changing landscape of digital marketing with evolving artificial intelligence technology

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abstract

In the current scenario with rapidly changing situations of technology, Artificial Intelligence has established itself in the world. When the world AI is heard by the general audience the first thing that comes in mind is Siri and Alex or multi-Billion-dollar project like Tesla, all these projects have gazed and engaged the audience with the fascinating world of AI. But facts to be noticed that AI is not only Siri or Tesla but it goes way beyond this, it is software which is capability of replacing a human doing its jobs. This powerful analytical software is used on daily basis, to do daily works within a blink of an eye. And with rapidly evolving digital landscape, with connectivity between Digital marketing and Artificial Intelligence (AI) is giving a new shape to the business to connect to masses. As more and more evolving the technologies are provided to a marketer the more the usage and benefits is provided to the consumers.

Not only digital marketers but content marketers, social media marketers to SEO Specialists are including a way to use AI in their day to day working, they ditched the old strategies and working and now they had adapted to technological advancements with AI. One of the most evident shifts is using of AI tools like ChatGPT, Jasper, GrammarlyGo etc, marketers have learned to emerged some the data generated by these tools. Not only this with recent upgrades these tools also help in facts checking and data analysing.

This paper will deal how with new and constantly evolving AI technology is emerging into the world of digital marketing. It also makes a point in how marketers are constantly using AI tools into their works and findings. Not only this but this paper will also put-up light on the changes that is taking place in the software and its effect on the digital marketing as a whole.

introduction

Digital Marketing is one spectrum where Artificial Intelligence (AI) has become a disruptive force. Even in general marketing strategies with technological evolution has been affected at a larger scale. Digital marketing fosters high level of artificial intelligence (AI), which has been crucial factor in unleashing a new wave for the marketers to optimize their creativity. It is very evident that last decade has shown a very rapid development in technology and its applications. In this world the generic marketing is based on data-driven, automation and intelligence of the technology and new trends in the economy. With introduction of AI, the world if digital marketing has been transformed into more efficiency and accuracy in terms of productivity. AI not only allow marketers to enhance the efficiency and effectiveness of their work but also demonstrate
the potential of revolutionizing how marketers operate significantly. Furthermore, it’s been easy to say that AI is the future of marketing, as AI enhances the strategies of how a marketer works on day-to-day basis.

In today’s generation, having an access to unlimited internet, which has further led in rise on internet users, business turning into online/ electronic mediums to engage more consumer base to boost their business. In every business there is a point where its mandatory for a business to expand and invite new strategies, now here comes a very important role a marketer to play. Now a marketer not only have to work inside but also have to implement plans and strategies to expand the business, in this process sometimes the credibility and creativity goes head on head with each other, which furthers lead to blurring the line between them. When the line comes to a vanish point, tools like AI help the marketers to be accurate by maximizing their time and efforts providing efficient results. AI not only add value to business but also to the marketers. Now a days big organization highly depends upon AI when it comes to operating on big data and their computing powers. As AI has evolved over the years, they are not equipped with ability to investigate and analyse big datasets, identify new patterns, make future predictions and also to make decisions with minimizing human interference. On the other hand, Digital marketing is based more on its dynamic nature and accuracy of its real-time information, that stands to benefit on a larger scale to being benefitted by AI.

In other words, this research paper deals with current and potential relation between Digital marketing and AI, which can also be put in words to understand the relationship between two very different yet scientific roots of marketing and computer science. The interaction between these two worlds in terms of academic is very expressive, it’s more like how on same time machine learning is being incorporated in the dynamic world of digital marketing.

Over the years, it has been found that the proliferation of Artificial Intelligence has a great influence on the world of digital marketing, by introducing to a completely new era where everything is characterized by data-driven insights, enhanced personalized, and automation optimization. For business to sustain in competitive markets it’s important to use Digital marketing as in this dynamic and interconnected environment, with development of technology it has altered the fundamentals of how a company interacts with their target market with further signifies a very crucial transition in the world of digital market. With introduction to newer and advance technology, it has revolutionized the world of digital marketing by developing more efficient and effective strategies to apply in the real case scenarios.

In the digital era, with increasing use of internet and mobile usage it has made a significance change in how a business can be operate. Digital marketing the essential component of any marketing strategy and with technology it has now become very crucial for any company to adapt with the change. The momentum AI has gain over its significance development has tremendous in the area of marketing. In today’s business scenario its very evident that AI is playing very crucial role. If practitioner and academician are to believed AI is the future of the society. And even as a user, the usage of AI is in almost everything, from ordering from a shopping site to needing assistance in any sort of daily work AI plays a very crucial role. Digital marketing as whole has been adversely affected by the introduction of AI technology, it has changed the way companies do their business, engage with their targeted audience and it is also opening the doors of data driven and well customized marketing campaigns. With AI and AI driven technologies it has made been very convenient for the companies to use and handle big data, analyse and compile complicated data, to monitor the data trends and insights and automating more machine learning.

Aim and Objective of the Paper

This aim and objective of this research paper is:

1. To understand the current emerging trends in AI.
2. To analyse the impact of AI on Digital Marketing.
3. To understand and analyse AI application used by marketers.
4. To identify challenges and ethical concerns related to AI used by marketers.

Review of Literature
In various literature, AI has been mentioned but the but most definite definition highlighting the idea of programming of the non-human intelligence to carry out certain tasks. John McCarthy termed “Artificial Intelligence” (AI) in 1955, “the science and engineering of creating intelligent machines.” Over the period of time many studies have been conducted where it has been mentioned that machines have been trained to behave intelligently, but somehow the objective has been changed now-a-days to teach the machines to learn to act somewhere near what human does. In over 20 years, Digital Marketing has become very popular among the marketers due to the advancement and introduction to new marketing strategies and availability of new and upgraded internet-based platforms. As Taherdoost et al., mentioned in his study in 2014 “Digital marketing is commonly referred to as internet marketing, e-marketing or online marketing, and these terms are interchangeable.” On the other hand, Hanelein & Kaplan in 2019, defined AI “as a system’s ability to interpret external data correctly, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation.”

Digital marketing is now becoming a very significant key for the business who are looking to obtain themselves in competitive advantage in this dynamic world of marketing (Beig and Khan, 2018). It’s very evident to say that people have shifted from real world to virtual world, which further indicating the way companies evolved and used social media, email marketing, software etc in order to maximize their profits in long run.

Research Methodology

For this research paper, as it is more oriented towards Artificial Intelligence and Digital marketing so the use of mixed-approach was applied in order to collect the data. This questionnaire is created and then circulated to the digital marketer who are working in the industry and uses AI on daily basis. This research paper has also taken the data from existing research papers available on the internet.

This research paper majorly focused on collecting data which is the primary data i.e. Questionnaire the sample size is 40 samples collected from working professionals, who has been working in and as Digital marketers and have incorporated Artificial Intelligence in their professional life on day-to-day basis. Then further, studied existing research papers on topics related Digital marketing and Artificial Intelligence, some of these existing researches were also covering both in aspects of each other. This further made sure that quote the researchers and give credit to existing studies. In order to collect data for the questionnaire, an initial attempted was made to contact the digital marketers through social media platforms majorly LinkedIn, Instagram and Facebook.

Let us further drive into the world of Digital Marketing and Artificial Intelligence.

Digital Marketing

Over two decades, digital marketing has been quite popular due to internet advancement, new marketing strategies and availability of internet platforms. Which further results in marketers and new business taking digital marketing as a way to grow and promote their business, make it more tailored based on their clientele. With digital marketing, marketers take first mover advantage in developing new and improve marketing strategies. In India over the years, Digital marketing has seen unexpected growth and if data is to be believed it will only trend of digital marketing will only see tremendous growth.

Digital marketing, also commonly known as Internet marketing, e-marketing or online marketing (Taherdoost et al.,2014). In other terms it refers to all the marketing activities that happens through the medium of internet, happening online including all kinds of communications and promotion channels which are used by business professionals specifically marketers to existing and pre-existing customer base. It also involves the promoting and advertising of all the kind of services and products through different channels of distribution with a creative and new ways of marketing (Todar, 2016). Digital marketing is considered as the most cost effective and efficient way to targeted audience. With digital marketing people are shifting from real world to virtual world, as it’s a rapidly growing industry and with digital marketing companies, social media platforms, software and robots are on a constant race of outperforming each other (Busca, 2020).
Digital marketing is a very elaborate term which includes all kind of marketing trends and strategies that can connect customers to the business through the medium of internet. Business use digital marketing as a medium to objectify their means to reach larger customer base by using email marketing, websites, social media profiles and focused adverts.

