

Influence of Artificial Intelligence on Digital Marketing

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Abstract

Digital marketing & promotion of brands through digital channels. Businesses are finding unique solutions to keep their sales ticking and devising very unique digital marketing strategies. Different forms of Digital Marketing are used apart from the traditional known methods such as SEO, SEM, Social Media Marketing etc. With the growth of Artificial Intelligence, its impact into the digital landscape is easily being realised and how it can be used to create innovative digital marketing campaigns. Marketing currently represents the 4th largest use case of AI in terms of resources spent on it. With AI technology being more feasible to implement than ever before, we are beginning to see its potential for marketing slowly opening up in different areas under marketing. This study aims to find out the areas of influence of Artificial Intelligence on the Digital Marketing Strategies. The findings reveal that AI has spread its roots to almost all arenas of digital marketing like chatbots, predictive Marketing, automation, content generation, personalized UI, Ad targeting, Voice search. Customer Buying habits and preferences are also tracked and useful insights provided using AI. AI thus helps the organisations drive the opportunities of achieving things with a greater degree of speed and accuracy, helps in computation of large volumes of data providing useful insights to make data driven decisions.

Keywords: AI, Digital Marketing, SEO, Chatbots, Lead Scoring, Target Marketing, Voice Search.

Objectives

1. To study the usage of AI in marketing.
2. To Study the areas of Influence of AI on the digital marketing strategies.

Research Methodology

This is a conceptual study where data has been sourced primarily through secondary sources collected from various journals, research papers, websites, various reports, books and articles published online. AI being an upcoming field of study, there are not many research articles published in this area specific to the linkage between AI and Marketing which is the scope of the current study.

Importance Of This Study

Artificial Intelligence has slowly grown to be an important part of our daily life. AI is being used almost everywhere

in every sector. By 2025, the market for global artificial intelligence is expected to be almost **\$60 billion** whereas in the year 2016 it was **\$1.4 billion** (Source: Accenture). We use feature one form of AI or another in already about **77 percent** of the smart devices (Source: Accenture). Artificial Intelligence has affected Digital marketing in a multitude of ways. A survey by Salesforce indicated that nearly 51% of marketers are already using AI, and 27% of new marketers are even planning on incorporating this technology by 2020. A survey in 2017 by Evergage on personalization in real time showed that 33% of the marketers surveyed made use of AI to provide personalized web experiences. 63% responded that personalization in AI increased conversion rates and improved the consumer's experience (Adext AI, 2019).

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Introduction

Artificial Intelligence is the creation of Intelligent Machines which are capable of thinking and reacting like Humans. The goal of artificial intelligence (AI) as a science is to make machines do things that would require intelligence if done by humans (Negnevitsky, M. 2004). Artificial Intelligence has been treated as the next big industrial revolution; people believe that artificial intelligence can provide a solution to most of the problems and challenges that exist right now in the world. Artificial Intelligence (AI) and Machine Learning (ML) are causing disruptions and transforming the technological landscape in almost all domains of each industry (Aulakh, Abeer, (2019). 84% of marketing organizations have implemented AI and machine learning in 2018 (Source: Forbes). Artificial intelligence uses technologies which includes natural language processing, speech recognition, machine learning, robotics, and computer vision. These technologies provide a number of opportunities for business. Machine learning is a method to get artificial intelligence and deep learning is considered one of the branches of machine learning and a method for understanding machine learning. The major emphasis of deep learning is on algorithms driven by the configuration and function performed by the human brain (Shahid Zafeer Muhammad & Li Gang, 2019). "Weak AI" is that which does something very specific and it does it very well, "strong AI" on the other hand is that which thinks like humans and draws on general knowledge, imitates common sense like humans, threatens to become self-aware and as feared by most, takes over the world (Sterne, 2017). Digital marketing is a term which is used for the targeted, measurable, and interactive marketing of products and services using various digital technologies to reach the viewers, turn them into potential customers, and also retain them. Digital marketing includes methods such as search engine optimization (SEO), search engine marketing (SEM), content marketing, influencer marketing, content automation, campaign marketing, data driven marketing, e-commerce marketing, social media marketing, social media optimization, e-mail direct marketing, display advertising, e-books, and optical disks and games, and any other form of digital media (M, M., & M, P. D, 2019). Artificial Intelligence and digital marketing have started to go hand in hand. With the power to gather knowledge, analyze it, apply it then learn from it, AI is remodelling the digital strategy. As it continues

to advance, the capabilities to use it for digital marketing strategies will also enhance and provide valuable client insights for firms (Nicole Martin, 2018).

