

AI FOR DIGITAL MARKETING

Abstract

This chapter will explain the various Artificial Intelligence (AI) technologies accessible for modern digital marketing. We will also list the marketing-related AI applications that are now available. On the desk, there are various data sources. Managing this data presents a difficult task for managers. Managers have a competitive advantage with this knowledge. AI uses this information to handle projects more effectively. There is no denying that artificial intelligence is developing at a faster rate than ever before. In reality, it's a catch-all term for the method by which machines like computers and robots can be taught to mimic human behaviour. Although the most popular application of AI is assumed to be chatbots, it actually encompasses a wide range of technologies. Today, AI is able to do everything from help with content creation to advertising plans to consumer behaviour prediction. While AI can be a priceless companion when used correctly, it cannot replace the insights of humans. AI may provide marketers with insights that will help them automate tasks, rethink their marketing strategies, and boost their total return on investment (ROI).

Keywords: Digital Marketing, Data, Machine, computer, Return on Investment

Authors

Dr. M. Jithender Reddy
Assistant Professor
Department of Computer Science
Engineering
Vasavi College of Engineering
Hyderabad, India
jeethreddy1@gmail.com

I. INTRODUCTION

The goal of artificial intelligence is to maximise some processes mathematically and practically while minimising errors and discrepancies. The only distinctions between the various branches of artificial intelligence are the means of data collection and action execution: Robotics uses sensors to collect data, whereas machine learning employs data. Actuators and search engines are used by robotics to perform tasks. To fix errors and improve functions, however, basically similar procedures are used. Different applications of the same idea are made. Marketers can work more effectively thanks to AIA few applications of AI technology include biometrics, picture identification, emotion analysis, and natural language understanding. This information provides several opportunities that not only provide deeper insights but also reduce the intrusion and distraction of marketing.

Recent studies show the value of AI in marketing budgets and business growth strategies. Through the examination of data sets, artificial intelligence creates knowledge. This process is assisted by algorithms, which tell the computer what to do and how to do it. AI will be used more frequently since it can make decisions based on data fast and reliably. AI can now completely utilise the data that digital marketers have collected to enhance and adjust their content marketing, lead generation, email marketing, and other programmes and expenditures.

It's critical to comprehend how digital marketing has developed thus far in order to comprehend how AI and machine learning will affect it in the future. The original set of algorithms employed in content curation was straightforward: ranking the different websites according to their popularity. However, the search query results that were merely based on popularity were frequently erroneous, which led to the propagation of spam and fake news, such as the association of the phrase "worst failure" with the former American president Bush [2]. The addition of relevance as a criterion represented the following significant modification to these algorithmic rankings. At least somewhat, the inclusion of relevance as a factor appears to have ironed out the bugs in how websites are ranked and what comes up when you search [2]. Nevertheless, algorithms do not end here. The creation of algorithms appears to be aimed towards comprehending human behaviour as it continues to be present in digital media activities. In contrast to the crude manner that websites are ranked in search engines, we already see how algorithms can track our online activity and customise the content we see based on the best understanding of our behaviour. Examples of these can be found in the newsfeed of any social networking app, such as Facebook or Twitter, as well as in the search results from any search engine [4]. The capacity to create an algorithm that can comprehend the user's behavioural eccentricities, which is made possible by AI, is still a significant barrier to achieving this goal.

The ability to comprehend emotions in people is a crucial asset when it comes to focused marketing. Most public-sector algorithms gather data from big data and create trends based on it [1]. However, emotional/behavioural data, or thick data, is a crucial component of marketing. The fact that the algorithms cannot understand this "human" component of the data proves to be one of the largest obstacles to 100% accurate data analysis outcomes. AI is the solution to this problem because its algorithms can connect with users more directly. It may be possible to create algorithms that are self-evolving using these interactions. If this were possible in the near future, AI might be applied to more than only content creation. Its

comprehension of human behaviour can be utilised to determine the frequency and timing of our advertising for specific goods in addition to the actual substance of such advertisements. Digital marketing can be tailored for micro-groups and even go as far as developing material specifically for a family or an individual with the use of cutting-edge artificial intelligence.

Future advances might put some human emotions behind each search query, but that isn't the case right now. AI and machine learning are undoubtedly progressing, and each upgrade increases their complexity. Due to the fact that engineers and coders have not yet discovered a means to incorporate human emotions into codes, the coding that powers the algorithms used in AI and machine learning is still heavily reliant on numbers. The main objective of AI and machine learning in the future is to develop freely evolving algorithms. Because engineers and programmers haven't figured out how to incorporate human emotions into codes, the algorithms that power AI and machine learning still rely mainly on numbers. The main objective of AI and machine learning in the future is to develop freely evolving algorithms.

II. AI AND DIGITAL MARKETING

The creation of intelligent robots capable of doing tasks that typically require human intelligence is the focus of the vast topic of AI in computer science. The phrase typically refers to the objective of creating systems with human-like cognitive abilities, such as the capacity for reasoning, meaning discovery, generalisation, or experience-based learning. AI development is still under progress. But the beneficial effect is now discernible. AI can think, read, and act almost like humans do when educated with a large data set. Although AI is capable of doing any task, it is most commonly used for robotics, speech recognition, and picture recognition. Artificial intelligence is transforming several industries. Brands operate in a variety of sectors, from retail and banking to technology and artificial intelligence. Artificial intelligence is now being used by brands to interact with their audience. Incorporating conversational marketing into their daily life is an experiment.

