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INTEGRATION OF ARTIFICIAL INTELLIGENCE INTO MARKETING

ИНТЕГРАЦИЯ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В МАРКЕТИНГ

Kalinovskaya I. N., Sherstneva O. M.

Vitebsk State Technological University, Belarus

Калиновская И. Н., Шерстнева О. М.

Витебский государственный технологический университет, Беларусь

ABSTRACT

COGNITIVE MARKETING, ARTIFICIAL INTELLIGENCE, NEURAL NETWORK, CUSTOMER, MARKETING RESEARCHES

The main aspects of integration in an artificial intelligence into marketing are considered in article. The analysis of such concepts as cognitive marketing and

АННОТАЦИЯ

КОГНИТИВНЫЙ МАРКЕТИНГ, ИСКУССТВЕННЫЙ ИНТЕЛЛЕКТ, НЕЙРОННЫЕ СЕТИ, ПОТРЕБИТЕЛЬ, МАРКЕТИНГОВЫЕ ИССЛЕДОВАНИЯ

В статье рассмотрены основные аспекты интеграции искусственного интеллекта в маркетинг. Проведен анализ таких понятий как когнитив-

an artificial intelligence is carried out. Evolution of information systems is studied. Features of development in intellectual information systems are selected. The main directions of application in an artificial intelligence in marketing are revealed such as: web design, contextual advertising, and assessment of efficiency of the conducted advertising campaigns, search in photos, obtaining data to advertisers for provision of news or the ad info. The most perspective direction of application of an artificial intelligence is defined. Premises of development in cognitive marketing are revealed.

ный маркетинг и искусственный интеллект. Изучена эволюция информационных систем. Выделены особенности развития интеллектуальных информационных систем. Выявлены основные направления применения искусственного интеллекта в маркетинге, такие как веб-дизайн, контекстная реклама, оценка эффективности проведённых рекламных кампаний, поиск по фотографиям, получение сведений рекламодателям для предоставления новостей или рекламной информации. Определено наиболее перспективное направление применения искусственного интеллекта. Выявлены предпосылки развития когнитивного маркетинга.

Now rapid development of information and communication technologies and concepts of an artificial intelligence led to practical and wide use of intellectual systems. Their action can be found in mobile phones, expert systems, prediction, etc. Evolution of information systems towards their intellectuality led to appearance of a new type of software products which received the name intellectual information systems. [3]

The artificial intelligence can become the modern tool of the marketing specialist allowing to process huge data arrays without serious time expenditure, to obtain data from a photo and video records, to reveal potential customers on behavior on social networks, etc. Its use allows analyzing data of all types, to build in means of the analysis daily marketing processes, doing communications more address, relevant and effective.

The artificial intelligence is the mathematical structure imitating certain aspects of operation of a human brain and showing such opportunities as ability to informal training, generalization and a clustering of not classified information, to prediction. The most important difference is that the artificial intelligence doesn't need in advance known model, and builds it only on the basis of the shown information. Therefore, the artificial intelligence became applicable everywhere where it is necessary to solve problems of prediction and classification where there are tasks for which it's hard to build an algorithm [1].

The main objective of an artificial intelligence is processing the images. At the same time

the ability of an artificial intelligence to train, to extract of the regularities hidden in big arrays of information is used. If there is any communication between input and output data which even isn't found by traditional correlative methods, then the artificial intelligence is capable to be set up automatically on it with the given accuracy rating. Besides, it allows to estimate comparative importance of different types of input information.

In recent years possibilities of intellectual technologies have considerably extended due to appearance of new models of representation of knowledge, new theories and ideas of an artificial intelligence. The considerable milestones relating to the development of intellectual information systems and technologies are the following:

- appearance to argumentation models and a reasoning instead of a logical output;
- intellectual network models;
- appearance of methods of search of relevant knowledge;
- appearance of algorithms of recognition of texts and images;
- appearance of methods of graphical representation of knowledge;
- development of multigene systems;
- appearance of the computation based on genetic algorithms, a fuzzy logic, neural networks.

The artificial intelligence holds a specific place in marketing. Thanks to synthesis of technologies of depth training, machine vision and a cognitive neurobiology the artificial intelligence can be applied both to a market research, and to personalization of content for the purpose to improving of process in information analysis and determination of scale to impact on customers without excess expenses.

Among the main directions of application of an artificial intelligence in marketing select web design, contextual advertising, assessment of efficiency to the conducted advertising campaigns, search by photos, obtaining data to advertisers for provision of news or the ad info.

