

# How Artificial Intelligence (AI) is Helping Digital Media to Understand Consumer Behavior

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**Abstract:** Today technology is changing every day and to stay updated with the society and to follow the trends business also need to update themselves with the new advancements of technology, nowadays business does not interact with customers the traditional ways they use digital media platforms to interact with customers which generate data, the customers are now changing they want the personalized experience to achieve that we need to understand every customer. Here is where the role of AI comes in analyzing, segmenting, delivering insights of customers which help businesses to cater to the customers with a personalized experience.

AI is a self-learning system which uses data mining and big data analytics to learn, this helps the business in saving lots of time which would be used in analyzing and segmenting the data now they get these things done by AI in just a short period of time without any error, which not only saves them time but also saves cost to the company. In this paper, I have talked about how AI is helping businesses understand consumer behavior thus improving the consumer experience.

**Keywords:** Digital Marketing, Consumer behavior, consumer experience, Artificial Intelligence, Real-time marketing.

## I. INTRODUCTION

Artificial Intelligence has emerged as a new technique in uplifting and anticipating consumer preferences through digital media and helping marketers to better understand their consumers thus delivering a personalized product/ experience. AI is making our systems intelligent every day, we generate tons and tons of data online, which helps machines to learn more about us and cater us with content and ads that we would engage with, ever wondered how youtube shows you recommended videos, and how it keeps changing this is all a play of machine learning and AI every time when we are browsing the internet we are enabling machines to learn more and more about us, a simple example of this is let's say you picked up a date on Tinder and then to go out with that that you searched about restaurants, and then you searched the route of that restaurant on Google maps and then checked in on Facebook this all data will be used by marketers to show you personalized ads. This all is a part of Big data, people in the marketing world are packed up with these kinds of data this is where machine learning plays its part in optimizing the data reducing the time and thus improving the consumer experience. In this paper, I will explain how different tools of AI like object recognition, voice recognition, predictive

analysis, etc. helps brands to improve and enhance the consumer experience.

## II. INTEGRATION OF AI IN BUSINESS

Data has become the most important tool in marketing the more data brand acquires the more possibilities it has, but the down part of having the large volume of data is to analyze and create different data sets and then to create a pitch-perfect marketing plan for every data set which requires enormous time and efforts, and now everyone is on Omni channels which makes data collection and classification and measurement difficult for brands. AI has the ability to collect, process, measure, and segment the data and it is also always learning from the data so when AI is integrated with Digital Media it can deliver valuable insights and help save time.

## III. DIGITAL MEDIA AND ARTIFICIAL INTELLIGENCE

The basics of consumer sentiments are still the same which is in communication now the only question is how well we communicate and cater to the needs of our consumers and digital media has helped us better understand consumer sentiments but the issue with the digital media is that there are a lot and lot of data to process in a limited time, Marketers are using their past experience and their knowledge to market their brand online because it's not possible to analyze and process that much of data and then segment it in a short period of time. As both Digital Media and consumer behavior are so dynamic that the data becomes obsolete so early, so it is important to integrate Artificial Intelligence techniques once the system is integrated with current marketing infrastructure of the brand the through self-learning techniques like language processing, voice recognition, image recognition, consumer behavior analysis by analyzing consumer at every touchpoint and creating a unique profile of every customer which helps marketing team in deciding a unique strategy for every set of consumer, and they can create personalized content for every set of consumer, which will eventually result in acquiring more people.

## IV. HOW AI IS BEING USED WITH DIGITAL MEDIA

*1. Image Recognition:* Image recognition is one of the most important features of AI which is used in digital media, this helps in real-time marketing, with tools like Lexalytics Sematria and IBM Watson, which provide top-notch AI image recognition capabilities, now our systems are well

equipped to understand the image and send to the marketing department so they instantly act upon that for ex: if someone posts a photo of the broken camera and is now looking to buy a new one and if that information is relayed to brand in the real-time basis they can approach the customer directly through social media and pitch him about ongoing offers or maybe create one especially for him.