With a doubt digital marketing is a core is about internet and how it utilizes internet as whole in its different mediums like electronic devices, social media, search engines and all the other channels to potential reach all the targeted markets. It acts as a frontier for different tools like advertising, promoting, marketing and it helps in sustaining changes in business across all the platform in and around the world. The dynamic evolution of the digital marketing is very splendid, it has shifted from a very non-complex, easy following and generic content centric to more personalized and tailored as per the relations and engagement between the customer and the market. Digital marketing unable both online and offline promotion, brand building, brand equity and further helps in connecting different channels to the end user. It's very significant how digital marketing has transformed the way companies comply with communication and technology. It's very evident that over decade’s digital marketing is very prominent along with online marketing. The main of digital marketing is to help the customers to connect with the product and services offered by the company through digital mediums. It covers every aspect of marketing efforts that can be used by and electronic device or by the internet. By this business grasp different digital channels like search engines, social media, email and their websites to reach their target market. Many academicians and practitioners are to believed digital marketing can be defined by many different digital tactical terms and channels to connect with large base of the potential market and understand their behaviour to design a well-tailored marketing plan. Digital marketing has different methods like Search Engine optimization (SEO), Search Engine Marketing (SEM), influence marketing, email marketing, content marketing, content automation, campaign marketing, data driven marketing, social media marketing, social media optimization (SMO), e-commerce marketing etc along with direct marketing like advertising, e-books and optical disks which over the time are also being very advance in technology. With the change in consumer behaviour, it has led to change in overall marketing strategies from traditional marketing to digital marketing.

With digital marketing the main aim is to draw more brand awareness and generate more leads for a brand through digital mediums which can be free or paid. But in usual cases brand uses paid forms to generate more traffic to their websites. There are different channels like social media, websites, search engine rankings, email, advertising and company’s blogging sites etc by which brand uses digital marketing channels. There are many indicators known as Key Performance Indicators (KPIs) used by digital marketers across different channel to monitor the progress on different platforms. Each channel has different KPIs according to their algorithm of their selected channel by the marketer. Digital marketing is done in different ways by the companies of different sizes for instances small companies uses digital marketing as generic marketing specialist to use across different platforms, whereas big companies have different specialist across different platforms to manage different tactics of digital marketing. Digital marketers have a proper strategic plan on how and which channel a camping needs to be published and how different channel across social media will help them to generate traffic in order to promote a certain campaign for the company. Digital marketers use many different digital marketing tactics in order to create hype and engage audience, here are the list of tactics use by digital marketers:

- **Search Marketing Optimization (SEO):** It is way by which a website is optimized to “rank” higher on the search engine result page (SERPs), this increases the overall traffic of the website organically. There are many channels like website, blogs, info-graphics etc that get benefitted by SEO.
- **Social Media Marketing:** It is a way in which a company promotes brand content on the different social media platforms to increase brand awareness, drive traffic and generate leads for the company. Social media channels like Facebook, Instagram, LinkedIn, snapchat, Pinterest, Twitter etc are used by marketers.
- **Content Marketing:** It refers to the process of creating and promoting the content for lead generation, drive traffic and to increase brand awareness in the target market. Content creation can be done on different channels according to the selection of different social media platforms and websites.
Affiliate Marketing: It is a sort of advertising which is based on performance, in further you received commission for promoting someone’s else product and service on your website. It includes hosting video ads on YouTube program and also by posting affiliate links from your social media account.

Native Advertising: It refers to content-led advertising and featured on platforms alongside with non-paid content. Native advertising is also called Sponsored content, partner content and brand journalism. It is usually in paid form.

Marketing Automation: It is a software that helps to automate the server to operate on basic marketing operations. Usually, companies use this software to automate their tasks like sending out emails to potential clients and customers else all these tasks need to be done manually. Social media posts can also be posted by this software by scheduling the time and date of the post alongside it also do constant contact updates and also tracks the progress of campaigns.

Pay-Per-Click (PPC): It is a paid way of driving traffic to website by paying the publish to be pay every time the ad is clicked. Google Ad Words offers PPC, which further allows you to select the top slot on the search engine result page (SERP) at price, as the name suggest “per click”. There are many others platforms that offers PPC model like Facebook, Twitters and LinkedIn.

Email Marketing: Email is one of the most used ways to communicate with the audience about their product and services. It is often used to promote content related information along with links to drive traffic to the website. This kind of email marketing helps companies to connect with their client base very easy and quickly with less cost than any other marketing tools. It further helps company to nurture to their clients’ needs.

Inbound Marketing: It is a way in which a brand attracts, engage and delight customers by using online content. This is also called “full-funnel” approach. Inbound marketing as the same suggest it can be used in any of the digital marketing tactics along with inbound marketing strategy.

Digital Marketing gives a clear picture to the marketers in real time, it not only helps the marketers to efficient work with real time data but also helps to plan more strategical for future campaigns. With no doubt marketers with digital marketers can know the frequency by which the traffic is generated towards the website and also can calculate the sales made due to the traffic that has been generating over the time, meanwhile in traditional marketing its difficulty to understand if the traffic is generated by certain advertisement published in a newspaper. It’s very difficult to even monitor the percentage of sales that can be calculated while opting for traditional form of marketing. That where digital marketing has been taken over as crucial step for any company to add into its marketing plan. It’s not like digital marketing has also been very advantageous to the company, everything comes with its own pros and cons and so does digital marketing. Digital marketing is high dependent upon internet, anything and everything related to digital marketing is by the means of internet whereas internet is sometimes not available in certain areas either its poor connectivity issue or slow speed is a big hindrance in digital marketing. In this competitive market many similar goods and services it’s difficult for the marketers to come up different strategy but somehow, they end up having the same digital marketing and strategy as their competitors.

Digital Marketing campaigns have evaluation criteria and metrics depends upon the time and type of digital tactics. Usually, the types of digital marketing are further evaluated on bases of Qualitative and Quantitative. Quantitative includes the number of sales made by the traffic generated by the digital tactics whereas Quantitative is the brand image, awareness, lead generation etc it is usually on the basis the enhancement made to the website. The other matrix is the time span, there are two scales in which time is measured in two ways “Interim Matrix” and “Final Matrix”. With Interim matrix it tells us insights of the journey of digital tactics where as the “Final Matrix” tell us the overall progress and success of the campaign in the end.

It’s not a surprise with such advance technology, digital marketing always goes from different trends that come and go with time. These trends help the marketers to understand the market and the customer base. These days social networking platforms helps marketer to understand the buzz created by the new trends and how the audience is reacting towards it. And with social media its easier for the audience to even voice out their concerns, feedback and voice out their opinions regarding products and services. These
constantly emerging trends and techniques have big impact in this realm of digital marketing. Here are few of the trends:

- **Social Media Marketing**: As the name suggests, this kind of marketing is done by the mean of social media platforms like Facebook, Twitter, Instagram and other leading platforms act as a medium between the company and the audience.

- **Video Marketing**: It is one of the most popular ways of creating content. Long video and short video content is created by the creator in order to create buzz in the audience. Many companies use this way to engage audience and generate viewership on their content.

- **Influencer Marketing**: Influence marketing refers to a practice of promoting goods and service by using social media influencers. Influencers with vast following on the social media is used by companies to tap new audience for their product.

- **Voice Search Optimization**: As voice search optimization is highly used as voice assistances with websites incorporating it into their websites for better results for the users.

- **Personalization**: With digital marketing customization and personalization has been playing a very critical role. With business using data, analysing the marketing and customers behaviour makes more tailored content for more user centric results.

### Artificial Intelligence

AI has been a very well-known name in the industry, AI is nothing but the programming for non-human intelligence to carry out certain tasks. AI has been defined in many literatures but the most highlighted definition is the potential to define its own way, pave its own path, sets its own rules and unlock all the untapped potential in the industry. AI is a very futuristic concept but in reality, it is something that everyone has been using on almost daily basis for instance, asking Alexa and Siri to answer our questions or while finishing a statement google suggests words to finish a sentence. There are many more things that everyone is doing which is actually something happening through AI. AI has been transforming so many industries over decades and has been redefining the way in which the work is getting done. The term “Artificial Intelligence” (AI) is defined by John McCarthy in 1955, in which he describes it as “the science and engineering of creating intelligent machinery.” Over the period of time, many studies have been conducted where they have been trained to act intelligently, however with span of time the objective shifted towards making this machinery learn to act somewhere more similar like humans.