Usage Of Ai In Marketing

AI has boosted the performance of marketing in different ways. In near future, it is expected that AI will boost its impact, for e.g. Robots will be used as a substitute for salespersons, websites will be updated and reformatted automatically by eye-tracking data. AI has been used to enhance and upgrade all the outdated methods of marketing (Hoanca & Forrest, 2015). With the help of AI which would analyze the data, companies can be successful in creating customized marketing campaigns. AI will also help in improving yield management by presenting dynamic pricing and give excellent customer service. (Bughin, Hazan, Manyika & Woetzel, 2017). AI is expected to play an important role in predicting not only what customers want to buy, but also what price to charge, and whether price promotions should be offered (Shankar 2018). Because AI can help firms predict what customers will buy, based on this firms may even substantially change their business models, providing goods and services to customers on an ongoing basis based on data and predictions about their needs (Davenport, T., Guha, A., Grewal, D. et al. 2019) AI plays a significant role in the background, monitoring consumer sentiments on the internet and social media. These social listening kits, driven by AI engines ensure that consumers can easily find their preferences. (Grewal .et al. (2017)

Areas of Impact of AI on Digital Marketing.

Chatbots: Chatbots are computer programs developed for interacting with online customers and they also complete the order for them. Chatbots can be integrated into websites and social media pages. Chatbots boost engagement, they can help customers 24/7 and they can handle several customers simultaneously. Importantly, Chatbots can respond immediately to customer's queries through chat interaction. Many online businesses already implement chatbots to provide better customer support. In many cases the customers do not realize that they actually interact with the machine (Rajanarthagi, 2019). AI bots will be used in future which will function as well as human salespeople, to make initial contact with sales prospects. Unlike humans, bots never actually lose patience. They are available 24x7 to handle several requests simultaneously thereby resulting in tangible



results. However, a chatbot must be able to understand the nuances of a language in order to give a comfy experience with convincing responses (Geekship, 2019).

Semantic search: Semantic search helps in findings answers to a search query much faster. Semantic search is a data searching technique that understands user's intent and contextual meaning of a search query rather than using keywords. AI can do this by understanding the meaning of search phrases. It involves finding the relationship between words and phrases in the search query. Machine learning technique helps the search engines in trying to understand what information the user might need based on their search history and user persona. With the help of machine learning, the search quality will increase constantly (Rajanarthagi, 2019). Ranking is an essential functionality that is innate to any application offering search features to users. Given a query, documents relevant to the query have to be ranked according to their degree of relevance to the query. The data that is retrieved using an algorithm should be ranked appropriately irrespective of the data set it has been extracted from (Rai, Piyush & Prabhume, et al. (2014). Google is trying to learn on how they can provide better results to end users that satisfy their intent. If the web content fails to provide users with a positive experience where he does not find the content useful or relevant, and it did not meet their intent, then it'll be difficult for the webpage to rank in the top positions of the SERPs (Search Engine Results Pages) as the machines continue to learn and get smarter (Winston Burton, 2017). Through better search results, Netflix estimates that it is avoiding cancelled subscriptions that would reduce its revenue by \$1 billion annually (Bughin, J., et al., 2017).

Content Creation: The concept of content marketing can be defined as a marketing approach, which aims to find products produced according to customers' needs and create customer satisfaction and fulfilment in this way (Karkar, A, 2016). There is a lot of research work that focuses on the potential of relevant business models in success of today's content marketing under some industries (Amit, R. and Zott, C, 2001). Artificial Intelligence can write data focused contents such as stock updates, sports stories, and financial reports. Gartner predicts that by 2018, nearly 20% of content of businesses will be authored by machines with a speed of producing 2000 articles per second.

