iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 9 **Issue:** VII **Month of publication:** July 2021

DOI: https://doi.org/10.22214/ijraset.2021.36287

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 9 Issue VII July 2021- Available at www.ijraset.com

How Digital Marketing along with Artificial Intelligence is Transforming Consumer Behaviour?

Dr. Manas Khatri

Abstract: ***This report highlights the role of AI in digital marketing to change consumer behaviour. It relates the technical aspects of modern technology with digital marketing and their use considering the changes in trends and consumer preferences based on new products and market analysis. Artificial Intelligence is a technology that makes the computers or machines as smart as human being so that they are capable of doing tasks like a human brain. As in this era of technology AI continuous to advance, it is used in almost every field of life. It is combined with digital marketing to make it easier for firms to reach the right customers at the right time. Artificial Intelligence helps the firms to get perception about the customer needs in a very short frame and effectively which boosts their sales and revenues. Some techniques that are used in digital marketing utilizing AI include Big Data analysis, machine learning and customer insights of the specific sector. India has 280 Million facebook users that makes it the top country having the biggest Facebook audience, Inida is second highest based on Instagram audience. The smartphone industry in India is among the develping markets which are adding to the number of middle-income customers and it is estimated that it will reach millions of the cinsumers in future. These analysitics have changed the way marketers make digital marketing strategies and desgin business portfolio in accordance with the products and services available in the market. This report also explain the challenges of ai in digital marketing. Furthermore, it identifies the relevant tools and technologies which help marketer effectively implement the AI in digital marketing.***

I. INTRODUCTION

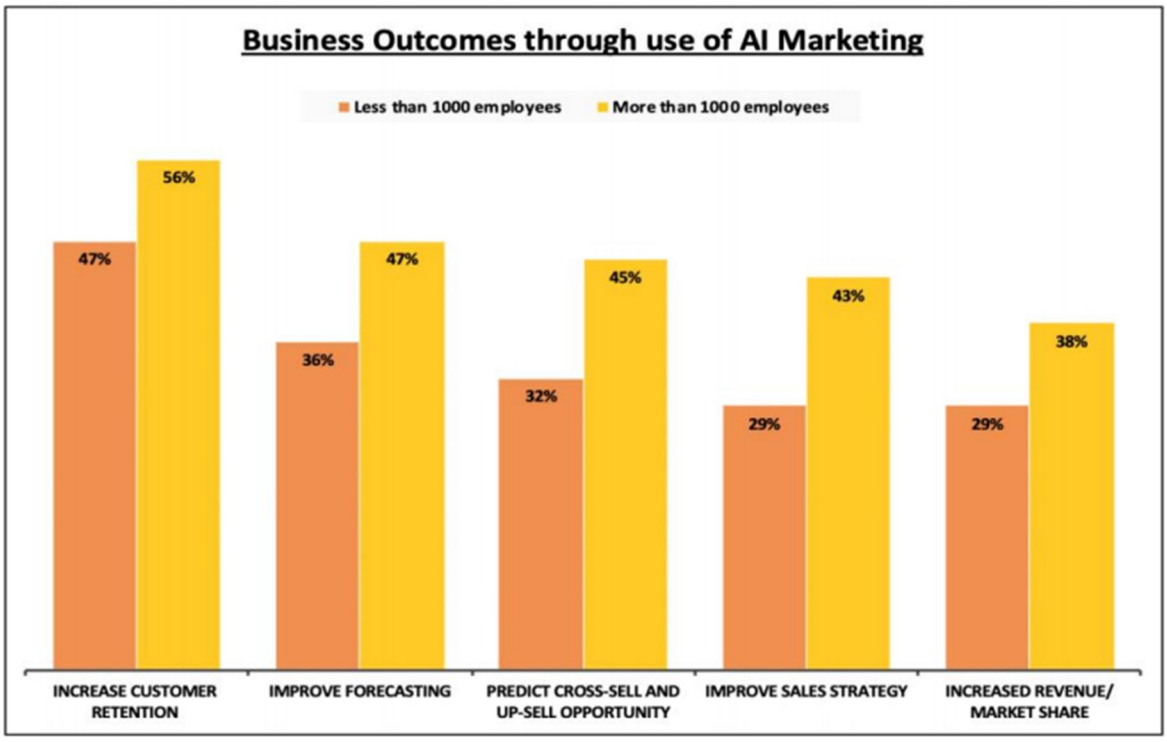
Marketing is a way used by many organizations to tell their customer about the products and services they are offering. It tells them the benefits, value, usage and other information associated with the products and services. Digital marketing includes the marketing that uses internet to connect with the customers for promotions and product information. Artificial Intelligence is a technology that makes the computers or machines as smart as human being so that they are capable of doing tasks like a human brain. As in this era of technology AI continuous to advance, it is used in almost every field of life. It is combined with digital marketing to make it easier for firms to reach the right customers at the right time.