AI is commonly defined as “the way in which a system has the ability to elucidate outward data in a right manner, to learn from such data and to further use these outcomes to achieve specific goals and tasks through flexible adaptation” (Haenlein & Kaplan, 2019). Many practitioners and author said that AI is one of the most crucial technological developments, which further allowed humans to substitute manual labour with high level of mental capacity and cognitive functions in different industries, also to the physical support provided by the machinery (Chien et al., 2020, Kumar et al., 2023). AI is new and advance technology which empowers to replicate human intelligence and connect with its environment (Glikson & Woolley,2020). The term AI originated from two terms collectively, artificial meaning something which is man made and intelligence is applying knowledge and skills. AI is used by almost each and every industry in the market and it has been contributing a lot toward the growth of respective industries. Over the period of time, it has become very important tool of banking, finance, health care, digital marketing and many more. In short AI is developing machinery in a way in which they can incorporate human intelligence, which includes emotions, reactions, problem solving attitude, learning, understanding and decision making. It also combats using of new techniques, algorithms and modes to the system to perform different tasks. AI has been everywhere one can see and its application is also varying from industry to industry. With internet and technological advancement, the world is connected with each other over just a click of a finger and with such high level of technological advancement has led to investment in AI to further generate market intelligence by big data analyses. It very evident that AI is generated by machines and it’s not exactly what human’s intelligence but its somewhere replicate the human intelligence.
The term AI have a very ordinary image of automated robots who works on the command of a human this is because of the showcase of these robots done in movies. AI is much more than what is been portrayed it’s the practicality of imbibing the human intelligence into machinery for better work on their stimulus response to be more like humans. The new trend in the AI has been focused more on AI driven data automation that has changed the perception of AI. AI is nothing but the stimulus response of human intelligence by machines and computers. If facts are to believe over 60 years of research has been done on AI and after 60 years it was possible for researchers to launch AI into the market. With time many studies have already proved that AI has been taking over humans and industries which are led by humans yet there is some philosophical difference of opinion, where they argue about the true existence of intelligent machinery. When hearing about AI, the first thing that comes to our mind is ChatGPT it is one of most used AI software in which its suites to machine learning- powered technologies it further helps in generating content, checking facts, analysing data and many more things. To understand machine learning, the need to know that it works on algorithms which are trained on different data that creates machine learning models, furthermore it allows different systems to perform tasks as commanded by the user. These tasks involve song suggestions, travel details or providing directions, translating languages and many more tasks.

Here are few examples of Artificial Intelligence:

- **ChatGPT**: It is one of the most use software which is based on Large Language models (LLM) which means it generates texts also known as replies in response to the questions that has been asked to the software.
- **Google Translate**: It is one of the most used tools for translating from one language to the other. Google uses deep learning algorithms to translate texts.
- **Netflix**: It is one of the most used online steaming platforms in the world. Usually noticing that Netflix recommend us movies and series as per our pervious viewing history it is because Netflix uses machine learning algorithm to create more personalized recommendation.
- **Tesla**: It is one of the kind self-driven vehicles ever built in the world. Tesla uses computer vision to power self-driving features on their cars.

While researching in depth about AI, the term strong AI and weak AI occurred quite many times. Strong AI usually is that kind of AI programming which can achieve human-level of intelligence, which is the general level of intelligence which a human has which is also known as “Artificial General Intelligence” (AGI). Whereas Weak AI is something which have a limited use or rather a very narrow use of AI, for instance use of machine learning or deep learning for performing special allotted tasks. In our day-to-day life, generally the use of weak AI to perform our specific tasks, weak AI is also known as “Artificial Narrow Intelligence” (ANI). With many researchers who researchers tried to develop more advance AI, they tried to formulate more deep understanding of what exactly intelligence or cognitive logical means. In this attempt researchers were able to classified AI into 4 different types of Artificial Intelligence.

- **Reactive Machines**: This is the most basic type of AI, as the name suggest this type of machinery “reacts” to the previous events rather than process the knowledge of the same. This kind of reactive machinery reacts on the very same moment the event is taking place, because of this they can only perform only certain sort of advance tasks with a very narrow scope as they are built in a way to do certain things which are according to their capabilities.
- **Limited Memory Machines**: With limited memory machinery they can analyse limited scope of the past events. Unlike reactive machinery they have capability to connect and interact with world in the real time. As they have narrow time span, they can only form a basic understanding of the world with whatever par events they can recall.
- **Theory of Mind Machines**: Theory of mind machinery are those machinery that actually represents the first form of AI. This machinery processes the understanding of the different entity in world with addition to create a representation of the entities that exists in the world.
- **Self-aware Machine**: As the name suggest these machineries are very well aware about the knowledge, they process about the world. These are the most advance kind of AI machinery, and when people talk about AI this is the most authentic example that come to mind.
With AI the level of applications provided unlocks some another level of potential to actually impact and transform our day-to-day life as well as our business life. However, AI might seem very intriguing and exiting but with thrill it always comes with risks and its own challenges. AI exert unlimited potential of being accurate at repetitive tasks, it decreases the operational cost of greater efficiency of the machinery, helps in increasing more personalized content and user centric approach toward the data, improve decision making and has ability to generate content, text, image etc as per one command. Moving on the potential danger that AI can be to the society in whole is the situation of unemployment with job automaton, the result can be biased and discriminating as the AI is trained on certain data sets, AI comes with higher cybersecurity risks, with AI the potential lack of transparency persists and lastly AI cam be miss used to create fake news which can further violate the rules and regulations.

AI at a larger extent is a blessing that has been showered upon the man kind buy with blessing it also comes with its bigger disadvantage of possible replacing humans in the future scenario. By if facts are to be believe and as per the researchers’ comments that it’s unlikely that with any degree of AI advancement it can replace the cognitive thinking a human,

Now, in this study here come where it is important to see what kind of evolution AI has bring to the world of digital Marketing.

Intersection of Artificial Intelligence and Digital Marketing

The work of Artificial Intelligence has been exceptional in each and every field, and no doubt it has done wonders in Digital Marketing. In last few decades AI and big data has retargeted the field of digital market. With AI in digital marketing, it has led them to be much more efficient and meet their customers’ expectations which further results in better results in customer satisfaction (Jain etal.,2020). AI algorithm has been deigned in such a way that allows marketer to analyse the data set to predict the consumer behaviour and retarget as per the need of the market. Technological advancement in AI plays a very crucial role in AI marketing (Tjepkema,2020). With development in AI, it has opened gates for programmatic advertising which further automates the process of decision making for the media buying and real time bidding agency utilize the online advertising. A survey conducted by Accenture in 2019, stated that over 80% of the working professional uses AI to achieve their goals while working in the field of digital marketing. AI gives a marketer the ability to collect, interpret and analyse the big data files which have given them freedom to provide more personalized insights.

In the field of marketing, AI is like talk of the town and if the facts are to believe it’s the future of marketing. It’s not even an arguable statement that AI soon would be replacing marketer to do the professional work. With AI marketers now can provide more customized, insightful outcomes on based of individual customer needs, marketers make sure that they take first mover advantage of the market. It’s without a doubt that when a brand is understanding the importance of AI, they put in significant amount of work to ensure that create an environment where they can competitive and take advantage of it because AI is not just a technology or advancement of technology but it’s a right of mix of both content and context. There are plenty applications that works on AI technology from Google’s home to Amazone’s Alexa uses natural language processing (NLP) to understand the voice commands and to act accordingly. Whereas, Google’s DeepMind uses deep learning mechanism to act on the voice recognition. Deep learning machines are capable of forming a connection and coming to a conclusion without being dependent on predefined behavioural algorithms, but rather they adapt to new learning and further use unprocessed data as its input. In business scenario, AI has evolved so much that there is solution for each and everything. Company of any size is now betting on their technology in order to increase the quality of their enterprise and to meet the expectation of their customers. Marketers have been quite reluctant to adapt to AI in their professional work for last few years, but approximately 3 years ago they incorporated AI into their work just notice less ambiguous results and more efficiency.
Without a doubt AI is transforming life of many professional each day, it is changing the way marketers carry out their campaigns. It’s pretty much evident that AI is making impact on the world as whole and in few years, it would be difficult to define digital marketing with AI. Let’s further see the ways in which AI is transforming the world digital marketing and the marketers:

1. **Consumer Behaviour focused marketing**: AI is very data-driven in nature and when it is applied to marketing its much more centric to data and the decision making to which further helps in data integration to different platforms. When a user uses internet for shopping, post or browse, they usually leave their digital imprints on the web. Here’s when AI comes to play, AI tries to scrap the data collected by digital imprints from users “online behaviour” and digital identity”. Different platforms have different ways to collect and store the user data to further analyse the data and keep tracks of user’s patterns and they online activity in order to customize and use user centric approach while targeting the audience. It’s not even a doubt in near future these platforms will be able to perform more advance analyses to understand consumer pattern and develop more automated systems to perform their “own” outreach planning, hence building more user-friendly interface.