In ways that humans are unable to, machine learning enables an in-depth examination of complicated data sets from data management platforms, data warehouses, or other repositories by using algorithms. This helps business intelligence and forecasting. By examining in-store interactions, past purchases, referral sources, and geo-specific behaviour, AI may assist marketers in creating a 360-degree image of their consumers so that they can tailor their content and promotions to suit them. Marketers can help by automating the lead generation and scoring process with the use of machine learning and predictive analysis. They also assist marketers in keeping customers motivated by foretelling turns: by analysing customer interactions with marketers, they may tell when a customer is ready to lose interest.

Brands will then utilise emails and updates to try to re-engage certain people. It is indisputable that social media has an influence on digital marketing. Social media is an essential part of every marketer's toolset since it has a proven track record of boosting a company's marketing endeavours. AI may enhance marketers' capacity to take into account and assess the impact of these organic encounters, which may be crucial to their overall success. Through programmatic advertising, platforms for optimization, and measurement, AI automates the time-consuming media procurement cycle and makes sure that adverts are

viewed by the intended consumers. AI is assisting marketers in evaluating, tracking, and assessing the results of marketing campaigns with essentially no human input.

III. ARTIFICIAL INTELLIGENCE AND SEO

Search engine optimization is one field where AI is having the most of an impact (SEO). Machine learning has a direct impact on site accessibility, and this impact will continue to expand. Technical SEO has been completed but is still in use today. The areas of focus for SEO specialists will include voice search optimization, schema implementation, AMP implementation, and data structure.

AI aids marketers in improving the user experience on websites by personalising information, promotions, and warnings by analysing data on individual users' activities. Evergage conducted a poll, and it found that 63% of advertisers who employed AI on their websites reported higher conversion rates, while 33% claimed that customer relations had improved.

Chatbots have changed marketing to the point where they now need their own specialised content, even if they are supposedly a part of the consumer experience. AI-enabled bots efficiently serve customers for dozens of worldwide businesses utilising machine learning and natural language processing.

AI has a wide range of applications in the world of content. Business reports, product reviews, stock market reports, and sports recaps are just a few examples of the types of content that AI-enabled tools and platforms might create without any human involvement. Marketing professionals will have control over the tone and style of the content by creating the standards and conventions.

Email marketing is still one of the greatest strategies for advertising. 61% of the time, customers enjoy receiving weekly promotional emails. Thanks to AI, email marketing has become lot easier for both you and your customers. AI may use files to build personalised emails for each subscriber based on their prior brand interactions.

IV. USES OF AI IN DIGITAL MARKETING

Consumer interaction with personalised marketing messaging is more likely. According to Experian data, emails with customised subject lines are 26% more likely to be opened. In addition, a Marketo global survey found that 79% of consumers said they are only likely to use brand promotions if they are specifically tailored to prior interactions.

With the help of AI, marketers are now able to tailor their messaging to specific individuals rather than the broad target groups on which they traditionally relied.

This technology predicts consumer behaviour based on data from past brand engagements. In order to maximise lead-to-sale conversion rates, marketers can deliver content and marketing messages during the most productive times to drive conversions.

To engage with businesses, customers now frequently utilise Facebook Messenger, WhatsApp, and other messaging apps, but keeping customer service representatives active on these accounts may be costly.

To lessen the strain and give customers a speedier response, several firms have already started using chatbots to handle frequent customer enquiries and deliver quick responses at any time of day or night. Chatbots can be programmed to provide predefined answers to frequently asked questions and to route more sophisticated requests to a human agent. To put it another way, less work is required of customer care representatives, which frees them up to tackle conversations that call for a more personalised response.

V. CONCLUSION

AI has the power to completely change the marketing environment. Even at this early stage of development, it has already demonstrated to be quite effective in generating a significant ROI. Artificial intelligence solutions can give us chances to grow and can simplify and improve the quality of our work. Marketers must educate themselves so they can assist their businesses in making good investments. Only then will they be able to focus on the creative and strategic aspects of their work. One of the most effective ways to target specific demographics and produce adverts that are user-specific is through digital marketing. The development of algorithms that could recognise activity trends in the online behaviour of several users based on the vast volumes of data collected from each user made this type of targeted marketing viable. This was accomplished through the creation of various algorithms that assist programmes and applications like AI and machine learning.

REFERENCES

- [1] Bakardjieva, M., & Gehl, R. W. (2017). Critical approaches to communication technology—the past five years. *Annals of the International Communication Association*, 41(3-4), 213-219.
- [2] Moz, D. "The Beginners Guide to SEO." (2017).
- [3] Noble, Safiya Umoja (2018). "Chapter 1: A Culture, Searching", *Algorithms of Oppression*, pp. 15-30.
- [4] Vaidhyanathan, Siva. *Antisocial media: How Facebook disconnects us and undermines democracy*. Oxford University Press, 2018, pp 77-105.
- [5] <https://marketinginsidergroup.com/artificial-intelligence/5-benefits-of-ai-for-digital-marketers/>
- [6] <https://ied.eu/blog/how-ai-transforming-the-future-of-digital-marketing/>