

## Impact Factor:

ISRA (India) = 4.971  
ISI (Dubai, UAE) = 0.829  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 0.126  
ESJI (KZ) = 8.997  
SJIF (Morocco) = 5.667

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

SOI: [1.1/TAS](https://doi.org/10.1/TAS) DOI: [10.15863/TAS](https://doi.org/10.15863/TAS)

## International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 10 Volume: 90

Published: 30.10.2020 <http://T-Science.org>

QR – Issue



QR – Article



**Saidakhror Saidakhmedovich Gulamov**  
retraining institute of personnel and statistical researches  
academician, Dr.Sci. (econon.sci), prof. chief of chair “ Digital economy”

**Saidasror Saidakhmedovich Gulamov**  
Tashkent agrarian university  
academician, Dr.Sci. (econon.sci), prof.

**Abbas Tairovich Shermukhamedov**  
Tashkent branch of Russian economic university after G.V. Plekhanov  
prof. of the chair “Digital economy and mathematical disciplines”  
[abbas\\_sh@inbox.ru](mailto:abbas_sh@inbox.ru)

## DIGITALIZATION OF THE EDUCATION SYSTEM IN UZBEKISTAN

**Abstract:** Digital technologies in the higher education system make it possible to individualize the learning process, both at the stage of mastering new material and at the stage of monitoring individual results. The digitalization of higher education is reforming the educational infrastructure at the university: it makes it necessary to partially or completely abandon a number of educational programs and include new disciplines in the educational process, such as risk theory, the basics of the digital economy, business statistics, the basics of information security, etc. New disciplines and courses in the digital economy will reduce the shortage of specialists with digital knowledge, skills, and skills, for which training is exactly what it is necessary to adapt the educational infrastructure in the digital economy. The article discusses the need to develop and introduce into the education system fundamentally new approaches to learning, which will ensure a high level of digital literacy of students both through retraining and additional education.

**Key words:** Internet, digital technologies, digitalization, digital University, higher education virtual universities, network universities.

**Language:** English

**Citation:** Gulamov, S. S., Gulamov, S. S., & Shermukhamedov, A. T. (2020). Digitalization of the education system in Uzbekistan. *ISJ Theoretical & Applied Science*, 10 (90), 453-456.

**Soi:** <http://s-o-i.org/1.1/TAS-10-90-77> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.10.90.77>

**Scopus ASCC:** 3304.

### Introduction

Digital technologies have begun to modernize the Uzbek higher education system in the digital economy. Digitalization of the education system cannot be limited to creating a digital copy of the usual textbooks on special subjects taught in universities and providing universities with access to high-speed Internet. The approach to teaching in the digital economy must change, as well as what and how to teach students. In developed countries, 10-15 years before the advent of the digital economy, decisions were made and implemented at the state level to create new industries, such as the "E. Learning industry", create virtual universities, and create conditions for

the independent transformation of existing universities into electronic, virtual, and network universities and Smart universities. The development of digital technologies displaces "routine" work from universities, and the digital economy requires teachers to create effective pedagogical methods for developing students' self-organization and planning skills, where motivation contributes to the individualization of education [1-2].

**Research methods:** when writing the article, methods of analysis and synthesis of materials from reports of universities and research institutes of Uzbekistan were used.

## Impact Factor:

ISRA (India) = 4.971	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 0.829	PIHIQ (Russia) = 0.126	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.997	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 5.667	OAJI (USA) = 0.350

**Discussion.** The research Institute for statistical research and personnel retraining of the State Committee on statistics of the Republic of Uzbekistan has created a system for educational and methodological support of the educational process, which is a social network for teachers, students of courses, with educational content, evaluation and feedback systems [3-7]. Western countries pay attention to the academic requirements of students, but the level of these requirements varies. For example, the UK or Denmark require students to simply be active in their studies. In Norway, exams are required to pass according to the plan. In Sweden, students must take the course exams within a set time period. In the Netherlands, since 1996, basic grants have been replaced by performance-related grants. Research centers in Europe, when studying current trends in the world's educational systems, have increasingly begun to talk about the Asian model of education, which combines the educational systems characteristic of Asian countries and borrowed from outside this continent, institutional structures and management elements of these systems, in particular, from the United States and Great Britain. Special attention is paid to the structure and content of education in Japan, as well as in the four other "Asian tiger" countries (South Korea, Taiwan, Singapore and Hong Kong). Their powerful breakthrough to the world market is largely due to the correct choice of priorities in the educational process. In terms of small areas, the virtual absence of any significant mineral resources, these countries have invested in education. According to their governments, only a highly educated person with their intellectual abilities and innovative attitude will be able to lead these countries from the category of poor and technically backward to the trajectory of rapid progress and achieve an "economic miracle". Later, leaders of Malaysia, China, India, Turkey and other Asian countries with diverse natural resource potential began to adhere to similar views on the role of education. National and historical traditions and the mentality of the people of these countries have been instrumental in achieving good results in education and related scientific and technological progress. A characteristic feature of modern Korean consciousness remains the cult of higher education received at one of the most prestigious universities. Korean higher education is both egalitarian and elitist. On the one hand, the government consistently and consciously pursues a policy of "equal opportunities" in access to higher education, on the other-Korean universities form a clear hierarchical pyramid, in which the "quotations" of diplomas from different universities may be different. This balanced and well-thought-out policy has produced positive results. By 2005, 97% of people aged 25-34 in South Korea had a higher education. This is the highest indicator for all countries with highly developed production. By comparison, in the 1960s, South Korea's national

