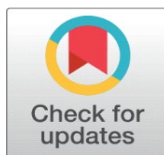
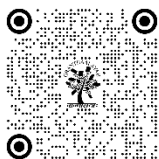


# THE EFFECTS OF ARTIFICIAL INTELLIGENCE ON DIGITAL MARKETING

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## ABSTRACT

Artificial intelligence (AI) has emerged as a key way to improve digital marketing. AI can help marketers build better products, deliver faster and more relevant advertising to customers, and better understand their audience's data patterns. Brands are using AI in marketing to craft more personalized customer experiences across all channels, from email campaigns to social media posts. It can help marketers better understand how their audience interacts with their brand and what types of messaging will resonate most effectively. At the same time, brands struggle to find a balance between using AI and remaining transparent with customers. As more companies invest in AI-powered products, customers will expect more transparency around how these technologies work—and what they mean for privacy. AI can be used in various ways, from improving website navigation to using computer vision to create more targeted ads. AI is integrated into many digital marketing tools marketers use daily. It can help them with things like social media management, graphic design, content creation, and keyword research. It can also help them with things like customer service and lead generation by automating repetitive tasks. AI might be able to answer simple questions about company products or services without any human intervention. AI has potential to make marketers' lives easier in the future by automating many of their current tasks and providing insights about consumers. In this study, content analysis and interview methods were used to analyze various AI tools used in digital marketing and how they can improve the projects of digital marketers.

**Keywords:** Digital Marketing, Artificial intelligence, Tools, Impact, Future

## 1. INTRODUCTION

In the realm of Digital Marketing, AI has a profound impact by enabling marketers to collect and analyze vast amounts of data to make informed decisions about their marketing campaigns. AI algorithms can be used to predict consumer behavior, personalize advertisements, and optimize website content for search engines. Marketers can also use AI-powered tools to automate repetitive tasks, such as email marketing and social media management, freeing up more time for strategic thinking and creativity.

AI is also transforming the customer experience by offering real-time personalized and predictive recommendations. AI-powered virtual assistants can

make product recommendations based on a customer's previous purchases. These advancements in AI are making it easier for businesses to connect with their customers and provide a seamless shopping experience. AI technologies can automate routine tasks such as email marketing, social media posting, and ad targeting, freeing up time and resources for more strategic marketing activities. This can also help businesses to scale their marketing efforts and reach more customers with less effort.

Predictive analytics involves using historical data and machine learning algorithms to predict future outcomes and trends. The usage of predictive analytics to gain insights into customer behavior and preferences, and optimize their marketing campaigns accordingly. It can be done by analyzing customer data, businesses can identify patterns and trends in customer behavior, such as the products they are likely to purchase, the time of day they are most likely to make a purchase, and the channels they prefer to use for communication. By leveraging this data, businesses can develop targeted marketing campaigns that are tailored to each customer's preferences, increasing the likelihood of a successful sale. Additionally, predictive analytics can be used to forecast demand, optimize pricing strategies, and identify new market opportunities. [Artificial Intelligence for Marketing: Practical Applications. \(2017\).](#)

Digital marketing plays a crucial role in helping businesses to gather valuable insights about their customers. By tracking customer behavior and preferences across multiple digital channels, businesses can gain a deeper understanding of their target audience and develop more effective marketing strategies.

## **1.1. DIGITAL MARKETING**

Products and services are advertised through digital platforms like search engines, websites, social media, email, and mobile apps. Search engine optimization includes a variety of techniques and strategies, including content marketing, influencer marketing, social media marketing, and others. (SEO). Through online channels, digital marketing seeks to connect with prospective customers and encourage conversions. The benefit of digital marketing is its capacity for mass audience targeting and real-time analytics tracking of marketing campaign performance. [Barone \(2022\).](#)

Digital marketing encompasses a wide range of marketing activities that are executed through digital channels. Digital marketing includes the following types:

### **1.1.1. SEARCH ENGINE OPTIMIZATION (SEO)**

A website is optimized for SEO to appear better in SERPs for particular keywords. By enhancing a website's visibility and ranking in search engine results pages, SEO aims to boost organic traffic to that website.