2. *Chatbots*: Chatbots are becoming game-changer in business, now every website may it be small or big everyone is using and Chatbot AI for customer support, although it is not capable of answering every question still it reduces the time and effort of support team questions like order status, refund status, etc can easily be answered by an AI, for a customer now they don't have to wait "for next available executive"

Although the human touch is missing and sometimes AI is not even perfect with customer support but still, at the end, my problem is getting solved I don't mind if it is done by an AI, or a Human my issue solved I am a happy customer to that brand. Now the next big thing in Chatbots AI is Smart chatbots which can predicate and analyze human behavior while chatting which would result in answering more complex and personalized questions some companies like Facebook and Amazon are already testing it.

3. *Customer Profiling*: Profiling means defining customers based on different attributes so that to identify the customers based on their likes and wants. AI is a technology that self learns and improves the process based on the data it had gathered, AI is programmed to gather and recognize patterns and trends of data, the deep learning mechanism used by AI can be used in Customer profiling, Customers now days are using Omni channels to interact with brands leaving behind a long trail of data tools like IBM Watson can help brands analyze this data sets and based on these sets marketers can identify the problems that customers are facing and help customers with personalized responses resulting in satisfying the needs of customers. There can be different types of customer profiling where AI can be asked to analyze the customer based on income, age, gender, education, Taste, preference, political views, based on behaviors, etc. this segmentation helps brands to approach customers with personalized messages and offers.
4. *Personalized Marketing*: Every time we are on social media we generate some personal data which is gathered by companies like IBM, Lexanalytics which is then used by brands to show us ads based on our preferences and our behavior, every time I log on to Netflix, YouTube the video/movie that I want to watch I just in front of me I don't even have to search for it same is with Flipkart and Amazon the products are just right in front of me it just saves the chaos of searching the right product and puts all

my favorite content in right front of me. Which encourages the customer to visit the site again and again.

5. *Digital Advertising* : Digital ad spending are rising day by day according to emarketer \$333.25 billion were spent in 2019 in Digital ads, Digital Ads platforms like Facebook, Google, Bing is using best AI techniques like smart analysis, customer segment profiling, which help them reach out to the better and mass audience based on the requirement of advertiser which helps in generating true and fairleads with these AI technologies they can gather real-time information of on ongoing trends and better-performing hashtags, keywords which can be used in ads and posts campaigns to deliver better results and utilization of funds, by the use of AI both user and advertiser are happy as the user is able to see ads based on the preference and advertiser can reach out to the right user.
6. *AI-based feedback analysis*: Analysis of customer feedback is very important in order to make the customer happy and avoid mistakes that were occurred in the past, but the is issue that the amount of data the customer feedbacks generates its huge and its not possible for human beings to go through it and analyze it in a short time thus the improvements can't be made in business so to solve this issue we can Integrate AI with all our customer feedback platforms (websites, Social media posts, stores, text messages, chat support, call support) and make a central repository of feedbacks, the AI integrated feedbacks can raise flags based on the seriousness of issues the quick action can be taken and the issue can be solved quickly.
7. *Augmented Reality*: AR is another technology which when linked with Digital Media can change the customer perspective and the way how they look and feel the products, brands like Oneplus recently launched their TV's in which they gave the option of trying the TV screen through their app the user can try the digital variation of the TV and can analyze if the TV fit's in the area for which he planning to buy it for, which eventually brings user one step closer to brand and also helps in increasing the engagement rate of ad campaigns, Nowadays many brands (Tata Motors, Asian Paints, Lenskart) are using AR and AI together to give a boost to its Marketing dept.
8. *Email Marketing*: AI is now helping brands in sending personalized email messages with personalized offers these emails are only sent when the user triggers certain option on the touchpoint, which encourages them to buy the product, AI not only helps in sending these emails but it also helps in email marketing campaigns analyzing and customizing the campaigns based on consumer sets, which helps the brands to reach out to the right consumer with the right message.