2. **Predictive Marketing**: Now with growth in internet, social media platforms merges and plays a very pivotal role; Social media gathers personal information about their target audience and the marketer then uses this data to further make well-tailored and customized campaign for the target audience. With each click that is being made by the user on the internet, new data is being generated which further is compiled to analysed by AI. This sort of data holds a lot of importance for a marketer in order to provide more appropriate and customer centric details.

3. **Generation of Lead**: With AI it’s easy to transfer huge chunks of data, which further can help in locating potential customers, clients and market based on the information which pre-exists in program that it has been using. It’s a very intriguing fact that it can predict and even rate how the lead is given. For B2B or any sorts of recruiting purpose it saves a lot of time and energy on a very basic task as searching this not only saves a lot of time in the hand of marketers to make more sales pitches to the client.

4. **Chatbots**: Chatbots are programs that helps user to interact with AI in a natural-language environment. These kinds of programmes are becoming popular interest zone for the marketers, with an increasing traffic on social media platforms like WhatsApp and Facebook Messenger these are private messaging platforms. Digital Marketers see chatbots as an opportunity which is hard to ignore, as these chatbots provides a very well customized customer service at a large scale, which further is very much related to marketing strategies but not exactly equivalent to marketing functions. But any who these chatbots helps the user through a whole journey from browsing to finally buying a product.

5. **Content Creation Automation**: With AI it has become easier for the brands to sue automate content creation, this helps brands to create content very quickly and easily. For instance, Coca-Cola is one of the leading global beverage brands in the world, Coca-Cola uses AI to automate its advertising narratives. AI not only helps in content creation but also in helps in creating logos and music scripts in tandem to automated context.

6. **Advertisements Redefinition**: With advance technology like AI, it is also use to redefine the way ads are delivered. Over 60% of all the PPC campaign is actually controlled by google and Facebook in the United States, AI helps many advertisers to find new channels for advertising of their PPC campaigns. AI offers a competitive advantage to the advertisers as these channels may or may not be used by their competitors in the market.

7. **Image Recognition**: AI has made one of the most exciting and most crucial development, which is Image recognition. Computers are designed in way in which they have ability to identify and
recognize any sort of object or even a scenario, for instance if someone wants a machine to be able to think like human do and react to respond to a certain environment one of the biggest examples is the self-driven cars. It’s very hard to compare the ability of a computer with actual human intelligence, the human’s vision and perception however the fact that cannot be denied that it’s the vision of human which acts as a building block for a computer system to make some significant technological advancement and till day it continues to do so. Marketers gets beffited by image recognition as it helps them in finding visuals on social media platforms.

8. Email Marketing: Email marketing is one the most used and oldest way in which a brand contacts their potential target market. With AI Email marketing is getting even better for both the marketers and customers. AI has made it possible to personalized emails as per the target audience, which is like every marketer’s dream. AI uses data as per users’ behaviour on internet to create personalized emails for their subscribers and their interaction with the brand. AI not only personalize emails but it also customizes it on based on what sort of content is actually consumed by the customer, it analyses their wish list, what sort of pages they’ve visited and how much time they are spending on the page. For instance, if a user visits a page with a link in email send to them by the company, but another user on the other hand skips those links and go straight for their content, AI helps in making more well-tailored email for both the user with more relevant information according the need of the user.

9. Augmented Reality: With AI and its potential to satisfy the needs of customers, Augmented Reality is one such thing. AR is a sort of technology that provides customer with an option to see and feel the product before actually buying it in real life. One such thing as AR was actually introduced by LensKart in India, where Lenskart’s 3D trail has allowed the customer to try the frame of their choice before buying which they can do by the cameras at their home on just one click. This kind of technology has not only stimulated better and faster responses for the customer but has also benefited the company by increasing their sales revenues.

Factors of dilemma in the intersection of Artificial Intelligence and Digital Marketing

With intersection of AI and digital marketing, it has expanded the horizons for the digital marketers to explore and create more and personalized campaigns to satisfy the marketing need of the brand. Hover, with advantages of the intersection there is always disadvantages that comes along with it. So let us give glance to the different factors that brings concerns to the digital marketers while applying AI into their professional work:

- Ethical and Privacy Issues: AI algorithms is designed in a way which concerns take centre place, as it gathers and evaluate information about the customer which breaches the privacy of the customer and also raise ethical issues of using AI in general. Even though companies and business guarantee of using this data wisely and responsibility yet the question is still gets in the way of processing the data.

- Integration with different technologies: AI is being used with many different technologies in different ways, this conjecture includes natural language processing artificial intelligence. With encompassing with digital marketing, the approach is very ll lacking as this technology in combination can be very powerful if not used in a right way.

- Consumer behaviour: There are many studies that have proved that customized and tailored marketing strategies can results in greater conversion and increase the level of engagement. Hover, it’s very important to understand how AI driven techniques affects the overall behaviour of the consumer in the long run. It’s very crucial to understand the know-how of the AI pored technical marketing tactics that impacts the loyalty and trust of the consumer as reflect on the behaviour of the company.
There are many factors that put a digital marketer in dilemma while using AI into their professional work. However, it’s critical and essential for a marketer to be diligent and cautious while using AI and should make decisions based on ethical considerations.

**Questionnaire**

1. Name
2. Age
3. Gender
4. Educational background
5. How would you define Artificial Intelligence in your own words?
6. Which AI applications or tools are you familiar with? (e.g., Siri, ChatGPT, Jasper, GrammarlyGo, etc.)
7. Have you personally used AI tools in your marketing activities?
   - Yes
   - No
8. If yes, which specific AI tools have you used, and for what purposes?
9. In your opinion, how has the integration of AI impacted the field of digital marketing?
10. Have you observed any changes in your working strategies since adopting AI tools?
    - Yes
    - No
11. If yes, can you provide specific examples of how AI tools have influenced your day-to-day tasks?
12. Do you believe AI has enhanced or replaced traditional marketing methods in your industry?
    - Enhanced
    - Replaced
    - Neither

**Challenges and Opportunities:**

13. Challenges, if any, have you faced in incorporating AI into your marketing activities?
14. In your opinion, what are the key opportunities that AI presents for digital marketers in the current landscape?
15. How do you foresee the future integration of AI in digital marketing evolving over the next five years?
16. What advancements or changes in AI technology do you believe will have the most significant impact on digital marketing?
17. Is there anything else you would like to share regarding the intersection of AI and digital marketing?
18. Would you be open to participating in a follow-up interview to discuss your experiences and insights in more detail?
    - Yes
    - No

**Data Analysis**

1. Age
In the above-mentioned graph, the young digital marketers falling in the age group of 18-26, around 53.3% of the total respondents. Then as per the graph, about 26.7% of the respondents falling the age group of 27-36 and rest 20% of respondents falling in the age group of 37-46.

2. Gender

In the above shown graph, the total of 30 respondents there are 60% of the Females participating and rest 40% is male digital marketers participating in the questionnaire.

3. Educational background
In the survey conducted, according to above mentioned graph it shows that 43% of digital marketers are Post graduate, about 36.7% of respondents are Graduate, 13% of these respondents are Doctorate and 1% is under graduate and others respectively.

4. How would you define Artificial Intelligence in your own words?

R1: Getting more alternative process and Path

R2: Aids human productivity in different sectors

R3: Logical reasoning and situation-based action decisions taken by machines.

R4: Artificial Intelligence, in essence, is the field of computer science focused on creating systems and algorithms that can mimic human cognitive functions, such as learning, problem-solving, perception, and decision-making, enabling machines to perform tasks that typically require human intelligence.