Content Curation is the process of gathering, organizing information relevant to a particular topic. The best example for content curation is e-commerce websites like Amazon which recommends similar products based on what has been previously looked or purchased. It takes significant time and energy to create effective content. The idea is to create awareness for people to buy a product or service. AI helps the marketers to create relevant content that the target audience wants to read and also keep them engaged (Geekship, 2019). AI can already write reports and news based on data and information. Intelligent tools like Wordsmith, Quill and Articool are already being used by the Associated Press and Forbes to create news, which leads to clicks on their websites (Realomat, 2019). Utku Köse provides some sample models of intelligent content marketing approaches in order to improve functions of content marketing (Köse, Utku & Sert, Selcuk, 2016). Machine learning and image, speech, and natural language generation enable advertisers to curate content while learning from consumer behavior in real time, adjusting content on the fly (Kietzmann, et al, 2018).

Ad targeting: AI can generate and promote online Ads by generating or improving Ads content based on user's interest, likes, dislikes and preferences. Google Ad platforms already make use of machine learning and artificial intelligence to target the audience. AI can deliver Ads to users based on their previous purchase history, search history, interests, demographics, etc and display the right Ads to the right audience at right time. This will give better ROI to advertisers (Rajanarthagi, 2019). Facebook is one of the most profitable platforms for advertisers having more than 1 billion monthly users and an infinite number of selection criteria of the target groups. Facebook ads produce large and productive results within a few hours. If an ad is placed in the right target group and contains the right offer, it generates sales usually at low acquisition costs. And if the ad is run successfully, then the sales will scale up and thus the profit by increasing the display costs. And this display can deliver quality performance for a certain amount of time until the target group is exhausted (Rob Miller, 2018)

Predictive marketing: Predictive analytics refers to the use of machine learning, data mining, and artificial intelligence to examine the historical data in order to predict the future trends. When the user browses on the internet every time AI collects the information related to the user's online behavior and analyze that data. This data



reveals a lot of information about the user like brand preferences and buying frequency. Artificial Intelligence has the capability to understand the needs and preferences of consumer based on the data analyzed and then helps companies to understand what their customers want by segmenting the audience. (Rajanarthagi, 2019). AI can also predict behavior for new users part from analysing past behaviour of existing users. AI can collect information about all users across the internet and not just for a session. This helps to concentrate on targeting only potential leads and eliminating those unlikely to convert (Rob Miller, 2018). Using AI, online retailers may be able to predict what customers will want with higher degree of accuracy and could transition to a shipping-then-shopping business model. That is, retailers will be able to use AI to identify customers' preferences and ship items to customers without a formal order, with customers having the option to return what they do not need (Agrawal et al. 2018).

Voice search: Voice search is an easier and quicker way to search for information. By the end of the next decade, the vast majority of shopping purchases will be made by voice. Retailers are scrambling to add artificial intelligence to ensure their sites can be crawled via voice and virtual assistants. Audioburst uses artificial intelligence to index audio broadcasts, which makes it easier to find and extract what a consumer might want. VSO (voice-search optimization) is the new SEO. By 2020, more than half of all internet searches will be made without the use of screens. Rather than typing a topic and then clicking through links, consumers will instead get answers while conversing with smart speaker devices, their cars, TV remotes, and more (Amy Webb, 2019). Voice commerce is helping its users in placing orders online using voice assistants. Apple and Google have already developed their personal assistants such as Siri and Google assistant. The number of consumers who are using smart speakers for their purchases is increasing rapidly and percentage buyers using virtual assistants are not limited to one category of products and rather vary in a wide range of products (Manoj Rupareliya, 2019). Location-specific information is not the only thing people want from brands out of a voice assistant. According to a Google survey, people want to get information about deals and sales, about upcoming events, personalized tips, customer support etc (Chaitanya Chandrasekar, 2018)