According to Jain (2020), “With the help of AI, Marketers can process the huge amount of data, carry out individualized sales and fulfil customer expectations” (Jain & Aggarwal, 2020). Artificial Intelligence helps the firms to get perception about the customer needs in a very short frame and effectively which boosts their sales and revenues. Some techniques that are used in digital marketing utilizing AI include Big Data analysis, machine learning and customer insights of the specific sector. The use of internet in India is increasing which brings opportunities for businesses to grow.

“If Electronic marketers (E-Marketers) know the factors affecting online Indian behaviour, the relationships between these factors and the type of online buyers, they can further develop their marketing strategies to convert potential buyers into active buyers while training its original customer base” (Raunaque, Zeeshan, & Imam, 2016). According to statista (2020) statistics, India has 280 Million facebook users that makes it the top country having the biggest Facebook audience, Inida is second highest based on Instagram audience.

The smartphone industry in India is among the develping markets which are adding to the number of middle-income customers and it is estimated that it will reach millions of the cinsumers in future. (Sharma & Thakur, 2020). These statistics are the big opportunity for marketers to use the digital platform for marketing with a blend of Artificial Intelligence to get to the right consumers. “The marked and rapid increase of upper- middle class people have yielded to a progressive online marketing” (Kumar & Sekhar, 2019). This is an opportunity for marketers to reach this segment. The role of artificial intelligence in the digital marketing can not be ignored. It covers every aspect from SEO, to chatbots for customer interaction and assistance, it is an important tool for businesses nowadays.

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The above statistics shows that what benefits are gained through using Artificial Intelligence in digital marketing. Digital marketing is effecting the consumer behaviour in many ways. Consumers can provide feedback based on their experiences. “One of the biggest Changes in Consumer Behaviour Due to Digital Marketing is that modern consumers expect a more consistent and personalized experience. They are not loyal customers anymore” (GUPTA, 2020). “Indian youth is a strong consumer group that drives manufacturers to do what they want” (Sharma & Thakur, 2020). Consumers are research which means they do research before buying a product or service, as they are more educated now. Every company is using digital platform for reaching out to their customers as its easier with AI now. The choice of consumers is influenced by the interaction and relation with the company.

Artificial intelligence is changing the world of digital marketing and providing huge benefits. AI agents provide happy customer services which is really important to have good customer relation. Human agents may get upset sometimes so they may not respond to customers in a good mood, but AI agents don’t do so which is one of the benefits of using AI. Machine learning is also used along with AI for data processing and provide efficient digital marketing. Machine learning is used by machines to train themselves based on the available data and provide useful insights to take effective decisions (Marr, John Wiley & Sons). Chatbots assistance use NLP to provide easy interaction with the customers which satisfies customer needs. NLP also helps the firms to identify that if they are using keywords correctly in their marketing content that the users are actually looking for.

II. AI IN DIGITAL MARKETING

Businesses with effective marketing strategies are adopting new technologies to support their marketing programs oriented to reflect a change in consumer behavior considering modern trends and ensure data analytics to analyze the consumer needs and demands. AI has altered the way businesses collect and use consumer data. The use of intelligent technology solutions to digital marketing has encourages businesses to improve customer experience by adopting new technologies such as AI and big data (Davenport, 2020). With the help of these technologies marketers are able to better understand their target audiences.

