NOVATEUR PUBLICATIONS
JournalNX- A Multidisciplinary Peer Reviewed Journal
ISSN No: 2581 - 4230
VOLUME 8, ISSUE 10, Oct. -2022

ROLE OF ARTIFICIAL INTELLIGENCE IN THE TRANSFORMATION OF FINANCIAL ANALYSIS

Akhmedov Khojiakbar
Ph.D, Associate Professor at "Accounting"
Tashkent State University of Economics, Tashkent, Uzbekistan

ABSTRACT
The financial analysis of an enterprise is an important tool in the enterprise management system. The article concludes that the automation of financial analysis allows not only to conduct a comprehensive retrospective analysis of the financial and economic activities of an enterprise, but also solves the problems of evaluating investment projects, building and optimizing the financial plans of organizations. The features of the use of artificial intelligence, the trends of its implementation in the financial industry are considered.

Keywords: financial analysis, automation of financial analysis of the enterprise, artificial intelligence, financial analysis of an enterprise.

INTRODUCTION

Business financial analysis is the process of using appropriate analytical methods to process documents from financial statements and other documents, to form a system of financial indicators for assessing the financial situation and predicting future financial potential.
Artificial intelligence (AI) is directly related to Data Science, the science of data that aims to extract business value from an array of information. This value may lie, for example, in expanding the possibilities of forecasting, knowledge of patterns, informed decision-making. In a narrower sense, AI is algorithms and methodologies for processing information. Artificial intelligence operates on huge arrays, analyzes incoming data and develops adaptive solutions based on them.
Artificial intelligence is used in various fields, including marketing and business. According to the PwC forecast, thanks to artificial intelligence, the gross domestic product (GDP) in individual countries will increase by 26%, and the global economy will grow by almost $16 trillion. In this article, we will look at how modern digital technologies are used in the Russian market, what a "smart" algorithm can do, what results it gives, what information it requires, and why the use of AI gives companies an advantage over competitors.[10]

LITERATURE REVIEW

In her work, Galimova M.P. draws attention to the fact that the financial analysis of an enterprise is, first of all, the transformation of financial statements of financial statements into useful information. This process can be carried out in different ways depending on the goals of the analyst [2].
Cherkasova V. A. and Slepushenko G. A. interpret financial analysis as a process of determining the strengths and weaknesses, as well as the financial stability of a business. By establishing relationships between items in the balance sheet, income statement and cash flow statement [6].
The analysis helps to assess at what stage the business is, growth or decline, the current financial condition. In addition, financial analysis is based on indicators that help predict the future financial situation.

Analysis and results

To date, many methods have been developed for assessing the financial condition of an enterprise. During the financial analysis of the enterprise, a wide variety of techniques, models and methods of analysis can be used.

For investors. Each investor, before deciding to participate in a particular enterprise project, will have to calculate the possibility of benefits that he will receive. Without analysis, investors will make poor decisions, predict and evaluate poor returns, thereby increasing risk.

For business owners. They are the direct administrators themselves, managing business activities, so they need a lot of information to do their job. Financial analysis supports the implementation of the principles of financial management, profit and risk management, liquidity, etc. Based on the information in the analysis process, the manager checks and controls the operations, management, financial forecasting in the company more effectively.

For credit institutions. In business operations, the use of financial leverage is one of the frequently used strategies. Currently, enterprises need to borrow capital from credit institutions. If, during a financial analysis, a lending institution finds that the company's ability to repay the debt is low, it will restrict lending. Usually, with short-term loans, the organization focuses on the analysis of solvency. If it is a long-term loan - the financial efficiency of the investment project.

Their number and range of use depend on the goal and are determined by the tasks of analysis in each individual situation. Depending on the purpose of the analysis, various indicators of the enterprise's activity are investigated. The creation of an information base, algorithms for calculating financial indicators is absolutely necessary to obtain objective information about the financial performance of an enterprise. The very information platform for automating the process of processing financial information can be varied, ranging from the simplest packages, for example, Microsoft Excel, widely used by many, to the most complex latest developments of software products, which, of course, is a separate line of activity, a product of our own or attracted companies. part of IT specialists - technologies, for example, the introduction of artificial intelligence. [5].

A key approach to automation in finance and accounting is the use of robotic process automation to improve efficiency and internal control, which, according to 35% of financial executives surveyed, is a top priority [1].

