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BIG DATA ЯК ОСНОВОПОЛОЖНИЙ ПІДХІД У СТВОРЕННІ ПОРТРЕТА ЦІЛЬОВОГО СПОЖИВАЧА

Аналіз ринку споживачів - невід'ємна частина успішного ведення бізнесу. Саме з портрета покупця починається будь-яка маркетингова кампанія і це один з найважливіших моментів визначення прибуткового бізнесу. Не маючи чіткого портрета можливого клієнта / покупця, неможливо скласти грамотне пропозицію на товар, а ще важче правильно адресувати цю пропозицію. У світлі Четвертої промислової революції і відповідно масової цифровізації, коли передові технології радикально змінюють цілі галузі економіки приголомшливо швидкими темпами і накопичуються величезні масиви неструктурованих даних, слід звернути увагу на технологію Big Data.

У статті розглянуто поняття Big Data як основний фактор переходу до персоніфікованого підходу в дослідженні поведінки споживачів. Визначено, яким чином Big Data впливає на маркетингову діяльність сучасних підприємств. Викладено

методи обробки неструктурованої інформації, серія підходів і інструментарій великих даних. Розглянуто, як використовується досліджувана технологія на етапі аналізу ринкового середовища і аудиту власне маркетингової діяльності. Виділено основні переваги, які отримує виробник при впровадженні рішень інтелектуального аналізу інформації. Доведено вигоду споживача від поширення технології Big Data в бізнес-середовищі. Виявлено основні ризики і проблеми, якими супроводжується використання Big Data на даному етапі розвитку даної технології. Наводяться практичні приклади досвіду використання Big Data для створення портрета цільового споживача зарубіжними компаніями в якості подальших передумов для реалізації різноманітних маркетингових рішень, стратегій, для здійснення професійної діяльності, що передбачає використання сучасних технологій прийняття рішень, бізнес-аналітики для різних галузей економіки.

Ключові слова: Big Data, сегментація, маркетингові стратегії, таргетинг, цільова аудиторія, цільовий споживач, цифровізація.

Sotnikov Yurii, Ereshko Andrii

BIG DATA AS A FUNDAMENTAL APPROACH TO CREATING A PORTRAIT OF THE TARGET CONSUMER

Consumer market analysis is an integral part of successful business. It is from the portrait of the buyer begins any marketing campaign and this is one of the most important moments in determining a profitable business. Without a clear portrait of a potential client / buyer, it is impossible to make a competent offer for a product, and it is even more difficult to correctly address this offer. In the light of the Fourth Industrial Revolution and, accordingly, mass digitalization, when advanced technologies are radically changing entire sectors of the economy at tremendous speeds and huge arrays of unstructured data accumulate, one should pay attention to Big Data technology.

The article discusses the concept of Big Data as the main factor in the transition to a personalized approach to the study of consumer behavior. It was determined how Big Data affects the marketing activities of modern companies. Outlined methods for processing unstructured information, a series of approaches and tools for big data. It is considered how the investigated technology is used at the stage of analyzing the market environment and auditing the marketing activity itself. The main advantages that the manufacturer receives in the implementation of data mining solutions are highlighted. Proven consumer benefits from the spread of Big Data technology in a business environment. The main risks and problems that accompany the use of Big Data at this stage of development of this technology are identified. Practical examples of the experience of using Big Data to create a portrait of a target consumer by foreign companies are given as further prerequisites for implementing various marketing decisions, strategies, for carrying out professional activities involving the use of modern decision-making technologies, business analytics for various industries.

Key words: Big Data, segmentation, marketing strategies, targeting, target audience, target consumer, digitalization.

Сотников Юрий, Ерешко Андрей

BIG DATA КАК ОСНОВОПОЛАГАЮЩИЙ ПОДХОД В СОЗДАНИИ ПОРТРЕТА ЦЕЛЕВОГО ПОТРЕБИТЕЛЯ

Анализ рынка потребителей – неотъемлемая часть успешного ведения бизнеса. Именно с портрета покупателя начинается любая маркетинговая кампания и это один с важнейших моментов определения доходного бизнеса. Не имея четкого портрета возможного клиента/покупателя, невозможно составить грамотное предложение на товар, а еще труднее правильно адресовать это предложение. В свете Четвертой промышленной революции и соответственно массовой цифровизации, когда передовые технологии радикально меняют целые отрасли экономики потрясающе быстрыми темпами и

