



A Study On Transformation Of Marketing Practices Through Artificial Intelligence

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Abstract:-This is the age of disruptive technologies where the technologies like IIOT, Big data analytics, Artificial intelligence, Machine learning and Block chain have changed the ways that business operates. Amongst all, AI i.e. Artificial Intelligence gains immense power to drive the businesses with a greater speed and bring transformational changes. Current study was conducted considering role of AI in marketing functions of the businesses. A qualitative approach has used by collecting the data from scholarly work by researchers, industry reports and reputed blogs. It was attempt to explore the concept of AI through marketing practices, its current applications and future prospective. Research study provides benefits of AI implementation in marketing. It explores how AIM technology affects the marketing decisions. The readers and research scholars would have a complete overview of the AI in marketing through the research paper.

Keywords: -Artificial Intelligence, Digital Marketing, Intelligent marketing, Machine Learning, Marketing Strategies, Marketing decisions, Predictive analysis.

Introduction

The technology advancement, innovations and evolution in recent years have kept the industries to move on. Marketing has reached a point where the transformation can be observed distinctly through adopting technological advancement. Evolution in information technology like IIOT, Big data analytics and Artificial Intelligence have changed the ways the marketing practices operates in various industries. Considering all the innovations brought by IT sector, Artificial intelligence is observed as one of the disruptive technologies that hold a massive potential to bring the transformation in the marketing field. However today most of the organisations are trying to find out the best AI solutions suitable to their marketing functions. Artificial Intelligence brought the efficiency, effectiveness and much more improvement in current marketing functions that assures exclusive new ways of creating and delivering the values to customers. AI offers the optimum technology that enhances customer experiences and it let the

organizations to know the changing needs, preferences and expectations by collecting a huge amount of data systematically. An AI tool collects the qualitative as well as quantitative data in short span of time that help them to bring the changes and boost the performance rapidly. Therefore current research paper is an attempt made to understand the transformation brought by AI in the Marketing field and its future prospective.

Objectives Current study has been conducted with following aim and objectives.

- To understand the concept of artificial intelligence marketing
- To explore the scope of Artificial Intelligence in Marketing functions
- To conduct systematic literature review on AIM through authenticate sources
- To understand future scope of AI in business domains
- To determine the effect of AI in various areas of marketing decisions

Considering above objectives an extensive literature review was conducted. Literature was selected from authentic and relevant sources.

Research Methodology

Explorative Research Design was used in the research. Focus was on qualitative data hence inferences were drawn on the basis of literature reviewed. Data used in literature review was collected through secondary data sources. These were consisted with research paper published in Scopus, Elsevier journals, Emerald journals, and UGC CARE listed journals. Various reputed blogs related with AI, reports published by esteemed organizations and reference books were also referred for literature review.

Scope of the Study Functional scope of the study was confined with two terms i.e. Artificial Intelligence and its applications in Marketing. Both the respective concepts are very vast and hence AI and Marketing were studied with selected parameters in the study. Current situations of adopting AI in Marketing functions, its future prospective t were primarily studied through the research.

Concept of Artificial Intelligence “Artificial Intelligence or AI is a field of Data Science that trains computers to learn from experience, adjust to inputs, and perform tasks of certain cognitive levels.” Artificial intelligence is the branch of data science where computers functions like human being. Its emergence in the data science has changed the various business domains drastically. It helps the organizations to take most appropriate decisions especially real time decisions through insights derived from the data.

Organizations are investing a huge amount on AI research and development. Despite the

current pandemic situation most of the organizations found no effect on their investment in AI rather investment increased substantially. AI in future is all set to define global competitiveness in coming years with noteworthy economic and strategic advantages.

AI enables the machines to learn and predict from the experiences and work like a human brain. Using AI computers can collect large amount of data and recognize the patterns in it. Organizations with more data will lead the market. AI adds intelligence to machines and achieves incredible accuracy. It automates repetitive and consistent learning to machines that helps to discover more from the data.

