

The Role of AI solutions to study Marketing Objectives and Consumer Behaviour

Paper Submission: 15/11/2020, Date of Acceptance: 26/11/2020, Date of Publication: 27/11/2020

Abstract

In Marketing the main purpose of development of any brands isto reachupto the right consumers, at a precise time, with the specific message to achieve maximum profit by selling goods and commodity.In the present VUC (Volatile, Uncertainty, Complexity, Ambiguity) world Artificial Intelligence (AI) or machine learningenabled platforms isfocusing and bringingthis into a reality.Nowa day technology with the help of AI has a humanlike capability of realizing what is actually going on with regards to certain situation. In the present modern era AI is more commonlyused in the execution of Ad as well as fulfilling marketing objectives to identify consumer behaviour.AI network is a machine learning system which put together a combination of features persistence with their application infinancial and economic sector which deals flexibly with different types of informative data and higher accuracy by making better predictionsand forecasting ofoptimum benefitsto business activities. The present paper highlight how AI fulfil the basic objectivesof marketing in present days by raw information acquired from traditional surveys.Therefore, we need to understand thewords/vocabulary which iscommonly usedfor AI and machine learning in business domain. Currently in any business or industry we do not requirea widely common vocabulary to understand and define what AI? Moreover,how AI can be used? The reason behind that in Marketing Strategy these are the primary drivers in inventing AI and machine learning is one new generation tools used for executing inmarketing strategy.

Keywords: artificial intelligence networks; marketing management; consumer behaviour; market segmentation.

Introduction

The fathers of the field Minsky and McCarthy in 1950s, denoted artificial intelligence as any activity performed by machine algorithm that, carries out the same humanlike activity, we would say that it applies humanlike intelligence to carry out the same task. Artificial Intelligencealgorithm is basicallydemonstratingmany behaviours associated with humanlike intelligence like planning certain things,fast learning,specific reasoning, Complex problem solving, humanlike perception, precise motion, creativity and social intelligence. Intelligence shown by machinesare humanlikecognitive functions that closely associates with a human mind like quick learning and complex problem-solving is known as Artificial Intelligence.

To understand a core of Artificial Intelligence the first and foremost point is data. For functioning of AI,the most basic requirement is data, So, companies which have larger and more accurate data gets an advantage in the competitive world. Nowadays in marketing and advertising, AI is more common and extremely pervasive tool, because there is 80% of the digital media market likely to be using AI in advertising this year. Today's modern digital advertising would not exist in absence AI. Artificial Intelligence can also be used to profile visitors and their behaviour on a website or app, then thatinformation which is collected is applied to target and deliver advertisement to a network of platforms and also for services that play various roles at each stage and each phase of the supply chain of advertisement. Hence, the Artificial Intelligence market is growing day by day atunbelievabledimension as the quantity of data collected by companies increases and businesses look forward to use the collected data in more meaningful and profitable ways. In the digital marketing

Sandesh Madhavrao Tilekar

Research Scholar,
Dept. of Management,
Shri JITU University,
Jhunjhunu, Rajasthan, India

Priyanka Gupta

Professor,
Dept. of Management,
Shri JITU University,
Jhunjhunu, Rajasthan, India

sector, most of the growth of AI is related with marketing objectives. According to eMarketer, study in USA nearly \$60 billion US dollar amount spent on programmatic display in 2019 and by 2021, almost \$81 billion will be spend on digital display ad. AI plays the better role and also provides great value in predicting and collecting data about latest trends and consumer behaviours, And after those predictions are forecasted, then the duty of Businesses is to examine it and finally put it into action.

Aim of the Study

To identify role of Artificial intelligence to help organizations to reach at mass customer and focus on target group in short span of time and achieved real-time growth.

Literature Review

Sanjiv Mehta, CEO & MD of Hindustan Unilever Ltd.: According to him, the core of marketing principles never change this days only change in the way of communication. It is morphing every day. That is where the big shift has happened. The art of storytelling is very much there but how we tell the story and the medium through which we tell the story is the key. The big changes that will happen in marketing, just as in business, is artificial intelligence and machine learning.

Thomas H. Davenport (Artificial Intelligence for Marketing by Jim Sterne): Now it is not that much difficult to argue that marketing in the future will make increasing use of AI. Even today, the components of an AI based approach are largely in place. Contemporary marketing is increasingly quantitative, targeted, and tied to business outcomes. Ads and promotions are increasingly customized to individual consumers in real time. Now a day all Companies are employed digital contents and multiple channels to get to customers. For that work there are so many agencies are available to perform this work.

Research Methodology

The paper identifies a mixture of different approaches related to the idea of AI marketing and its objectives. In this paper a descriptive study is done, where marketing objectives are mentioned created on the reference's available and some from the authors personal realizations. The study recommends some process that can help businesses to improve their marketing strategies.

