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CHALLENGES OF APPLYING AI IN THE BUSINESS SECTOR

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Abstract: Implementation of artificial intelligence in the business sphere is experienced a sharp increasing in recent years. Moreover, it is conditioned not only by the demand for speed, accuracy, and network communication of business processes, but also by the manifestations of the participation of artificial intelligence in management decisions. Receiving a Big Data, having the opportunity to systematize and process it, artificial intelligence in the business sphere is given tasks to make forecasts, solve problems of optimizing operations, and propose ways of positioning in the competitive market.

However, on the other hand, with the use of artificial intelligence, the business sphere faces a number of technical, financial, and ethical challenges that require their own solutions. The article suggests ways to overcome the risks of using artificial intelligence in the business activity.

Keywords: artificial intelligence, digital transformation, digitalization opportunities, decision making, risks of AI

JEL codes: M15

Research aims: analyze the risks of artificial intelligence used in business and propose ways to overcome them.

Research novelty: solutions to the challenges as a consequence of the use of artificial intelligence in business have been proposed.

Introduction

Currently, when digital technology is developing at an incredible speed, Artificial Intelligence (AI) stands out as one of the most significant achievements in business. It is not just a set of algorithms and software, but an entire era that revolutionizes the possibilities of automation and intelligent data analysis. Since its inception and the first experiments in the field of AI, we have witnessed its evolution from simple mechanisms to complex systems capable of learning, adapting, and even making decisions.

Artificial intelligence has found its application in a wide variety of areas, ranging from the daily tasks of ordinary users to complex business processes in large corporations. In business, AI has opened up new horizons for optimizing work, increasing efficiency, and reducing costs, providing entrepreneurs with tools to solve problems that previously seemed impossible.

The purpose of using AI in business extends from the automation of routine tasks to complex analysis of big data for making strategic decisions. This technology allows enterprises to be one step ahead, anticipating changes in the market, optimizing production processes, and personalizing interactions with customers. Because of AI, companies can not only improve the quality of their products and services, but also significantly increase the level of satisfaction and loyalty of their customers (Maphosa V., M. Maphosa 2022).

Though the use of artificial intelligence can lead to significant economic benefits for businesses, there are some potential negative consequences, such us:

- ✓ Implementing artificial intelligence systems can be expensive and requires large investments in hardware, software, staff training and other resources.
- ✓ The use of artificial intelligence can lead to the misuse and storage of personal data, which may violate laws and regulations.
- ✓ The use of artificial intelligence can increase the risks of cyber attacks and leaks of confidential information.
- ✓ Artificial intelligence systems can be complex and not always flexible to changing business requirements. This can lead to difficulties in adapting to new tasks and changes in the market.
- ✓ Automation of tasks using artificial intelligence can lead to job losses, especially in areas where previously many tasks were required.

These negative consequences can impact business, so companies should consider them when making decisions about implementing AI systems. The potential benefits of using AI must be balanced against the associated risks and costs (Alshaikhi, A., Khayyat, M. 2021). The use of artificial intelligence can lead to the misuse and storage of personal data, which may violate laws and regulations.

Research results

Optimization work processing is a key benefit of implementing artificial intelligence in a business environment. It is the process of improving and simplifying the way tasks are performed and the company's goals are achieved. Using AI allows companies to automate and optimize their workflows, which leads to increased efficiency and reduced time costs. Optimizing work processing with AI is based on analyzing data and identifying bottlenecks in current processes. AI can process large amounts of information, identify patterns and trends, which helps companies make more informed decisions to optimize their operations (Budak, A., 2022).

Applications of AI can include automating previously manual tasks, improving resource planning and management, and optimizing logistics and supply chains. For example, machine learning algorithms can predict product demand and optimize warehouse stock levels to avoid surpluses or shortages. Optimization can also include improving communication and collaboration between different departments within a company. AI can help automate data collection and analysis processes, making it easier to share information and make joint decisions (Victor, N., O., C. 2023).

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One of the main advantages of AI is the ability to automate decision-making processes. Machine learning algorithms can independently analyze data, identify patterns, and recommend optimal decisions based on the information provided (Palanivelu, V., R. 2020). The use of AI allows companies to create predictive models that can take into account many different factors and variables, including complex relationships between them. For example, machine learning algorithms can analyze large amounts of data on past trends and market events to predict possible future scenarios and developments (Angström, Rebecka, C., Björn, Michael, Dahlander, Linus, Mähring, Magnus, and Wallin, W, Martin. 2023).

Predicting trends and market behavior using AI also allows companies to quickly respond to changes in external conditions and adapt to new situations. For example, machine learning algorithms can automatically analyze data on market trends and alert a company to possible threats or opportunities for business development (Bento, S., Pereira, L., Gonçalves, R., Á. Dias, and R., L., da Costa. 2022).