AI & Marketing: -Business making decisions is a complex and critical and varies with situations. Business experts found that AI has a tremendous potential to collect large amount of data from the different sources simultaneously, analyse it instantly and provide the bases for decision making. Deloitte report explored that all the domains in the business will be overcome by AI especially in marketing domain. AI will help the organizations for simulation, real time data gathering, forecasting, trend analysis etc. It will be found very vital in customer relations management where organizations can automate the functions like database management, contact management, prediction in terms of CLTV i.e. customer lifetime value etc.

Significance of AI in Marketing

From last few years influence of AI can be observed in various marketing functions as helps the marketer to understand customer better and improve customer experiences. It helps the organizations through predictive customer's analysis and makes customer journey more meaningful, targeted and individual customer tailored. AI speedup the overall marketing decisions. AI is found significant in augmenting marketing teams and perform critical task easily. AI reduces marketing cost and minimizes complexities in decisions. Optimization of time, cost and resources as well as effective outcomes of decisions can be obtained through AI. Following diagram reflects the areas in marketing where AI has a substantial role.

AI in Marketing Functions



AI for Customers:-

AI has equal importance for customers in many ways as it enhances the shopping experiences, faster decisions, more information, and use of sentiment analysis from customer feedback. Major areas where AI can help the customers are mentioned in the following areas.



Big pay-off from AI in Marketing

Harvard business review published a report on accelerating sales and marketing through Artificial Intelligence. It has explored the opinions of 320 experts and predicted how AI will shape the businesses in the future. Following is the statistics discovered through the survey.

Expected outcomes after implementing AI in next three years.



Source: Harvard Business Review Analytic Services, May 2019

Literature Review

An extensive literature review was conducted through scholarly works of scientific researchers, latest studies in the field of AI, established thoughts and related literature, articles and data from renowned scientific journals, blogs etc.

Dan Dumitriu, Mirona (2020) Researchers have developed a four-step sequential model that helps organizations improve their website visibility through various keywords. These steps consist of making relevant topics and themes for making the website more accessible, using online tools for searching key words, keywords search in search engines, and analysis of those key words etc.

Savica Dimitrieska, Aleksandra Stankovska and Tanja Efremova (2018) Current study highlighted how AI helps organizations predict consumer buying preferences, their next purchases, and improve their customer journey. AI helps deliver the right messages to the right consumers, i.e., target consumers through proper medium. Content in the messages carries a lot of importance in AI. Challenges in implementing are data breaches and preventing frauds.

Arnaud De Bruyn, Vijay Viswanathan (2020) Authors have discussed the opportunities and pitfalls in AIM. Knowledge creation and knowledge transfer were the two variables focused in the study. Significance of AI in marketing through predictive tasks and automated explanation through chatbots were elaborated in the research.

Michael Haenlein, Matthew J. Schneider, Abhijit Guha (2021) Researchers examined the adoption AI and its effects in retail industry. Researcher suggested that retail managers should adopt AI considering various factors like value creation to customers, effective retailing, ethical concerns etc. Authors have explained that AI will be more effective if they focus on augmenting managers judgements.

Christi Olson and Jennifer Levy (2017) Automation in marketing and its results were highlighted through the research study. Study found that automation based marketing is effective in bringing better results, creative development, personalization in marketing activities execution, builds life time value models and deeply focused customer relationship.

Thomas Davenport, Timna Bressgot (2019) Multidimensional framework to study the effect of AI in marketing was developed in the study. It was consisted with intelligence levels, task types, and embedded AI in robot etc. The model also focuses on effect of AI on marketing strategies, consumer behaviour etc. Researcher also discussed the privacy issues, bias in data, ethics in AI implementation and practices.