Research objective

1. The basic purpose of this research is understanding and analysing different components of Artificial Intelligence (AI). And 2) toward covering the marketing objectives essential for adjusting marketing strategy for the marketing of their product and services by the marketers.

Marketing by using Artificial Intelligence (AI Marketing)

It is a technique of leveraging consumers data and AI ideas for example machine learning to await your customer's next move and advance the customer drive, There are fundamentals that make AI marketing influential for instance big data, machine learning & the exact solutions, machine learning is one of the methods that can be applied to

allow added active behavioural targeting. AI Marketing helps to fulfil following objectives for achieve goals.

Precise and Effective Advertisement

Correct and precise marketing helps for retaining current customers to promote brand trustworthiness and improve purchasing behaviour.

Accurate marketing counts less on producing influential advertisements, and on making deals, offers etc, which will attract to present customers. Even market segments can be very broadly and very specific also; for example, unmarried women over 50 with adopted children. Crucial role is being played by AI in discovering latest marketing trends. Marketers and Brands are combining Machine Learning and Artificial Intelligence to spare time and reserves. Market breakdown is reliant on harvesting data about purchaser behaviour. For example, many grocery stores offer some discount cards that offer some savings to consumers, but also examine all their purchase and monitor their demographic statistics. Online retailers request for specifics about a consumer's personal preferences such location, age, and sex after they sign up for their account. All this collected data is stored in massive databases and identified by marketing sections to get improved sense of who their consumers are and what they need. For instance, Amazon practices AI to display only related products to shoppers, founded on preceding purchases, explorations, and opinions. It can possibly raise the probabilities of a customer to buy additional products with the exceedingly sought-after adapted experience. Many marketing advertisements companies have been concentrating on using AI and machine learning to discover the right spectators to write fitting advertisement, cumulative conversion rates and assignation with the target spectators. AI solutions are given below which are helping for the fulfilment of Marketing Objectives in India.

1. Profile building and modelling; user profile segmentation and clustering.
2. Campaigning simultaneously for improving performance with optimisation of resources.
3. Collecting data to alter into actionable advertising perceptions.
4. Forecasting future shopper behaviour and additional enhancing real-time behaviours.

Targeting Spectators optimization Strategy

This is a strategy to reach and engage audiences and better understand the interests of users. Artificial Intelligence allows us to recognize patterns and optimize processes. It has directly influenced and helped modern technology and brands that fail to adapt to lose relevance. Facebook, LinkedIn, and Google are the big platforms which offers data-rich algorithms to target viewers with incredible accuracy but undertaking this by hand is repeatedly unsustainable and does not scale. By depending on AI, marketers can influence the exact audience and identify how customers respond to campaigns, various kinds of creative, and diverse channels. Advertisers can also hyper-target some of the consumers, improve targeting strategies in real-time, and tune the global media delivery based on

customers behaviour. AI enables a change in longer-term KPIs and shoppers lifetime value. By using AI and also generating a data feedback loop that occupies machine learning, marketers has a ability to expand and reach a additionally qualified viewers than merely choosing a motionless audience from any kind of sources which are available. Following are the AI solutions in fulfilment of Marketing Objectives in India.

- I. Audience optimization approach by targeting customers grounded on long period behavioural patterns and lifetime value
- II. 2) Hyper-targeting built on how customers involve with and react to brand advertising.

Inventive Significance Application

Invention is the final aim of artificial intelligence. AI has also assisted with mimicking the styles of great painters and write pop ballads. In education for stipulating teaching constraints for artistic creativity have gone to the extent that using AI to create and design paintings that imitate great art works. For instance, by means of the style transfer method, artists can have the ability to "teach" AI algorithms by screening them style of painting in the to rearrange photos and video of the similar style. It is essential to develop a business strategy for understanding customer sentiment. Platforms which are powered by NLP (Neuro-Linguistic Programming) helps you gain valuable insights from your text data. It will identify product review, social media content, and customer content to develop data understandings. To look at the contexts of positive and negative reviews Sentiment analysis is used to aim at a brand. Determination of what types of content will vibrate with social media followers is done by marketers. Aim is to target exact influencers with the precise content to spread awareness and message diffusion. At social influencers who were deemed to embrace "openness to change," "artistic interest" and "achievement striving" the NLP algorithm was targeted. This was done using community posts originated in social media. Activation of influencers to execute its strategy was done, Kia reported that in engagement with its brand there was nearly 30% increase.

1. Determination of Natural language processing and sentiment analysis for consumer intent to notify creative execution or for tasks like content recommendations, resemblance, and classification of text
2. Analysis of content consumption and interactions to easily customize the content.
3. Automated optimization of creative experiences and content comprising of sequenced messaging optimization.
4. Automated audio and visual recognition which creates intuitions that are used to improve and boost advertising.
5. Identify trends and report them in real time (from a content consumption viewpoint to assist optimizing content strategy)

Digital Media competency

Marketers search for a longer relationship using media mix modelling, advertisers can also take

advantage of AI to determine the consumers who probably can be very receptive to their campaigns and thrive to maintain a high lifetime loyalty value for their brand. This helps them to improve their spectators strategy by creating a channel. AI can also uninterruptedly issue commendations for how to enhance the media mix constructed on how customers are reacting to messaging on various channels. This helps advertisers to determine their best media mix strategy and also helps to increase digital advertising ROI. By following this workplan, agencies and brands can create their marketing mix allocation completely automated which will eventually result in conservation of valuable time and money.