накапливаются огромные массивы неструктурированных данных, следует обратить внимание на технологию Big Data

В статье рассмотрено понятие Big Data как основной фактор перехода к персонифицированному подходу в исследовании поведения потребителей. Определено, каким образом Big Data влияет на маркетинговую деятельность современных компаний. Изложены методы обработки неструктурированной информации, серия подходов и инструментарий больших данных. Рассмотрено, как используется исследуемая технология на этапе анализа рыночной среды и аудита собственно маркетинговой деятельности. Выделены основные преимущества, которые получает производитель при внедрении решений интеллектуального анализа информации. Доказано выгоду потребителя от распространения технологии Big Data в бизнес-среде. Выявлены основные риски и проблемы, которыми сопровождается использования Big Data на данном этапе развития данной технологии. Приводятся практические примеры опыта использования Big Data для создания портрета целевого потребителя зарубежными компаниями в качестве дальнейших предпосылок для реализации разнообразных маркетинговых решений, стратегий, для осуществления профессиональной деятельности, предусматривающей использование современных технологий принятия решений, бизнес-аналитики для различных отраслей экономики.

Ключевые слова: Big Data, сегментация, маркетинговые стратегии, таргетинг, целевая аудитория, целевой потребитель, цифровизация.

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Formulation of the problem. It is extremely difficult to determine the very industry for which the problems of information arrays would not be urgent. The ability to operate with giant unstructured data streams, analyze the interdependence between them, thereby making rational management decisions, provides a huge potential for companies of various formats to raise profitability

and efficiency gains, while taking into account the sophisticated tastes of consumers.

Based on today's digitalization realities, the volume of the Big Data market is growing almost exponentially and will reach \$ 92 billion by 2026. The results of the Forbes study showed that 48 % of marketers using Big Data analysis do it for the deep analysis of consumer behavior. Finally, Big Data is turning into a real-life tool for managing consumer behavior due to the opportunity to get new insights to turn static advertising campaigns into flexible tools in the hands of marketers to ensure timely response to changes in consumer behavior [1, p. 103].

Analysis of recent research and publications. The theme of Big Data is multifaceted and ambiguous, therefore it is popular among specialists in various fields. The impact of Big Data on social processes and business organization (consumer motivation, the concept of segmentation, the approach to the study of consumer behavior), in particular, was studied by N. Bessis, M. Chen, V. Meyer-Schönberger, K. Cooker, and others. C. Davis, T. Craig, and M. Ladloff studied the ethical problems arising from the formation of large amounts of personal information available to companies [6, p. 4].

Isolation of previously unsolved parts of a common problem. Modern Big Data technologies make it possible to convert a mass of heterogeneous and unstructured data into information that forms the basis of a personalized approach to each individual client. Currently, in the Ukrainian business environment, Big Data technology has not yet become widespread due to the high cost of software and rather high requirements for analysts, although marketers are aware that their competitiveness is necessary to ensure competitiveness [11; 2, p. 246].

The purpose of the article is to study the capabilities of Big Data technologies as a fundamental approach in order to create a portrait of the target consumer, its main advantages and possible imperfections.

Presentation of the main research material. Traditional data formats are quite definite and weakly changeable. In contrast to unconventional data formats, Big Data shows a high susceptibility to

change. With the advent of Big Data, the world has changed: data has become comprehensive, ever-changing

Only Google makes about 40,000 searches every second, which gives about 1.2 trillion searches for big data every year. And every day the amount of data increases faster. If today humanity generates 4.4 zetabytes of data, then by 2020 it will have already created 10 times more. By 2020, almost a third of all data will pass through cloud services, and therefore will be analyzed [10].

It is extremely difficult to determine the very industry for which the problems of information arrays would not be urgent. The ability to operate with giant unstructured data streams, analyze the interdependence between them, thereby making rational management decisions, provides a huge potential for companies of various formats to raise profitability indicators and increase efficiency.

The rapid growth of the B2C services market in recent years necessitates radical changes in the field of Internet services. The emergence of new platforms providing services to the consumer through the global network marked not only the beginning of a new stage in the development of relations between business and the consumer, but also significantly advanced the technology of its implementation via the Internet [7, p. 135].