SEO experts employ a range of strategies, such as technological optimization, off-page optimization, and on-page optimization, to accomplish this. A website's content and architecture, such as its headlines, meta descriptions, and internal connections, are optimized as part of on-page optimization. Technical optimization enhances a website's technical features, such as its crawl ability, mobile responsiveness, and loading speed. Off-page optimization entails obtaining high-quality links from other websites to increase the website's backlink profile. [Barone \(2022\)](#)

### **1.1.2. SOCIAL MEDIA MARKETING (SMM)**

SMM, or social media marketing, is the process of promoting a good, service, or company on websites like Facebook, Twitter, LinkedIn, Instagram, and Pinterest. SMM aims to raise brand recognition, increase website traffic, and interact with customers and followers.

To interact with followers and advertise a business, SMM entails producing and sharing content on social media, such as images, videos, and text posts. Additionally, it entails interacting with customers and followers, reacting to messages and remarks, and keeping an eye on metrics to gauge a campaign's effectiveness.

### **1.1.3. PAY-PER-CLICK (PPC)**

An online ad that rewards advertisers when their ads are clicked is known as a pay-per-click ad. PPC advertising is frequently used on social media sites like Facebook and LinkedIn as well as search engines like Google and Bing.

PPC advertising makes use of keywords and phrases that marketers can bid on and are pertinent to their intended market. A list of sponsored ads is shown at the top or foot of the search results screen when a user searches using one of these keywords.

### **1.1.4. EMAIL MARKETING**

It is a form of digital marketing that entails using email to distribute marketing materials or ads to a large audience. Building relationships with customers, promoting goods or services, and boosting revenue are the objectives of email marketing.

Typically, email marketing campaigns involve sending periodic newsletters, sales offers, or product updates to a group of subscribers who have agreed to hear from the company via email. Email marketing needs a targeted user list, compelling emails, and a call-to-action that inspires subscribers to act if it is to be successful.

### **1.1.5. CONTENT MARKETING:**

The objective is to attract, retain, and drive profitable customer action by creating and distributing valuable, relevant, consistent content.

Providing valuable information and resources to the target audience is the goal of content marketing, not selling products or services directly. This can include blog posts, videos, infographics, e-books, case studies, and other types of content that provide value to the audience and educate them on the products or services offered by the business.

### **1.1.6. AFFILIATE MARKETING**

It is a form of performance-based marketing where a business pays affiliates for each client or transaction brought in as a result of its marketing initiatives. Affiliates, also known as publishers, advertise the business's goods or services on their websites, blogs, or social media pages in exchange for payment for any resulting purchases.

Typically, businesses give affiliates exclusive affiliate links that monitor the sales produced by their affiliate marketing efforts. Businesses gain from it by

becoming more visible and exposed, being able to reach new groups, and scaling their marketing initiatives without having to pay more money. Additionally, it enables associates to make money by endorsing goods and services that are appealing to their target market and align with their interests. [Emma \(2022\)](#)

### **1.1.7. INFLUENCER MARKETING**

To promote a good, service, or company, it entails working with people who have a large following on social media sites like Instagram, YouTube, and Twitter. Reaching a sizable and interested audience, increasing brand recognition, and promoting sales are the objectives of influencer marketing.

They will educate their followers about the goods or services offered by the business. Influencers use their platform to produce paid content, such as blog posts, social media posts, and videos, that promote a business's goods or services and nudge their followers to act. [Frankenfield \(2022\)](#)

## **1.2. ARTIFICIAL INTELLIGENCE (AI)**

Artificial Intelligence (AI) is a field of computer science that aims to create machines with intelligence that mimics human-like abilities. AI is the process of creating computer programs and algorithms that are capable of carrying out operations that usually require human intelligence, such as comprehending natural language, identifying objects in an image, making judgment calls, and solving problems. [JumpStory \(2022\)](#)

Based on its capabilities, AI can be divided into several kinds. Reactive machines can only respond to environmental changes, whereas machines with limited memories can draw on their prior decisions. The goal of the still-evolving theory of mind AI is to build tools that can recognize and react to the feelings and mental states of humans. The most sophisticated form of AI is self-aware, which entails giving machines a sense of consciousness and self-awareness. [Jasper. Ai: Jasper is a Leader in Creating Content Using Artificial Intelligence \(n.d.\)](#)

Virtual personal assistants, recommendation engines, fraud detection, and autonomous vehicles are just a few of the useful uses of AI. However, there are also moral and societal issues with AI, such as possible job loss and technology abuse. It is critical to take these concerns into account as AI advances and to work towards developing moral and accountable AI [Artificial Intelligence for Marketing: Practical Applications. \(2017\)](#).