Melanie Florence Boninsegni (2021) Industrial fourth revolution-new technological advancements and its pros and cons on consumers well-being were focussed in the research study. Researcher found that new technologies like AI, Robotics, blockchains etc. providing advanced approaches towards their day to day decisions in the field of healthcare, education, financial aspects etc. Author observed that these technologies are disruptive technologies and they are changing the realities of consumers and service providers.

Gang Li, Muhammad Zafeer Shahid (2019) It was a qualitative research approach where researcher conducted an interviews with marketing professionals. Study found that AI helped these professionals to improve their performance in terms of sales and market share. AI helps them in Pricing, promotion, production, distribution and product planning. Predictive models were developed for planning future strategies in marketing. Competitors pressure, digital literacy, digital maturity, media attention, revolution in IT and consumers preferences were major affecting factors for adopting AI in marketing. Authors suggested that managers should follow the aspects and challenges in AI before actually they implement in marketing.

N Ramya and Dr. SA Mohamed Ali (2016) Researchers have explored on consumer buying process and factors affecting on it. Study observed that factors like demography of customers, culture, social class, family members, personality traits and psychological factors are influencing factors affects on customers purchase decisions.

X. Zhu, Z. Tan, September (2012) Current research was conducted with the aim of

understanding SEO key word analysis as well as its role in website editing system. Researcher observed that website editing system is related with text extraction technology that helps to collect the visitor's information. A real time SEO factor analysis could be run automatically that helps to improve the productivity in SEO processing.

Tiago Ribeiro and José Luís Reis (2020) Researchers emphasize that many of our daily tasks are already be replaced by artificial intelligence and probably many of us may not be aware of this. Researcher examined that use of AI through machines with humans will provide better results. Researcher mentioned one of the major obstacle that humans are still not confident in technology and they are yet ready for this technological change. Hence researcher suggested that managers and companies should make themselves and their employees for implementation of artificial intelligence in marketing practices.

Satya Ramaswamy (2017) Researcher thrown a light on advantages as well as consequences of AI in industries. A survey by TCS reveals that though some jobs are lost by the introduction of artificial intelligence but still there is a great scope for employment if the companies using AI to improve computer to computer task while employing the people. In fact AI has given an opportunity to each segment of the business by grabbing the new techno-skills. From the findings it can be inferred that in marketing also there are tremendous opportunities but one must learn AI.

Amy Gallo (2014) Study reveals the value of retention of customers comparing to acquiring new customers. Study examined that acquiring new customers cost would be 25 times more than the retaining the existing customers. Study also showed that increase in retention rate by mere 5% increases profits by 25% to 95%. Here AI can play an important role as it will keep you informed with existing customers and their preferences.