One of the main benefits is the ability to improve the quality of decisions made. Machine learning algorithms can provide a company with valuable data and recommendations that help make informed and sound decisions about business development strategies (Inan. T., Narbaev. T. 2022).

In addition, AI allows companies to be more competitive in the market, as they can quickly adapt to environmental changes and offer their customers the most relevant products and services.

Positive features of artificial intelligence are,

1. Automation of routine tasks. This factor will significantly reduce the workload of the company's employees, which will increase productivity;

2. Increasing the accuracy of analytics and forecasting. It is mainly used in business areas that require a large number of mathematical calculations and processing of information arrays;

3. Optimization of production processes: The use of AI in production allows you to optimize processes, improve product quality, reduce production time and reduce costs;

4. Cost reduction: Thanks to the automation and optimization of processes, companies can reduce labor costs, improve the efficiency of resource use and reduce losses.

These advantages clearly show us that artificial intelligence can be used in almost all areas of business. This is explained by the fact that the range of tasks performed is not limited, therefore, by developing the correct algorithm, it is possible to achieve automation of any entrepreneurial activity.

The challenges and obstacles that companies face when using artificial intelligence to improve customer experience can be varied and include both technical and organizational aspects. One of the main challenges is the need to process and analyze large volumes of data. Intensive use of AI requires access to high-quality and large-scale data, which can be difficult for companies, especially small and medium-sized enterprises. Insufficient data preparation or its

low quality can lead to unreliable analysis results and, as a result, to incorrect strategic decisions.

Another challenge is the complexity of implementing artificial intelligence into existing business processes. Implementing new technologies often requires changing the company's culture and working methods, as well as training staff. Some employees may be wary or resistant to new technologies, which can make the implementation process difficult. Collecting and analyzing customer data can entail risks regarding the protection of personal information. Companies must ensure compliance with data protection laws and take measures to protect customer privacy.

Finally, the need to constantly update and develop technologies and skills. Artificial intelligence is a rapidly evolving field, and companies must constantly monitor new trends and technologies to remain competitive.

Conclusion

The development prospects for the use of artificial intelligence to improve business competitiveness are vast and exciting. One of the main areas of development is the further improvement of machine learning algorithms and data analysis. As a result of development of deep learning and neural network technologies, companies will be able to create more accurate and effective prediction models and recommendations for their customers. Another important aspect of development is the integration of artificial intelligence with other technologies, such as the Internet of Things (IoT), blockchain and big data analytics. This will allow the creation of more complex and intelligent systems that can adapt to

changing customer needs and offer innovative solutions. In addition, an important area of development is increasing transparency and responsibility in the use of artificial intelligence. Business companies must follow to high standards of ethics and data protection in order to ensure the trust of customers and society as a whole.

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ԱՐՀԵՍՏԱԿԱՆ ԲԱՆԱԿԱՆՈՒԹՅԱՆ ԿԻՐԱՌՄԱՆ ՄԱՐՏԱՀՐԱՎԵՐՆԵՐԸ ԳՈՐԾԱՐԱՐՈՒԹՅԱՆ ՈԼՈՐՏՈՒՄ

Նունե Սահակյան
Երևանի պետական համալսարան, տ.գ.թ.

Բանալի բառեր – արհեստական բանականություն, թվային փոխակերպումներ, թվայնացման հնարավորություններ, որոշումների կայացում, ԱԲ ռիսկեր

Գործարարության ոլորտում արհեստական բանականության կիրառումը վերջին տարիներին կտրուկ ակտիվություն է ցուցաբերում: Ընդ որում, այն պայմանավորված է ոչ միայն բիզնես գործընթացների արագագործության, ճշգրտության ապահովման, ցանցային հաղորդակցման պահանջով,

այլև կառավարչական որոշումներում արհեստական բանականության մասնակցության դրսևորումներով: Ստանալով հսկայածավալ տեղեկատվություն, հնարավորություն ունենալով այն համակարգելու ու մշակելու, արհեստական բանականությանը բիզնես ոլորտում հանձնարարություններ են տրվում կատարելու կանխատեսումներ, լուծելու գործառույթների օպտիմալացման խնդիրներ, առաջարկելու մրցակցային շուկայում դիրքավորման ուղիներ:

Սակայն, մյուս կողմից, արհեստական բանականության կիրառումով բիզնես ոլորտը բախվում մի շարք տեխնիկական, ֆինանսական և էթիկական մարտահրավերների, որոնք իրենց լուծումներն են պահանջում: Հոդվածում առաջարկվում են բիզնես ոլորտում արհեստական բանականության կիրառման ռիսկերի հաղթահարման ուղիներ:

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