

ARTIFICIAL INTELLIGENCE IN DIGITAL MARKETING - A ROAD MAP TO BUILT A VIBRANT BUSINESS

Abstract

In this study, the existing and possible link between digital marketing and artificial intelligence (AI) is described. Simultaneously, suggestions are made about the ways in which artificial intelligence (AI) might be engaged in the development of digital marketing. Digital marketing, which is a legitimate subfield of marketing science, has been successful in adding value to businesses and increasing their level of interaction with their clients by means of electronic services.

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I. INTRODUCTION

Since 1988, when the phrase "Digital Marketing" was first used, there has been a significant extension to the business sector, beginning with small enterprises functioning on a local basis and progressing to huge businesses operating on a global scale throughout the world. At the beginning of the 20th century, as a result of the steps taken in the growth of technology, digital marketing saw a significant rise in value, which led to the emergence of a demand for digital promotion, digital advertising, digital distribution, and digital customer experience. These advancements led to a shift away from an approach that was driven solely by data and toward a new approach that is data- and knowledge-based decision-making systems. The necessity to save and analyze data arises whenever one intends to carry out qualitative marketing, user, or data analysis. Audiences that are specifically targeted are essential to the success and profitability of marketing efforts.

The technology might be used to the advantage of marketing managers, who would then be able to specify the aspects that impact marketing share. The use of such technologies could result in more intelligent and timely decision making. In spite of the fact that artificial intelligence (AI) may be put to use in a diverse array of applications across numerous scientific domains, it has been shown that Marketing Science finds it difficult to use. It would seem that decision makers in digital marketing require more than just an efficient computational method due to the qualitative, quantitative, and strategic nature of the difficulties that might arise. Making a choice might appear like a very difficult process due to a number of factors, such as the information that comes from professional experience, the area of expertise, judgment calls, and an environment that is multifaceted, continuously changing, and demanding. Marketers today have the ability to study, build, and execute apps that integrate scientific multifactor data with the goal of developing intelligent knowledge-based decision-making patterns thanks to the massive amounts of data that are generated every day.

II. THE CONCEPT OF DIGITAL MARKETING

The use of digital technology, specifically the internet, is the most recent strategy that has emerged for the promotion of items. Digital marketing that is based on the Internet makes use of a wide variety of digital networks in order to build brand value and convert it from the producer to the potential customer. The rise of digital marketing has fundamentally altered the way in which firms leverage technology for promotional purposes. People are increasingly shopping online through digital podiums like mobile, desktop/laptop computers, and tablets rather of visiting to traditional businesses. As a result, digital podiums are gradually transitioning into advertising programs. E-commerce marketing and other forms of digital marketing, such as search engine optimization (SEO), also known as the "organic method of ranking the website," pay-per-click (PPC) advertising, content marketing, email marketing, social media marketing, and show promotion, are gaining popularity in the field of advertising technology.

According to Zeisser (1996), digital marketing is the practice of promoting goods and services using one or more forms of digital or electronic media. According to Techopedia (n.d.), digital marketing can be defined as the providing of various promotional techniques and approaches to clients through the utilization of various forms of digital technology.

According to Bird's (2007) definition, digital marketing is a form of media communication that creates direct links between a business and its customers or prospects on an individual level.

In other terms, direct marketing (DM) is the act of promoting a company, brand, or organization through the use of a range of media. These media can include the Internet, mobile devices, television, radio, and other classic and new media. Direct marketing can also include online advertising, podcasts, videos, and other approaches that are comparable. Promotion via the internet, in particular, plays an important element in various promotional programs and serves as the basis for the entirety of the promotional methods employed by many businesses.

The terms "digital marketing" and "internet marketing" are not interchangeable. It does not matter what kind of digital gadgets it is using because it employs digital channels, platforms, and devices. In addition, cutting-edge ideas like augmented reality and wearable technologies are pushing the boundaries of digital marketing beyond the internet. And one component of what is known as digital marketing is known as internet marketing.