9. *Real-time Marketing*: The focus of marketing is now changing now it's no more that we follow the traditional approach of Digital media where we create a common content for everyone, now consumers are changing and their needs and wants are also changing everyone wants that their demands should be fulfilled in real-time so to achieve that we need real-time data and which also needs to be analyzed and processed in real-time which is only possible with the use of AI, now user don't like to wait to get a reply from the brand he just shifts to next alternative so we need to be attentive and to be present 24\*7 to help and assist and to fulfill the demands of the consumer in real-time and in order to achieve this we need to understand our consumer in a better way for that we need to focus on few things i.e: Brands need to understand and follow the ongoing trend, focus and implement economic changes asap, always be ahead of the competition and make good use of social media because social media is the only platform today where we can interact with our consumer personally and get a sense of what they want. It not 2013 anymore where we can just post on a Superbowl evening and can get the attention we have to stick with our customer at every touchpoint like what pages or what sections of our Website/App he is browsing, what exactly he is looking for, did he or did he not made a purchase if not then why an automated email should be triggered instant as soon as he leaves our platform reminding him that he needs to go back and make a purchase if that doesn't work then maybe give me a call and ask him what was the reason why he abandoned the cart and left and how we can make him our valuable customer

Today AI is used everywhere and AI has only made our lives easier than ever before, AI helps to automate so many processes which helps in saving so much valuable time. AI is no longer a luxury it has become a necessity for every brand it doesn't matter if you are a big business giant or a small business everybody has to integrate AI with their business process. The marketing team has to focus on lots of important questions like who is my target audience, which social media platform is best for me, what type of posts should I be sending out, AI can solve all these issues in just a matter time and can deliver accurate results, which can result in getting amazing engagement results, the reason why AI is able to deliver this amount of Accurate result is that every time we log on to the internet we start a long trail of data which is instantly being picked up and being shared with the huge data companies which create our online behavior and start analyzing our behaviors and create a separate profile of each and every user about his search patterns likes, dislikes, emotions, what types of sites we visit everting added up creates a digital identity of every user which shared with marketing to create a great campaign strategy.

As no technology can replace the human mind, so AI also has some cons which can become can cause some serious problems sometimes.

1. *Security Risk*: We all know every app that we install on our Smartphone's takes lots of permissions even ones that are not necessary for that app. I remember once I installed a camera app on my phone and it asked me to access my contact list I don't think that a simple camera app has any use of my contact list to function but what these apps do is they gather all these critical information from us and then sell this data to some other company because data today is the new gold in the market the more you have the richer you are. So we always have to be cautious while giving app permissions.
2. *Investment*: AI is not so cheap to implement it requires a good amount of investment and a dedicated team is appointed just to manage the system but with the advantages that AI brings in the cost can easily be recovered if AI is implemented properly.
3. *Creativity*: AI can only do tasks based on the data that it has, it can't do anything new or isn't able to make any decision which it has not learned' simply it can't think and act like humans or maybe replace humans in any task because although its a cutting edge tech still it requires humans to run it, surely it is making our lives easier and complete those tasks in minutes which would take hours but it can't do creative things.

## V. CONCLUSION

Marketing Communication is changing day by day, the biggest change that is now happening is Artificial Intelligence in the marketing sector the ability it has in lead generation, maintaining relations with customers, guiding them to the best product, AI has already proven its importance in business now is the time when we *efficiently and effectively* integrate AI with business, we today the customer has become so impatient that without automation we can't make our customers happy, and AI is helping us to achieve this.

Digital Technologies has helped the business to know more about customers and built a relationship with them. Now with the integration of AI, this has it is becoming advanced because the more data we acquire more capable we are in serving our customers better, with the great potential that AI has and when integrated with marketing it is delivering outstanding results which not help brands but some also help customers to reach the brand which is best suited for them.

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