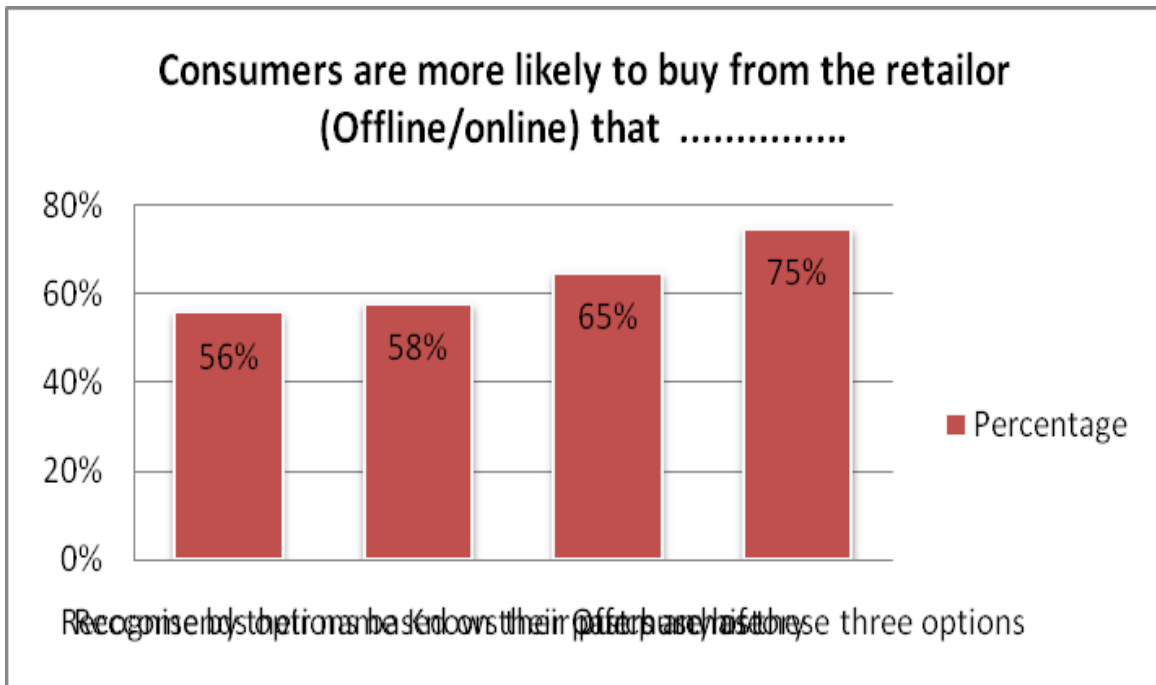
Piyush Jain, Keshav Aggarwal (2020) Researcher have illustrated about the need of AI in marketing, drivers of AI in marketing through real world business cases. Study entailed different AI strategies that can be implemented in marketing. Sector wise and region wise role of AI has been entailed in the study. Customer life cycle stages and role of AI in each stage was explained by the author.

Inferences and Findings

AI and Personalised customer experience

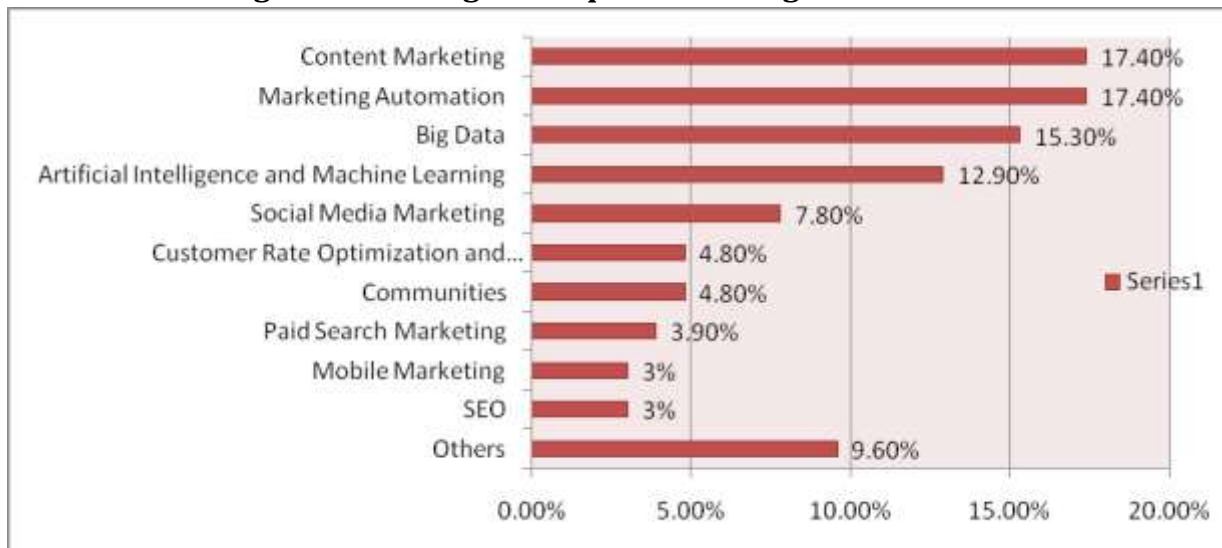
AI helps to monitor their customer's behaviour and leverage their needs to enhance the buying process. From a survey done by quick sprout, it has been observed that customer's gives preferences to the online/offline stores that recognise their name, earlier purchases,

recommendations based on past purchases etc. Here AI can play a very important role that it will keep all the above said records, track the records, gives recommendations etc.