1. Systems that help to do attribution autonomously, marketing mix modelling, and journey discovery.
2. Optimization of bids with respect to price prediction for Open and Real Time Bidding.
3. Media mix modelling powered by AI created on how consumers react to campaigns across various channels.

Reduction of fraud and safeguard brand safety issues

In the early period of fraud advertisements, the procedures implemented by fraudsters were comparatively easy. They not only used bots focused on directing huge volumes of traffic to dedicated websites but also somehow bought cheap traffic by using auto redirects or by employing people from public install their designed apps. When click was made by someone or someone installed their app, they used to easily achieve their goal. There was a need realised by Big brands and also the major publishers to act against these kinds of ad fraud. Another type of technology which is gaining more attention among marketers is termed as blockchain, it has a ability to impose independent verification and distributed monitoring. But, there were many more challenges which need a special attention, for example handling the huge transaction volumes involved in real-time bidding and also getting universal acceptance from every person involved. As fraudsters find new ways that are more powerful and capable of mimicking humanlike behaviour, marketers get help to identify fraudulent behaviour using these machine learning algorithms which are not immediately recognised by human. The "tree-based model" is one of the foundational AI-approach, which works by analysing a huge number of signals to achieve optimum coverage and exact accuracy while a detecting unusual behaviour. Advertisers could minimize the financial losses by using AI the data generated and collected from advertising activities.

1. Detection of outliers anomaly for brand safety issues.
2. Detection of Fraud using train sets and irregular patterns.
3. Automated Bot that can take care of tasks that weigh down employees, teams, and even entire departments.
4. Text recognition using Natural language processing to understand the background of the page and blacklist bad content.

Conclusion

How brands talk to consumers has been affected extensively by AI. AI is playing a major role by helping marketers direct brands and also understand the essentials regarding how marketers distribute smarter, improved and most relevant experiences and conversions and it is believed that at minimum 80% of the digital media market is expected to be a combination of traditional and advanced type of AI to easily gain more number of marketing objectives. In future up to next 10 years to 15 years over the next 10 to 15 years we assume this kind of trend to accelerate more and more as marketers learn how AI can not only alter their programmatic advertising in more smarter and better way but they also try to optimize the performance in competitive world, personalize marketing according to consumers choice, creation of automated advertisement, target new as well as existing viewers, alter and optimize their media mix and apply AI in ways we can hardly imagine as technologies such as IoT and 5G are started to originate rapidly. There is a need of higher standards and best techniques for operating the industries efficiently by considering safety and effectiveness. It is a responsibility of each and every AI user to keep our collective fundamentals safe and also our product and client during this type of technology advancement.

Reference

1. Aamodt R. (2010). *Using artificial neural networks to forecast financial time series*, Norwegian University of Science and Technology, Department of Computer and information Science, June 2010.
2. Dineley D. (2001 Feb. 5). *Knowledge Management with Human Smarts*. InfoWorld, vol.23(6) Feb. 5, 2001.
3. Hota S.K. (2014). *Artificial neural network and efficiency estimation in rice yield*, International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET) Vol. 3, Issue 7, July 2014, ISSN: 2319-8753.
4. Arndt, J. (1986). *Paradigms in consumer research: A review of perspectives and approaches*. European Journal of Marketing.
5. Battalio, R. C., Kagel, J. H., Winkler, R. C., Fisher, E., Jr., Basmann, R. L., & Krasner, L. (1974). *An experimental investigation of consumer behavior in a controlled environment*. Journal of Consumer Research.
7. Belk, R., Askegaard, S., & Scott, L. (Eds.). (2012). *Research in consumer behavior*. Howard House, Bingley, UK: Emerald Group Publishing Limited.
8. Berthon, P., Pitt, L., Ewing, M., & Carr, C. L. (2002). *Potential research space in MIS: A framework for envisioning and evaluating research replication, extension, and generation*. Information Systems Research.
9. https://en.m.wikipedia.org/wiki/Machine_learning
10. https://www.doc.ic.ac.uk/~nd/surprise_96/journal/vol4/cs11/report.html
11. <https://www.singlegrain.com/digital-marketing-strategy/how-artificial-intelligence-is-revolutionizing-the-digital-marketing-sphere/>
12. <https://www.inc.com/james-paine/how-ai-can-be-used-to-increase-sales.html>
13. <https://www.quora.com/in/how-is-artificial-intelligence-programmed>