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**THE USE OF ARTIFICIAL INTELLIGENCE IN  
ECONOMICS AND MARKETING**  
**ПРИМЕНЕНИЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА  
В ЭКОНОМИКЕ И В МАРКЕТИНГЕ**

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*Abstract. The article describes the concept and use of artificial intelligence in the modern world. It explains how artificial intelligence helps to increase the effectiveness of campaigns, collecting and analyzing the information received. The scope of application is described: personalization of services; predictive analytics; communications; content generation. The study of the experience of using artificial intelligence made it possible to determine the marketing tasks that can be solved with the help of artificial intelligence, as well as the main steps for the implementation of artificial intelligence.*

*Аннотация. В статье изложено понятие и использование искусственного интеллекта в современном мире. Объясняется, как искусственный интеллект помогает увеличить эффективность кампаний, сбора и анализа полученной информации. Описана сфера применения: персонализация услуг, предиктивная аналитика, коммуникации, генерация контента. Изучение опыта применения искусственного интеллекта позволило определить маркетинговые задачи, решаемые с помощью искусственного интеллекта, а также основные шаги по внедрению искусственного интеллекта.*

Introduction of elements of Industry 4.0. and the concept of Society 5.0 in the real sector of the economy significantly change business processes, including marketing. Marketing research, the purpose of which is to refine products to the desired level or to remove a product from the product range, in Belarusian organizations is currently carried out on the basis of statistical observations using a survey (self-registration, correspondence). This method entails a representativeness error and requires a lot of

time and money. To increase the efficiency of collecting and analyzing information received from the consumer, it is possible to suggest the use of artificial intelligence in the field of digital marketing.

At the present stage of development, the ultimate goal of the strategies of any transnational corporations (TNCs) in the world market is the growth of business efficiency, which is largely ensured by the development and implementation of modern technologies. Artificial intelligence (AI) for the subjects of international economic relations is a set of tools that ensure the digital transformation of business. The development of artificial intelligence can not only change the business, but also modify the format of competition in the world market, contribute to further differentiation of the countries of the world according to the levels of economic and technological development [6].

With a growing amount of data, with high consumer requirements for the quality of real-time interactions, machine learning will become indispensable. AI will help companies link together disparate data and develop algorithms that predict people's behavior and/or recommend certain actions in real time.

Already, the use of AI is strongly correlated with higher business performance and higher revenue. AI is guaranteed to help improve economic performance and offload employees, launch more effective campaigns and better analyze them. AI can help copywriters, editors, production teams, and analytics departments, but it cannot completely replace them.

Applications of AI:

1. Personalization of services. This is one of the more undeniable and early applications of AI. It is easy to analyze purchase statistics for the system, data from statistics counters and databases are often well structured. With the support of AI, Eldorado, 220 Volt and almost all retailers in the Russian Federation are personalizing their own product offerings.

2. Predictive analytics. Performs tasks: predicting customer behavior to increase conversion and reduce risks; forecasting company budgets, marketing costs; customer segmentation based on various variables, etc.

3. Communications. For retail, smart chatbots that understand the meaning of questions well and can give clear answers are of great importance than voice control.

4. Content generation. Creation of realistic portraits of people or animals, personalized videos, texts in different languages.

The study of the experience of using AI [1, 2, 3, 4, 5, 6] made it possible to determine the marketing tasks that can be solved with the help of AI:

1. Text generation

The neural network generates original words based on content analysis in the digital space. Word formats range from marketing slogans to messages, from blog posts to sales posts. Such tools are in great demand, as the entire process is delegated to AI.

2. Creation of advertising creatives

In order not to spend a lot of time and money on collecting data, the results of past campaigns, the effectiveness of competitors' advertising and providing analytics, AI

solutions can help. They process a lot of relevant creatives in a niche, find out what exactly they attracted the audience - from the visual components to the wording on the poster, and then generate a personal original creation.

### 3. Launching advertising campaigns

AI can help increase performance in all three stages of an effective advertising campaign (hyper-targeted audience, powerful creatives, maximum automation of assembly, launch and scaling). To begin with, select a micro-segmented audience in social networks, observing compliance. Next, research competitors' ads and create high-converting creatives. And, in the end, complete and launch campaigns in one window and in a certain number of clicks.

### 4. Creation of deepfakes for marketing activities

Deepfake is a replacement for photo, audio and video materials close to reality, developed with the support of neural networks. Despite the fact that almost everyone is skeptical about the use of deepfakes, this development has the ability to deliver important bonuses to firms. This is a promising marketing tool if you respect copyright and do not abuse technology.

### 5. Creation and launch of outreach and email newsletters

To create a catchy headline and the beginning of the email, match the subject and offer without obsessive words - the ability to communicate with current customers. Artificial intelligence can also be trained in this, which can analyze user behavior and personalize its mailings.

### 6. Chatbot training

It takes time, a good command, and a large dataset to train a machine to recognize keywords and ignore typos and spelling errors. A little perseverance, and the bot will clearly recognize the request and respond to the user in a "natural" language. As a result, positively influencing marketing and sales.

### 7. Processing and analysis of small & wide data: for everything

Companies are gradually switching to small & wide data. Processing and analyzing big data is too costly and time consuming for SMB, and they have nowhere to collect such an amount of data. But even working with small & wide data is easily automated: AI can analyze the data and visualize the findings, brightly highlighting insights on which companies can base their decisions.

Stages of AI implementation:

1. Collection and analysis of information;
2. Entering the received information into the data processing program;
3. Writing an algorithm from scratch or improving based on a framework;
4. Training and self-learning of the algorithm;
5. Create a new marketing strategy for the organization using modern AI capabilities.

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**ANALYSIS OF THE COMPETITIVENESS OF  
PRODUCTS BY MEANS OF INFORMATION  
TECHNOLOGY**

**АНАЛИЗ КОНКУРЕНТОСПОСОБНОСТИ  
ПРОДУКЦИИ СРЕДСТВАМИ ИНФОРМАЦИОННЫХ  
ТЕХНОЛОГИЙ**

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