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THE ROLE OF ARTIFICIAL INTELLIGENCE IN THE ACTIVITIES OF CREDIT INSTITUTIONS

The sphere of financial services undergoes the most noticeable changes in its own functioning in modern conditions due to the active use of the potential of information and communication technologies. Such technologies are especially actively developed and used by credit institutions, which, carrying out rather risky activities, are interested in the best ways of accumulating data about customers, processing such information and making correct and justified management decisions.

Military actions on the territory of our state require the use of effective methods for the protection of the financial and economic sector, including credit institutions. After the full-scale invasion, the Ukrainian financial sector was forced to quickly adapt to new operating conditions in order to ensure stable and uninterrupted functioning. Credit institutions faced complex, abnormal challenges for the financial market, the impact of which is difficult to predict. The growing number of cyber-attacks, internal and external migration of the population, the destruction of structural subdivisions form new conditions in which banking and non-banking financial intermediaries operate and try to develop today. This requires them to find, develop and use new work methods and tools, measures to improve the quality of providing financial services even in turbulent conditions of their functioning.

According to research by the World Economic Forum, the use of innovations based on artificial intelligence technology will lead to the release of 26 million people over the next five years. Such data were obtained on the basis of a survey, in which 75% of enterprises out of 800 surveyed plan to use artificial intelligence technology and, if appropriate, to lay off some employees [3]. Today, among the companies that participated in the study, 11.3 million people work in 45 countries of the world. Thus, in May 2023, 3,900 people were laid off in the USA due to the introduction of artificial intelligence technology [1]. However, the use of this technology, according to scientists, on the other hand, will have a positive impact on the environmental situation in the world, which can be ensured by replacing outdated equipment with new ones that will already be created based on the use of this technology and will allow better analysis, observation and management ecological systems in the world.

According to Elon Musk, artificial intelligence technologies pose a threat to humanity, and machines will win. The opposite opinion is held by Mark Zuckerberg, who believes that the correct use of technology can significantly improve the life of mankind, since the capabilities of artificial intelligence depend on developers, then a balanced approach to the creation of such technologies can bring more benefits than negative consequences [2]. In most areas that use artificial intelligence technology, there is an improvement in the functioning of automated processes, the speed and volume of processed information increases, the accuracy of forecasts improves, which contributes to the quality of decisions made.

Most often, in the work of credit institutions, artificial intelligence technology is used to perform automatic analysis of customer credit histories, assess their solvency and ultimately make decisions on granting loans. The use of the specified technology enables deep and detailed analysis of large data sets about potential customers and more correct assessment of potential risks.

Automated decision-making systems allow credit institutions to better analyze various information about customers: credit history, income, expenses, risks, service history, and other

external data. Information systems based on artificial intelligence technology can analyze transactions and search for anomalous patterns in the financial behavior of potential customers, which may indicate possible cases of fraud in the future. Modern credit institutions actively use the technologies of chatbots or automated customer support systems that can provide information about credit products and provide consulting services in real time. Analysis of customer data and their preferences in the range of services make it possible to create personalized loan product offers and form marketing communications [4].

Based on the use of artificial intelligence technology, credit institutions can predict future changes in financial services markets. The use of this technology will allow in the future to make decisions on crediting certain projects in the early stages, which will reduce the focus solely on the results of the analysis of financial indicators for decision-making. One of the areas of use of artificial intelligence technology is machine learning, which enables an algorithm based on the analysis of previous data to generate results that will be highly accurate and contribute to better financial risk management.

Another advantage of the use of artificial intelligence technology for credit institutions is the automation of payments without the involvement of a person, which will significantly speed up the execution of transactions. Identification of a person can be fast and carried out through the analysis of voice, appearance or fingerprints. In general, today these technologies are already being actively implemented by credit institutions. Payments can also be organized exclusively through voice commands. For example, the application of the Monobank mobile banking service uses an algorithm of AI solutions to determine risks based on the use of neural network technologies, which consist in image recognition and dialogue analysis [5].

Despite the positive directions of using artificial intelligence technology in credit institutions, there are certain risks and threats of their active use. This requires the development and implementation of additional measures. The risks associated with cyberattacks on the functioning of information systems of credit institutions should be highlighted as a priority. Also important are social risks associated with the dismissal of employees due to the active use of artificial intelligence technology in the work of credit institutions.

Therefore, the financial sector is one of the leading sectors of the economy in which digital technologies, including artificial intelligence technology, are actively used today. The COVID-19 pandemic, the war and its complex consequences for the economy of the country and its citizens necessitated the digitalization of financial institutions at an even faster pace in order to remain competitive in the financial services market and provide quality services to clients, which intensified the development and implementation of new digital technologies.

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