income was lower than Mexico and South America, and in terms of educational qualifications, South Korea was among the lowest in the OECD's 30-country ranking. The success is that the country has managed to change the attitude of its population to education and respond adequately to the increase in demand. In Japan, 42% of the working-age population aged 25-65 have a higher education. This is due to the high level of automation of production in the country, which requires highly qualified training from representatives of the working profession. Today, there are about 600 universities in the country, including 425 private ones, where about 2.5 million students study. Japan's higher education system is unique, where, despite all the transformations of recent decades, it still remains one of the most conservative and original in the world. But through educational reforms, Japanese society was being updated: starting with the first modernization at the end of the XIX century, which laid the foundations of Japanese higher education on the Western model, and ending with the last world forms directed against the traditional isolation and total dependence of educational institutions. The reform initiated by the government in 2001 is to reduce the number of higher education institutions by merging them into University corporations that have more independence. Corporations not only get ownership of University buildings and land, but also almost complete autonomy. This will increase the responsibility of the University for the quality of its diploma, and encourages management to step up activities aimed at establishing links between science and business. Corporations create unique programs and curricula, finding their own University specifics and taking full advantage of the freedom of liberalization and diversification policies. A positive consequence of the reform was the beginning of the process of integration of universities and research institutes. Cooperation between business and education, integration of research centers and universities, administrative autonomy of universities these are the main achievements of the education reform in Japan are the most advanced. China has a multi-stage system of higher education. Over the past 5 years, the number of universities in the country has almost doubled and by 2007 was 2,200 units. All students must pay for their education in China, and there is a scholarship system. Graduates of higher education institutions are employed independently or enter graduate school. Chinese universities can send students abroad for study and internships. China ranks first in the world in terms of higher education. In the UK's theTimes ranking, six Chinese universities were ranked among the world's top 200 in 2009. Peking University is ranked 52nd on this list. The prestige of Chinese business schools has grown, and one of the best universities is the Shanghai CEIBS, in the Financial Times Executive. Although all higher education

## Impact Factor:

ISRA (India)	= 4.971	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 0.829	PIHII (Russia)	= 0.126	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.997	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 5.667	OAJI (USA)	= 0.350

institutions in China are run by the state, there is no single program for all higher education institutions. Each University develops not only teaching methods, but also sets its own forms of control over students' academic performance and the quality of teaching academic subjects. Unlike European and American universities, where one institution can train specialists in hundreds of different specialties, Chinese universities have a strict specialization: here are pedagogical, technical, linguistic and other higher educational institutions. It is necessary to note the cooperation of Russian universities with innovative business, for example, the signing in April 2006. Agreements between Rusneft and Moscow state University to establish the "Higher school of innovative business of Moscow state University" with the status of a faculty on the basis of Moscow University. These models do not exclude various options for the transfer of certain powers by the Ministry of education to other bodies as part of the creation of new types of educational institutions. An example is the creation of branch universities.

For the conditions of Uzbekistan, it is preferable to use the model of European innovation systems, where the liberalization of the education management system gives sufficient independence to educational institutions when making significant decisions for the University. Uzbekistan's labor market is full of economists and lawyers, while the industry has a real shortage of middle-level managers, engineers and technical managers (unlike, for example, India, which has placed a special emphasis on training engineers). In order to provide their staff with an appropriate level of training, the interest of industrial groups in the field of education has increased significantly recently. The most important direction of the country's education reforms is to limit state regulation and, at the same time, expand the independence of universities in the organizational, financial and, in fact, educational spheres. In countries from the so-called "elite list", this trend is determined by one of the fundamental principles of higher education. Based on world experience, there are three main models for delegating the powers of a Central state body (Ministry) [8-10]:

- powers are transferred to a regional management body;

- specialized Agency (intermediary organization);

- directly to higher education institutions.

In Uzbekistan, the use of this approach is difficult due to insufficient administrative and managerial capacity at the local level, which risks turning this organization into an analog of the Ministry. Within the framework, the role of the Ministry can be reduced to strategic management. And all other operational and tactical management should be decided by the universities themselves.