R5: Very useful, but going forward it can be a danger weapon. Government/politician can misuse it against public, security threat, data privacy issues, environment danger - a single chat gpt query takes several watts of electricity. Misuse of tool but corporates - even the efficiency of employees is increased but there working hours are Still same, lack of insecurity and pressure to learn it, lack of self-imagination development. Simply it is an invitation to bigger problems in future

R6: A double edged sword ⚔️

R7: Smart work not hard work

R8: A commuting system capable of performing tasks that early required human to do.

R9: Artificial intelligence, to me, is like training a super-smart, super-fast apprentice. It can learn from massive amounts of data, allowing it to identify patterns and make connections that would take a human forever. This lets it automate tasks, predict what customers might want, and even create new things. It’s a powerful tool that can take care of the heavy lifting, but it still needs a human to guide it, set the goals, and make sure it’s on the right track. AI isn’t here to replace us marketers, but to make us even better at what we do.

R10: Artificial Intelligence refers to the simulation of human intelligence in machines, enabling them to perform tasks that typically require human intelligence. This includes learning, reasoning, problem-solving, and decision-making.

R11: It involves the ability of machines to perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, and perception.

R12: AI is a way in which a machinery performs Human intelligence functions

R13: AI is nothing but a man-made invention of Human intelligence

R14: AI is software that have tendency to think like humans

R15: It is new technological advancement with power to do what humans can do
R16: A great invention by mankind for mankind.

R17: Artificial intelligence is the integration of human intelligence with science and technology.

R18: It is very useful in all aspects

R19: AI are tools to make things easy and time saving

R20: Artificial intelligence according to me is something which is making our work easy and fast.

R21: Artificial Intelligence, or AI, is the branch of computer science that aims to create systems or machines capable of performing tasks that would typically require human intelligence. These tasks can include learning, reasoning, problem-solving, perception, and language understanding, among others.

R22: AI technology can process large amounts of data in ways, unlike humans

R23: Artificial Intelligence is technology that helps in performing basic task to advance task over a single command

R24: AI is an invention to replace humans at job

R25: According to me it’s a tool to help me with my professional work of managing data, creativity and ideation

R26: it is an artificial form of human intelligence which is at a very advance level and is very helpful

R27: It’s like a technological game for grown ups

R28: simulation of human intelligence processes by machines, particularly computer systems.

R29: Artificial Intelligence is like giving computers a brain of their own, enabling them to think, learn, and solve problems just like humans

R30: Kind of a computer language or algorithm that can perform human functions

In the above-mentioned responses, the respondents think that AI is sort of scientific development which is something similar or replication of human intelligence. All the respondents in their own way defined Artificial Intelligence.

5. Which AI applications or tools are you familiar with? (e.g., Siri, ChatGPT, Jasper, Grammarly Go, etc.)

In the above-mentioned graph, about 29% of the respondents actively uses ChatGPT, about 18% uses Grammarly GO and rest about 1% of the respondents uses Gemini, Bard and others respectively.

8. Have you personally used AI tools in your marketing activities?
   - Yes
   - No
In the above-mentioned chart, about 66.7% are using AI tools for their marketing activities, whereas 23.3% of the respondents prefer not to use AI tools for their marketing activities and on the other hands about 10% of the respondents says they may or may not use AI tools for their marketing activities.

9. If yes, which specific AI tools have you used, and for what purposes?

R1: ChatGPT
R2: No
R3: Grammarly
R4: Not used
R5: ChatGPT and Grammarly. Mostly Used them but not for marketing.
R6: myself, but I've been trained on a diverse dataset that includes information about various AI tools and technologies. My purpose is to assist users like you by providing information and generating responses based on the input I receive.
R7: For data analysis, ideation, schema generation for websites, pdf reader, topic research, image ideation, ppt creator, whimsical, scholar ai, Vox script
R8: ChatGPT / Bard: content creation, Quilbot: Paraphrasing
R9: ChatGPT For content research
R10: 1. Ad creative for advertising 2. ChatGPT for copywriting
R11: Gemini for content creation and Grammarly for correct word structure
R12: I have used ChatGPT and Bard for generating engaging content ideas and improving customer interactions through chatbots. Additionally, I've utilized Grammarly Go for proofreading and enhancing the quality of written content.
R13: I have used tools like ChatGPT for generating engaging content, social media algorithms for targeted advertising, and Google's AI-powered algorithms for optimizing search engine marketing campaigns.
R14: AI is used in apps like swiggy while talking to their customer service.
R15: Chat GPT, for basic information and content idea
R16: ChatGPT, majorly for basic information
R17: ChatGPT, Bard. Grammarly for writing purpose and researching
R18: AI, for my studies.

R19: ChatGPT, for the purpose of finding keywords, image generation, fact checking and content idea.

R20: NA

R21: ChatGPT for all sort of work related to digital marketing

R22: ChatGPT, Grammarly Go use it for idea and creativity for marketing campaigns

R23: ChatGPT and Bard, there paid versions help in image creation, logo designing and sometime in editing

R24: I have used ChatGPT for content generation, Grammarly for proofreading and language enhancement, and social media analytics tools powered by AI for audience insights and targeting.

R25: I have used ChatGPT for generating content ideas

In the above-mentioned respondent chart, as per responders that most of the digital marketers uses ChatGPT and Grammarly Go as their AI tool for different purpose like idea generation, creativity, audience insights, logo generation, image generation, editing, keywords, thumbnails, search engine marketing strategies and many more things. Also noticing that bard is also one of the AI tools used by the digital marketers for achieving their marketings goals.

10. In your opinion, how has the integration of AI impacted the field of digital marketing?

R1: It can help to provide the Rightful target audience.

R2: Helped in creative and novel representation of ideas

R3: Higher productivity and efficiency at lower cost per acquisition

R4: The integration of AI in digital marketing has significantly improved personalization, targeting, and efficiency. AI algorithms analyse vast amounts of data to identify trends, predict consumer behaviour, optimize ad campaigns, and deliver personalized content, leading to higher conversion rates and ROI for marketers.

R5: Yes, very much it has made the things simpler

R6: AI has significantly reshaped digital marketing, making it more data-driven and audience-centric. By analysing vast amounts of customer data, AI personalizes content and ad experiences, leading to higher engagement. AI also automates repetitive tasks, frees up marketers' time for strategic thinking, and optimizes campaigns in real-time for better results. Overall, AI empowers marketers to deliver the right message to the right person at the right time.

R7: The integration of AI has revolutionized digital marketing by enabling marketers to analyse vast amounts of data, personalize user experiences, automate repetitive tasks, and enhance decision-making processes. It has significantly improved targeting accuracy and campaign effectiveness.

R8: It enhances customers experience and helps digital marketers to enhance their skills

R9: Yes, it has impacted the field of digital marketing by making work easy for them

R10: It has changed the dynamics for digital marketing completely

R11: It has opened more doors for creativity

R12: It has made the doing work very easy

R13: It has made life of a digital marketer very easy by giving them each and everything on a platter.

R14: It is helping in many ways but majorly for handling big data

R15: It's helps them to create their ideas in a different way

R16: 100% effected people and their time is saved; AI also took jobs of people because it's too much accurate and quick. In digital marketing AI plays a major role from scratch to end.
R17: The integration of AI has had a profound impact on digital marketing by revolutionizing various aspects of the field. AI-powered tools enable marketers to analyse vast amounts of data more efficiently, personalize marketing campaigns at scale, optimize advertising strategies in real-time, and enhance customer experience through chatbots and virtual assistants. Overall, AI enhances targeting precision, increases marketing ROI, and enables marketers to adapt more quickly to changing consumer preferences and market trends.

R18: Very much

R19: with AI in digital marketing, it has saved more time and is very efficient and accurate

R20: NA

R21: by making it easy for us to work on time and close it on deadline

R22: it has helped in bridging the gap between the consumer and the brand.

R23: The integration has led to change un the industry the shift from being very human oriented now it more technological based

R24: The integration of AI has significantly impacted digital marketing by enabling more personalized and data-driven strategies, improving targeting accuracy, automating repetitive tasks, and enhancing customer experiences.

R25: AI integration has transformed digital marketing by making it more personalized, efficient, enhancing customer engagement and getting better results

R26: by enabling marketers to analyse vast amounts of data, personalize customer experiences, automate repetitive tasks, and optimize campaigns in real-time.

