

THE IMPORTANCE OF DEVELOPING THE ARCHITECTURE OF A COUNTRY'S PAYMENT SYSTEM

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Abstract:

This article discusses the theoretical and practical aspects of organizing the architecture of a modern payment system. The main trends and provisions for the development of payment system architecture are presented, and the principles of their operation in the context of payment system digitalization are demonstrated.

Keywords: payment system, architecture, main elements of the payment system, modeling, integration, main directions of development.

In our rapidly evolving world, payment systems play a key role in making financial transactions fast, secure and efficient.

The architecture of the payment system is the foundation on which the entire payment processing process is built. It defines how data is transferred between participants in the payment process, how transactions are processed, and how data is kept secure. The state of the economic process depends on the state of the architecture of the payment system. The institutional structure that provides the architectural basis of the payment system should be organized in such a way that all levels of payment systems in the economy work smoothly, the exchange of financial information and cash flows are organized in a stable, transparent, efficient and effective manner. To do this, it is necessary to ensure the full creation of technical, legal, economic and social conditions in the payment system.

Payment system architecture can be classified by type, specificity and level of action. In this article, we will consider the architecture of the payment system at the national level, where the Central Bank of Uzbekistan plays a key role as an organizer and regulator of payment systems. However, there are also private electronic payment systems that are not subject to any regulator or government agency. For example, international payment systems with a decentralized platform, such as cryptocurrencies (such as Bitcoin), operate independently of central authorities or



government agencies. In addition, there are payment systems with non-custodial protocols, such as Ledger Nano and MyEtherWallet, which allow users to buy and sell virtual assets and store them under their control using protocol keys.

The modern architecture of the payment system of Uzbekistan includes the following payment systems:

- interbank electronic payment system;
- interbank clearing system;
- Uzkart card system;
- card system "Humokart";
- interbank system of instant payments;
- payment organizations and operators of electronic money systems.

The modern architecture of the payment system is the result of many years of deep and constructive reforms and transformations. When it comes to the architecture of the payment system, it is important to consider the integration of all levels of national payment systems to form a seamless payment platform. However, it is equally important to note that the modern architecture of the payment system includes not only the integration of national systems, but also integration with international systems. But in this article we will limit ourselves to integration at the national level. In the context of increasing digitalization of economic and financial processes, the gross and retail payment systems of Uzbekistan are increasingly being transformed towards integration. This trend is aimed at expanding the offer of payment services, increasing process automation and creating flexible and favorable conditions for system users, as well as increasing the profitability of service providers.

The payment system is an important element of a market economy. It ensures the efficient and safe movement of funds between market participants, which contributes to the development of economic processes, economic growth and an increase in GDP. A well-organized payment system can improve the availability and quality of financial services, which in turn can promote entrepreneurship and investment. Thus, the payment system plays a key role in maintaining the stability and growth of the economy.

An important place in improving the architecture of the payment system is occupied by the development of seamless payments, which is based on the integration of smaller payment systems with larger ones.



Seamless payment systems are payment solutions that allow you to securely accept payments, make global payments and scale your business. It offers a comprehensive payment solution for businesses to help optimize their services. These systems can be integrated with other business software to facilitate payments across multiple channels. Blockchain technologies are also being used to connect global financial systems so that they are easily interoperable, efficient, accessible and accessible. This can reduce the cost and time of payments.

To optimize and improve the architecture of the payment system, it is important to work out practical issues in the following areas:

1. Development of technological infrastructure: the use of modern technologies to ensure the security and efficiency of payments.
 2. Improving the availability and quality of services: expanding the range of services offered and improving their quality to meet the needs of users.
 3. Flexible integration of various types of payments: providing flexible integration of small and large payment systems for the convenience of users.
 4. Improving legal regulation: development and implementation of regulations to regulate the activities of payment systems and ensure the protection of user rights.
- These and other areas can contribute to the optimization and improvement of the architecture of the payment system, which in turn can improve its efficiency and meet the needs of users.

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