To provide the economy with personnel who already possess certain competencies in the field of digital economy, not only the introduction of new disciplines in the educational process of higher education institutions plays an important role. The modern educational infrastructure is being transformed by new technologies and modern education platforms, and a significant part of educational services is being transferred to the distance and online format, which allows universities to interact more actively with information technology partners to create online educational programs, build more effective individual educational trajectories of students, and create new opportunities for organizing independent individualized learning via the Internet.

### Conclusion.

Thus, one of the basic principles of the digital economy is implemented in the educational environment: "the consumer becomes a full-fledged participant in the chain of creating the product or service they consume. It is necessary to reduce the shortage of specialists in the field of digital technologies [11]. The transition to a new technological structure will allow us to solve the training of personnel for high-tech industries. The potential of any country can be increased both in terms of the level of human capital development and the potential of this resource due to the high level of primary, secondary and higher education. However, the current system of education and training indicates the need for additional efforts in the future to develop the labor force and prepare the country's population for the fourth industrial revolution.

## References:

1. (n.d.). *Erasmus+ Program.EU publications*  
URL: Retrieved from  
<https://publications.europa.eu/en/publication-detail/-/publication/def6a811-f4ee-11e7-be11-01aa75ed71a1/language-ru>
2. Shermukhamedov, A. T., & Shermukhamedova, M. M. (2020). School education in the era of the "Digital economy" in Uzbekistan. *International*

**Impact Factor:**

**ISRA (India) = 4.971**  
**ISI (Dubai, UAE) = 0.829**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 0.126**  
**ESJI (KZ) = 8.997**  
**SJIF (Morocco) = 5.667**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

- Scientific Journal "Global science and innovations 2020: Central Asia" / Nur-Sultan, Kazakhstan, August 2020, pp. 30-32.*
3. Gulamov, S. S., & Shermukhamedov, A. T. (2019). *"Global program for education"*. Materials of the Republican conference "Innovation policy and foresight technologies in the higher education system of Uzbekistan". November 17-18, 2019. (pp.6-8). Karshi: Karshi Institute of engineering and Economics.
  4. Gulamov, S. S., & Shermukhamedov, A. T. (2019). *Digitalization of education in Uzbekistan*, Materials of the scientific and practical seminar dedicated to the 27th anniversary of the Constitution of Uzbekistan. Tashkent branch of Moscow state University, November 16, 2019, (pp.169-171). Tashkent: Tashkent branch of Moscow state University after Lomonosov M.Yu..
  5. Gulamov, S. S., & Shermukhamedov, A. T. (2019). *Development of the digital economy in Uzbekistan*, Materials of the Republican conference "Innovation policy and foresight technologies in the higher education system of Uzbekistan" Karshi engineering and economic Institute, December, 2019. (pp.122-124). Karshi: Karshi engineering and economic Institute.
  6. Gulamov, S. S. (2020). *Development of mass online education*. Republican scientific and practical conference. "XXI century-the age of intellectual youth", 2020 April 24. (pp.124-126). Tashkent: Fan publishing house.
  7. Gulamov, S. S., & Shermukhamedov, A. T. (2018). *Legal education of students Materials of the scientific-practical seminar "Constitution of the Republic of Uzbekistan; science, education and upbringing of youth"*. (pp.76-77). Tashkent: Tashkent branch of Moscow state University after Lomonosov M.Yu..
  8. Gulamov, S. S., & Shermukhamedov, A.T. (2018). *Improving the development of youth science in Uzbekistan*. Improving the development of youth science in Uzbekistan in the proceedings of the scientific and technical conference dedicated to the 75th anniversary conference of the Academy of Sciences of the Republic of Uzbekistan. "The place of youth in science and education", November 23, 2018, 1 part. (pp.202-203). Tashkent: Navoi.
  9. Gulomov, S.S., & Shermukhamedov, A.T. (2019). Role of intellectual potential of scientists of Republic of Uzbekistan in the innovative development of economy. - *Colloquium International J.*, Poland, N3(27), March, 2019, part 6, pp.10-20.
  10. Shermukhamedov, A.T., & Shermukhamedova, M. M. (2020). *Financial mechanism of management of development of the education sector of Uzbekistan*. Current issues of financial sector development. Collection of materials of the IV International scientific and practical conference (April 28, 2020). (pp.435-440). Makhachkala: ALEF.
  11. Gulamov, S. S., & Shermukhamedov, A. T. (2020). Introduction of digital technologies in higher education institutions of Uzbekistan. // «Global science and innovations 2020: Central Asia» 4(9). June-July 2020 series "Economic Sciences", I vol. *International scientific journal "global science and innovations 2020: Central Asia"* Nur-Sultan, Kazakhstan, June-July 2020-pp.126-129.