ARTIFICIAL INTELLIGENCE IN FINANCIAL SERVICES

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This scientific paper explores the impact of artificial intelligence on the financial services sector. It analyzes the current state of artificial intelligence in the financial industry, its potential consequences in the future, and how people perceive artificial intelligence in finance. A survey of School of Business students revealed that while some perceive the level of security when using artificial intelligence in finance to be high, others have concerns about its safety and reliability.

Keywords: artificial intelligence; financial services; financial sector; digital transformation; technology.

Nowadays technologies are developing and developing. One of the most significant things that was created by people is AI. Everyone uses it in many spheres like healthcare, recreation, art, IT sphere and not only. But one of the most valuable ways of application is usage in financial services.

The financial sector is one of the most important and influential in the world. It not only provides economic stability, but is also an engine of progress in various fields. Therefore, the use of new technologies in this area is of great importance.

The purpose of this study is to study the impact of artificial intelligence on financial services. We strive to find out how artificial intelligence is used in the financial sector, what advantages it offers and what risks it poses.

The goal of our work is to analyze the current state of artificial intelligence in the financial services sector and its potential consequences in the future. And also look at how people perceive AI in finance and whether they want to use it in the future or not.

The financial sector, as we know, is the driving force of the global economy and the world in which we live. Along with the boom of digital technologies in the 21st century, this sector has also undergone drastic changes. What we had to work with in the last century is now becoming impossible for the digital generation.

Take, for example, how the behavior of customers has changed. Account holders today rarely visit banks to perform everyday operations. Banks have also changed their services in order to meet modern customer needs. It is at this moment that a new stage of transformation takes shape. Artificial intelligence is coming on the scene. Chat bot and robotic automation of processes

are among the many forms of AI that are gaining momentum in the financial segment of the market.

According to a PwC study, 45 % of total economic gains by 2030 will come from product enhancements, stimulating consumer demand. This is because AI will drive greater product variety, with increased personalization, attractiveness and affordability over time. The greatest economic gains from AI will be in China (26 % boost to GDP in 2030) and North America (14.5 % boost), equivalent to a total of $10.7 trillion and accounting for almost 70 % of the global economic impact [1].

The advantages of using AI in the financial services industry include increased efficiency, improved customer service, and more accurate and timely insights into the financial markets. AI can automate mundane tasks, freeing up employees to focus on more complex tasks. AI can also provide customers with personalized advice, helping them make better decisions. AI can also provide more accurate and timely insights into the financial markets, allowing investors to make more informed decisions.

The disadvantages of using AI in the financial services industry include the potential for bias, the cost of implementation, and the potential for misuse. AI algorithms can be biased if they are not trained properly, leading to inaccurate results. AI can also be expensive to implement, as it requires specialized hardware and software. Finally, AI can be misused if it is not properly monitored and regulated which can lead to big losses and problems.

There are a number of apps and services that use AI to provide financial services. For example, Mint is a popular app that uses AI to help users manage their finances. Mint uses AI to analyze user data and provide personalized advice on budgeting, saving, and investing. Another example is Acorns, which uses AI to provide personalized investment advice. Acorns uses AI to analyze user data and provide personalized investment advice based on the user’s risk tolerance and goals [2].

We have made a research that includes empirical collection of data using Google Forms, as well as statistical analysis and interpretation of the results. The survey participants are mostly School of Business students.

According to respondents ' assessments, 50 % and 10 % estimate that the level of security when using artificial intelligence in finance is «Very high» or «Quite high» while 23 % is «Neutral» towards it. However, there is still a significant portion (17 %) who believe that the level of security is quite low, indicating that there may be concerns about the safety and reliability of using AI in finance (Fig.1).

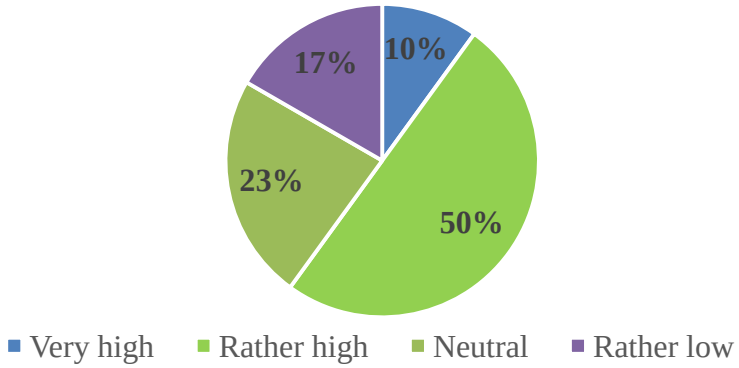

Fig. 1. Answers to the question: how do you assess the level of security when using artificial intelligence?

Also we collected information about what types of financial services respondents would like to receive using artificial intelligence. Based on the data, it can be concluded that internet banking and financial analysis are the most desired AI-based financial services among respondents, with 29 % and 27 % respectively. Investment portfolios and investment recommendations are also desirable, but to a lesser extent, with 19 % and 17 % respectively. This information can be useful for financial institutions and service providers in determining which AI-based services to prioritize and develop in order to meet the demands of their customers (Fig.2).

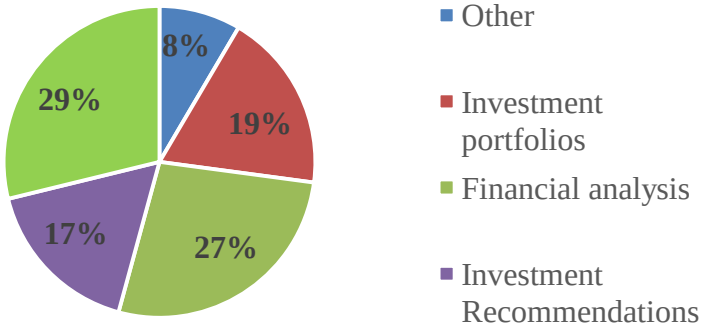

Fig. 2. Answers to the question: what types of financial services would you like to receive?

Based on the data obtained from the question of using artificial intelligence in the future, it can be concluded that a majority of respondents are open to using AI in finance in the future, with 83 % answering either yes or absolutely yes. This suggests a growing acceptance and trust in AI-based financial services among consumers. The neutral responses (10 %) may indicate a lack of knowledge or uncertainty about AI in finance. Overall, the data suggests

that there is potential for AI to be widely adopted in financial services in the future (Fig.3).

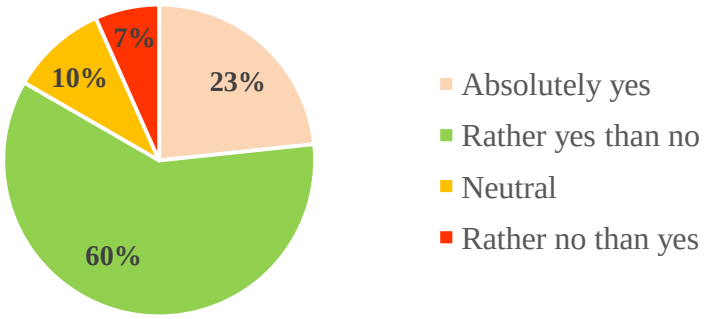

Fig. 3. Answers to the question: what types of financial services would you like to receive?

To sum up, the use of artificial intelligence in the financial sector has its advantages and risks. However, our results showed that most people are ready to use automated financial services in the future. It is important to continue developing technologies to ensure the safety and effectiveness of the use of artificial intelligence in the financial sector.

References

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