## **1.3. ARTIFICIAL INTELLIGENCE AND DIGITAL MARKETING**

Digital marketing now makes extensive use of artificial intelligence (AI), which supports pay-per-click ads, website personalization, content creation, and behavior prediction. With 84% of organizations adopting or increasing their use of AI and machine learning in 2018, marketers are beginning to recognize the benefits of this technology. Businesses can use AI in digital marketing in two primary ways: backend tasks like forecasting product demand, creating customer profiles, and programmatic ad buying, and front-facing tasks like enhancing the customer experience to boost brand recognition and increase sales. According to 75% of companies, machine learning and AI increase customer satisfaction by over 10%.

The understanding and analysis of data and information are being revolutionized by artificial intelligence (AI). Because AI can recognize patterns and trends, it is increasingly better than people at predicting market trends. To save time

and resources, marketers and brands are depending more and more on machine learning and AI. [Porutiu \(2023\)](#)

Large data sets can be effectively analyzed by AI-powered tools, which can also spot patterns that are difficult for humans to notice. This makes it possible for companies to make data-driven choices that produce better outcomes and higher returns on investment. Artificial intelligence can automate repetitive chores for marketers and brands, freeing up time for more creative and strategic work.

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## **2. METHODOLOGY**

A qualitative method is used in this study and the data has been collected using descriptive study and semi-structured interview methods. Data has been collected based on the context of how AI helps to create, manage, and analyze digital marketing. The first part of the study provided the theoretical concepts based on secondary information from scholarly articles, journals, reports, books, and through the Google Garage course and the primary data collection was performed through the interview method. [Ryan \(2023\)](#)

### **2.1. OBJECTIVE**

This study aims to examine the present state of Artificial Intelligence in Marketing by analyzing its current impact and the future implications it will have. The primary objective is to gain a comprehensive understanding of how AI currently influences Marketing and its potential impact on the field in the future.

- AI tools that are helpful to digital marketers for optimizing content.
- Impact of AI on Digital marketing.
- AI is a boon or bane
- Future of AI in digital marketing

### **2.2. DATA COLLECTION**

To gather primary data and achieve the study objectives, qualitative interviews were conducted as the preferred method. The interview questions were not rigid and allowed for open answers, utilizing a semi-structured approach. These questions were based on the knowledge acquired through the literature review. Digital marketing Specialists were selected for the interviews via LinkedIn connections. [Sasikumar \(2023\)](#)

Digital marketing specialists were selected and interviewed through the Google meet platform. Notes were taken during the interview and later it is analyzed and summarized based on the objective. [Software Advice. \(n.d.\)](#)

## **2.3. AI TOOLS USED IN DIGITAL MARKETING**

Every day, new AI marketing tools are being developed that can help with time savings and allow for the creation of more individualized and intelligent strategies. A recent study found that 61% of marketers think that their data strategy's most important component is AI software [Crabbe \(n.d.\)](#).

With AI, marketers can examine consumer data, spot trends, and forecast future behavior while wasting less time and money. With the help of AI-powered tools, repetitive duties like data entry and analysis can be automated, freeing up marketers' time to concentrate on more strategic work. Businesses can offer more customized and audience-relevant campaigns by incorporating AI into their marketing strategies. [Sterne \(n.d.\)](#)

AI can also offer in-the-moment insights, allowing marketers to react rapidly to shifting trends and modify their campaigns as necessary. In the fast-paced world of marketing, where being able to react swiftly to new trends can make all the difference, this adaptability is essential. As AI technology continues to advance, we can expect even more significant breakthroughs and innovations in marketing.

