

Emergence of Digital Marketing in Current Scenario and Implementation of AI to Improve the Productivity of a Concern

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Abstract

Businesses have been on the rise in current decades as an outcome of digital progressions. The promotion has achieved a phase in its evolution where it is essential to modify to digitalization. While it seems to be a boost for marketing, every AI-based computerised programs and platforms reduce the burden of traditional advertising and personalization operations. In many cases, the systems used for online marketing include algorithms for determining the optimum combinations, while in others, businesses take the initiative to build and deploy unique methods in-house. The authors' goal is to summarize the prevailing status of AI in marketing efforts and facilitate implementations of a smart marketing approach to increase a site's exposure using keywords. This article also focuses on the various benefits of AI in Digital Marketing. Along with all these, the author discussed how Artificial Intelligence is used in today's digital marketing scenario to increase the productivity of any company.

Keywords: Artificial Intelligence (AI), Digital Marketing, AI Based Automated Programs, Search Engines, Social Media Sites.

Introduction

Artificial Intelligence refers to computers and machines that replicate intellectual activities, including such education and reasoning that individual identify with some other humanoid intelligence. It's a discipline of computer engineering aimed at deciphering the heart of cognition and developing a revolutionary intelligent network that observes, responds, and performs activities based on the information it gets, much like humans accomplish. Automation, voice control, image identification, natural language understanding, problem-solving abilities, and other Artificial Intelligence-related activities are highly technological and professional[1]. Artificial Intelligence systems are growing ever more developed due to precise algorithms, enabling computers to become much more operative at a far quicker hop than earlier. Artificial Intelligence's potential request has been increasing, permitting academics and makers all across the globe to make important advancements.

AI's technological products may likely one day act as a keeper for human understanding. Artificial Intelligence is not like intelligent behavior, but it can behave somewhat alike and perhaps outpace it. Advertisers were afraid to include AI in their marketing tactics in earlier decades. Though, many projecting firms have accepted it besides are utilising it in their marketing, with corporations such as "Amazon" effectively using artificial intelligence systems.



Figure 1: How Artificial Intelligence is changing the world of digital Marketing

"Amazon", for instance, utilises artificial intelligence to display consumers only related goods according to prior searching, orders, and pageviews. Artificial Intelligence's technological products may likely one day act as a keeper for human understanding. Artificial Intelligence in digital marketing is already a fact, with a variety of benefits and adoptions.

Advertising, particularly digital marketing, will be the sector where AI will be most useful. In the previous year, companies have slowly but steadily begun to follow recent trends. It is still considered modest by the writer and might be utilised to a larger degree[2]. AI has been there since 1959, but it was formerly thought to be too costly and hazardous for a firm to pursue. Marketing companies have increasingly become more ready, and organisations are gradually recognising the significant benefits it may provide.

It is a list of qualities that a company Digital Marketer might utilise and find useful:

- Content creation and distribution
- Information gathering
- Email promotion Online advertisement
- Search online
- Chatbots
- Analytics tools

Artificial Intelligence-based content production has been in use for quite some time now. Reporters utilise such techniques to create articles. The process examines prior information and data before generating a draught of an article for publication.

The way keyword work is conducted will be altered by AI. AI has become more commonly employed. Search engine optimization practitioners will need to be familiar with programmed training and programming. As more people start to utilise speech recognition, SEO specialists will have to adapt to this relatively new search strategy. The fact that spoken searches differ from traditional queries poses a difficulty, and the keyword analysis approach will almost probably change as a consequence. Not only can speech identification include more words, but it may well be highly centered on the data which a customer wants. If it is an online company or a demonstration website, terms are among the most crucial elements of a good Search Engine Optimization plan, along with other factors[3]. Keywords are phrases, phrases, including keywords that a user types into browsers to discover a website. Essentially, an optimised site must speak in its consumers' dialect, employing the same terms in material, metal, picture Alttext, and other areas. One of the few constants in this ever-changing market is keyword research, which is identifying the most acceptable and useful terms to identify a company's website. The requirement for finding keywords has not changed, but the method for doing so has. It is not only feasible to develop a sequence of keywords and ideas that should be put into Search Engine Optimization strategy by researching the terms employed on a certain market, but it is also necessary to learn more about prospective clients: wishes, requirements, aspirations, preferences, and so on. The essential thing is to draw in engaged people who have a high potential of becoming customers. Keyword research helps you predict