The consumer insights are an important fuel of digital marketing which has been made easier to collect and interpreted using AI. AI in digital marketing is used to make automated decisions with the help of data collection, analysis and interpretations. The modern AI technologies are helpful in collecting consumer data based on observation and by conducting an analysis on socio-economic trends that change every now and then.

Also, AI in digital marketing offers great speed and reliability in the marketing process with more advanced online platform and easy access to of using these platforms to a large number of customers. Accordingly, the online marketing channels are adaptive to new technologies using embedded sources to code them in small programs that are highly efficient and reliable for long-term use

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and stability of online systems using AI and big data (Gentsch, 2018). The use of AI in digital marketing is multifold and many aspects can be explored in this regard to implement a customized AI program in digital marketing.

Digital marketing offers a comprehensive and efficient form of data collection through online platforms, websites and social media. The use of consumer data is highly pertinent to understand the needs of the customers and offering relevant content for online sales and promotion. However, digital marketing separately is not something regarded as data analytics. It requires additional tools and technologies to gather the data and convert it into a readable form (Campbell, 2020). Also, the data collected through digital channels is in raw form and needs to be analyzed for better use.

Therefore, AI in digital marketing uses modern tools and technologies to analyze user data and help marketers understand their target audiences to offer customized content and relevant products to specific consumer groups. In this regard, the AI tools are used in digital marketing to learn consumer behaviour through communication with the customers. Subsequently, these tools deliver custom messages to each customer based on his queries and the type of information they need. AI is also used to reduce human indulgence in tactical tasks and communications which can be eased using small AI tools.

The various forms of digital marketing using AI incudes:

A. Data analysis and interpretation
B. Automated decision making
C. Content generation
D. Personalized content on online channels
E. Language processing
F. Media buying

AI supports the aforementioned tools and operations in digital marketing. However, their implementation comes with a change in digital media strategy of a company as AI relies on automated response and decision making. Most of the operations of AI in digital marketing are based on consumer data and input through communication. Therefore, certain relevant technologies such as computer robots and big data analytics are also used along with AI to ensure better response in strategic implementation of digital marketing plans (Davenport, 2020).

III. MAJOR ELEMENTS OF AI IN DIGITAL MARKETING

As discussed above, AI facilitates the adoption of relevant technologies and components to ensure greater efficiency and reliability in digital marketing process. These technologies bridge the gap between large data sets and data analysis conducted at later stages of data collection and information handling. Thus, the various dimensions of AI also include some of the crucial elements that are highly related to this technology and also serve as the basis for the implementation of other supported technologies (Marr, John Wiley & Sons).

One of the major elements of AI supporting digital marketing in online platforms is machine learning. The automated responses generated through AI and the decision making prospects are all facilitated across the board through machine learning. It is a type of computer technology that uses algorithms to analyze information and improve automated responses accordingly. Machine learning is used to analyze new information within a specific context and match them with historical data based on decisions that have not been taken in the past.

Similarly, the big data and analytics also play a crucial role in AI implementation in digital marketing. The digital marketing has brought widespread and extensive user data bases to be analyzed for improved automated responses and decision making. However, these large data sets cannot be analyzed by humans in a shorter time period. Therefore, to ease out this process, the AI in digital marketing uses big data and analytics to understand the consumer data and apply relevant analytics for better reach to consumer choices (Xu, 2020). These analytics are useful to alter consumer behavior based on consumer preferences for certain products and services.

The targeted ads are also based on a thorough analysis of consumer choices and interaction with brands on digital platforms such as websites and social media. The AI-powered solutions are also a part of digital marketing campaigns to target specific consumer groups. These solutions have the ability to drive marketing intelligence into target audiences to make data-drive decisions that are more precise and appropriate for different markets. For instance, the use of Bayesian Learning help marketer understand the response of customers to particular products and service offers in digital marketing (Gentsch, 2018).

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IV. USE OF DIGITAL MARKETING WITH AI TO CHANGE CUSTOMER BEHAVIOUR

Using digital marketing tools and techniques to alter consumer behaviour has been a conventional practice for large and technology-oriented businesses as they start exploring the wonders of AI and big data analytics to modify their course of action with regard to digital marketing. The use of AI in digital marketing is beneficial in reducing the overall marketing cost and time used to implement the digital marketing strategies and achieve underlying marketing goals and objectives. The implementation of AI tools in digital marketing follow a certain pattern that should be devised using business goals and objectives (Miklosik, 2019).