Previously, marketers could only analyze only the results of their activities - now they can use dynamic data in real time and take instant preventive measures, correcting the previously adopted marketing strategy during its implementation, and not after completion. Modern technologies offer a wide range of possibilities for the use of data: this is both primary collection and storage, as well as comprehensive analysis and multi-level segmentation that allow you to implement thoughtful marketing strategies and build mutually beneficial relationships with the consumer.

It is important to make a portrait of the target consumer. To do this, you need to significantly expand the set of monitored parameters. This helps to open new parameters, the existence of which was not even suspected, and in the meantime, they are wonderful for describing individual segments of the target audience. This allows for more accurate targeting and helps to plan further

actions, understand what repels the target audience, and use this knowledge to optimize the strategy and content of messages.

It is also necessary to compare lists of loyal consumers and those who change their addictions: this helps to highlight the characteristics of non-regular customers and prevent them from leaving, and also to convince loyal customers to maintain their loyalty to product positioning.

A properly composed portrait of the target consumer helps to understand which channels and marketing tools to use. Knowing the needs of the client, we can formulate a more precise advertising message. At the same time, it is important to remember that the portrait of a client is the "personification" of a certain market segment. But most companies operate on the principle of "universal tailor" - they try to create a universal portrait of a client, taking in a bunch all the clients from their base [9].

A portrait of a target consumer typically includes the following characteristics: age, marital status, income level, place of residence (geography), gender, employment, position held, typical problems related to the specifics of work, needs, fears and desires, etc. .

The main purpose of the portrait of the target consumer is to create marketing campaigns (advertising, commercial offers, content, etc.) that are maximally "tailored" to the needs of a specific target audience.

The more detailed the portrait of the target consumer, the more characteristics it takes into account and the more information is collected, the higher the chance to create a proposal that best meets the needs of the target audience [8, p. 41].

For example, to create an individual psychological portrait of a target consumer, not only his posts and likes on Facebook are used, photos on social networks, the number of friends, intensity, frequency of change of location, time spent in the network and other user-unconscious data are analyzed. Thus, a motion sensor in a smartphone shows whether it is waving a hand, how far it moves (these actions correlate with emotional instability). The functional support of a smartphone is a kind of questionnaire on a free basis: with its help it is possible not only to form a psychological portrait of

a potential consumer, but also to select the desired one among the resulting portraits.

So developments in the field of applied applications of Big Data technology based on data from computer networks are engaged in the British private company for behavioral research and strategic communications Laboratory of Strategic Communications. It is a global campaign management organization and specializes in marketing based on psychology and logic. In the United States, the company is known as Cambridge Analytica and conducts data mining and analysis of user audience data [5, p. 153].

The success of Cambridge Analytica's marketing strategies is based on an analysis of the psychological behavior of a person who uses the "ocean model" and segmentation (only users of a selected target audience can see the ad). This means the personalization of advertising and precisely adjusting the advertising message to the type of character of each individual consumer.

An analysis by Cambridge English scientists confirmed that psychological targeting, like that used in Cambridge Analytica, increases the number of clicks on Facebook ads by 60%. The likelihood that after viewing personalized advertising, people will switch to action (they will buy the advertised item) growing 15 times.

Also, examples of using Big Data to create a portrait of a target consumer can serve as prerequisites for:

- personalization of the proposal for a specific consumer based on the analysis of information about him in real time. For example, with the help of Affdex Affectiva technology, when viewing a horror movie, a user can make it as scary as he wants. Using the camera on a tablet or smartphone, the program analyzes in real time the emotions and facial expressions of the viewer. If at any scary moment the user turns away, then on the basis of his biometric data and algorithms, the program decides whether to keep him energized or speed up an eerie moment;

- price discrimination depending on the user profile. For example, a network of popular hotels in the United States, as a result of in-depth analysis of data on its consumers, found that owners of certain models of smartphones and users of individual browsers when booking rooms focus more on prices than on the appearance of

the rooms and the quality of services. Based on this information, management has developed differential pricing for certain categories of its customers;

- automation and optimization of the process of supplying goods to retail chains. This is made possible by software that analyzes the data accumulated by trading networks, and provides manufacturers with information on which products are in demand, or whether they are sufficiently in stock, which stores are the most profitable, etc .;

- create personalized advertising campaigns. Extensive online targeting capabilities allow you to provide consumers with information about products that may interest them. Moreover, the campaign can be customized not only by geographical, regional, socio-demographic characteristics of users, but also by interests based on the analysis of search history and pages on the user's social networks [3, p. 171].