market changes, adjust to them, and develop goods, services, and discounts that people are always looking for. The article undertakes a study to determine the present state of digital marketing and if any academics have looked at voice recognition in advertising or keyword detection techniques. The authors offer a four-step strategy for determining important keywords for a firm, based on the growing trend brimming voice recognition in digital marketing. These are some of the fundamentals for doing voice recognition.

Application of AI in digital marketing

The prevalence of AI and Deep Learning has contributed significantly to the development of the digital marketing environment during the past five years. The contemporary marketer faces numerous complicated issues in today's extremely competing and splintered promotional scene, including how to keep their company relevant and viable, maintain brand recognition, and establish engaging customer interactions.

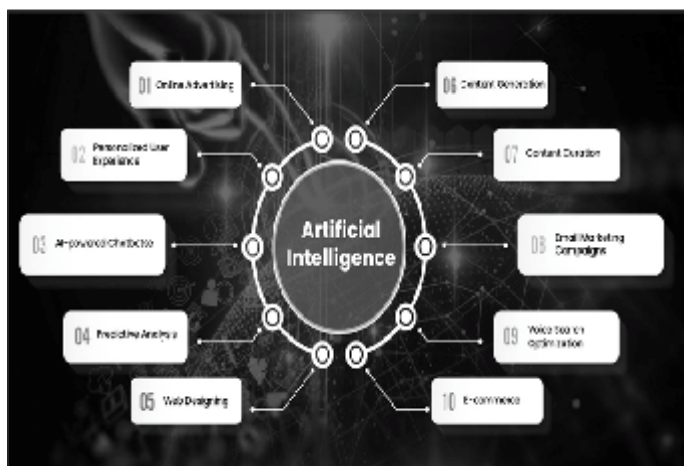


Figure 2: Ten Applications of Artificial Intelligence in Digital Marketing

Artificial intelligence and machine learning-based apps have risen to the occasion and supplied useful insights to enhance digital marketing wiser and much more successful. In reality, it's fair to argue that Artificial Intelligence and digital marketing are now inextricably linked. Because digital marketing operations provide us with access to a vast amount of rich data, Artificial Intelligence can help us make meaning of the information more quickly and create and execute more successful digital approaches.

Artificial Intelligence-driven initiatives and authorizations, Artificial Intelligence -enabled marketing services, and much more are a few of the ways Artificial Intelligence is being used in digital advertising nowadays [4]. Here are some of the most prominent artificial intelligence applications in the digital marketing field nowadays:

Programmatic Advertising

It was running any type of internet promotional campaign used to be such a difficult undertaking that it required much analysis and research and was vulnerable to human mistakes. Everything has altered suddenly. A sophisticated Artificial Intelligence-based software now manages the majority of internet advertising termed programmatic promotion. This enables the purchase and sale of ad stock in milliseconds and the positioning of advertising on the appropriate network to the appropriate target demographic and full campaign optimization, making the whole process very efficient, rapid, and successful.

Personalized Online Experiences

Being capable of enjoying individualised information and encounters digitally, just as in the physical world, might be the difference between winning mental space with the intended audience and wandering aimlessly in the throng. By tailoring content and delivery depending on geography, like, hates, online behaviour, gadgets, and more, Artificial Intelligence allows businesses to create distinct, customised client experiences online[5]. This is utilised to build personalised marketing automation, landing pages, and sometimes even real-time adverts, resulting in a more distinct environment, more relevancy, and a higher engagement rate.