The benefits of implementing automation include:

1. strategies for the efficient use of employees' working time;
2. reduction of manual, repetitive work; reduce the human factor;
3. improve internal controls by testing larger sets of data;
4. improve understanding of future risks and opportunities [6].

Among the risks of automation, the following points should be highlighted:

Technology incorrect robot design can affect existing IT infrastructure. Conversely, frequent IT platform changes can affect automation decisions.

Compliance Failures in automation can reduce the accuracy of regulatory reports, result in fines and violations of the law.

Operations. An increase in processing errors can be caused by poorly designed automation solutions. Lack of effective monitoring procedures can lead to increased operational efficiency.

Personnel access control and monitoring of automated processes must be carefully managed to prevent and detect abuse

Financial reporting Inadequate robotic bookkeeping and automation of financial processes can lead to inaccurate or incomplete financial reporting, duplicate financial reporting, and reputational damage.

Artificial intelligence (AI) is a new technology in the field of computer science. AI is rapidly changing the dynamics of development in all areas. New AI capabilities combine and shape in unexpected ways, creating new opportunities and challenges, as well as hidden threats such as cybercrime and financial risk.

The natural intelligence that humans possess is the ability to sense, understand, analyze, draw logical conclusions or solve problems, and finally learn from experience in order to improve and develop. Similar traits that machines imitate are called artificial intelligence and machine learning.

AI, a term coined by John McCarthy, a cognitive scientist and computer scientist at Stanford University (USA), refers to the characteristic of a machine that mimics a person in thinking and makes intelligent choices to achieve a certain goal. In addition to the development and revolution in areas such as aviation, healthcare, transportation, education, medical diagnostics, e-commerce, remote sensing, robotics and many others, AI is increasingly being used in financial services, banking, data mining, market analysis, asset management, insurance, retail lending, process automation.

AI is superior to humans in collecting and analyzing data to identify patterns and make more accurate predictions for the future, thereby improving the efficiency of financial management:

- portfolio and asset management services: the main mission is to understand the trade-off between risk and return, to be able to advise on securities and decide which assets will bring the most profit. A typical example of the application of AI is that the world's largest investment group BlackRock (USA), with assets of over $6 trillion, has a dedicated AI lab to support its operations. The Swiss bank UBS has expanded its trading platform with two new artificial intelligence systems: the first is designed to identify trading patterns after analyzing a wide range of market data, and the second is to advise on trading strategies. The second system deals with the user's distribution preferences after the transaction [2];
- Validated data sets are needed by AI machines for data analysis: The Mobile Banking application based on AI technology can collect user data and shape the learning process corresponding to the behavior to improve the user experience. After properly analyzing the data, it can provide users with a more personalized service;
- The banking system is gradually applying AI through intelligent systems to help make investment decisions and support research: At present, AI technology in the banking sector continues to transform to provide more value to customers, reducing risks and increasing opportunities as a financial tool for the modern economy . For example, Bank UBS (Switzerland) or ING (Netherlands) use an artificial intelligence system that scans the market to inform their algorithmic trading systems;
- automation of processes with the help of robotic processes: processes including withdrawal and deposit processing, statement creation can be better performed by software to increase labor productivity, reduce costs, increase operational efficiency and optimize;
- AI models in banking are used to analyze the state of financial markets: the use of machine learning methods in combination with AI models can provide insight into market trends. Based on market trends predicted by AI models, investors can make more valuable financial decisions for investors;
- credit scoring and analytics using alternative data: there are many individuals, as well as small and medium-sized enterprises, who do not have access to bank credit information due to a limited or no credit schedule. Fintech companies are using AI to collect and process alternative data such as location, employment history, age, spending habits, education level, criminal records, social media to make

lending decisions. AI-powered predictive analytics can help calculate credit scores, prevent bad loans, and provide credit requests to customers when considering a transaction;

- regulatory compliance, anti-money laundering, fraud detection and prevention. The real appeal of AI lies in its ability to sift through this mass of data, revealing trends and patterns in a short amount of time.

The AI model is changing the traditional method of communication between customers and banks from personal communication to the use of information technology. In both cases, the customer does not know how the personal data provided by him will be used, to whom and for what purpose. One reason is that people have little interest in reading lengthy privacy policies, but are quick to agree to allow access and use of their information.

AI has made a huge contribution to cybersecurity by creating strong passwords and user authentication conditions, preventing phishing attacks, spam, fake news detection and strengthening the fight against cybercrime in general. It is worrying that AI itself could also be used by hackers as a tool to target databases. Hackers use artificial intelligence technology to automate the process of attacking, scamming, and extorting many people using chatbots, as well as spreading false and fake news.

