Volodymyr PYLYPCHUK
PhD in Economics, Professor of Department of Marketing
Kyiv National Economic University named after Vadym Hetman
kneu52pvp@gmail.com
Andrii HOLITSYN
PhD in Economics, Associate Professor
Kyiv National Economic University named after Vadym Hetman
holitsyn@kneu.edu.ua
Svitlana HOLITSYNA
Bachelor's degree student, Faculty of Management,
AGH University of Science and Technology (Poland)
Bachelor's degree student, Educational and Research
Institute of Information Technologies
State University of Information and Communication Technologies (Ukraine)
holitsynas@gmail.com

USING BLOCKCHAIN AND MACHINE LEARNING TECHNOLOGIES IN MARKETING

ВИКОРИСТАННЯ ТЕХНОЛОГІЙ БЛОКЧЕЙН ТА МАШИННОГО НАВЧАННЯ В МАРКЕТИНГУ

Blockchain and machine learning are technologies that are becoming increasingly popular in the field of marketing. Blockchain is a digital technology that allows for the secure storage and transmission of information in real-time. In marketing, blockchain is used to store customer data, enabling personalized offers and discounts, improving loyalty program functionality, and preventing fraud and deception in online advertising.

Machine learning is the process by which a computer learns from data and algorithms to solve specific tasks. In marketing, machine learning is used to forecast demand for products and services, analyse consumer data, determine appropriate advertising channels, and improve analytics.

According to Forbes, companies that use blockchain and machine learning in marketing gain significant competitive advantages. For example, AdHive uses blockchain to automate ad placement on social media and has already raised $12 million through an ICO. Amazon uses machine learning to create personalized recommendations for customers and forecast their demand for various products [1].

Another way to use blockchain in marketing is the ability to create decentralized advertising networks. Traditional advertising platforms usually offer higher advertising prices for advertisers and low pay-outs for content publishers. Decentralized advertising networks based on blockchain can change this approach, allowing advertisers to directly contact content owners and pay them for their content without intermediaries. One such advertising platform is Brave, which uses the internal cryptocurrency BAT (Basic Attention Token) to pay for advertising and reward content creators [2].

Another area where blockchain can be used in marketing is loyalty programs. Blockchain allows loyalty programs to work with any cryptocurrency. This allows loyalty program owners to receive data about their customers and increase sales, while customers can receive rewards in the form of cryptocurrency for their purchases.

One of the main challenges associated with the use of blockchain in marketing is ensuring confidentiality and protecting users' personal data. Since blockchain stores data in a decentralized format, the possibility of unauthorized access to data may increase. However, blockchain solution developers are constantly working to improve security and confidentiality systems [3].

Similar to blockchain, machine learning has significant potential to transform marketing. One example of using machine learning is personalized marketing, which can be achieved by analyzing large amounts of data on user behavior. With machine learning, algorithms can be developed to analyse user data, including their interests, website behavior, and purchasing habits. Based on this information, individualized offers can be created for each user, which can significantly increase the effectiveness of marketing campaigns.

In the realm of marketing, we find ourselves at the exciting intersection of cutting-edge technologies like blockchain and machine learning. These innovations beckon us to embark on a journey of research and development. Notably, industry giants such as IBM, Google, Amazon, Salesforce, have thrown their hats into the ring, fervently exploring the myriad possibilities that these technologies offer for marketing strategies.

Moreover, the tandem of blockchain and machine learning wields a formidable sword in the battle against fraud and counterfeit activities rampant in internet marketing. Picture this: banks deploying blockchain for airtight transaction data verification, and advertising agencies harnessing machine learning's prowess to unmask fraudsters and counterfeiters in their tracks.

Nevertheless, our path is not without hurdles. The adoption of blockchain and machine learning in marketing faces the complexities intrinsic to these technologies and a dearth of consistent standards. Yet, as technology continues its relentless march forward and becomes more accessible, the horizon beckons with the promise of their pervasive integration into the marketing landscape.

List of references

1. Michael del Castillo Blockchain 50: Billion Dollar Babies URL: https://www.forbes.com/sites/michaeldelcastillo/2019/04/16/blockchains-billion-dollar-babies/# 20036ac030e6 (date of access: 05.08.23).
2. Brave Software. The Basic Attention Token. URL: https://basicattentiontoken.org (date of access: 05.08.23).
3. Werner Geyser Everything You Need to Know About Blockchain Marketing. URL: https://influencermarketinghub.com/blockchain-marketing (date of access: 05.08.23).