1. Models of Digital Marketing: There are several digital marketing models that have been proven to be effective. Some of the most popular ones include:

- **Race (Reach, Act, Convert, and Engage) model:** This model is specifically designed for digital marketing and helps companies plan and execute their digital campaigns in a structured way.
 - Reach is the point at which the customer's lifetime is considered to have begun. The primary objective is to increase the number of potential customers by presenting them with an engaging experience that will prompt them to make a purchase and, ultimately, raise their knowledge of the brand's products and services.
 - **Act (Interact):** It is also known as the stage of interaction. Lead generation is the process of encouraging prospective customers to visit a company's website or the business pages it maintains on various social media platforms. The organization needs to meticulously craft the route that the visitor will take in order to continue their engagement with the organization.
 - **Convert:** A conversion, also known as conversion optimization or conversions, is a type of marketing strategy in which a prospective client is turned into a member of an organization or a customer and urged to adopt a particular course of action. Conversion can also refer to any action that marketers have targeted as a goal for their business. Any activity that moves a preview from its current state to a new one, such as "Purchased," is referred to as a conversion.
 - **Engage:** Once the intended conversion has been completed, it is crucial to perform all of the necessary activities to satisfy the customers so that they continue connecting with the organization by e-mailing, commenting or sharing on social media, purchasing, or reviewing products and services. It is a behaviour that occurs after a sale that raises awareness, fosters trust, and ultimately may result in additional sales or the attraction of new customers.

- **Inbound marketing** is a concept that focuses on recruiting people to your organization by utilizing content marketing, search engine optimization, and social media marketing.
- **Growth Hacking:** This strategy is centred on discovering unique and innovative ways to fast develop a firm through digital marketing tactics such as A/B testing, SEO, and social media marketing. Growth Hacking is an acronym for "growth hacking," which stands for "growth hacking."
- **The funnel model:** This model reflects the process that a customer goes through from awareness to conversion. It is an excellent technique to analyze the behaviour of customers and to optimize the trip that customers take in order to maximize the conversion rate.
- **The 4Ps Model:** This model is used to assess the parts of a marketing mix and identify how they interact to impact consumer behaviour. The 4Ps stand for "product," "price," "place," and "promotion," respectively.
- **The 7Ps (adding People, Process, and Physical evidence to the 4Ps):** This model is comparable to the 4Ps but adds additional components that are seen to be significant in the context of contemporary marketing.
- **The customer, the cost, the convenience, and the communication:** This model places an emphasis on the customer's point of view and examines how a company may fulfill a customer's requirements while also taking into account factors such as cost, convenience, and communication tactics.
- **The AIDA model (Attention, Interest, Desire, and Action):** This model is used to create effective advertising and sales campaigns by focusing on capturing the attention of the target audience, building interest, creating a desire for the product or service, and motivating the consumer to take action. In other words, the model focuses on a four-step process: attention, interest, desire, and action.
- **The ABCD Model:** Attention, Branding, Connection, and Direction- These are the four tenets that should be adhered to while making a great video on YouTube.

2. Diverse Digital Marketing Components

- **Internet Advertising:** One type of internet tool that assists users in locating the information they require is known as a search engine. Google, Yahoo, Bing, and Baidu are just some of the search engines available today. Search engine marketing refers to any activity that a user undertakes to improve the ranking of their website within a particular search engine. There are two distinct flavours of search engine marketing: paid search engine results and organic search engine optimization (SEO).
- **Email:** Because of its versatility, email continues to be a channel that provides medium to high returns on investment for businesses. There are many reasons for this,

but one of them is that email is easy to use. Even while email is not the most up-to-date technology, it is still possible to utilize it to adopt the most recent trends in content marketing, such as personalization and automation, without having to reduce the amount of money you spend on marketing. Given that email has the potential to assist a wide variety of other marketing goals, it should come as no surprise that the majority of B2B marketers (73%) and revenue drivers (63%), respectively, feel that email is their most effective medium for generating leads and driving revenue.