Online Customer Service

Given how important it is to provide a positive customer journey today, Artificial Intelligence-powered chatbots are progressively being utilised to conduct tailored, humanised interactions with consumers whenever they require them. Like traditional chatbots that reply to particular keyword inputs, AI-powered chatbots may answer the same way a person would. Indeed, many prominent companies throughout the world are already using it, and that we can anticipate it to grow in prominence.

Content Creation

As unbelievable as it may seem, Artificial Intelligence algorithms may be used to generate unique material for your website, blogs, goods, and more. Artificial Intelligence can develop relevant and helpful content by evaluating large amounts of existing web material around a given subject or theme. This may be quite useful for enterprises that demand short turnaround times on unique material, such as news publishers. Yes, it has its limits, such as the inability to write an opinion article, but if existing capabilities are any indication, this seems to be quite promising.

Curation of Content

Indeed, things get better. Derived from past behaviour, interests, hates, geography, and other factors, Artificial Intelligence may be used to select and offer the most appropriate and interesting content to your clients/web users. What was that about delight-inducing? Given the significance of material advertising in customer happiness, this is a great method to show your consumers that you care[6]. The majority of us are already aware of the personalised suggestions we get on shopping websites or streaming video applications. This is a great demonstration of content selection driven by Artificial Intelligence.

Inputs to the Strategy

Without question, Artificial Intelligence is far superior at turning large amounts of market information into useful insight. Artificial Intelligence could not only assist us in examining whatever has performed what has not, but it could also assist us in anticipating future client behaviour using complicated predictive methods and technology. All of this provides marketers with information that is critical for making the most of their digital marketing approach and better planning initiatives.

Whenever it relates to what Artificial Intelligence can do, these examples are simply the tip of the iceberg. Regardless, there is little question that a mix of human and computational intelligence is the most effective way to address today's modern complicated marketing difficulties. Artificial Intelligence can only improve things, and I am interested in exploring where it takes us.

Benefits of using AI in Digital Marketing

Artificial intelligence is increasingly altering the approach people conceive about business. Artificial Intelligence can help improve customer experiences and increase transactions by optimising and accelerating up a range of marketing operations. When you engage in marketing and advertising, there's a good possibility you probably have such an AI-powered application in the marketing application framework. On the other hand, most firms are generally ignorant of the benefits of AI and deep learning over "non-intelligent" promotional solutions. If they have not fully gotten on the panel or are just considering dipping their feet in the water, you're not the only one. Money for novel technology is a big step, and it's even frightening when this is founded on complex concepts like deep learning.

Improved Personalization and Recommendations

Individual's responses to additional interactions with commercial messages are changing. Traditional marketing methods, like newspaper advertisements and mailings, are no longer effective as people previously were. A clarification is that today's clientele demand companies to personalise messaging grounded on their geography and hobbies. Non-personalized advertising will elicit little or no response from most people[7]. In 2017, as per a review by organisation consulting business Accenture, over 39% of clienteles switched companies owing to an absence of trust and insufficient customization. Forty-three percent of the public are more inclined to purchase from trades that provide to their exact requirements.

Customized advertising messages are much more inclined to be networked with clienteles. Additionally, in worldwide research performed by "Marketo", 80 % of clienteles claimed they are solely inclined to utilise product offers if they are carefully customised to preceding encounters. Despite trusting commonly targeted groups over the years, Artificial Intelligence permits marketers to customise their messaging on a separate foundation.

Such a technique forecasts client behaviour with material collected from prior product encounters. It implies that marketers may provide the idea and promotion

communications at the optimum potential flashes to transform primes into sales. The personalised suggestions that are presented when you register into a website such as “Amazon or Netflix” are likely known to most individuals. These suggestion algorithms have improved throughout the period and can be quite accurate, particularly for consumers who have had a profile for a long time and have given the site access to a lot of information.

