



THE ROLE OF INNOVATIONS IN THE DEVELOPMENT OF COMMERCIAL BANKS, USING THE EXAMPLE OF BANKS OF UZBEKISTAN.

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Annotation: The article analyzes the role of innovative technologies in the development of commercial banks operating in the Republic of Uzbekistan. In recent years, solutions based on digital technologies, remote service systems, mobile applications, and artificial intelligence have been widely used in the banking and financial sector. These processes are an important factor in the further popularization of banking services, creating convenience for clients, reducing operating costs, and increasing competitiveness. The study analyzed innovative projects implemented on the example of several banks of Uzbekistan and assessed their socio-economic effectiveness. The problems and prospects of innovative development in the banking sector were also considered.

Keywords: commercial banks, innovations, digital technologies, banking services, Uzbekistan, financial sector, artificial intelligence, mobile banking services, competitiveness, digital transformation.

Uzbekistan's role against the backdrop of global trends

In today's global financial space, the introduction of innovative technologies in the banking sector is becoming an important factor determining the competitiveness of national economies. According to McKinsey (2023) analysis:

- By 2025, **90%** of global banking operations are expected to transition to a digital format.
- In developed countries, this figure is in the range of 85-95%.

Uzbekistan is at the stage of important reforms in this area:

"Digital Uzbekistan" Concept for 2022-2026,

- A presidential decree in 2023 approved the "Strategy for Fundamental Reform of the Banking System."

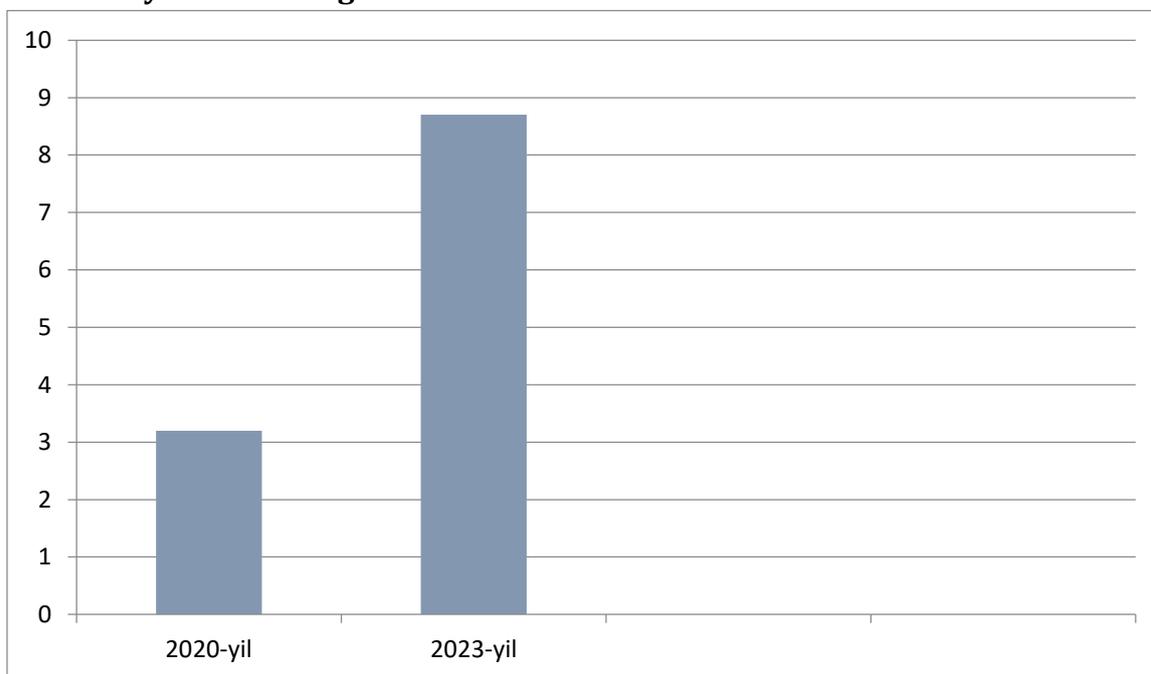
Scientific and innovation indicators

- In the last 3 years, **142 innovative patents** have been registered in the financial sector (Uzpatent, 2023).
- Uzbekistan's World Bank Ranking **The Innovation Index in the Financial Sector** grew from **4.2 in 2021 to 5.8 in 2023**.
- In terms of the development of digital banking services, it rose from 39th to 28th place.