- **Social Media:** However, the fact that there are now 3.81 billion active users of social media is not the only reason why social media marketing should be included on this list. There are a lot of other incredibly essential reasons why social media marketing should be included. The original purpose of social media was to facilitate the development of personal relationships between users; but, it has since evolved into something that fulfills a much broader and more important role in people's lives.
 - Facebook is presently the most widely used social networking website. Facebook allows businesses to advertise their wares and services to users of the platform.
 - LinkedIn is a platform where users may create professional profiles and share them with other users. LinkedIn bridges this gap by requiring businesses to build out their profiles alongside LinkedIn itself.
 - Google+ is the company's version of a social network, and it allows users to rapidly connect with one another on the basis of friendship and common interests.
 - Twitter's purpose is to increase conversions and sales, in addition to brand visibility and lead generation, by gaining more leads.
- **Affiliate Promotion:** This can be done in exchange for promoting the affiliate's own products. You decide on a product that interests you, promote it to others, and then receive a commission on any sales that result from your efforts.

3. Forms of Digital Marketing: A kick in the pants for today's companies: Building out buyer's personas to understand your audience's wants and providing meaningful online content are always necessary components of digital marketing, regardless of the products or services that your firm sells.

- **B2B Digital Marketing:** If your firm caters to other businesses, often known as business-to-business (B2B), your digital marketing efforts will most likely be focused on the development of web leads, with the end aim being to have someone speak to a salesperson. Your website and the other digital platforms that support it should be used as part of your marketing plan to attract and convert potential customers into leads of the best possible quality.
- **B2C Digital Marketing:** If your firm is business-to-consumer (B2C), the goal of your digital marketing activities should be to attract visitors to your website and have them become clients without ever having to speak to a salesperson.
- **Website Traffic:** By utilizing digital analytics software, which is offered by marketing platforms such as Hub Spot, you will be able to observe, in real time, the

exact number of visitors who have viewed the homepage of your website. In addition, the number of pages they visited, the type of device they were using, and the origin of their traffic, which are all examples of data collected by digital analytics. This information enables you to choose which marketing channels you should spend more time on and which you should spend less time on depending on the number of visitors that can be driven to your website by each of those channels. For instance, if just 10% of your traffic is coming from organic search results, you know that you most likely need to invest some time and effort into search engine optimization (SEO) in order to boost that percentage.

- **Content Performance and Lead Generation:** Imagine that you have prepared a product brochure and sent it out to be delivered to people's letterboxes. This brochure is a type of content, even though it is distributed offline. The difficulty is that you don't know how many people looked at your brochure or how many people just threw it away without looking at it.
- **Attribution Modeling:** The process of tracing all sales back to a customer's first digital interaction point with your company is referred to as attribution modelling. This may be accomplished with an efficient digital marketing strategy that is combined with the appropriate tools and technologies. It enables the identification of trends in the manner in which consumers do research on and purchase your product, so assisting you in making better informed judgments regarding which aspects of your marketing strategy deserve greater attention and which aspects of your sales cycle want further refinement. According to Aberdeen Group, connecting the connections between marketing and sales is of utmost importance. Those that have good alignment between their sales and marketing efforts have a 20% annual growth rate in revenue, whereas those that have poor alignment experience a 4% decrease in revenue. If you can improve the journey that your customers take through the purchase cycle by utilizing digital technology, then it is likely that this will reflect favourably on the bottom line of your company. The technique of gathering information on a user's online activity over time, "on a given device and across various, unrelated websites, in order to serve advertisements that are targeted to that user's interests and preferences, is known as online behavioural advertising.
- **Collaborative Environment:** To maximize efficiency in terms of effort, resource sharing, reusability, and communication, an atmosphere conducive to collaboration can be established between the company, the technological service provider, and the digital agency. Many businesses are reaching out to their customers in an effort to gain a deeper understanding of how best to serve them. The majority of this information is obtained through company websites, on which the company encourages visitors to submit their thoughts and opinions, which are then reviewed by other users of the website. This strategy for gathering information and generating new products can help a firm strengthen its relationship with its clientele, as well as generate ideas that would not have been considered in any other circumstance.
- **Data-Driven Advertising:** Data-driven advertising gives companies the ability to locate their most devoted customers among their target population and to

communicate with those customers in a manner that is significantly more personal and highly relevant to each customer at every moment.

