# A STUDY ON 'APPLICATION OF ARTIFICIAL INTELLIGENCE IN DIGITAL MARKETING'

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**ABSTRACT:**

In recent days there is a rapid change in Digital marketing. This changes helps business to take next level. Both product and service oriented business are efficiently developed and developing from the bottom line where their artificial intelligence takes its major role. In this Commercial world technologies leads in Analytics, mobile devices, automation and artificial intelligence (AI). AI changes the way of communication from the fundamental level.

Digital marketing throughout make the use of digital technology in order to boost the service level delivered to their customer's efficiency in their business. In marketing AI play vital role through search engine, smarter ads, refined content delivery, relying on bots, continued learning, preventing fraud and data breaches, image and voice Recognition, sales forecast, language recognition, predictive customer service, customer segmentation, etc.

## Application of Artificial intelligence in Digital Marketing

[**KERWORD**: Digital Marketing, Artificial Intelligence, Wight collar job, Blue collar job]

## I. INTRODUCTION:

Artificial intelligence refers to systems or machines that copy human intelligence to perform tasks and can repeatedly improve themselves based on the information they collect.

Digital marketing, also called online marketing, is the promotion of brands to connect with potential customers using the internet and other forms of digital communication.

Artificial intelligence is integrated into our lives, although many people are unaware of its presence. This misconception is evident from the fact that only 50% of responses from the PR Newswire (2018) consumer awareness study state that, they have never interacted with AI technologies and 23% are unsure whether they have ever interacted with AI. Technology. There are many examples of AI that operate in the background of modern technologies (smartphones, computers, smart TV's, etc.) revealing an apparent lack of knowledge about what consumers think AI is and how AI is applied daily. This paper presents the results of an exploratory study with a quantitative methodology, based on 15 interviews with specialists, which provided a better understanding of the impact of AI on digital marketing. The article presents the main aspects related with Artificial Intelligence and Digital Marketing, the used methodology, the analysis and discussion of results of the research

## II. Objectives of the study:

1. The aim of this study is to determine the Impact of AI in digital marketing.
2. Objective of this study is to analyse the influence of artificial intelligence and its uses in digital marketing by analysing how it is being used in digital market.
3. To identify the factors influencing the Artificial intelligence on Digital Marketing.
4. To forecast & predict succeeding potential of artificial intelligence in future.
5. To analyse the impact of Artificial intelligence on marketing world.

## III. The scope of AI in digital marketing:

AI has been making its presence felt quite strongly in the day-to-day digital world of today. With technologies like Chatbots and voice recognition helping businesses offer seamless customer service, it won't be too long for AI to mark the future of digital marketing.

### 1) AI Digital Marketing can enhance the user experience:

By using AI in digital marketing can customize the views of prospectus by predicting their behaviour, personal and search cycles. It also can be used in Chatbots to help the searchers to find what they are looking for and make it easier for them to take their purchase decisions.

### 2) Artificial Intelligence maximizes ROI (Return on Investment):

ROI can easily increase the marketing campaigns by using AI tools such as robotic analytics, CRM (Customer relationship management), and social data. It can personalize the sales messages through email in artificial intelligence applications to make sure it is reach the right target audience at the right time. Many brands are leveraging the power of Artificial Intelligence to personalize their email marketing campaigns according to user behaviour and preferences.

### 3) AI drives the right kind of traffic:

Artificial intelligence SEO (search engine optimization) techniques can help to drive the right kind of traffic to your website that leads to sales. Advertisement (Ad) platforms such as Google and Facebook have already started using AI digital marketing tools to identify people who are very likely to take the advertiser's desired action. These tools help in analysing user information such as their demographics and interests and identify the best audience for different brands.

## 4) Artificial Intelligence tools make search sessions easier:

Artificial Intelligence SEO (Search Engine Optimization) tools can make it easier for search engines to display the right results by tracking user behaviour and predicting their future decisions. The various tools such as SEMrush and Google Analytics also help in identifying and resolving on-page problems, analysing competitor websites, identifying growth opportunities, improving keyword list, and tracking and analysing traffic.

