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USING ARTIFICIAL INTELLIGENCE TO IMPROVE DIGITAL MARKETING STRATEGIES

Abstract. The use of artificial intelligence (AI) will provide huge advantages in the digital marketing strategy of each company. This is a new face of productivity, efficiency and profitability. Making decisions about the start of a new era based on artificial intelligence should not replace the work of marketers or advertisers. It is here to unleash their true strategic and creative potential. For a business executives and marketers, the time has come to identify the problems facing the business or the marketing campaign, and how accurate ideas can solve these problems. This study discusses how AI could affect to effective of marketing strategies, shows real cases of using AI tools, and how companies could increase their profit.

Keywords: artificial intelligence, machine learning, big data, digital marketing, marketing strategy.

Аңдатпа. Жасанды интеллектті пайдалану әр компанияның сандық маркетингтік стратегиясында үлкен артықшылықтар береді. Бұл өнімділіктің, тиімділіктің және пайдалылықтың жаңа кезеңі. Жасанды интеллект негізінде жаңа дәуірдің басталуы туралы шешім сатушылар мен жарнама берушілердің жұмысын алмастырмауы керек. Бұл жерде сіздің шынайы стратегиялық және шығармашылық әлеуетіңізді ашу керек. Кәсіпорын басшылары мен маркетингтік стратегиялар үшін бизнеске және маркетингтік кампанияға тап болатын проблемаларды анықтайтын және нақты идеялардың осы мәселелерді қалай шешетінін білетін уақыт жетті. Бұл зерттеуде ЖИ маркетингтік стратегиялардың тиімділігіне қалай әсер ететіні, ЖИ құралдарын қолданудың нақты жағдайлары және компаниялар онымен өз кірістерін қалай арттыра алатындығы туралы айтылады.

Түйін сөздер: жасанды интеллект, машиналық оқыту, үлкен мәліметтер, сандық маркетинг, маркетинг стратегиясы.

Аннотация. Использование искусственного интеллекта (ИИ) обеспечивает огромные преимущества в стратегии цифрового маркетинга

каждой компании. Это - новый этап производительности, эффективности и прибыльности. Принятие решений о начале новой эры на основе искусственного интеллекта не должно заменить работу маркетологов или рекламодателей. Именно здесь, чтобы раскрыть свой истинный стратегический и творческий потенциал. Для руководителей фирм и маркетологам, пришло время определить проблемы, стоящие перед бизнесом и маркетинговой кампанией, и выяснить, как точные идеи могут решить эти проблемы. В этом исследовании обсуждается, как ИИ может влиять на эффективность маркетинговых стратегии, показываются реальные случаи использования инструментов ИИ и как компании могут увеличить свою прибыль с помощью него.

Ключевые слова: искусственный интеллект, машинное обучение, большие данные, цифровой маркетинг, маркетинговая стратегия

Introduction

One of the major innovations in the digital marketing industry is the introduction of artificial intelligence tools to help streamline marketing processes and make businesses more effective. According to QuanticMind, 97% of leaders believe that the future of marketing lies in the ways that digital marketers work alongside machine-learning based tools.

As machine learning and artificial intelligence become more commonplace in the digital marketing landscape, it's imperative that best-in-class digital marketers learn how to apply machine learning to their digital marketing strategies.

Main part

The aim of research is how AI algorithms and tools could change the results of digital marketing strategies and campaigns, could AI improve results or not.

For now, AI helps marketers become even more effective at targeting high-value customers, driving conversions and generating sales. Here are three ways you can leverage AI to transform digital marketing campaigns:

1. Turn big data into action. Big data is nothing without the ability to translate it into actions that drive business outcomes. Predictive analytics and propensity modeling help marketers use customer behavior to execute more effective campaigns. The beauty of this model is that the more information it receives, the better it gets at producing results.

2. Use Chatbots to give customers the speed and service they command. 2016 saw the first wave of chatbots deployed at cutting-edge organizations. By many measures, consumers responded favorably, which is prompting other organizations to follow suit. A national survey in the USA of 1000 consumers

revealed that 49% of respondents prefer conducting all customer service interactions via text, chat, or messaging app instead of with customer service agents. Millennials' preference for using chatbots was the highest (54%) of any subgroup, indicating that businesses must consider these and other AI-powered tools for the long term.

3. Create personalized digital experiences that drive engagement and sales. Tech savvy consumers expect personalized experiences that are seamlessly integrated across devices. Google's Audience Solutions is poised to help marketers do just that while providing higher click-through rates and sales. How? With the power of machine learning. Google tracks user activity across several digital properties and combines it with other user data to identify key sales opportunities for relevant vendors.

As we understood, in digital marketing we have a lot of data and AI allows marketers to analyze more data than a human mind could comprehend, respond to an audience's preferences better, and using natural language processing to understand the target market.