### **2.3.1. EMAIL MARKETING**

#### **2.3.1.1. OPTIMAIL**

For highly individualized marketing, Optimail uses AI technology to monitor the behavior of each subscriber. The AI-powered tool can autonomously modify the content and timing of your campaigns to promote desired actions, from social sharing to making purchases, by analyzing subscriber data. You can anticipate greater customer interaction, higher conversion rates, and improved email deliverability with Optimail. [Types of Artificial Intelligence - Javatpoint. \(n.d.\)](#)

In addition to its capacity for content optimization, Optimail provides automatic features that take feedback from subscribers into account. Without the need for manual intervention, this makes it simple to send relevant emails at the right moment. Additionally, Optimail is a flexible solution that can grow with your company because it can be integrated with existing infrastructure and databases of any size.

#### **2.3.1.2. SEVENTH SENSE**

An AI-based tool called Seventh Sense uses behavioural profiling to help companies get their emails through their customers' cluttered inboxes and boost email open rates.

Considering that every client has a different taste, figuring out the ideal day and time to send an email can be difficult. By examining each contact's email reading patterns, Seventh Sense can determine when and how frequently emails should be sent out.

Users of Marketo and HubSpot will find this platform to be particularly helpful. Through HubSpot, Seventh Sense creates a predictive model for every contact based on their behavior across various sources.

### **2.3.1.3. PHRASEE**

Phrasee analyses data and produces millions of variations of natural-sounding copy that are consistent with your brand identity using Natural Language Generation, a sophisticated AI-based system. Each customer's language model is customized by the platform, resulting in content that is uniquely tailored to them.

The end-to-end model of Phrasee is one of its most striking characteristics. The platform's prediction model is rebuilt as you send the results back to it, enabling it to constantly learn from your audience and improve its predictions over time. You can use Phrasee to write topic lines for emails that draw readers in and increase email engagement rates.

## **2.3.2. CONTENT MARKETING**

### **2.3.2.1. WORD TUNE**

Wordtune is an AI-powered writing assistant that offers suggestions on how to improve your writing's authenticity, clarity, and engagement. It comprehends the point you're trying to make and makes tailored suggestions to improve your writing. Writing is no longer a lonely or tiresome job thanks to Wordtune. It allows you to write emails, documents, and instant communications that accurately convey your ideas.

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### **2.3.2.2. JASPER**

Jasper is a cutting-edge content platform driven by AI that enables people and companies to fully express their creativity. Jasper helps its over 105,000 constantly active users get past writer's block, repurpose their content, create unique artwork, and improve their writing style and tone. Jasper is at the forefront of offering cutting-edge solutions and paving the way in educating people on how to collaborate with AI as a creative partner as the demand for AI technology in creative sectors continues to rise. We're committed to assembling knowledgeable teams that will further transform the content creation industry.

### **2.3.2.3. WRITESONIC**

Writesonic is an AI-based writing assistant that enables users to create and publish any kind of content. It provides several tools that make it easier to create, modify, and publish different types of content, including articles, blog posts, landing pages, descriptions of eCommerce products, social media posts, and advertisements.

## **2.3.3. GRAPHIC DESIGNING**

### **2.3.3.1. MIDJOURNY**

Accessibility is an element that is becoming more important as AI art develops. A great example of this pattern is mid-journey. It uses the most recent machine learning and artificial intelligence methods to produce images from text input from

the user. With the help of Midjourney, producing graphic art is now more affordable than ever.

### 2.3.3.2. DALL-E

It is created by OpenAI, a machine-learning model that generates images using language cues. This method allows users to create realistic images from textual descriptions of scenes. DALL-E uses a neural network algorithm to generate precise pictures by analyzing brief phrases supplied by the user. The algorithm can comprehend language through textual descriptions and learn from data that users and developers have given in its datasets.

### 2.3.3.3. CHARLI

An AI-powered utility called Charli AI assists users in creating marketing copy for a range of applications, including social media posts, blog articles, email newsletters, and more. For marketers, authors, and business owners, Charli AI seeks to streamline and accelerate the content creation process.