While AI is said to be able to increase efficiency by allowing the processing of large amounts of data, in some cases it is not entirely reliable compared to the work of information technology and network security specialists in the real world. AI is best suited for analysis, forecasting, risk warning, policy formulation and response to cyber attacks. The assumptions made, the data used, the patterns discovered, and the score matrix in the AI algorithms that companies use are never disclosed to customers. AI systems operate on the basis of fairness, rationality, without economic, social and political prejudice, producing results. However, depending on the quality of the algorithm used or on the basis of samples and input information, in the presence of missing parameters, virtual data, errors in the processing formula, the control program is not optimal, the results obtained can be severely deformed, causing serious consequences.

The barrier to AI in end-to-end development and workflow automation still lies in the human psychology factor. Customers in business transactions want to work directly with service providers, which gives them a sense of security. They need a maintenance plan that can be customized to suit their specific needs, with the guarantee of constant support from people, not machines. Computerized instructions and automated calls tend to annoy customers who always want to contact a company representative to resolve their issues.

AI is a disruptive technology with huge potential to innovate, create and deliver banking and financial services. It has changed the way business is done in areas such as portfolio management, algorithmic trading, fraud detection, loan guarantees, insurance, customer service, cybersecurity, and financial risk analysis. AI has the potential to reduce back office and logistics costs, and has the potential to change the way financial companies operate, how they innovate products and services, and the way they work, as well as take the customer experience to the next level. Therefore, in order to quickly and widely apply AI technology, it is urgent to develop internal training programs to transfer AI skills to current employees. The banking and finance industry today is focusing on the implementation of AI and tends to ignore or minimize the importance of human labor. Artificial intelligence began to gradually take root in the accounting and auditing information systems of companies. The most common first step is robotic process automation - this is a piece of software that runs other application software and can be used to automate predefined business processes [4].

The difference between automation and artificial intelligence is that while robotic automation is driven by processes that automate rule based tasks, artificial intelligence is data driven which requires high quality data to operate.

While there are still ethical and legal issues surrounding AI in the financial industry, in any case, AI is becoming part of various business processes, and companies are investing more and more capital in their growth. While new challenges and threats may arise in the future, AI is sure to bring many opportunities and effective solutions. The application of artificial intelligence in the financial industry is of great importance as it will contribute to the development and innovation of the industry and improve the competitiveness of enterprises.

References

1. Vinogradov M.N., Vasiliev V.V. Analysis of the financial condition of the enterprise// Innovative science. 2021. No. 4. - pp.95-97.
2. Galimova M.P. Readiness of Russian enterprises for digital transformation: organizational drivers and barriers. USNTU Bulletin. Science, education, economics. Series: Economics. 2019;(1):27- 37.
3. Ivakhnushkina A.I., Anokhina L.V. Methodology and essence of financial condition analysis // In the collection: The Global Economy in the XXI century: the role of biotechnologies and digital technologies. Collection of scientific articles based on the results of the third round table with international participation. - 2020. - pp. 62-66.
4. Leskova K.A., Andreeva O.O. Analysis of the financial condition of the organization: methodological issues// Bulletin of Science. 2021. No.4 (37). - pp.86-91.
5. Minina T.I., Kuleshov D.V. Problems of automation of financial analysis// Chronoeconomics. 2020. No. 7 (28). - pp.178-183.
6. Cherkasova V. A., Slepushenko G. A. The impact of digitalization of business on the financial performance of Russian companies// Finance: theory and practice. 2021. No. 2. - pp.56-61.
7. Khramchenko A.A. Analysis of budget investment./ A.A. Khramchenko, Vakulenko A.A., Salova A.A. / Bulletin of the Academy of Knowledge. 2020. No. 5 (40). pp. 447-454.
8. Khramchenko A.A. Evaluation of the application of the methodology of mathematical modeling as a way to improve the efficiency of management of organizations (on the example of RUSAGRO Group of Companies LLC / Khramchenko A.A., Gogina A.D., Savchenko M.I.// Bulletin of the Academy of Knowledge. 2020. No. 5 (40), pp. 454-460.
9. https://cyberleninka.ru/article/n/transformatsiya-finansovogo-analiza-v-period-tsifrovizatsii.
10. https://www.simbirsoft.com/blog/rol-iskusstvennogo-intellekta-v-biznese.