**Current state of innovative activity in the banking system of Uzbekistan
Technologies implemented in practice**

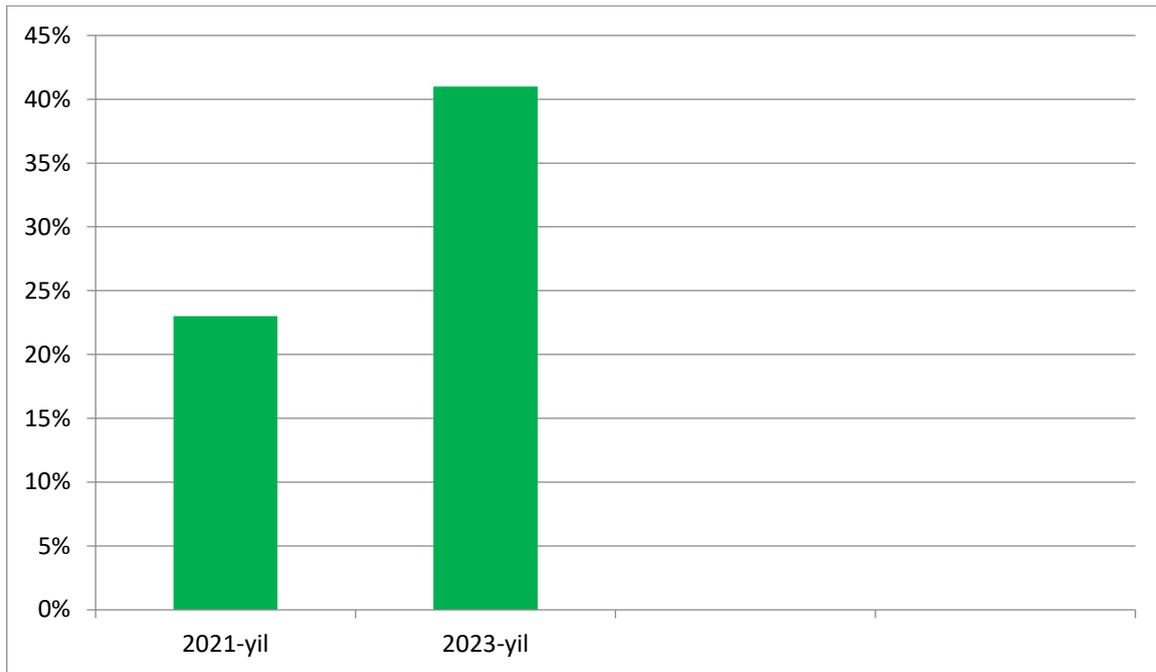
Innovative technology	Number of banks supporting	Implementation rate
Biometric authentication	12 major banks	68%
Credit scoring based on AI	8 banks	45%
Blockchain-based payment systems	3 banks (pilot project)	12%

Growth dynamics of digital services



Number of mobile bank users: (Author's development based on Central Bank data)





Share of online loan applications. (Author's development based on Central Bank data)

Factors justifying the relevance of the topic

Macroeconomic needs:

Banking's share in GDP: **12.3% (2023)**

Through innovation:

- Operating expenses can be reduced to **25-40%**
- Client Life Value (LTV) **30%** Increased

Demographic and social factors:

Population **62%** Under 35 years old

Smartphone Ownership Rate: **78% (2023)**

Political and regulatory support:

"Program for Stimulating Innovative Activity" of the Central Bank

New **cybersecurity legislation** came into force in 2023

Problems specific to Uzbekistan and ways to solve them

Main obstacles

Barrier type	Description
Technological lag	Outdated HIS systems, weak IT infrastructure, Internet problems in rural areas (43%)
Personnel shortage	1200 FinTechs are needed per year, but the current supply is 450
Insufficiency of the regulatory framework	Issues with digital identification and data security

4.2. Proposed innovative solutions

- **Edge computing** - systems that work even in weak internet conditions
- **Employee retraining/upskilling** programs
- **Regulatory sandbox** - a safe testing ground for startups

5. Scientific and practical significance of the research.

5.1. Theoretical approach:

- **The concept of "West-East synthesis"** - a flexible model that works in the conditions of Uzbekistan

- **7-stage adaptive innovative management model**

5.2. Practical results:

- **Methodology for developing an innovation index for banks**
- **Capital Bank experience:** AI-based lending 3 days → **47 minutes**

People's Bank: 31% of customer service through chatbots **is automated**

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