In the above-mentioned respondent chart, almost all the digital marketers have agreed that AI has impacted the field of digital marketing in different ways. One of the respondents even mentioned that “The integration of AI has significantly impacted digital marketing by enabling more personalized and data-driven strategies, improving targeting accuracy, automating repetitive tasks, and enhancing customer experiences.”, on the other hand one respondent said that “It has changed the dynamics for digital marketing completely.”

11. Have you observed any changes in your working strategies since adopting AI tools?
   - Yes
   - No

In the above chart, about 79.35% of the respondents have observed changes in their working strategies since adopting AI tools, where as 13.8% said No to the same and 6.9% said maybe.

12. If yes, can you provide specific examples of how AI tools have influenced your day-to-day tasks?
   R1: No
R2: It is less time consuming and provide KISS formula-based Communication.

R3: Aids in writing

R4: With Grammarly I have to now concentrate less on grammatical errors and I can focus more on my research and content development

R5: improve the accuracy and relevance of my responses over time through machine learning, and automate certain processes to enhance efficiency. For example, AI tools help me analyse and generate text based on context.

R6: Work is achieved more faster

R7: It gives a new perspective of thinking, analysing the target audience

R8: Since AI entered the game, my days of endless A/B testing and manual reporting are over. Now, AI automates those tasks, freeing me up to focus on the bigger picture. I leverage AI-powered analytics to understand customer behaviour on a deeper level, allowing me to personalize campaigns with laser focus. It's like having a superpowered research assistant that constantly optimizes campaigns in real-time. Sure, I had to learn how to work with these tools, but the results – happier clients and more conversions – have been incredible.

R9: AI tools have streamlined content creation and optimization processes, allowing me to generate high-quality content more efficiently. They have also enhanced audience targeting and segmentation, leading to improved campaign performance and ROI.

R10: AI tools have streamlined content creation processes, improved ad targeting and optimization, and enhanced customer segmentation and personalization efforts.

R11: helping me using keywords for website creation

R12: it has influenced day to day working of a professional, helps in content creation, data analyses and data visualization

R13: As a digital marketer it helps in so many things but i choose to work without any help of AI

R14: it helps me with content ideations

R15: NA

R16: Like when at times of deadline, it helps us to all the extends from analysing to interpreting the information

R17: Saves time, accuracy, measurable results

R18: Like it gives me planned layout. Different creative ideas to work on.

R19: Voice Assistants: Voice-activated AI assistants like Siri, Google Assistant, and Alexa help users perform tasks hands-free, such as setting reminders, checking the weather, or playing music, simplifying daily routines. Navigation Apps: Navigation apps like Google Maps and Waze use AI algorithms to predict traffic patterns, suggest alternative routes, and estimate arrival times based on real-time data, assisting users in planning their commutes more efficiently.

R20: AI helps in logo formation and also helps in providing thumb nail for YouTube videos.

R21: No, I don’t use AI while doing my professional work

R22: ChatGPT is something that i use on almost daily basis to work on social media schedule, ideation and scheduling.

R23: It helps in design a campaign for my targeted market and helps me in understanding the gap area

R24: It has increased my efficiency at work and has also helped me to be very motivated while at work

R25: AI tools have influenced my day-to-day tasks by streamlining content creation processes, improving the quality of communication with audiences through enhanced language and tone.

R26: facilitating more precise audience targeting.

In the above-mentioned respondent chart, AI has impacted day-to-day lives of the respondents in different ways from helping them in their professional work to saving their time and making them more efficient
while at work. But also, there are few respondents that says that they don’t use AI tools to get their professional work done.

13. Do you believe AI has enhanced or replaced traditional marketing methods in your industry?
   - Enhanced
   - Replaced
   - Neither

![Chart showing responses]

In the above-mentioned chart, about 63.3% of the respondent thinks that AI has enhanced marketing methods in the industry, where as 13.3% of respondents says that it has actually replaced on the other hand 20% says that it has neither enhanced nor replaced the marketing standards of the industry and there is that 1% that says that both exists in their own ways of expectation.

14. Challenges, if any, have you faced in incorporating AI into your marketing activities?

R1: No

R2: None

R3: Don't know

R4: Not applicable

R5: I am personally into marketing myself however I have seen that in cooperative AI especially in admissions related marketing activities of the University has benefited us by many-fold

R6: As an AI, I don't have personal experiences, but some common challenges in incorporating AI into marketing activities include data privacy concerns, ensuring data accuracy and quality, integrating AI with existing systems, and understanding the ethical implications of AI-powered marketing decisions.

R7: It's all good; though content is all stale.

R8: Still not

R9: One challenge is definitely the data. Feeding the AI beast with clean, high-quality data is crucial, but sometimes older data sets are messy or incomplete. This can lead to some funky results and throws a wrench in the whole optimization process. There's also the whole "black box" thing – sometimes it's hard to understand exactly why the AI recommends a certain strategy. It can feel a little like trusting a magic machine. And of course, there's the cost. Some of these AI marketing tools can be pricey, especially for smaller businesses.

R10: One challenge is ensuring the accuracy and reliability of AI algorithms, especially when dealing with sensitive data or complex decision-making processes. Additionally, integrating AI into existing marketing systems and workflows can require significant time and resources.
R11: Some challenges include the initial investment in AI technologies, data privacy concerns, and the need for skilled professionals to interpret AI-generated insights accurately.

R12: Ethical challenges of generating misleading content

R13: AI is very dynamic and is changing constantly to understand its working and adaptability is very challenging

R14: Nothing as of now

R15: Ethical issues of plagiarism

R16: Accuracy of answers

R17: To give prompt to the software you need to be very specify of what you want and how you want it.

R18: Lack of emotions

R19: No challenges faced

R20: The fact that we need to very specific in what we want and vague language usually does not work.

R21: As of now I feel like that human touch in the whole process is still lacking no matter how the level of human intelligence is presence

R22: One challenge I’ll say is the fact that the specification of giving prompts, if one single thing is missing the whole things fall off

R23: Na

R24: Frequent errors, inaccuracy, lack of real-time information and lack of human touch in outputs

R25: Concerns about data privacy and security

In the above-mentioned respondent chart, the responders were asked about the challenges they have faced while incorporating AI in their marketing activities, major challenge that can be noticed is the ethical concerns like privacy, copyright issues, data sensitivity etc. One of the respondents even mentioned that, “Some challenges include the initial investment in AI technologies, data privacy concerns, and the need for skilled professionals to interpret AI-generated insights accurately.”

15. In your opinion, what are the key opportunities that AI presents for digital marketers in the current landscape?

R1: To get more categorisation and authentic audiences

R2: Improving strategies

R3: Instant solutions based on logics derived from situations and available data analytics

R4: Overall, AI enables digital marketers to deliver more personalized, relevant, and efficient experiences to their target audience, driving better results and competitive advantage in today’s dynamic landscape.

R5: Analytics, ppt, video generation, image generation, schemas

R6: Data analytics, content creation etc.

R7: In today scenario, every is getting easy day by day, now anyone can do marketing by their self

R8: In today’s data-flooded marketing world, AI offers a golden opportunity to truly understand our customers. By analysing vast amounts of data, AI can predict customer behaviours and personalize campaigns with laser focus. Imagine creating content and ads that resonate with each individual customer, not just a broad demographic. This level of personalization leads to deeper engagement, higher conversion rates, and ultimately, happier clients. AI also automates repetitive tasks like reporting and optimization, freeing us up to focus on creative strategies and campaign analysis. It’s like having a tireless data whiz and a superpowered strategist by your side, allowing you to work smarter, not harder. AI is the future of digital marketing, and those who embrace it will be the ones who stay ahead of the curve.
R9: AI presents numerous opportunities for digital marketers, including advanced data analytics, predictive modelling, personalized marketing strategies, and automated customer service. It enables marketers to deliver highly relevant and targeted campaigns, resulting in better engagement and conversion rates.

R10: AI presents opportunities for marketers to improve ROI through targeted advertising, enhance customer engagement through personalized experiences, and gain valuable insights from data analysis.

R11: helps in professional work and helps in content creation

R12: a lot of opportunities like getting their work done, fact checking now a days with help of AI you can also do generate images and logos

R13: they help them in be more creative and think out of the box

R14: it helps digital marketers to explore more ideation pitches and helps in bridging creativity gaps.

R15: None

R16: it has changed the whole landscape for digital marketer but that given the opportunity to be quicker and more efficient

R17: They have created their own space to showcase the best for users

R18: Enhanced results-oriented data, money and time saving.