Target right audience: AI assists in penetrating deep into the data which is easily extractable from several sources

and help the digital marketers in reaching the right audience through segmentation. The consumer can now browse from anywhere at their own comfort through the AI enabled websites with relevant suggestions. For instance, the personalized content recommendations seen in typical e-commerce websites such as "user who bought X has also bought Y" or the YouTube suggestions which customers might find enthralling (Geekship, 2019). Google analytics powered by Artificial intelligence can segment the audience based on factors like location, demographics like gender, age, income, education, profession etc and psychographics like preferences, interest, attitudes etc. It helps to decide which target audience is best the product or service (Rajanarthagi, 2019). Artificial intelligence analyzes millions of data on a single user profile and makes use of Algorithms for detecting patterns from large volumes of data. Digital Marketers can effectively group and cluster the data to create rich user profiles for individual customers – based on their online browsing behaviours. There is no need to target a broad demographic but instead more niche audiences can be pursued, exhibiting very specific behaviours like customers frequently engaging with beauty care products on social media in the luxury segment (Andrew Arnold, 2018).

Lead Scoring : Lead scoring is a method for ranking leads based on customer buying behavior relating to their interest in the product or service and their current place in their buying cycle. It helps to identify which customer is likely to engage or buy. Artificial intelligence can automatically prioritize real hot leads and improve sales productivity (Rajanarthagi, 2019). Predictive lead scoring uses algorithms to establish shared traits among the leads that converted and those that did not. Using this knowledge, the lead scoring software will create and test different predictive scoring models, automatically selecting the best one based on a sample data set. This takes all the guesswork out and a finely tuned model for the company is resulted from this process. Furthermore, making use of machine learning, the lead scoring software will increase the accuracy by continuously re-analysing data and incorporating new insights to determine the lead scores (Source: Salesforce, 2018). Predictive lead scoring, through machine learning, allows marketers to make accurate predictions about the purchase intent of consumers. A machine-learning algorithm runs through a database of verified existing customer data; recognizes

trends and patterns and creates robust lead profiles for advertisers (Kietzmann, et al, 2018).

Web Development : AI helps to design websites faster and much easier with a few clicks. AI can help design a website within minutes based on pieces of information provided by users like page layout, images, text, calls-to-action, etc. The user interface design process includes a lot of creativity and often begins on a blackboard where website designers share their ideas. Once a design is drawn, it is then translated manually into an HTML structure in order to begin the web development process. This takes in a lot of effort and often delays the design process. Using AI, one could capture the website contents of the board on a photo and then upload it to an AI routine in order to generate the prototype web app (Sophia Martin, 2019).

Email Marketing: Email Marketing is a direct and cost-effective approach in digital marketing. With the assistance of artificial intelligence, email marketing is much more powerful than ever. It has introduced several benefits to garner higher conversions, including personalization, automation and data analysis. Some of the most successful email marketing campaigns are focused on creating emails that look like they were written personally by humans rather than being machine-generated. AI technology helps analyze consumer behavior and study their interests to generate a data-driven insight which makes it possible to create customized emails that are tailor-made for each individual subscriber. AI can also help determine what kind of content and images that are going to be most effective in drafting the welcome emails, order update emails and

retention emails among others to achieve the highest amount of engagement and conversion possible. AI takes the guesswork out of the equation and determines the right times to automatically send out emails based on subscribers' activity history. AI knows what promo works best with each customer based on their history, interests and habits, whether it's product recommendations, discounts, freebies, or rebates. When a customer abandons a shopping cart, AI can retarget that customer by sending an email either to have them reconsider and finally purchase the product or recommend a similar item (SmartInsights, 2019)

Conclusion

AI is transforming the way present-day websites are being developed. That's why many software development companies are using AI power to create smart web applications for increasing engagement, scalability, interaction, viability, experience and overall feel of the website. Using Artificial intelligence for digital marketing strategy will give several benefits. The decision to embark on a new era driven by AI, or get stuck in the past, will be everyone's personal choice. Artificial intelligence will continue to grow and improve without any slow down. Implementing AI into the digital marketing strategy will provide customers with a better experience and give businesses much needed insights in order to succeed. AI has transformed the landscape of marketing and helps in updating the outdated methods of marketing. It will be a major challenge for the organizations to transform according to the changing landscape of marketing.



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(Footnotes)

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