#### IV SHO'BA

# MOLIYAVIY TEXNOLOGIYALAR VA KRAUDFANDING SOHALARIDA SUN'IY INTELLEKT INSTRUMENTLARINI QO'LLASH KELAJAK DRAYVERI SIFATIDA

# ARTIFICIAL INTELLIGENCE AND ITS IMPACT ON THE FINANCIAL INSTRUMENTS TRANSFORMATION

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The emergence of new financial instruments under the influence of artificial intelligence (AI) is a significant event in the modern financial industry. Artificial intelligence causes significant changes in various aspects of the financial industry, influencing traditional financial instruments, creating new opportunities for their change and creation.

Artificial intelligence is used to create innovative products, automate data analysis, improve risk assessment, and optimize decision-making processes. This has led to the development of new payment methods, such as digital currencies and online payment systems, as well as chatbots for banking services. Research shows that the use of AI in the financial sector can lead to increased efficiency, lower operating costs, and more accurate risk assessment.

According to a McKinsey study<sup>268</sup>, among the sectors of the economy with the greatest potential for using AI is the banking sector, bringing this sector an additional capitalization of up to \$ 340 billion.

One of the reasons for the widespread adoption of AI in such sectors as financial services its universality<sup>269</sup>. Using AI, financial institutions can gain a competitive advantage by introducing innovative services and improving operational efficiency<sup>270</sup>. AI can also analyze the behavior and preferences of customers, offering individual recommendations and personalized services<sup>271</sup>.

<sup>&</sup>lt;sup>268</sup>McKinsey, (2023). Capturing the full value of generative AI in banking https://www.mckinsey.com/industries/financial-services/our-insights/capturing-the-full-value-of-generative-ai-in-banking#/

<sup>&</sup>lt;sup>269</sup> Milana, C., & Ashta, A. (2021). Artificial intelligence techniques in finance and financial markets: a survey of the literature. Strategic Change, 30 (3), 189-209.

<sup>&</sup>lt;sup>270</sup> Ryll, L., Barton, M.E., Zhang, B.Z., McWaters, R.J., Schizas, E., Hao, R., Bear, K., Preziuso, M., Seger, E., Wardrop, R., Rau, P.R., Debata, P., Rowan, P., Adams, N., Gray, M., Yerolemou, N., (2020). Transforming Paradigms: A Global AI in Financial Services Survey, 128 p. https://doi.org/10.2139/ssrn.3532038.

 $<sup>^{271}</sup>$  Zheng, X., Zhu, M., Li, Q., Chen, C., Tan, Y., (2019). FinBrain: when finance meets AI 2.0. Frontiers Inf Technol Electronic Eng 20, 914–924. https://doi.org/10.1631/FITEE.1700822.

Currently, AI is actively used to provide services in the financial markets. So, robo-consultants (robo-advisors) are online services that use AI to automate investment management. They analyze market data, customer preferences, and risk profiles to make personalized investment recommendations and manage portfolios. Examples include foreign services such as Betterment, Wealthfront, and Acorns; Russian services such as Fin ex's Financial Autopilotand Sber's Financial Assistant.

So, Betterment is one of the largest robo-consultants, managing assets worth more than \$ 25 billion. Uses artificial intelligence algorithms to create and manage diversified portfolios.

The AI-powered Wealthfront service provides automated investment and wealth management services, including tax optimization and portfolio management.

In addition to robot consultants, many companies offer algorithmic trading services. Artificial intelligence is playing an increasingly important role in trading stocks and other securities. Algorithmic trading using artificial intelligence allows you to make transactions in fractions of a second, analyzing huge amounts of data, which leads to more efficient pricing and lower transaction costs.

Algorithmic trading uses artificial intelligence to implement high-speed and accurate trading strategies in financial markets and automate day-to-day operations. Algorithms analyze large amounts of data in real time to find trading opportunities and make decisions. For example, Kensho Technologies provides a data analysis and algorithmic trading platform that uses machine learning to analyze the market and automate trading decisions.