Source:-Quick sprout Survey 2018

Most effective digital marketing techniques according to marketers worldwide in 2020



Source:-Worldwide; SmartInsights.com; January 2020; among marketers; Online survey AI Implementation strategies in Marketing

From the above extensive literature review it can be inferred that there are many ways to implement AI in Marketing.

Chat bots
Content
creation
Image Recognition
Email
Personalization
Product Pricing
Programmatic AD
Tracking Speech
Recognition

Chat bots: -Chat bots are used in messaging applications. It helps the customers by providing convenience. They engage the customers by interacting like human would and cost very less. This is an automated program that stimulates the customers to interact with machines. This communication could be verbal or written and found very effective and time saving.

Content Creation:-Here content is created by a machine for a human being. The days are gone when marketing executives spends hour and days to send the emails to their customers. Emergence of AI, email content creation task is carried out by machines that too in less manual efforts. AI maps the customers email browsing data, website experiences and it creates the dynamic content of emails. Even today AI content creation is used in writing posts in blogs, articles in magazines, creating videos and audios etc.

Image Recognition:-AI powered machines can act like humans and hence it can see just like we human and interpret the objects. This machine vision can be used to interpreting and understanding the images. Google lens could be the best example of image recognition and it helps in marketing especially in retailing business to suggest the best results based on their interest and surfing behavior.

Email Personalization: -This is used in marketing where one can use personal information of subscribers to delivers more targeted emails. These are automated emails generated by machines powered by AI. Customer's feels like they are considered individually and getting the individual treatment. Research proven that individual or personalized emails results in increase in revenue and profit. Dynamic content, Personalized content, browsing history, anniversaries are used in email personalization.

Product Pricing:-AI got the power to make dynamic pricing easier and better. Through AI machines can collect the demand and sales data, analyze and produce the results in few minutes and helps to optimize the sales by giving dynamic price when the demand is high. These applications are mostly used by OLA, UBER, IRCTS train booking etc.

Programmatic AD Tracking:-It is an online advertisement that enables automated buying and selling process. This method enables marketer to target the segmented audiences to advertise the product or service to the right people at right time. Here advertisers charge the marketers for the particular advertisements. AI uses the algorithms that help the marketers to analyse the customer behavior and accordingly targeted customers are advertised with the campaign.

Speech Recognition:-AI brought the innovation through interpreting human voice. It recognizes the human voice and interprets them. Apple's SIRI and Google's Alexa are the best example of speech recognition in artificial intelligence.

Conclusion

There is no doubt that the future is all about to provide greater customer experience to sustain in the stiff competition. In the fourth industry revolution artificial intelligence will be the key to success. AI got this imperative because of its power driven by the data it collects, analyze and produce the results instantly. It helps the marketer to understand their customers, their needs, and changing preferences, purchase behavior etc. Here Artificial intelligence plays an crucial role to anticipate the demand, customer choices and guided experiences to match the customer expectations. Through this research an attempt has been made to understand the concept of AI, its role in marketing and predictive analysis.

From the literature review and critical analysis of various reports it can be conclude that AI is a technological disruptor and it holds massive potential in various industries like automobile, pharmaceutical, agriculture, digital marketing etc.

Future Research

It was a qualitative study conducted on the basis of literature review. In the future research scholars can conduct the quantitative research through using survey based data or any other method. In next one decade we can see the dramatic change in marketing practices driven by artificial intelligence. As well as same change can be observed in customer behavior. Hence consistent efforts in the field of marketing research are expected by the scholars.

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