## 5) AI makes it easier to forecast sales:

The fluctuations in the market are one of the most important challenges that businesses find very difficult to handle. However, by using AI, they can predict the future trends of the market and change their marketing strategies accordingly. The data that the various AI tools gather can help businesses to set realistic budgets and make informed decisions that save them from a lot of inconvenience in future.

## 6) AI helps businesses expand:

By using email in artificial intelligence applications and the various AI tools on social media can help businesses reach out to the right people, depending on their demography, interests, and other aspects. By predicting user behaviour and analysing user preferences, AI helps businesses display the right ads to the right people at the right time. While Implementing AI in digital marketing applications, such as email artificial intelligence applications and artificial intelligence SEO tools, is the best way for businesses to solve their customer issues and enjoy a competitive edge in the market.

## IV. Methodology:

This research helps to study how Artificial Intelligence is affecting the field of Digital Marketing. This part is also going to look on what interviewers think about the future of Artificial Intelligence, and how it is currently used in Digital Markets. The literature review provides a comprehensive analysis of the concept and material to build a theoretical framework around Artificial Intelligence and Digital Marketing. For a thorough basis on the information needed to complete the research question with Different personalities that have knowledge about the field of marketing with implementation of AI.

## V. Factors influencing Artificial Intelligence on digital Marketing:

## 1. Customised experience:

Every customer appreciates personalised items, whether if they are gifts, messages, or special offers. Every business aims to delight its customers by providing them good satisfaction. It's veritably crucial to facilitate the collection of consumer information for this purpose, and also to invest in Artificial intelligence. Artificial intelligence is used to analyse the customer behavioural patterns, which Enables businesses to customise their own products as required.

## 2. Real-Time Reaction:

By using Artificial Intelligence in businesses helps to keep consumer's loyalty. Customers prefer services or products that help to address their issues in a timely manner. For example, AI Chatbots allows the User to provide a quick response and solution. Some chatbots are provided with sensory abilities including such as touch and voice. Customers like this, because it provides them the almost direct experience and they do not even feel like they're having conversations with a machine.

## 3. Customer Behaviour Prediction:

Artificial intelligence not just personalises the customer satisfaction, but it could also predict behaviour of both, the existing and new customers. Artificial Intelligence can collect user information from across the internet by utilising Data Management Platforms (DMP). This is not focused on a single visit to your Website. This will allow the company to personalise their services based on the needs and wants of the customers and also target potential customers and generate more effective marketing strategies. The procedure of AI is collecting, assessing, evaluating, and interpreting the information is always evolving, and with time, the accuracy in this area will enable a business to predict their sales and also ROI (Return on investment) and find success by their effort.

## 4. Increase the return on investment:

Return on investment is an ability to perform image quality recognition, artificial intelligence aids in Improving ROI. This, throughout turn, enhances the company's revenue. It moreover enables in the resolution of many security problems and ensures that payments are made as quickly and efficiently possible. The machine learning technique is used to acknowledge a user's behavioural patterns, and then a personalised campaign is generated for the destination. AI drives business with personal Information, which allows businesses to customise their products and services. It also helps in saving the Business a lot of time and money that would have been spent on unengaged customers.

## 5. Enhance the Search period:

Technology had also advanced to the point where it has benefitted greatly users as well, they seem to be smarter users are looking for a variety of tools or applications that can provide them to high-quality products and services. As a moment, businesses must integrate AI into their strategies.

## 6. Advertising:

When it comes to promoting their products and services online or offline, businesses are depending on Advertising. This seems to be an important factor and since it can be used to completely exterminate the majority of the manual labour. Customer data is extremely beneficial, particularly when it comes to providing unique advertisements. The AI tool evaluates all the data collected from customers and indicates their areas of interest. This provides a framework for some business advertisements, by allowing them to easily complement the desires of their prospective customers. This gives businesses an Advantage over their competitors in the market.

## 7. Search Engine Optimization (SEO):

Search engine optimization implies to have one of the greatest possible editions of scientific. In terms of search engine Marketing, or SEO, the large number of related scientific tends to work concern evolutionary Computations, misty intelligent systems, machine learning techniques, and web-crawlers for reading, Collecting, and analysing website data, with both the purpose of improving website page ranking positions in search engine results by integrating ranking factors in an intelligent learning model.