It may utilize this data to provide product suggestions dependent on your preferences, previous orders, and what individuals who purchased the very same goods since you have acquired. If you have already purchased a printer, Amazon is likely to suggest print cartridges and paper[8]. If you are having a baby and have already purchased stretch mark cream and prenatal vitamins, do not be startled if baby clothing and toys appear in your suggested items list. All of this is made possible via the DSSTNE Artificial Intelligence framework, which was provided as open source software to increase its deep learning capabilities. Meanwhile, according to Gartner, although 90% of firms will utilise some marketing customization by 2020, the majority will fail to deliver adequately customised content. AI has the key to improving personalisation and providing ever better content. Machine-learning systems allow marketers to provide a hyper-personalized consumer experience by evaluating client data.

Active Estimating

While giving bargains is a proven way to increase revenue, certain customers may prefer a smaller bargain or no discount at all. To optimise sales and effectiveness, Artificial Intelligence could be used to continually control merchandise values grounded on need, supply, client profiles, and other criteria. The webpage "camelcamelcamel.com", which records the cost of Amazon goods over time, is a good example of price changes in practice[9]. A graph for each item shows how much more the value variations are grounded on the period, desirability, and some other variables. When you have already watched for a ticket and afterward refunded to purchase it several days back only to discover the worth has actually risen a certain hundred thousand dollars, you have experienced pricing structure at the action.

Client Provision Chatbots

Users have initiated "Facebook Messenger, WhatsApp", and other communicating applications to be a prominent and easy method to interact trades, but keeping the records manned with client support employees may be costly.

Several companies are now adopting chatbots to cope with frequent client inquiries and deliver rapid responses at any time of day or night to minimize effort and provide a quicker response to consumers. Chatbots may be configured to respond to commonly asked queries with pre-programmed responses or route the chat to a humanoid representative if the subject is too complicated[10]. It reduces client support time and burden, allowing agents to focus on interactions requiring a more direct answer.

We are becoming increasingly familiar with chatbots, and in certain instances, choosing them over a real person, thanks to "virtual personal assistants, Google Assistant, Alexa, and Cortana". In current history, Artificial Intelligence language processing algorithms have improved to the point that robots may now replace human workers in customer service and sales positions.

Chatbots are not always less expensive than adding additional members of the team to handle inquiries, and they can even just do it more quickly and, in some cases, more humanly. Computers, like individuals, never get a bad day; thus they can always be counted on to be courteous, entertaining, and pleasant.

Search Engine Optimization

From modest information search queries on e-commerce websites to searching platforms like Google, which are utilized by millions worldwide every day, algorithms are usually evolving. Artificial Intelligence-assisted search may detect spelling errors, propose options, and impact previous surfing or purchase habits. Google is getting improved at commutating out searcher's "goal" is.

When a person searches for "coffee houses" on their smart phone, most search engines assume they are seeking a coffee house within several miles instead of investigating coffee businesses in general. Specialized searches, including such e-commerce and Google My Business outcomes, are also improving searchers' experiences, and

voice search has become more widespread as the number of Artificial Intelligence-powered gadgets and companions grows[11]. Voice recognition is also on the rise, thanks to the rise of mobile broadband use and home automation speakers, and is projected to continue. Artificial intelligence is required to comprehend complicated shapes in voice and identify the significance of the spoken search requests, which are substantially distinct from standard written searches. Advertisers may also employ AI to optimise material for voice recognition, which can increase SEO and web traffic as we get closer to a voice-controlled digital future.

PPC Ad Optimization

A/B screening is the standard method of improving marketing messaging and displays advertisements, but it's a time-consuming procedure with an endless set of factors to test, so it requires a lot of time and effort. With Artificial Intelligence algorithms, you can adjust your adverts continuously and instantly based on conversions and engagements.