We have been using AI almost every day for quite some time, after all. For example:

- Google Maps analyzes anonymous data from smartphones. Every time you use it, the app uses machine learning-powered insights to help you avoid traffic congestions.
- Another of Google's AI platforms, Rankbrain, interprets your search queries. It helps the search engine understand your search intent. Rankbrain then uses those insights to deliver you the right information.
- Gmail uses machine learning to protect you from spam.
- Credit card processors use artificial intelligence to detect fraud.
- Various brands offer AI-powered platforms to help us with such mundane aspects of our work lives as project management or time management.
- Many business platforms use machine learning to deliver personalized content, offers, and so much more to enrich your customer experience.
- And AI-powered marketing analytics platforms let you analyze unbelievable amounts of data to drive the marketing ROI further.
- Yet, in spite of the above, little evidence suggests any negative impact of AI on marketing, in general.

Plenty of evidence confirms the positive impact of AI to digital marketing:

- 84% of marketing companies have implemented or expanded their use of AI in 2018.
- Next year, 40% of digital transformation initiatives within organizations will include artificial intelligence.
- By 2020, 30% of companies will use AI in at least one of their sales processes

Furthermore, AI helps drive meaningful results and an incredible ROI:

- 3 of 4 companies that have implemented AI achieved a 10% or more boost in sales.
- For 75% of organizations, using AI has helped drive customer satisfaction by 10% as well.
- Finally, a report by Forrester revealed that, in just two years, businesses using AI to power data-driven insights in marketing would grow to \$1.2 trillion combined.

Methods and Materials

AI opens up incredible opportunities for marketers. It can be hard to realize its full potential. Particularly, when you try to imagine how you could use it in your work. Let me show some of the ways to use artificial intelligence to enrich marketer work.

Case #1. Better Customer Segmentation and Personalization. Today's customers expect a personalized marketing experience. In fact, to even consider buying from you, they want you to make them feel as if you knew them in person. And the minimum prerequisite to meeting those expectations is delivering the right message to the right customer. And at the right time, at that. Which is quite a challenge. That's especially true, if you try doing it without having a deep understanding of various customer segments your brand can serve.

That is where AI comes in. Artificial intelligence allows marketers to analyze their customer data in detail. Such insight helps create precise customer segments. And also, map those to the entire customer journey. But that is just a start. Such in-depth data analysis could also reveal each segment's motivations, desires, and pain points. Correlated with other data points, it could even help predict the customers' next moves. For example, it could help forecast each segment's buying pattern throughout the year per product or service.

And with such information, marketers can launch campaigns designed to engage a specific segment. And do so with a message tailored to those customers' needs, and perfectly-timed.

For example, this is screenshot from Ads Manager of Facebook, which I used for my work. There are a lot of ad campaigns. Each campaign has specific

goal and they were used algorithms of machine learning of Facebook. As the result, when people see ads 2-3 times with specific offer, effect of campaign increases.

Название кампании	Бюджет	Результат	Охват	Показы	Цена за результат
Трафик Иван шатчет на вебинар	10 668,56 р. Ежедневно	2 113 Клики по с...	252 608	305 131	14,43 р. За клик по ссылке
МК Алматы - 23 января 2020 - Генерация лидов	30 000,00 р. Ежедневно	1 319 Лиды на Фа...	298 047	482 585	63,01 р. За лиды на Facebook
МК Астана - 24 января 2020 - Генерация лидов	30 000,00 р. Ежедневно	1 072 Лиды на Фа...	221 182	593 389	118,33 р. За лиды на Facebook
Вовлеченность пост Иван 24.02.2020	325,00 р. Ежедневно	935 Взаимодей...	8 174	9 116	0,46 р. За вовлеченность для публик...
Ретаргет - Трафик	3 000,00 р. Ежедневно	253 Клики по с...	8 130	33 999	22,83 р. За клик по ссылке
Трафик на свежую аудит	1 200,00 р. Ежедневно	245 Клики по с...	22 800	23 503	5,87 р. За клик по ссылке
Трафик тест	667,04 р. Ежедневно	206 Клики по с...	14 441	15 284	5,84 р. За клик по ссылке
Результаты, число кампаний: 80			818 685 Пользователи	1 585 044 Всего	

Figure 1. Ad campaigns in the Ads Manager Facebook
Source: Author

Case #2. Improving the Depth of Marketing Data. For most marketers, the benefits of data-driven marketing remain limited by their ability to access, and then, analyze the information. Incorporate artificial intelligence to help process and correlate large data sets to obtain deeper insights. AI platforms can help marketers spot and understand anomalies in the market behavior or campaign performance. In turn, they could act and tackle problems before they escalate.

Having a deeper understanding of the data could help predict future campaign performance as well. It could even aid forecast the growth and set realistic, achievable expectations. For example, here is screenshot of Yandex Metrika, where we can see number of visitor from each ad type and we could optimize which ad type give conversion and sales and which not.

