

2) Simplification of the reporting system. A system of settlements through terminals could simplify the process of preparing financial statements for a company, since detailed information on all transactions will be available.

3) Reduction of cash transactions. The risk of cash loss and theft is reduced, which can reduce operating costs and improve security.

4) Improved service quality. The time for settlements is reduced, which can improve overall work efficiency.

5) VAT. When using terminals, it may become mandatory to pay VAT based on recorded transactions.

6) Income taxation. Accounting for all transactions through terminals will help to more accurately calculate the taxable base, which can lead to an increase in taxable income, but also to possible tax optimization due to the legal accounting of all receipts.

However, it should be taken into account that the purchase and maintenance of payment terminals will be carried out by the route companies themselves. To do this, companies will need to invest large amounts of money at the stage of technology implementation. On the other hand, route companies can rent terminals, which may be more economically beneficial for minibuses owners.

It should be noted that the introduction of terminals does not exclude the possibility of making payments for passenger transportation services rendered in cash and gives the consumer the right to make payments in non-cash form using either bank payment cards or other payment instruments (for example, QR codes). Thus, based on the results of the study, it is clear that the introduction of this law already at this stage has positive results and experience.

Reference

1. Об изменении постановления Совета Министров Республики Беларусь и Национального банка Республики Беларусь от 6 июля 2011 г. № 924/16 : постановление Совета Министров Респ. Беларусь и Нац. банка Респ. Беларусь от 26 сент. 2024 г. № 704/22 // Национальный правовой Интернет-портал Республики Беларусь. – URL: <https://pravo.by/document/?guid=12551&p0=C22400704> (дата обращения: 24.10.2024).

M. Goreglyad

М.Ю. Горегляд

БГТУ (Минск)

Научный руководитель А.Ф. Круталевич

APPLICATION OF NEURAL NETWORKS IN MODERN MARKETING

Применение нейросетей в современном маркетинге

At the moment, neural networks have confidently entered all areas of human activity thanks to their constantly developing functionality. They are actively used to solve

a variety of problems, both simple, in order to save time, and complex, where conventional solutions are impossible.

The purpose of this research is to determine the significance of neural networks in the marketing activities of organizations and to identify marketing tasks that neural networks can effectively cope with.

First, let's figure out what a neural network is. The term itself comes from biology, where a neural network is a collection of neurons united in the nervous system. A neuron is a special cell that can process and transmit signals. An artificial neural network has a similar functioning scheme. As in biology, each neuron implements an activation function, which is responsible for further data transfer.

Artificial intelligence in the USSR was started in the 1960s. In Belarus, even in Soviet times, areas such as image recognition and computer graphics, speech recognition and synthesis, machine learning, etc. were successfully developed. This began to develop intensively in the 1990s. We started to participate in international projects, write in English and became recognizable in the world.

As already mentioned, neural networks have entered almost all spheres of people's lives, these include healthcare, energy, transport, finance, manufacturing and, of course, marketing.

Now let's move on to what kind of connection exists between neural networks and marketing. There are a huge number of definitions of marketing, but its main goal can be formulated as follows: «satisfying consumer needs». Previously, organizations had to conduct surveys on the street and count the number of responses themselves. With the development of the Internet, companies were able to automate execution marketing strategies.

Gradually, with the development of technology, it became possible to develop and implement neural networks. Their use allows you to process large volumes of information and obtain effective results with minimal loss of time. So, what tasks can neural networks perform in marketing activities? I will give some of the most striking and interesting, in my opinion, examples.

The first and probably the most famous are various chat bots or telephone bots. Based on information previously entered into the neural network, it determines the impact on the object. Using such a system, you can train a model to automatically answer customer calls and messages. Such communication channels allow you to maintain constant contact between the client and the company.

The generation function of neural networks allows you to create new data based on the input information. This way companies can create content for a website or blog and make it more diverse for the audience. Such neural networks can speed up the process of writing posts or articles and minimize human participation.

The neural network is capable of determining the class of an object based on the input data. In this way, you can determine whether the client is satisfied with the product or service. This is used to analyze feedback and improve the product accordingly. It is also

possible to find out how likely the client is to make a purchase again. Since the neural network is capable of finding numerical parameters based on the information received.

In conclusion we can say that the tasks listed above are not the limit of the capabilities of neural networks. There are a huge number of them, and in the future neural networks will become even more developed and widespread.

V. Gorodnikova

В.А. Городникова

БНТУ (Минск)

Научный руководитель Н.И. Липлянина

SOCIAL MEDIA'S ROLE IN BUSINESS DEVELOPMENT

Роль социальных сетей в развитии бизнеса

The initial role of social media was to communicate over distances and share information with friends. However, in recent years, social media has become an integral part of business strategies for companies worldwide. The importance of social media promotion has grown to such an extent that it has led to the emergence of a separate field in marketing – social media marketing (SMM). The goal of this research is to analyze the impact of social media on business development, identifying the main advantages and challenges associated with SMM.

Today, SMM is a powerful tool for attracting customers, building a brand, and establishing communication, which drives business growth. The largest platforms for SMM have become Facebook, Instagram, TikTok, Telegram, and X.

The main impact of social media on business can be summarized in three points:

1. Reach. According to statistics, over 5 billion people actively use social media. Social media gives brands access to global audience, expanding opportunities to find new customers from anywhere in the world. Additionally, social media offers targeted advertising options that can be displayed to audiences with specific interests.

2. Customer engagement. Social media allows for interaction with consumers on a more personal level. Companies respond quickly to inquiries, resolve customer issues online, and provide any information in real-time, which increases customer satisfaction and loyalty. Furthermore, the feedback that companies receive from social media (reviews and comments) helps improve products and services.

3. Ease of marketing. Companies create unique content in various formats that can be easily shared by users. Therefore, diversity and originality of content are quite important, as they attract the attention of new customers to the brand.

The advantages of promotion in social media also include cost. SMM allows businesses to reach a wide audience without the high costs of traditional advertising, such