## 8. Social Media Marketing:

Social media marketing (SMM) is a form of internet marketing that uses social media apps as a marketing tool.

These social media platforms enable brands to connect with their audience to:

- Build a brand.
- Increase sales.
- Drive traffic to a website; and Build a community of followers to share and engage with content.

Producing relevant content that users will share with their own networks which helps the brands to increase their display. Digital Marketing is a Content Creation, and Prescriptive Marketing of Scientific research that explores data extracted from blogs, websites, e-commerce sites, and social media through using data mining, specifically deals procedures, text mining, and machine learning based including such extractive summarization, expert systems, customer decision support systems, text analysis, and predictive Analysis.

## 9. Pay-Per-Click (PPC) and Advertisement Targeting(ad):

Artificial intelligence is used extensively in scientific research for bidding and ad targeting through the use of optimized advertising models. It analyses criteria that allow one to assess the importance of the various factors on the probability of clicks and conversions. Artificial intelligence provides new information and reveal hidden trends.

## 10. Chatbots:

While compared towards other digital marketing methods, chatbot research has made digital Marketing effective. From health care, education to digital counselling as well as insurance, there seems.

To be a significant ongoing research effort to build automated robotic simulation software that interact with humans by utilizing AI fields such as decision support systems, neural networks, autonomous exploratory procedures, etc.

## 11. Semiology Search:

The scientific research is far exceeded similar aspects of business sector that includes a high volume of Scientific publications referring to search engines, information retrieval, world wide websites, data Mining, social networking, internet, learning algorithms, machine learning, information analysis, natural Language processing systems, query processing, information management, decision support systems, User interfaces web searches etc., which refers to web development. More than 2000 publications have been described in the web technologies and optimized versions. From web design and web development to web application, web services, mobile friendly websites and data representation, artificial intelligence is involved in an effort of optimizing procedures in web development.

## 12. Voice search:

Most research refers to voice search and digital marketing is infrequent and limited. However, in other scientific fields makes an impressive progress. Most important research referring to marketing includes Personal voice assistant technologies and speech recognition providing flexible interaction technique where the user and the system act as equal participants having the ability to facilitate precise and Unambiguous answers in web queries.

## VI.    Applications of Artificial Intelligence in Digital Marketing:

Earlier Digital Marketers were reluctant regarding the usage of AI in Digital Marketing but with the Growth of AI and its results of AI has proved that it will bring dynamic changes in the marketing world.

## 1) Generating Content:

Machines can now create content from scratch based on data fed in coding. These can be helpful to save time and resources. AI can write reports and news based on data and information. Automated Journalism is now used by many leading news giants like BBC news, The New York Times, Washington Posts and more. Also, Facebook uses AI to remove fake news.

## 2) Product Recommendation and Content Curation:

Not just creating content but helping recommending products and services based on the user's search, Interest and behaviour. Artificial intelligence can rightfully understand the behaviour of the targeted audience and what is better than finding the right products or services that you are already looking at.

## 3) Use of AI Chatbots:

We are aware of automated responses used by businesses to solve customer queries and also used in Data collection, keeping the audience updated about products and services. They can serve clients 24/7 and retain their data for future use. Also, the applications of chatbots are huge and the amalgamation of Chatbots with Artificial Intelligence and Machine is the new game changer.

## 4) Web Design

Without the help of a programmer or a designer, you can still have your website through the use of Grid, that uses Artificial Intelligence to do the work for you based on the information provided like images, Text, calls-to-action, etc. they can make the website look professional in much less time and at affordable Price.

## 5) Predictive Analysis:

Artificial Intelligence uses data to make probable future projections. Predictive analysis is just the use of Data, statistical algorithms, and machine learning.

## 6) Digital Advertising:

Digital Advertising is widely using Artificial Intelligence to ensure maximum success, it is being used across platforms like Facebook, Google, and Instagram to provide the best possible experience. Analysing User information like gender, age, interest, and other aspects to show them relevant ads. With the help of AI technology, marketers can spot micro trends and even predict trends. They can then make strategic Decisions as a result; brands can reduce digital advertising waste and ensure that them spend delivers the best possible results.