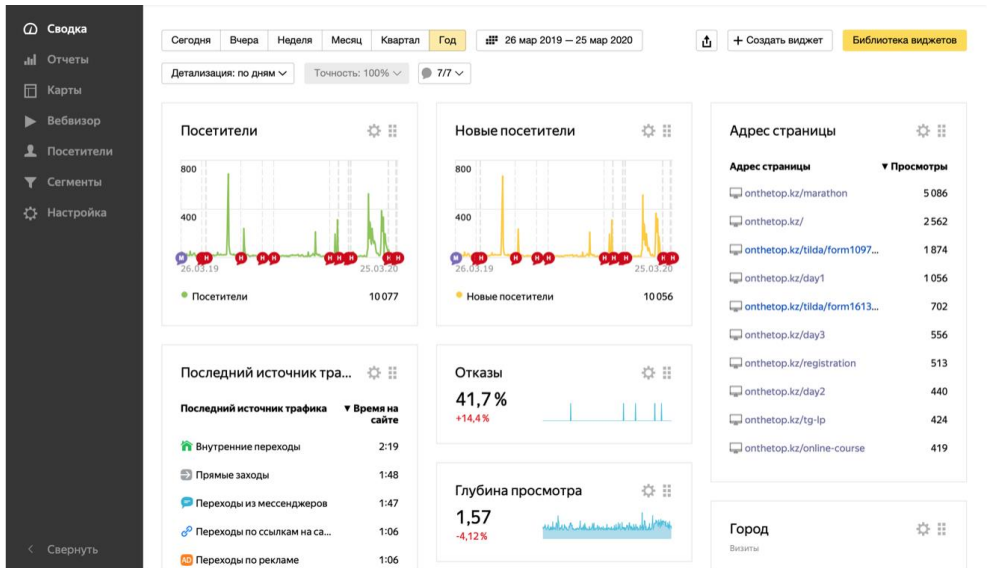


Figure 2. Statistics of web-site at the Yandex Metrika
Source: Author

Data and Results

As the result we can see how brands use AI in digital marketing:

1. Dynamic Product Recommendations

By far, the most recognizable example of artificial intelligence in marketing is Amazon using AI to recommend products for users.

Amazon's AI analyzes a person's past purchases and viewing history, and identifies products they are the most likely to buy next.

2. Dynamic Pricing

Car rental companies, hotels, and many other organizations use AI to monitor buying trends and determine the most competitive pricing. By doing so, they can offer customers prices based on external factors and their buying trends.

Similarly, many e-commerce stores use AI to monitor competitor prices as well as internal factors (like costs, etc.) to adjust pricing to an optimum point of competitiveness. For example, analyzing demand for our item and if it increases, we can increase price and as the result we can increase profit. The implementation is in progress.

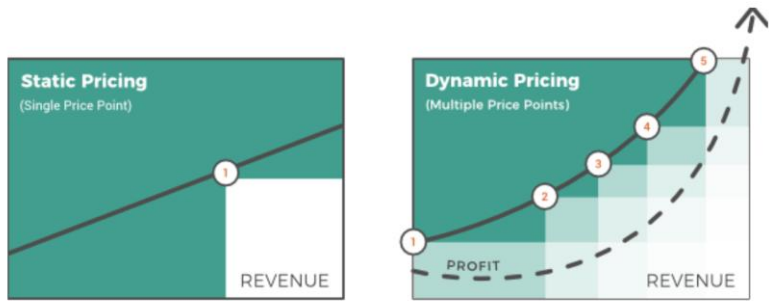


Figure 3. How Static and Dynamic Pricing could change revenue
Source: blog.prisync.com

3. Personalization

Spotify's AI analyzes each user's listening history to suggest other artists, records or playlists that should match their taste in music. And they use quite a sophisticated algorithm to do that. In our project we can give discount for people, who visited web-site 3 times and did not buy yet.

Discussion

Analyzing results we understand that AI in digital marketing has 3 advantages:

1. Faster data analysis. With artificial intelligence, marketers can analyze complex data sets faster than a human. But this increased speed doesn't mean greater efficiency only. Or the ability to gather and act on insights faster. It also suggests that organizations could reduce the time associated with processing information manually. As a result, they could launch more effective campaigns faster and deliver higher ROI at a lower cost.

2. More accurate insights. Using AI opens up the possibility to conduct a more in-depth analysis of the data. A machine-learning algorithm could break down complex data sets, correlate them with other information and deliver deeper insights. For a marketer, the above means finally having the ability to utilize more insights when planning campaigns. And also, being able to act much faster on those findings.

3. Greater efficiency. For them to work, today's marketing campaigns must be 100% relevant to the target audience. Unfortunately, many marketers lack data and insights to launch an initiative capable of engaging their intended audience. With AI, they can acquire all the insight they need and increase the efficiency of their efforts.

But AI in digital marketing also has disadvantage. It is creativity. In spite of many attempts, AI is still incapable of being creative. Machine learning algorithms can't act on the data in the same manner as a human would. And what goes with it, their ability to create something based on those insights remains

severely limited. That is just one reason why AI-created content lacks the magic touch making a blog post, article or even a Facebook Ad engaging.

Conclusion

In the end, it is clear that machine learning, big data and AI will help marketers do their job. From analytics to forecasting and endless optimization possibilities, digital marketing job will look a lot different in 10 years from now. Joe Pulizzi, founder of the famous Content Marketing Institute, has a very clear vision for the future of content creation: “In 10 years the majority of content will be generated by software. In 20 years, humans will wonder why we wasted so much time on content creation. I can’t see any other way around this.”

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