The first step of this process involves establishing the marketing goals in line with the business strategy to highlight the marketing prospects. The marketing teams have to define clear marketing goals to identify the areas that can be improved through AI. The marketing operations that need modification should also be analyzed to alter their pattern with the help of modern analytics. Thus, the key performance indicators (KPI) must be developed to ensure an effective analysis into marketing efforts and strategies based on AI automated decision making. The next step is to set the data privacy standards that will be implemented in AI-based digital marketing campaigns to secure consumer data and personalize it accordingly. The privacy standards must be programmed into the digital platforms used for marketing. For instance, if a business is using social media marketing and applies data analytics then the data standards must comply with the privacy policy of respective social media platform to avoid potential conflict with user data policy (Ribeiro, 2020). Also, the safety and security of user data is a matter of concern for marketers applying different tools and techniques to acquire data. The data quantity and sources of data collection will be defined in the next step to collect relevant data needed for targeted marketing campaigns. The marketers need large amount of data to ensure effective decision making based on historical aspects of consumer interactions with the brand and communication for updated information. This data can be collected from different sources such as the marketing campaigns, customer relationship management data and social media interactions. The data sources must be reliable enough to support AI-based digital marketing and analytics (Stone, 2020). However, this data should not be used on user's discretion to comply with data policies of social media and other online platforms.

The quality of data also matters when AI-based digital marketing is applied. For this purpose, businesses implement machine learning programs to learn how to make automated decisions improving data quality and summarizing the large data sets into more useful forms. The machine learning programs must set standards to reduce errors in data and implement the decision making marketing programs to ensure improved consumer behavior. It requires coordination on part of the marketing and data management teams to establish processes for data curacy and transparency (Miklosik, 2019). The data should be consistent and relevant to consumer attributes of product and service choices.

Also, the data reliability is a great matter of concern as large data sets usually contain various data forms that need to be interpreted to ensure quality data to be processed through AI-based data analytics. The final steps of this process include selecting an appropriate technology that reside with the digital marketing goals of a business. For this purpose, the marketers and data managers have to identify the type of data sets they are dealing and then relate them with considerable technologies for data analysis and interpretation.

V. MAJOR ISSUES AND CHALLENGES OF AI AND DIGITAL MARKETING ON CONSUMER BEHAVIOUR

Although AI is bringing more opportunities in marketing field, it also has some pitfalls. When we open social media platforms like Facebook or Instagram, we often see the products that we have talked to someone about, or we have seen somewhere and wanted to buy or we are thinking of something and it appears in front of us, this is all because of artificial intelligence. But the question is how, this means that the data is analysed using AI techniques, but did we provide the data? the answer is No, privacy is the biggest challenge here. Customer's data is being used without their consent or permission which may cause trouble in future if the customers get aware of the consequences of the data privacy (Newman, 2019). "Catching attention and connecting with today's tech-savvy audience has posed a challenge for many businesses, however, implementing the right marketing approach can help tackle these challenges" (QINDIA, 2020) AI is becoming a trend because It is providing personalized experience based on the data analysed. Research shows that if digital marketing is done optimally, it can have negative impacts. To provide an efficient AI based digital marketing, firms need to have robust IT infrastructure which might be expensive this can be a challenge for digital agencies who are trying to adopt artificial intelligence. Artificial intelligence needs proper and high quality data to provide efficient insights, thus insufficient or poor quality data can be a challenge for firms (Xu, 2020). The skills required for AI based digital marketing might not be enough as it is a new technology which imposes challenge for firm's Human resource.

The employees of the organizations need to interpret the results from the already made AI software's which they might not do properly, and the insights derived from them can be ineffective (Brenner, 2019). Another challenge is that customer switch to other buyers easily, this can be because those rivals are posting negative comments in the company's feedback section.