## 7) Online Search engine:

The way of searching content has changed and marketers will need to create and change content accordingly. New innovations include Voice Search and Google's algorithm and other AI advances. Other Innovations include Amazon Echo, Apple's Siri, Microsoft's Cortana, and Google Home where they can perform searches just by voice command or pressing a button.

## 8) Email Marketing:

Brands are customizing emails to reach their target audience with the power of AI. They can now personalize content based on customer behaviour and preferences. Machine learning or automatic Learning can now determine the best time and days of the week to contact the user, the recommended Frequency through analysing millions of data. Now they can understand which content catches most Attention and which subject and titles get more click.

## VII.   White collar and blue collar jobs in AI:

This research suggests artificial intelligence and machine-learning solutions are automating white-collar professions at a high rate.
The jobs are:

1. Customer service executives:

Customer service executives don't require a high level of social or emotional intelligence to perform. Chatbots are not only becoming a significant part of customer interaction. They also support a lot of internal queries, among others.

2. Bookkeeping and data entry:

There is a chance you may not have heard of bookkeeping as a profession in a long time. Instead of using humans for data entry and bookkeeping, it makes sense for AI and ML (Machine Learning) to be introduced in the product cycle.

3. Receptionists:

And with auto check-ins in both large and small hotels, there will be a lesser need for receptionists in the long run. Nowadays, even in fast food joints, people can place orders through communication screens or tabs. With AI's introduction, there is a good chance that robots can handle ordering and other related functions.

4. Proofreading:

While editing is a more complex job in terms of tonality, comprehension, and others, proofreading is much simpler. Detecting grammatical mistakes, sentence construction, and other errors can easily be automated through different apps.

5. Manufacturing and pharmaceutical work:

This sector is probably the most extensive area where people are scared that AI will take over jobs. When the production process for most commodities produced today has been mechanized, the operational aspect can also be handled by AI.

6. Retail services:

Automated services have replaced people who carry out the way sales. Robots are replacing retailer jobs in many shopping conglomerates to understand customers' patterns. Moreover, the advanced data analysis of AI machines shows other products that customers might be interested in in the future.

7. Courier services:

AI has introduced many social and economic changes to the delivery industry. It has streamlined various logistics and supply chain functions. Drones and robots are already taking over courier services. Aside from the manufacturing industry, the transport sectors will be most affected when robotic automation booms in the future years.

8. Doctors:

We are witnessing robot-surgeons perform critical operations worldwide, and it's only a matter of time before they completely replace us. Robotic doctors will make more accurate and effective treatments for the patients compared to their human counterparts. There is also less chance of infection due to more sterile measures and no room for human error.

9. Soldiers:

Military professionals are sure that future battlefields will consist of robots that can follow orders without constant supervision. Robots are significantly being used in military operations for various tasks such as surveillance, intelligence, and many more.

10. Market research analysts:

Research analysts are crucial for every organization. They conduct market research to increase the performance of their business. AI-enabled robots are gaining popularity in this sector because of the comprehensive data that they provide.

      The jobs which cannot change by AI

Psychologists, caregivers, most engineers, human resource managers, marketing strategists, and lawyers are some roles that cannot be replaced by AI anytime in the near future.

## VIII.   SUGGESTION:

Artificial intelligence is transforming the business through technology such as big data, Machine learning, and perfect solutions. Companies alter their business practices to become more responsive, productive, and competitive. Technological advancements have always created new Marketing opportunities.

A major way that artificial intelligence can transform the digital marketing space is by providing an improved user experience. Technological updating always helps business by creating new opportunities to reach customers. AI not only leads Marketing, but also plays a major role in Banking, Financing, trading etc., Today, AI (artificial Intelligence) impacts numerous aspects of life in the form of smart devices, chatbots, and even Self-driving cars. All of these are designed to understand consumer needs and preferences and Deliver customized customer experiences. This is mainly because the use of AI Digital marketing strategies can help us to afford improved customer support. More than that, they can help us to save both time and money.

## IX.   CONCLUSION

Artificial Intelligence and technology are one side of the life that always interest and surprise us with the new ideas, topics, innovations, products etc. AI is still not implemented as the film representing it (Intelligent robots), however there are important tries to reach the level and to compete in market, like sometimes the robots that they show in TV. Never the less, hidden projects and the development in industrial companies.

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