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APPLICATION OF NEURAL NETWORKS IN BUSINESS

Применение нейросетей в бизнесе

The purpose of the research: to study possible applications of neural networks in business, to consider the disadvantages of AI.

Artificial intelligence has been available to businesses for a long time and has been used as a convenient tool. However, only in 2022 neural networks became an integral part of it, in the same year the word "neural network" became the most popular query in the Yandex search engine [1].

The popularity of the integration of artificial intelligence both by small and large companies in various business areas lies primarily in the extensive capabilities of neural networks that are able to carry out comprehensive collection, analysis and filtering of information, visualize and recognize images, predict various situations and function smoothly even when some nodes fail. Thus, the ability of neural networks to adapt to constantly changing market trends, analyze consumer preferences and behavior and segment the consumer audience is reflected in e-commerce, marketing and retail. Various bots and recommendation systems based on customer requests are created with the help of neural networks in these areas, which allows companies to personalize and modify their products in accordance with these requests. Also, thanks to artificial intelligence, website designs are created, images are processed and formed, creatives for advertising companies and ideas for new products are generated, recommendation systems are improved, etc. For example, the company L'etoile with the help of AI created a creative for the PR of its campaign, which quickly went viral in telegram channels, the Nike brand using a neural network launched a futuristic collection of clothes, which also quickly became popular online, and Coca-Cola identified the most successful recipe for a new drink [2]. Neural network capabilities are also widely used in logistics and manufacturing, where with the help of AI optimization process is monitored, the condition of mechanisms and automated systems are controlled, finished products are designed and the cost of materials is calculated; in banking, where financial forecasts and risk analysis, various banking transactions and financial fraud are also performed using the latest technologies.

All of the above capabilities of artificial intelligence can compete with human abilities, and in some areas even surpass them. However, along with the advantages, the use of neural network has a number of disadvantages. At the moment, the work of

AI is based on algorithms and analyses set by people, since a well-prepared source information is needed to set up a neural network. That is why, in order to avoid replacing human labor with artificial intelligence, product managers and project managers should improve their meta-skills: develop analytical thinking, adaptability and flexibility to various situations and leadership qualities. In addition, the neural network cannot be fully implemented in such areas as medicine, education, art, personnel management, because they require empathy and a complete absence of errors, which are sometimes possible when working with AI. Another problem of neural networks is their availability. The paradox of the introduction of neural networks lies in the simultaneous budget and high cost of this innovation. The use of AI makes it possible to reduce staff and reduce salary costs, however, the introduction of this technology implies the availability of qualified employees in this field, the availability of the latest business models and equipment, which entails large expenses that are not affordable to everyone.

Research results: familiarization with the main areas of application of neural networks was conducted and their main disadvantages were identified.

References

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SHOPPING ONLINE OR ALIVE. WHAT DOES MODERN SOCIETY CHOOSE?

Шопинг онлайн или вживую. Что выбирает современное общество?

Purpose: To explore what kind of shopping is popular these days. To identify which option of buying has more advantages.

The tendency of the development of our world is observed every day. With the help of new technologies humans makes our daily life more comfortable and easier.