One of the most perspective directions of application an artificial intelligence is an opportunity to personalize advertising content, giving to each customer the message suitable for it. The correct message will come to the necessary person in due time.

The greatest interest of marketing specialists is attracted by a combination of use in an artificial intelligence and cognitive marketing. Cognitive marketing is rather a new term which was formed on a joint of marketing and psychology. What is known to cognitive psychologists today can be a link which lacks practical marketing in the order that it became full-fledged scientific discipline, but not a congestion of accidental finds and observations. It studies perception and thinking as information processes that try to understand consciousness of the person, assimilating a brain to the computer which processes data.

Premises of development of cognitive marketing:

- Physiological needs of the solvent population are satisfied. Vendors create new

needs (goods), new more effective technologies of consuming and created demand on them.

- Appearance of hi-tech goods, complication of goods and/or appearance of goods with the uprated consumer properties. In order to sell them, it is necessary to inform a customer about knowledge of goods and technology of its consuming, to train a customer to use goods properly.

- Growth of customer needs in education for knowledge acquisition. People (especially leaders of judgments) transfer to new technologies of consuming more consciously.

- Development and fast distribution of the information technologies allowing to impart effectively knowledge and to train people.

Synthesis of artificial intelligence and cognitive marketing will allow the enterprises:

- to reveal unsatisfied needs of clients and to upgrade a product;
- to attract more clients and to raise profit thanks to individual approach, advantages, offers and prices;

- to receive the maximum return from cooperation with the available clients due to optimization of investments into solidifying of relations.

Today collection of necessary information on customers is carried out by many enterprises and organizations based on surveys and questioning, but such research incur big monetary and time expenses, and, above all — are extremely ineffective as people under the influence of different effects (effect of testing, role selection, tendencies, etc.) don't say the truth about themselves, they say about the person they want to be. Because of it the accuracy of such researches doesn't exceed 40 %.

According to the research related to collection, processing of information, to compilation of a portrait of customers and a client database, the analysis technique of the this «digital traces» of potential and real customers on social networks – posts, reposts, likes, comments, etc. – is more effective [2].

Thus, today marketing specialists are faced by the following research objective of this field of science: development of theoretical and methodical aspects and recommendations for enterprises and organizations for enhancement of market research regarding the procedure of collection, processing and information analysis about potential and real customers in the Internet for the purpose of formation and adjustment of consumer behavior that will increase competitiveness and efficiency of enterprises and organizations.

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TRENDS OF DEVELOPMENT IN AGRICULTURAL COMPLEX OF THE EURASIAN ECONOMIC UNION (EAEU) IN FACE OF GLOBAL ECONOMIC CHALLENGES

ТЕНДЕНЦИИ РАЗВИТИЯ АГРОПРОМЫШЛЕННОГО КОМПЛЕКСА ЕВРАЗИЙСКОГО ЭКОНОМИЧЕСКОГО СОЮЗА (ЕАЭС) В УСЛОВИЯХ ГЛОБАЛЬНЫХ ЭКОНОМИЧЕСКИХ УГРОЗ

Kireyeva A.

Belarusian State Economic University, Belarus

Киреева А.

Белорусский государственный экономический университет, Беларусь

ABSTRACT

AGRICULTURAL COMPLEX, FOOD SECURITY,
AGRICULTURAL COMMODITIES AND FOOD,
STATE SUPPORT OF AGRICULTURE

Problems of development of national agro-industrial complexes become more aggravated in face of expanding global economic challenges. Implementation of integration unions is partially balancing the appearing problems due to adoption of coordinated agricultural policy. The main idea of this investigation is to state that barrier-free access to common

АННОТАЦИЯ

АГРОПРОМЫШЛЕННЫЙ КОМПЛЕКС,
ПРОДОВОЛЬСТВЕННАЯ БЕЗОПАСНОСТЬ,
СЕЛЬСКОХОЗЯЙСТВЕННЫЕ ТОВАРЫ И ПРО-
ДОВОЛЬСТВИЕ, ГОСУДАРСТВЕННАЯ ПОД-
ДЕРЖКА СЕЛЬСКОГО ХОЗЯЙСТВА

Проблемы развития национальных агропромышленных комплексов обостряются в условиях расширения глобальных экономических угроз. Формирование интеграционных образований частично нивелирует, возникающие проблемы за счет проведения согласованной аграрной политики. Основная