R19: Personalization: AI-powered algorithms allow marketers to personalize marketing messages, content, and recommendations for individual users based on their past behaviours, demographics, and preferences. This enhances the customer experience and increases engagement and conversion rates. Automation: AI automates repetitive tasks such as email marketing, social media posting, ad targeting, and customer support, freeing up marketers to focus on more strategic initiatives and creative endeavours.

R20: Very good opportunities

R21: it helps digital marketers by saving their time and also increase their efficiency

R22: It is making Digital marketers very lazy and less human emotions are being used

R23: opportunities to explore the creativity side along with less room for error

R24: There are a lot of opportunities and i think majorly it will create more jobs in the future

R25: For digital marketers include hyper-personalization, predictive analytics for better decision-making, automation of repetitive tasks, and the ability to analyse vast amounts of data for actionable insights.

R26: AI simplifies digital marketing by personalizing campaigns, targeting effectively, automating tasks, and providing insights, leading to better results

R27: improved targeting and personalization, enhanced customer experiences, more efficient resource allocation, and the ability to gain actionable insights from big data.

In the above-mentioned respondent chart, responders were asked what are the key opportunities that AI presents to digital marketers, to which responders mentioned above the customization, personalization, consume centric approach, automation of tasks, increase their professional capacity etc.

16. How do you foresee the future integration of AI in digital marketing evolving over the next five years?

R1: advancements in natural language processing

R2: Don't know

R3: AI can improve digital marketing strategies in the coming years

R4: If not completely replace it, AI would possibly take over the operational jobs and help humans strategize and evaluate their creative decisions.
R5: The integration of AI in digital marketing is likely to become more sophisticated over the next five years. We can expect AI to play a larger role in personalization, predictive analytics, chatbots, voice search optimization, and automated content generation.

R6: Very good future

R7: Growing rapidly

R8: Didn't think too much about it

R9: The next five years promise an even deeper dive into AI's potential for digital marketing. I see AI becoming more sophisticated, creating content that's not just targeted but truly engaging. Imagine AI crafting personalized videos or social media posts that resonate with individual users on an emotional level. Additionally, AI-powered chatbots will evolve into hyper-realistic virtual assistants, capable of natural conversation and real-time problem solving, further blurring the lines between human and machine interaction. The role of the marketer will shift from campaign execution to AI oversight and strategic guidance. We'll focus on crafting the brand narrative and ensuring the AI delivers it seamlessly to the right audience. It's an exciting future – one where AI handles the heavy lifting, and marketers become strategic masterminds, shaping the customer journey like never before.

R10: Over the next five years, I expect AI to become even more deeply integrated into every aspect of digital marketing, from content creation and distribution to customer relationship management and predictive analytics. We'll likely see advancements in natural language processing, computer vision, and machine learning algorithms, enabling marketers to further optimize their strategies and drive better results.

R11: AI presents opportunities for marketers to improve ROI through targeted advertising, enhance customer engagement through personalized experiences, and gain valuable insights from data analysis.

R12: AI will be taking over most of the professional work and do it on need per basis

R13: it will be to next level of advancement and will give out many more opportunities

R14: It will be very revolutionary in the field of digital marketing and it will change the whole landscape of being a digital marketer.

R15: AI in future might replace digital marketer. In other words, there would be no jobs for digital marketers

R16: i believe the integration in the world of digital marketing has already been done now there will be upgrades in the same.

R17: the future of AI is very bright and it will give so many opportunities to a digital marketer that can be further explored

R18: It will change everything

R19: AI will replace humans in organisation.

R20: Advanced Personalization: AI algorithms will become even more sophisticated in analysing user data and delivering hyper-personalized marketing messages and recommendations across various channels, including websites, emails, and social media platforms. Real-time Optimization: AI-powered optimization tools will enable marketers to make data-driven decisions in real-time, dynamically adjusting advertising strategies, content, and targeting parameters to maximize performance and ROI. Voice and Visual Search: As voice and visual search technologies continue to improve, AI will play a crucial role in optimizing content and advertising for these platforms, providing marketers with new opportunities to reach and engage audiences.

R21: Good

R22: In 5 years, it will be probably will be more accurate and more high performing.

R23: it will probably replace humans at work

R24: according to me it will be helping digital marketers to be more on hands on and smart over the period of time

R25: As of now AI is very developed with invention like tesla, it will be great to see such inventions in future

R26: i think it has already been integrated now the question is to see the how it turns out in next 5 years
R27: AI is expected to increasingly replace traditional roles in digital marketing, streamlining processes, improving efficiency, and delivering more targeted outcomes.

In the above-mentioned respondent chart, it asked the respondent that how do they foresee the future of AI in digital marketing in the next 5 years to which respondents had very mixed reactions, where some respondents mentioned that “Over the next five years, I expect AI to become even more deeply integrated into every aspect of digital marketing, from content creation and distribution to customer relationship management and predictive analytics. We'll likely see advancements in natural language processing, computer vision, and machine learning algorithms, enabling marketers to further optimize their strategies and drive better results.” Whereas one mentioned about “AI will replace humans in organization.”

17. What advancements or changes in AI technology do you believe will have the most significant impact on digital marketing?

R1: Don't know

R2: Aiding human strategies

R3: Improved algorithms and availability of public data for input are the two most important changes that I foresee having the most significant impact on digital marketing using AI.

R4: Several advancements in AI technology are poised to significantly impact digital marketing:

R5: AI with time is evolving with things like SORA

R6: AI generated contents

R7: The most impactful advancements in AI for digital marketing will likely lie in two key areas: natural language processing (NLP) and generative AI. With more advanced NLP, AI will understand the nuances of human language even better. This will allow for highly personalized content creation, like crafting marketing copy or social media posts that tap into a user's specific interests and emotional triggers. Generative AI, on the other hand, will push the boundaries of what AI can create. Imagine AI generating not just targeted text content, but personalized videos, images, or even interactive experiences tailored to each individual. This hyper-personalized approach will lead to deeper customer engagement and significantly boost campaign effectiveness. These advancements, coupled with ever-more-sophisticated data analysis, will fundamentally transform digital marketing, making it an even more targeted and impactful force.

R8: I believe advancements in AI technology related to data analysis, personalization, and automation will have the most significant impact on digital marketing.

R9: Advancements in AI technology such as deep learning, reinforcement learning, and generative adversarial networks are likely to have a significant impact on digital marketing by enabling more sophisticated personalization, predictive modeling, and creative content generation.

R10: It will further help in data visualization and facts verification on more advanced level.

R11: when AI would be more developed to say "NO" when asked to generate fake news or misleading information.

R12: helping accessing big data and making it more accesses to understand

R13: where AI can actually perform all the commands considering all the ethical aspects.

R14: Where AI will be at its peak and probably replacing humans

R15: As of now i feel that AI is very developed but i look forward to more and better prompt commands

R16: There are many advantages from AI

R17: Quick growth.

R18: Natural Language Processing (NLP): Continued advancements in NLP will enable AI to better understand and generate human-like language, enhancing chatbots, virtual assistants, content creation, and sentiment analysis in digital marketing. Computer Vision: Improvements in computer vision technology will enable AI to analyze visual content...
more effectively, leading to better image and video recognition, product recommendations, and augmented reality experiences in digital marketing.

R19: ChatGPT helped a lot

R20: change in fact checking and creating fake new.

R21: AI as whole is very impactful to overall digital marketing

R22: none

R23: One change would be the accessibility of these tools are paid and it would be great if it would be available for free,

R24: None

R25: NA

R26: Real-time access to information will have a positive impact on digital marketing by providing insights into current trends and enabling more accurate predictions of outcomes

R27: development of more sophisticated algorithms, improved natural language understanding

R28:

R29:

R30:

In the above-mentioned respondent chart, responders were asked about What advancements or changes in AI technology do you believe will have the most significant impact on digital marketing, to which respondents say that real-time information accessibility, development of sophisticated algorithms, accurate predictions, Natural Language Processing (NLP) etc are the advancement they expect.

18. Is there anything else you would like to share regarding the intersection of AI and digital marketing?

R1: No

R2: NA

R3: -

R4: Make more Control able to consumers

R5: AI enables marketers to create highly personalized experiences for consumers by analysing vast amounts of data to understand individual preferences and behaviours. This leads to more targeted and effective marketing campaigns.