- **Remarketing:** In digital marketing, one of the most important roles is played by remarketing. This strategy gives advertisers the ability to place targeted advertisements in front of certain interest groups or specified audiences. These individuals are typically referred to as searchers in web parlance; they have either conducted an online search for a specific product or service or have visited a website for some other reason.

III. ARTIFICIAL INTELLIGENCE

The field of research known as artificial intelligence (AI) examines the application of computational processes to the performance of tasks that are typically performed by humans and need a certain level of intellect. Human intelligence can be demonstrated through a variety of means, including communication and learning. Both approaches call for specific mental abilities, such as synthesis, analysis, decision making, judgment, organizing, reasoning, hypothesis testing, and interpretation, among others. Knowledge must be represented, searched for, perceived, and inferences must be drawn in order to have artificial intelligence (AI). For artificial intelligence (AI) to be able to provide results, it must first define and read the data in forms that are conducive to representation and processing. That can only be accomplished by diligent research and deductive reasoning. In reference to searching, there must be advanced search algorithms in order to locate the best possible answers. After that, conclusions are reached regarding each circumstance. The method by which artificial intelligence (AI) leads to decision making begins with the selection of data, continues with pre-processing data, follows with data transformation, and then data mining plays an important role in the entire process. Results evaluation, which comes at the end of the process, is what ultimately leads to decision making.

1. **Artificial intelligence (AI) and Digital Marketing in Business:** According to Domo.com, users of the internet produce 2.5 quintillion bytes worth of data each and every day. There must be a means to personalize data and target audiences in order to enhance conversions and revenues given the fact that customers' attention is diverted by the enormous volume of adverts and data that is spread across all marketing channels. Increasing a company's sales can be accomplished by optimizing the digital marketing campaigns, channels, audiences, and markets, monitoring the impact on consumers and revenues, and working to improve customer happiness by developing personalized content.

Artificial intelligence (AI), data mining, predictive modelling, and machine learning generally tend to please marketers by assisting them in identifying strengths, weaknesses, opportunities, trends, and market demands, as well as helping them study users and target audiences. Processing data in a way that is both effective and efficient will allow for the classification of customers' demands, which will boost ROI, customer happiness, and growth. Data obtained from websites, sales, analytical reports, and social media insights are all sources of data that are used as inputs by artificial intelligence (AI), which then undergoes processing to produce outcomes that are optimized, accurate, and highly predictive.

2. How AI works on Digital Marketing Models- Example- RACE: Artificial intelligence (AI) successfully ‘runs’ the RACE providing data-based intelligent decision applications.

- **Reach:** Smart material Curation recognizes, categorizes, and recommends material based on the products that have been previously purchased. Advertisements are served to the users who are the most relevant to the target demographics using a process known as programmatic advertising. The term "content creation" refers to writing apps that generate human-centric content based on tailored and optimized key phrases or words that activate specific groups of clients. The application of Natural Language Processing to voice searches and voice commands issued by personal digital assistants (PDAs) expands the consumer base that may be reached.
- **Act:** a tendency to act For the purpose of predicting future user behaviour, modelling involves collecting and processing massive amounts of data relating to the actions of prior users. Ad Targeting is a method of determining and predicting which adverts will have the highest impact on particular user groups at particular stages of the purchasing process. Customers can be predicted to behave in a certain way using predictive analytics before the buyer has even begun the purchasing process. Lead scoring uses data prediction analysis to determine the value of a potential sales lead and whether or not the work required to pursue the lead is worthwhile.
- **Convert:** Dynamic pricing helps identify potential customers who could benefit from an additional incentive to make a purchase. It makes financial investments, which causes a reduction in profits from one of its products, but it is successful in attracting more customers. Re-targeting allows for the creation of user profiles and the identification of those who are likely to return to a website in order to make a purchase. Personalizing the content and user experience of a website or app in order to boost conversion rates is what's referred to as web and app personalization. Chatbots mimic human conversation by providing responses to inquiries posed by users, making product recommendations, processing orders, and so on.
- **Engage:** Predictive Customer Service identifies and engages customers by contacting them with offers, coupons, and suggested information after they have completed transactions. This helps to grow the engaging audience and prevent customers from leaving the business. Customers are categorized by Marketing Automation, and then optimized material is created for them based on when they should be contacted, what phrases or words would trigger them, and what offers they should make to ensure the company wants to communicate with them. 1:1 Through the use of dynamic emailing, sophisticated marketing of products and services may be tailored to the recipients of the emails.