As a result, we have grown less susceptible to advertisements. The development of programmes like Ghostery, which identify and disable monitoring technologies, has complicated matters for both publishers and marketers. The ramifications for the publishing sector are enormous: If the current adoption rate continues, revenue losses of \$34 billion are expected by the end of the year.

Cos of advertising strategy next to "undesirable or hazardous material," corporations including Unilever and agencies like Havas have frozen their Google and YouTube investments in the past. This, along with dubious viewability statistics and an increase in ad fraud, is causing companies and agencies to be more careful about how they spend.

The truth is, the customer journey starts at the point of interest. The holy grail is how we interact with that client to put the most relevant information in front of them at the moment when they are most likely to react. Practitioners in this nascent digital ecosystem have spent the previous decade experimenting, developing, and excelling in

implementing approaches to optimise efficiency.

Facebook has recognised that assessing effectiveness in total is not the best way to figure out what advertising work. Because the click-through rate (CTR) is a misnomer, they have switched to conversion metrics (CV). It is no longer a reliable indicator of actual purpose. Aggregating behaviours do not measure intent by ad format[12]. Instead, knowing the events in the purchasing funnel that influence purchasing behaviour is the key. And here's our primer on AI and why it'll be the next step in the CMO's growth.

On social media platforms like Instagram, Artificial Intelligence and optimization is also in use. Algorithms look at the profiles a person follows and display the adverts that are most generally applicable to that person. This gives the customer a better experience and the advertiser a higher return on investment since fewer advertisements are displayed to individuals who aren't engaged in products.

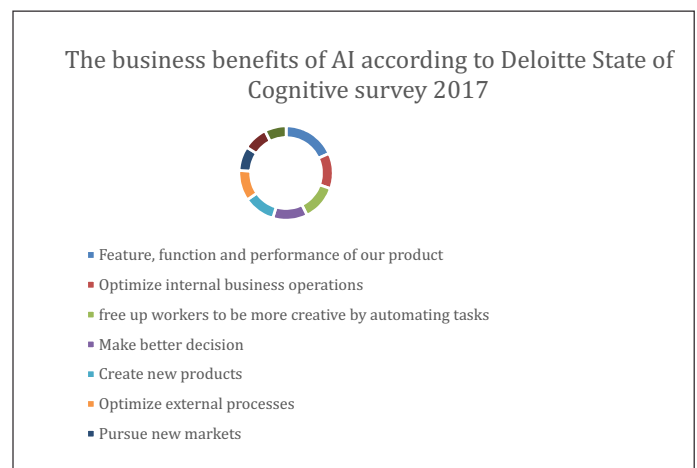


Figure 3: As per the 2017, Deloitte State of Intelligence study, Artificial Intelligence has several commercial advantages.

Above given graph shows how Artificial Intelligence benefited the business concerns in various perspectives.

Content Creation and Curation at Scale

Marketing strategy has a high return on investment (ROI). It may, however, be resource-intensive. According to Gartner's estimates, many companies suffer not with gathering sufficient information but with providing enough material to offer a tailored experience for everyone. Machine-generated material has been there for a while,

however, the early efforts were relatively illegible — they deceived search results, but not people. Stylist journal featured three autonomously produced pieces developed by Articoolo in its unique "Robots" issue, demonstrating how advanced artificial intelligence for content production has gotten.

In a variety of ways, artificial intelligence may assist you in speeding up and optimising your content marketing. News articles and analyses that would require a person writer hours or even days to compose may now be generated in seconds by automatic data technologies. Although you don't believe robots can automate your content production process completely, they may help you with little chores like creating social media posts[13]. Existing social media postings and news items are written by the Washington Post using Heliograf, an in-house reporting tool.