We must not forget that Big Data as such will carry little sense for the business, if it is not consistently converted into “Smart Data”. The main goal from analyzing a billion lines of data is to get answers to the crucial questions about your target consumer. And marketers, who have picked up the global trend of gathering large amounts of information everywhere, are more likely to get even more questions about their brand, product, and audience from them, for which they don't have enough resources to search for answers. It is important to remember that it is the choice of marketing tools, including deep analytics, that should contribute to the realization of your strategy of interaction with the target consumer.

Modern consumers do not like manipulations. They are already rather tired of the abundance of promotional offers and are rarely kept on price tags from '99. Yes, and on the good old trick with the location of the most necessary goods (at the end of the hall is not so effective. Today, a generation of new consumers is almost formed, who have little trust in marketing campaigns and “super-profitable” offers. They go to the supermarket with a list of necessary products and less give in to impulsive impulses to buy something unnecessary. In addition, consumers are beginning to react negatively to really aggressive ways of selling goods. In this regard,

marketers Now consumers strictly control the sex they don't wait and see what advertisements they'll show, they choose to watch, they can skip ads, ignore them, etc. From a position of a target consumer, the security of information is extremely important in working with Big Data double blind comparison, because in fact the names and addresses of customers are not important. It is also necessary to provide the consumer with the opportunity to refuse to receive targeted advertising addressed to him ("notice and choice"). However, consumers make it clear that they are happy to get acquainted with relevant advertising and that it is not an annoying factor. Therefore, it is so important to contact the target audience with a targeted message, without violating the privacy of their personal information at any stage of the campaign [4, p. 124].

Using the Big Data toolkit in business provides benefits to both producers and consumers. The consumer receives personalized content that matches his needs and interests. The manufacturer manages to automate the uniform data collection and processing processes and free up time resources for solving problems, which will require a more creative approach; optimize marketing activities: spend less, getting better results; to establish mutually beneficial relations with the consumer by maximizing the compliance of the marketing mix with the needs of the individual client [12].

Conclusions and prospects for further development. Big Data technology has a high value in marketing activities, as it allows companies to regularly receive detailed information about their customers, not as a single mass, but about each customer separately. This leads to a transition to personalized customer service with automatic generation of an individual marketing program for each consumer, which will make it possible to determine customer satisfaction with the product (service), increase trust and loyalty, and increase demand for products. Due to the increasing level of information relevance, companies are able to significantly improve the effectiveness of marketing investments. For foreign companies, the collection of Big Data tools has already ceased to be an innovative phenomenon. The use of this technology is not a competitive advantage, but a necessary condition for ensuring competitiveness.

The transition of the domestic business environment to management based on data mining will take some more time. The main reasons for the delay in the implementation of Big Data by Ukrainian organizations are the high cost of software, the time it takes to adapt specialists to use it and a number of technical problems associated with the imperfection of algorithms used in Big Data tools.

However, it should be noted that unlimited access to an array of digital footprints opens up unlimited opportunities to influence society or manipulate society, and therefore confidentiality, secrecy, personal space - these concepts lose their meaning in modern digital society. Thus, companies should take care of the integrity of the personal information of the target consumer.

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ЕКОНОМІЧНІ ДЕТЕРМІНАНТИ НАЦІОНАЛЬНОЇ БЕЗПЕКИ УКРАЇНИ

У статті розглянуто перелік загроз національній безпеці (економічна криза, виснаження фінансових ресурсів держави та зниження рівня життя населення) на основі аналізу законодавчих актів, а саме: Закону України «Про основи національної безпеки України» 2003 року, Закону України «Про національну безпеку України» 2018 року та «Стратегії національної безпеки України» 2015 року. Наголошено на важливості та значимості такі складових, як «тінізація» економіки, високий рівень бідності населення, низька конкурентоспроможність вітчизняних виробників, висока залежність від зовнішніх фінансових ресурсів тощо. Наведено місце України та динаміку зміни позиції у рейтингах відповідно до окремих показників світового рейтингу, зокрема «рейтинг щастя», «легкість ведення бізнесу». Проаналізовано динаміку зміни державного та гарантованого державою боргу, розраховано окремі показники боргової безпеки України у 2015-2018 рр. Обґрунтовано важливість пошуку шляхів фінансування економіки як альтернативи борговому залученню коштів. Запропоновано приділити увагу розвитку вільних економічних