



THE ROLE OF INFORMATICS IN THE DIGITAL ECONOMY

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Annotation: *The field of computer science lays the foundation for the development of the digital economy. It contributes to economic growth by enhancing technological literacy, implementing innovations, and automating economic processes. This article examines the role of computer science in the digital economy and its main opportunities.*

Keywords: *Computer science, technology, economy, digital, science, information, innovation, efficiency.*

The digital economy has become one of the most important sectors of today's global economy. The development of this economy is based on information technologies, software, and technological innovations. In this process, the field of computer science plays a significant role, as it shapes the necessary knowledge and technologies for the development of the digital economy.

To work in the digital economy, technological literacy is required. Through the study of computer science, students acquire the following skills:

Computer literacy.

Basics of programming.

Use of information systems.

Informatics significantly impacts the development of electronic commerce.

The development of trading platforms and payment systems requires knowledge in software and web development related to computer science. In e-commerce, enhancing user experience and increasing efficiency through the use of automated systems are essential. This knowledge facilitates the development of innovative solutions in the economy and makes their implementation easier.



Informatics ensures development in the fields of artificial intelligence and machine learning. Artificial intelligence is also used to automate economic analyses.

Cybersecurity is of great importance for the sustainable development of the digital economy. In this regard, the field of informatics plays a significant role. It involves developing technologies that ensure data security and advancing methods to combat cyber threats. Having a good understanding of such information, that is, mastering the field of informatics, creates significant opportunities.

At the same time, it contributes to training specialists in information security, which helps protect against various threats.

Informatics serves to develop new technologies and solutions. It involves creating mobile applications and web platforms. It applies virtual and augmented reality (VR/AR) technologies to economic processes. In the development of the digital economy, it performs tasks such as utilizing computers and aggregating and storing various data.

The economic benefits of developing the field of computer science primarily stem from focusing on computer science, which leads to economic gains. For example, training skilled personnel and preparing highly qualified specialists in information technologies create favorable conditions for enhancing economic competitiveness and developing innovative enterprises. At the same time, it also increases the efficiency of the economy. Tasks such as optimizing production and service processes through artificial intelligence, automation, and big data management are performed effectively. Computer science provides the necessary tools for managing and analyzing data. In a digital economy, managing big data and utilizing it for strategic decision-making is crucial.

The field of informatics plays a vital role in the development of modern society. It is not limited to technological advancement but also has a significant impact on social, economic, and educational sectors. The field of informatics ensures the creation of modern technologies and their effective utilization. Information technologies, software, artificial intelligence, and automated systems are all results of informatics. The field of informatics helps modernize the teaching process for other



subjects. For example, digital education platforms, electronic textbooks, and virtual laboratories are products of informatics.

Without the field of informatics, the development of a digital economy would not be possible. Informatics creates a foundation for the advancement of the digital economy. It contributes to economic growth by increasing technological literacy, implementing innovations, and automating economic processes. Therefore, informatika is considered a universal and innovative science that affects every aspect of society. Its significance is not only evident in developing technologies but also in providing conveniences that simplify human life and enhance economic efficiency.

For this reason, deeply studying and developing the field of informatics holds strategic importance for today's and future generations.

REFERENCES:

1. Turdiyev, R. (2020). Informatics and Information Technologies. Samarkand: Bukhara University Publishing.
2. Uzoqov, D. (2021). Digital Transformation and Its Role in Uzbekistan. Tashkent: Information Technologies Center Publishing.
3. Uzbek Academy of Sciences. (2021). Digital Economy and Its Development Prospects. Tashkent: Institute of Science and Technology.