digital tools – it is necessary to make an informed choice of technologies, taking into account the specific goals and objectives of the educational process, as well as the individual characteristics of students.
- Development of methodological recommendations – it is important to provide both students and teachers with methodological support that will help them effectively use new technologies.
- Training and support – Provide students and teachers with training on new digital tools, as well as the necessary technical support.
- Creation of digital infrastructure – it is necessary to provide access not only to the Internet, computers, but also to special software necessary for the implementation of digital education.

The practice of using digital educational technologies in the training and retraining of specialists can be examined using the example of the work of the Great Stone Industrial Park. The Great Stone Industrial Park [3], which is one of the most ambitious projects in Belarus, demonstrates how digital educational technologies can become a driver of economic development. “Great Stone” is not just a technological platform, but a global project that is designed to become the locomotive of the Belarusian economy, attracting investments and technologies from around the world. Located just 25 kilometers from Minsk, it offers a unique business environment, characterized by modern technologies, convenient infrastructure and environmental responsibility. The park provides companies with access to ready-made production, engineering,

transport, customs and social-administrative infrastructure, which significantly reduces the time and resources required to start a business.

The Great Stone project is being implemented within the framework of interstate Chinese-Belarusian cooperation, which confirms its scale and strategic importance. It includes enterprises from various industries, from high-tech industries to light industry, which will be located in the park, creating new jobs and stimulating economic development. On the territory of the park it is planned to create not just a production site, but an entire city with developed infrastructure. Involving leading financial and scientific organizations will create an environment for innovative development and technological progress.

Realizing the intense competition for investors, Belarus has created attractive business conditions within the Great Stone. The special tax regime operating within the park offers residents significant tax benefits, making doing business more attractive. A unique approach to administrative work, allowing companies to receive the full range of services needed to run a business in one place. The Great Stone is an integrated approach to creating a new model for the development of the Belarusian economy. It is not only a site for production, but also a center for attracting investment, technology and skilled labor. Thanks to an innovative approach to management, developed infrastructure and attractive conditions for business, “Great Stone” has every chance to become one of the leading industrial centers not only in Belarus, but also in the entire region.

Digital transformation in the training and retraining of specialists for the Great Stone includes the use of the following tools:

1. Online learning platforms. The park actively uses online platforms to train resident employees. These platforms provide access to various courses, webinars and master classes on current topics related to industry, logistics, management, finance, etc. Thanks to this, “Great Stone” provides continuous professional development, improving the skills of personnel and readiness for new challenges.
2. Simulations and virtual reality. To develop skills in the field of production management, logistics, robotic systems, etc., “Great Stone” introduces simulators and virtual reality technologies. This allows you to significantly reduce training costs, increase its efficiency, and also reduce the risks associated with errors when mastering complex technologies.



3. Interactive trainings and online consultations. The park actively uses interactive trainings and online consultations to increase employee motivation and engagement. This approach allows not only to transfer knowledge, but also to consolidate it in practice, as well as receive feedback from experienced specialists.
4. “Smart” training programs. “Great Stone” develops “smart” educational programs that adapt to the individual needs and characteristics of students. Using artificial intelligence and machine learning, programs analyze the progress of each specialist and offer the most effective training methods.

The economic and social effects of introducing digital educational technologies into the practice of the industrial park include:

1. Improvement of personnel qualifications. Investments in digital education at the Great Stone lead to improved qualifications of personnel, which makes them more competitive in the labor market.
2. Stimulating innovation. Digital educational technologies contribute to the introduction of new ideas and approaches in various areas of the park’s activities, which stimulates the innovative activities of residents.
3. Increased labor productivity. Thanks to digital technology-based training, Great Stone employees become more efficient, which leads to increased productivity and economic growth.
4. Strengthening the park’s image. “Great Stone” positions itself as an innovation center, which attracts new investors and residents, contributing to the further economic development of the region.

To further implement the digital transformation of training and retraining of specialists, it is necessary to take a number of measures:

- Financing – allocate sufficient funds for the development of educational infrastructure, the creation of research centers, and support for retraining and advanced training programs.
- Methodological support – create conditions for the development of digital education, including the development of standards and educational programs.
- Creating an information environment – providing access to modern information resources, developing technological infrastructure, creating conditions for the free dissemination of knowledge and information.

Digital transformation in modern society poses not a threat, but significant opportunities for the formation of a society based on knowledge, innovation and the disclosure of the potential of each individual. The process of digital transformation of education should be considered not only as a technical modernization, but also as a comprehensive reform related to all aspects of educational activities. To effectively implement this transformation, it is necessary to coordinate the efforts of all stakeholders, including government agencies, educational institutions, the business sector and public organizations. Such an intersectoral approach will ensure the integration of technologies into the educational process, as well as create conditions for sustainable development and an inclusive approach to education, which, in turn, will contribute to the formation of competent and ready-to-meet the challenges of the modern world of citizens.

Digital educational technologies open up new horizons for us in the management of socio-economic development. They can improve the skills of the workforce, develop new industries, ensure management efficiency, create new business models and reduce social inequality. The introduction of digital technologies in education is a complex and multifaceted process that requires an integrated approach. It is important not only to provide access to technologies, but also to create conditions for their effective use, guaranteeing the quality of education, safety and comfort of students.

The use of digital educational technologies in the Great Stone Industrial Park is an important step in the development of an innovative model of socio-economic development in Belarus. These technologies make it possible to create flexible educational trajectories adapted to the needs of business, as well as ensure the continuous development of skills, which is critically important in a rapidly changing world. As a result, investments in education, the development of digital technologies and the introduction of smart learning systems will not only improve the quality of the workforce, but also turn the Great Stone into an international centre of innovation and create prerequisites for long-term prosperity. Thus, this example illustrates the successful application of digital educational technologies in the field of socio-economic development management, opening up new prospects for the development of both individual enterprises and society as a whole.

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