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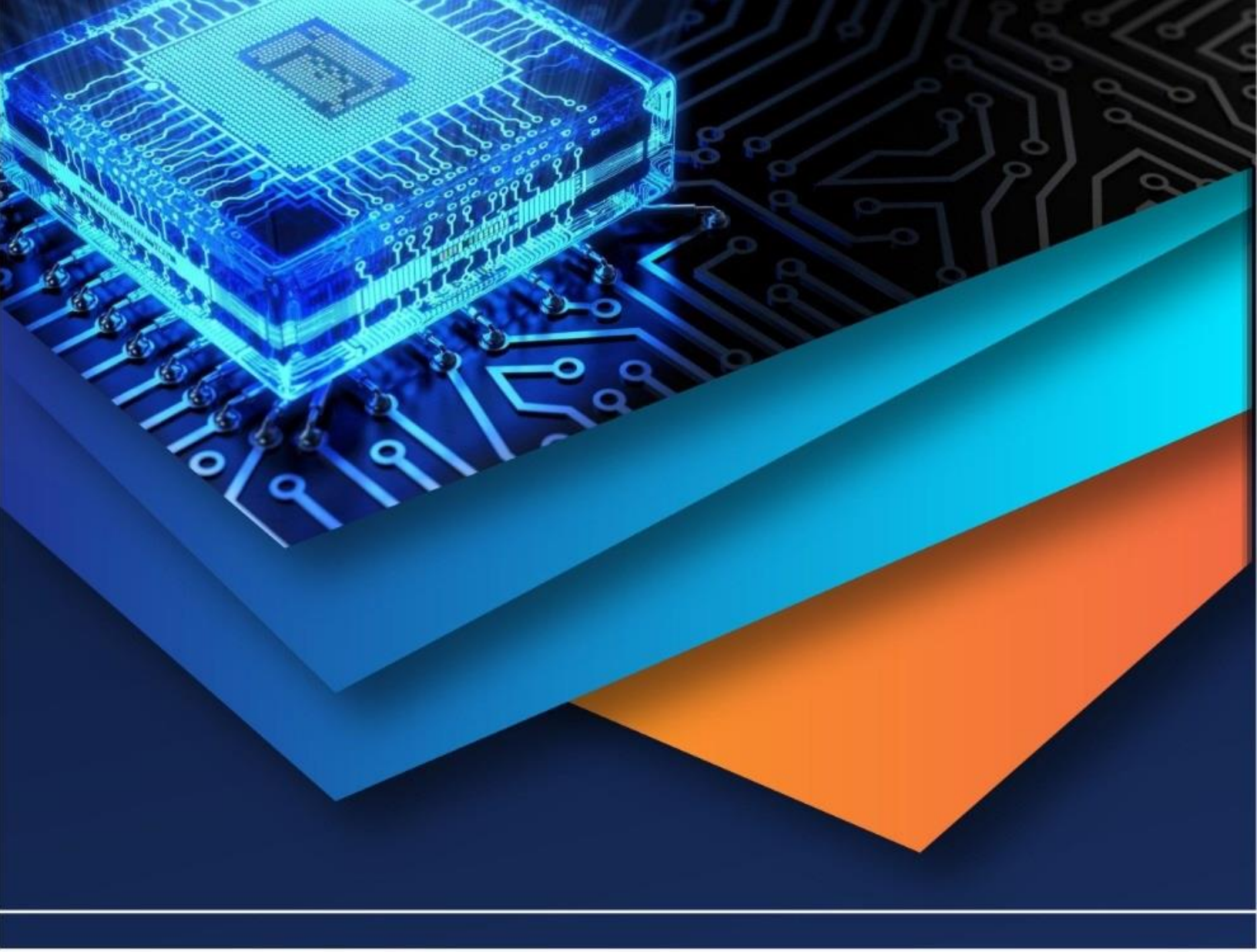
VI. CONCLUSION

Artificial Intelligence is a new technology that can improve the influence of digital marketing on consumer behaviour. Although it's a new technology it also has some pitfalls but they can be overcome. India is the 3rd highest country in terms of internet community which is an opportunity for firms to increase their marketing coamings online. They can target specific audience based on the valuable customer insights gained through the AI techniques used. They can use AI based assistance for the betterment of their customer relationships by providing happy customer interactions. Using AI with digital marketing can be highly effective.

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