### 2.3.3.4. AXIOM.AI

Without knowing any code, users can build apps for any website using Axiomi. Spending countless hours physically clicking, copying, and pasting is no longer necessary thanks to Axiom. Instead, it is simple to create bots without creating any code. With its no-code bot-building tool, Axiom makes it possible to perform button presses, automate form filling, and scrape data.

**Table 1**

Table 1 Digital Marketing Specialist Interviewed				
S.No	Name	Place	Designation	Specialization
1	Prarit Singh	Chandigarh	Digital Marketer	SEO, SMM, Designing, content writing.
2	Amit Kumar Pipersahaniyan	Bhopal	Web developer, Digital marketer.	SEO, SMO, SEM, SMM, Google Analytics, and Youtube optimization.
3	Santhosh M	Karnataka	Lead vulnerability management, Technology operations.	Service management, Risk management.
4	Hardik Singhaniaa	Chandigarh	Digital marketing specialist	SEO, SMM, Email marketing.
5	Nefertiti Artemis	Tamil Nadu	Graphic Designer	Social Media
6	Vasanth	Tamil Nadu	Lead Analyst	Analytics, Bing intelligence, Brand management
7	Ayesha Cincina	Tamil Nadu	Content writer	Blog, Website content.
8	Yogesh Balakrishnan	Karnataka	Groth Marketing Manager	Analytics and Operations
9	Suthan Rathinasamy	Tamil Nadu	SEO Specialist	Analytical skills, Affiliated marketing.



### **3. ANALYSIS AND DISCUSSION OF RESULTS**

After collecting results from various samples, data were represented and analyzed. The analysis noted a few points and was structured according to the research objectives. Initially, the samples began by listing a few benefits of using AI. Firstly, AI allows for storing data used which has seen great significance in digital marketing. It has its peculiar benefits in various other fields like planning and strategizing. One of the main benefits that were recognized in the study was that AI tools simplify the techniques and tactics of marketing. (S1, S4, S9). AI seemed to be highly useful in time management and optimization, which was quite helpful for the organization to grow and become competitive in this digital world. AI tools were not invented to increase unemployment, but rather to fasten the process of doing daily tasks. (S3, S7, S8) Many samples found AI to be very helpful in fastening the process of content creation, presentation, and design. (S2, S3).

#### **3.1. AI A BOON OR BANE?**

Conferring the pros and cons of using and developing AI, it was seen as both sides of a coin. Along with the myriad set of advantages, comes a list of consequences too. AI was seen as a boon in the aspects of time management, optimization, and enabling a faster process. (S2, S3, S6). AI tools like ChatGPT for content generation, and MidJourney for Visuals and references, have seen great significance in helping human minds in multiple ways. (S1, S5, S7).

While on the other hand, AI was indeed seen as a looming threat to many. With the rapid growth of AI and AI tools, it was reckoned to replace the very minds and works of humans. (S4). As the world is on its journey of being digitalized, the need for stronger data protection was recognized. Many samples stated the need for restriction of some strong privacy features to safeguard user privacy and enhance user experience.

#### **3.2. ETHICAL ASPECTS OF AI UPGRADATION:**

AI catalyzed many users, from different fields. It was seen to be helpful for many great things. But along the way, the need for taking up more responsibility while using AI with social concern was also seen by users. (S5, S7). Maintaining and regulating a certain set of ethics while using AI, was highly recommended. (S5, S7). The implementation of stronger privacy policies and self-updating on the upgradation of AI can come in very handy in maintaining the ethical aspects of the usage of AI.

### **4. CONCLUSION**

AI is revolutionizing digital marketing by providing new opportunities and techniques for businesses to enhance their brand quality. With AI becoming more accessible, companies are using it to analyze data, predict trends and develop a more customer-centric marketing approach. The traditional marketing model is being transformed by the integration of AI, which is automating manual tasks, improving productivity, and reducing human errors. AI will soon be able to assist marketers in decision-making by providing data-driven insights. Although human creativity will continue to play a crucial role in digital marketing, AI will undoubtedly change the way marketers approach their work, making operations more efficient and

productive. Ultimately, the content will remain the king, and humans will still be responsible for its creation and curation.

### **CONFLICT OF INTERESTS**

None.

### **ACKNOWLEDGMENTS**

None.

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