R6: No

R7: The rise of AI in digital marketing is definitely an exciting time, but it's important to remember that AI isn't here to replace marketers. It's more like a powerful collaborator. The human touch will always be crucial for understanding brand voice, crafting compelling narratives, and building genuine connections with customers. The future of digital marketing lies in this powerful partnership – humans providing the creative spark and strategic vision, and AI handling the data analysis, automation, and hyper-personalization. Together, we can create marketing experiences that are not only effective but truly engaging and memorable for customers.

R8: The intersection of AI and digital marketing presents immense opportunities for innovation and growth.

R9: AI has the potential to revolutionize digital marketing by empowering marketers to deliver more relevant and personalized experiences to consumers while optimizing efficiency and effectiveness.

R10: Fact that AI can be very confusing for beginners and can lead to creation of fake news.

R11: Nothing as of now

R12: Nothing much
R15: The intersection of AI and digital marketing holds immense potential for revolutionizing how brands engage with their audiences, providing unprecedented levels of personalization and efficiency.

R16: Intersection of AI and digital marketing represents a dynamic and ever-evolving landscape where innovation and creativity are key.

R17: No

R18: No

R19: No

R20: No

In the end of the questionnaire, responders were asked about any instance or anything they would like to share about AI and digital marketing intersection, to which one of the respondents mentioned “AI enables marketers to create highly personalized experiences for consumers by analysing vast amounts of data to understand individual preferences and behaviours. This leads to more targeted and effective marketing campaigns.” And other mentioned “AI has the potential to revolutionize digital marketing by empowering marketers to deliver more relevant and personalized experiences to consumers while optimizing efficiency and effectiveness.”

19. Would you be open to participating in a follow-up interview to discuss your experiences and insights in more detail?

- Yes
- No
- Maybe

Would you be open to participating in a follow-up interview to discuss your experiences and insights in more detail?

29 responses

- 34.5% Yes
- 17.2% No
- 48.3% Maybe

Lastly, responders were asked if they would like to participate any follow up survey or questionnaire related to AI and digital marketing to which 48.3% of the respondent said YES and about 34.5% mentioned NO. But on the other hand, 17.2% said MAYBE.

Findings
In the questionnaire, our main focus was to target digital marketers who are currently working in the industry and know all the ins and outs of the field of the digital marketing. Our next goal was understanding the impact of AI on digital marketing along with the intersection. This questionnaire was shared with 30 respondents, to which they have to answer couple of questions asked to them related to AI and digital marketing. According to the questionnaire, our main aim was to understand the relationship that is being formed between artificial intelligence and the world of digital marketing and to also understand the behaviour of digital marketers when AI is being used in the industry. To our surprise, many respondents are so comfortable with AI and all the advance technology that is been introduced to them in their professional work. The way in which digital marketers are incorporating artificial technology in their day-to-day personal and professional is very spectacular and its one sort of a point of view in looking at things from a perspective of a marketer in general. When talking about marketer, their point of view, perception and an eye to see everything from an eye of marketer is commendable and with AI and advance technologies being introduce, suddenly the whole thing turns upside down. Knowing that AI is very dynamic and it develops in such rapid speed that for a normal internet user it is often very confusing to understand that to do practical application in their day-to-day life, now the same thing applies for a digital marketer but here one thing that differs is the fact that a digital marketer is forces of to understand the applicability to understand apply with developments happing in AI in their professional working each day every day. It not like AI does not ethical issues but it’s like how digital marketers look in to working through all the issues that relates to ethical concerns of data privacy, fake news, violation of privacy rights, job displacements, bias results, security, deepfakes, misinformation and many more. Overall observation of the questionnaire, that digital marketers are not only incorporating AI with their work but also making use of it in most ethical ways to make them self-more efficient and work in more optimistic way to save their time. Not only the positive sides but the negative side of AI is also accepted by the digital marketers with open arms.  

The conclusion drawn by the conducting this questionnaire is AI has both pros and cons in general, but with integration with digital marketing it has led to a lot of things that was discovered. The horizons to which digital marketing and AI intersect with one and other is vert evitable and with AI it has opened many doors for unlimited opportunities in the world of digital marketing.

**Conclusion**

Over the years, the rise in digital marketing along with major shifts in the social media platforms which has results in increase in business potentials. AI is very revolutionary and have a very profound effect on the field of digital marketing. AI not only have changed how brands manages their customization, automation, predictive analysis, consumer insight and market tactics. Not only brands but social media platforms have also seen tremendous growth and continues to evolve with technology. And it’s such a strange fact that how to interact and engage on these social media platforms are driven by nothing but Artificial Intelligence. The applicability of AI on the field of digital marketing is very far stretched and technology is now pretty much developed is taking over to almost every sector of the economy. With AI becoming more and more advance and accessible, it has now opened the horizons for the marketers on how they conduct their business. With AI business are now able to get more comprehensive knowledge about customer insights and marketing tactics which further helps in promoting and being more successful. AI lets digital marketers to present more tailored and customized content which helps in improving customers experiences which further increased conversion rates and increased level of engagement. Thanks to AI-powered predictive analytics, business now a days are making more data driven decisions, more optimized marketing plans and always on tracks with new trends and features in the market. AI has providing marketers with the option of marketing automation which increase the productivity, this not only helps with productivity also free up funds for more projects. AI has potential to influence not only marketers but also the market, the enormous level of potential leads to more personalization, better efficiency and more customer satisfaction. With intersection with AI business now can streamline the process and created more personalized campaigns for targeted audience. But it’s not like AI always comes with all pros, well as it’s a saying everything has two side the good side and the bad side and with AI it comes with its own cons after all it’s a replication of human intelligence but it’s not what human intelligence is. Challenges that along with AI includes data privacy, data quality, integration and the cost that needs to addressed at all time. However, these challenges are not something that can’t be solved, rather they can easily be tackled by having proper knowledge, training,
ensuring data quality and privacy and looking out for the incurred costs for implementing AI. The intersection of AI and digital marketing helps in making more and improved personalized, effective, targeted and engaging campaigns for their target market. With AI driven tools like chat boxes helps in automation of tasks which saves times and resources by giving out more personalized response as per the customer’s request. The success that has happened the digital landscape is when AI is providing options of data analysis which helps business in making more informed decisions which increase the chances of more success rate for the business.

By the intersection of AI into the field of digital marketing, it’s important to consider all the ethical principles of integrity, accountability, data privacy and consent. It very crucial to ensure the correct implementation of these ethical principles by conducting regular audits, using opened sourced data, to take permission from the customer, providing more controlled options and complying to all the necessary and important rules of the GDPR guidelines. With the incorporation of AI into the world of digital marketing, businesses now hold the capacity of analysing big data sets, find out the new trends and level up their scales of expectations as per the demand of the market. Based on consumer behaviour and preferences, AI systems can use their optimization of marketing initiatives which helps them to learn and adapt to new things. With AI driven tools, a digital marketer can now increase their customer engagement, give their business a new competitive edge and not only this it can also address all the ethical and privacy concerns that can be a rooting the cause in the customers trusts and openness to the business.

In conclusion, the overall aim of this paper was to understand the intersection of Artificial technology and digital marketing has been pretty much established and achieved. Through this paper, understood different things related to AI and the world of digital technology. In order for us to have a more practical view point of this intersection, it was important to have insight of the professionals working in the world and having technological know-how of how evolving the technological advancement have on the world of digital marketing. Not only this but having a glimpse of their professional point of view was also a fact very turning point of this study. However, the ramification of the paper dealt in depth with both world on scale of pros and cons of intersecting into each other’s world, with a solid ground and a common goal of benefiting the consumer and the market. The successful implementation of the objective and reaching the desired conclusion was the main aim for this research paper. This paper adds useful insights and advice for navigating into the world of intersection between AI and digital marketing. AI has potential to grown and influence digital marketing in the future, business will be in better positions to satisfy their customer base and the market by embracing AI technologies. AI is such powerful intangible assets for not only the world of digital marketing but for the world if used correctly. At last, this paper was overall a comprehensive study which provided us with an in-depth overview of AI and digital marketing by telling us the implementation, benefits, ethical concerns and future trends when it is incorporated into digital. The combination of existing studies and exploring more and know territories to gather more valuable information and facts for academics and professional interests of intersection of Artificial Intelligence and Digital marketing.


13. Anca, Popescu. THE ROLE OF ARTIFICIAL INTELLIGENCE in DIGITAL MARKETING STRATEGIES.