Machines are also quite excellent at creating predictable titles, especially ones that fall into the "clickbait" category. Perhaps you might not consider replacing your author with Artificial Intelligence software just yet, but we may be closer than you think. Several prominent businesses, like Forbes, are already producing material that is created in part by artificial intelligence. This use of Artificial Intelligence speeds up and streamlines content creation, allowing marketers to ramp up their content advertising strategy — something which 48 percent of marketer's claim is their toughest issue.

How AI is transforming digital marketing

Artificial Intelligence is renovating “digital marketing” through its capacity to gather, assess, utilize, and respond to information. This will grow more important because as the amount of information on potential clients grows, it can make data-driven decisions quickly and accurately. Here are some instances of how artificial intelligence is affecting digital marketing:

Identify and investigate

CRM is a business strategy that concentrates on gathering and analyzing correct client information to determine a customer-centric business strategy. When Customer relationship management, Artificial Intelligence, and big

information technologies are joined, they might upsurge the gathering of operator information from various channels, get detailed insight into mark clients, and recognize users' wants, allowing businesses to select the best marketing approach. The point is that any behavioural data may be used to do Artificial Intelligence research[14]. For example, the types of items somebody buys, the websites people browse, the frequently used applications, and so forth. Advertisers can quickly assess a potential consumer's needs and adjust the AI used to boost purchases based on the information gathered. You will be better able to see the customer's workflow and provide the proper remedy, streamlining the buying journey while supporting the customer in achieving the checkout with recommendations that better reflect their needs and tastes.

Once Artificial Intelligence combines with AR/VR

Whenever Artificial Intelligence combines unique graphic technologies like augmented reality and VR, it creates a whole new consumer experience. For example, Coca-Cola opted to mix Artificial Intelligence with AR in a number of its bottling associates by projecting computer graphics over a operator's practical viewpoint with spectacles or an earpiece. It enables professionals to have data regarding hardware they concentrate on and receive assistance from experts who see everything they are viewing, making it easier for personnel in remote locations to carry out fixes and discover issues.



Figure 4: Artificial Intelligence combines with AR/VR

This strategy may also give customers unique opportunities to engage with and educate about a business, enabling them to establish a bond[15]. Integrating Artificial Intelligence with AR/VR updates the operator's consuming environment and generates a powerful product image that may contribute to a business's client base perceive more dedicated.

Conclusion

Businesses might benefit significantly from adding Machine learning and artificial intelligence inside their digital marketing strategy. Artificial Intelligence is approaching a novel age, one in which it could assist enterprises in increasing productivity, organization performance, and competition. It will help businesses obtain, expand, and sustain customer loyalty if they have a better understanding of customer wants and behaviour. Artificial Intelligence innovations will emerge as the most useful resource for digital marketers as innovation gets more affordable and available. Consumers would have been swayed by these approaches while choosing the right companies and commodities to satisfy their requirements[16]. As a consequence, in need to grow and meet customer demands, marketplaces must embrace such technology. Artificial intelligence technology will transform the digital marketing environment in the next few years.

Businesses have always benefited from technological improvements because they have provided new methods to reach out to clients. AI is one of the most important technologies of our day, and it is causing quite a stir in the digital world. AI in Business-to-business marketing and sales is coming to change the way consumers connect with companies, data, and services, thanks to its narrative and marketing possibilities. AI is primed to have an impact on B2B branding and its prospects. While many business behemoths despise the idea of fully automating marketing moves through savvy AI technology, analysing the impact of AI-powered robots in a variety of customer service industries, it is clear that comprehending client finer details will not be difficult completely manual or handled solely by

human control. AI, along with its supporting innovations, including such big data, the IoT, and deep learning, had an impact this year[17]. However, these are just a few of the elements that will ultimately help AI reach its full capacity. Artificial Intelligence's deployment will have a noticeable influence in the future years, particularly in 2018. Artificial intelligence is rapidly evolving as a powerful tool for digital marketers. It focuses on obtaining information from a single person or a group of individuals to grow your business. It is reasonable to argue that AI is a safe bet that will pay off handsomely.

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