IV. ARTIFICIAL INTELLIGENCE (AI) IN DIGITAL MARKETING BUSINESS PLATFORMS

Some of the most representing AI software applications were researched and presented.

- **Artificial Intelligence Platforms:** Rank Brain is continually organizing search results and assisting Google in the processing of search queries. Siri responds to voice instructions in the form of answering questions, making suggestions, and carrying out tasks. Siri is customized for each individual user. Gupshup is able to send customized campaigns to clients who have been specifically targeted, enable transactions directly within the campaign, qualify leads and direct them to the appropriate sales person, automatically arrange appointments, and perform a variety of other functions. Meetcortex produces photo, video, and text material that is optimized for audience, and it manages to reach customers by deploying content at the appropriate times to drive outcomes [33]. This results in the creation of superior content by Meetcortex. Atomic Reach provides value in terms of content marketing, has an understanding of what types of material drive conversions, and creates content that is geared for this aim.
- **SAS provides solutions for intelligent and automated predictive analysis through its Act AI Platforms.** Phrasee develops original, human-sounding marketing language for businesses all around the world. Evergage changes website visitors from targeted audiences into customers and enables users to communicate with one other individually, all while simultaneously generating leads.
- **Transform all AI Platforms.** Sentient Ascend offers excellent conversion rates through the customization of websites and applications as well as through the use of intelligent website testing. Messenger Chatbot gives businesses the ability to construct chatbots, which can then be used to increase brand recognition, gain new consumers, facilitate transactions, and more.
- **Participate in AI Platforms.** Seventh Sense sends personalized marketing emails to each of its clients at the most appropriate time and frequency. It determines the requirements of the customers and sends emails at the times when they are most likely to be opened and reacted to.

V. CONCLUSION

The results of this study demonstrated how adaptable artificial intelligence (AI) may be in the everyday lives of humans. It is a potent branch of computer science that has applications in every science, and while it can be helpful to some people, for others it can be harmful. As a result, there is a need for groups that work toward the goal of preventing artificial intelligence (AI) development from becoming primarily focused on the commercial sector. The use of artificial intelligence (AI) is another excellent solution to challenges in digital marketing. Because of the involvement of artificial intelligence (AI), the success of digital marketing is dependent on the appropriate storage and treatment of data, the creation of tailored content, the selection of targeted audiences, the provision of adaptive services, and the achievement of the optimal time. The collection, analysis, and interpretation of data enable businesses to offer their wares to the right people at the right time using the right language and with the right message. High revenues are consistently achieved by marketers.

Either business put their money into research centres that can supply them with apps, or they create their own research laboratories in-house in order to perfect their digital marketing strategies. Customers take pleasure in high-quality content, services, and overall experiences. The pace of digital marketing is more dynamic than it has ever been, and it generates sales seemingly out of thin air. The application of artificial intelligence (AI) in the

field of marketing carries with it a number of additional advantages. There has been a decline in the rate of unemployment, and daily additions are being made to the labour force. The creation and processing of data results in the birth of new knowledge, which presents a once-in-a-lifetime opportunity to provide clients with products that meet their genuine requirements while simultaneously conserving the resources of the world.

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