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THE IMPACT OF ELECTRONIC DIGITAL SIGNATURE AND ITS USE ON MODERN LABOR ACTIVITY

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Annotation*: In recent years, due to the rapid development of digitalization and information technologies, the use of electronic digital signatures (EDS) in document circulation processes is becoming increasingly widespread. An electronic digital signature (EDS) is a set of digital data attached to an electronic document that confirms its authenticity, integrity, and authorship. This article analyzes the essence of the EDS, its technological foundations, areas of application, and its impact on labor activity. It also highlights the socio-economic and legal consequences of the EDS system. The article presents a scientific approach to improving the modern document circulation system through the use of electronic signatures.*

Keywords*: Electronic digital signature, information security, cryptography, digital technologies, document circulation, EDS, e-government, public key, private key, labor market, modern work processes.*

Introduction:

With the advancement of digital technologies, human life and labor activity are undergoing significant changes. In particular, digital documents and the technologies that validate them are being increasingly used in government services, business processes, and education. One such technology is the electronic digital signature (EDS), which allows for the identification of a document's author, protects against forgery, and ensures legal validity.

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Main Part:

The Essence of the Electronic Digital Signature

EDS is a digital form of a signature that confirms the user's identity and provides legal force to an electronic document. It is a digital counterpart of a traditional handwritten signature. EDS is created based on cryptographic algorithms and operates using a dual-key system — public and private keys.

The private key is used only by the user for signing documents, while the public key is used by the recipient to verify the signature.

Legal Framework and Government Policy

According to the Law of the Republic of Uzbekistan "On Electronic Digital Signature" dated December 11, 2003, a document signed using EDS is legally equivalent to a handwritten signature on paper.

Additionally, in the "Digital Uzbekistan – 2030" strategy, the development of the EDS system is identified as a key priority.Technical Foundations of EDS

The EDS system is based on modern cryptographic technologies: digital signatures are created using algorithms such as RSA, DSA, and SHA-256. Electronic signatures are provided to users through tokens or special software. In Uzbekistan, the UZINFOCOM center operates as an official certification authority, offering services for the creation, storage, and management of keys for individuals and legal entities.

Practical Applications:

Currently, EDS is widely used in the following areas:

Government services: submitting tax reports via the Unified Portal, processes of state registration;

Business: electronic contracts, sending invoices;

Education: electronic signing of diplomas and grades;

Judicial system: submitting electronic applications and lawsuits.

Advantages and Disadvantages

Advantages of EDS:

Reliability and security;

Speed of document circulation;

Reduction of paper costs

Opportunity for remote work.

Disadvantages include:

Low level of digital literacy;

Limited technical infrastructure;

Incomplete adoption of EDS in some institutions

Conclusion:

In conclusion, the electronic digital signature has become an integral element of legal document circulation in today's digital society. It ensures document legality, simplifies and accelerates work processes, and enhances the efficiency of government and business sectors.

In the future, the improvement of the EDS system and the development of digital culture are expected to help Uzbekistan advance further in its digital transformation journey.

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