AI is used intraditional financial instruments, <code>Bprimarily</code> financial chatbots (fintech chatbots), which use artificial intelligence to provide clients with financial advice, support, and account information in real time. Bank of America's Erica is a virtual financial assistant that helps clients manage accounts, track expenses, andreceive financial advice<sup>272</sup>.

Artificial intelligence in finance has many positive aspects, such as transformational potential, improving the efficiency and effectiveness of financial organizations and services, automating operations, increasing the accuracy of data and forecasts, improving customer interaction and operational efficiency, combating fraud and financial crimes, etc.

In the future, the role in finance will only increase, opening up new opportunities and solutions for market participants. New financial products will improve the quality and accessibility of financial services, increase their customer orientation and adaptability to market realities.

#### **Sources:**

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1. McKinsey, (2023). Capturing the full value of generative AI in banking https://www.mckinsey.com/industries/financial-services/our-insights/capturing-the-full-value-of-generative-ai-in-banking#/

<sup>&</sup>lt;sup>272</sup> Chatbot Rank 2023 https://www.markswebb.ru/report/chatbot-rank-2023/

- 2. Milana, C., & Ashta, A. (2021). Artificial intelligence techniques in finance and financial markets: a survey of the literature. Strategic Change, 30 (3), 189.
- 3. Ryll, L., Barton, M.E., Zhang, B.Z., McWaters, R.J., Schizas, E., Hao, R., Bear, K., Preziuso, M., Seger, E., Wardrop, R., Rau, P.R., Debata, P., Rowan, P., Adams, N., Gray, M., Yerolemou, N., (2020). Transforming Paradigms: A Global AI in Financial Services Survey, 128 p. https://doi.org/10.2139/ssrn.3532038.
- 4. Zheng, X., Zhu, M., Li, Q., Chen, C., Tan, Y., (2019). FinBrain: when finance meets AI 2.0. Frontiers Inf Technol Electronic Eng 20, 914–924. https://doi.org/10.1631/FITEE.1700822.
- 5. Chatbot Rank 2023 https://www.markswebb.ru/report/chatbot-rank-2023/

### MOLIYAVIY TEXNALOGIYA VA XIZMAT KOʻRSATISH SOHASIDA RAQAMLI MARKETING TIZIMINING AHAMIYATI

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**Annotatsiya:** Ushbu maqolada xizmat ko'rsatish soxasida raqamli marketingni o'rni, axamiyati va xizmat ko'rsatish soxasining keng tarmoqlarga tarqalishida axoliga ko'rsatilayotgan xizmatlarning sifatli tashkil etilishida raqamli marketing o'rni, axamiyatini belgilash va bu borada mamlakatimizda tashkil etilayotgan iqtisodiy islohotlarning amaliy axamiyati o'rganilib chiqilgan.

**Kalit soʻzlar:** moliyaviy texnalogiya, xizmat koʻrsatish sohasi, raqamli marketing, raqamli texnologiya, mijoz, maqsadli reklamalar, onlayn soʻrovnoma, brend, raqobatbardoshlik, ijtimoiy tarmoqlar.

**Аннотация:** В данной статье рассматриваются место и значение цифрового маркетинга в сфере услуг, а также его роль в качественной организации предоставляемых населению услуг в условиях широкого распространения сектора услуг. Также изучается практическое значение экономических реформ, проводимых в нашей стране, в этой области.

**Ключевые слова:** финансовые технологии, сфера услуг, цифровой маркетинг, цифровые технологии, клиент, таргетированная реклама, онлайн-опрос, бренд, конкурентоспособность, социальные сети.

**Annotation:** This article explores the role and significance of digital marketing in the service sector, as well as its importance in the effective organization of services provided to the public amidst the widespread expansion of the service industry. Additionally, it examines the practical importance of economic reforms being implemented in our country in this regard.

**Keywords:** financial technology, service industry, digital marketing, digital technology, customer, targeted advertising, online survey, brand, competitiveness, social media.