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Artificial Intelligence in Marketing

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Abstract

Objective: This research is about how Artificial Intelligence changes the marketing strategy and organization seeing the AI as an opportunity to gain some market share and build their brand value.

Methodology: The research is descriptive in nature highlighting the insights of AI and how it can be implemented in today's marketing environment. The data is collected through secondary sources such as journals, blogs, websites, etc.

Findings: Organizations are adopting the AI very rapidly not only for surviving in the market but also to improve the buying experience of customers making the buying-selling process easy and comfortable. There are many ways and applications where Artificial Intelligence can be used in marketing which are presented in this paper.

Keywords: Artificial Intelligence, Marketing, Machine Learning, Artificial Intelligence Marketing, Data Mining.

Introduction

Artificial Intelligence is a programming based technology which is used to make machine intelligent to work smartly and efficiently. Autonomy, accuracy, speed are the major factors behind the Artificial Intelligence. It is a part of machine learning which is done by programming languages like python, C++ and many more. Python is the most common programming language used for machine learning. Machine learning is something which gives system a capability to learn and update from the past experiences just like humans. Machine Learning is a program which analyses the data to improve the decision making ability and for more accurate result [1] [13]. Data which is use for analysis is collected from old experiences or input provided by user.

Artificial Intelligence and machine learning are two different terms with different meanings. AI is used to work smart increasing the rate of success from old data while Machine Learning is something which allows the Machine to learn new thing and work on accuracy.

"Marketing is satisfying the need and want of the customer with some exchange process" [2] which means marketing is a process in which organization makes profit by satisfying the customer. Marketing of products revolves around the 4Ps which are product, promotion, place and price and these 4Ps are

commonly known as marketing mix [3]. However, for services there are 3 additional Ps namely, people, process and physical evidence.

Artificial intelligence has many applications in many sectors and many organizations are using it to increase their business and making huge profit by using AI. Apart from profit organization provides quality of services to their customer by giving them priority and by understanding their need with help of Artificial Intelligence. Artificial Intelligence used in almost every sector and every department such as in Defense, Finance, marketing, Research and development.

Artificial Intelligence Marketing (AIM)

Artificial Intelligence Marketing is a tool of marketing which is used to increase the marketing result or to develop new strategies to gain more market share. AI provides large amount of data and analyses it giving the clear picture of current market. With the help of data generated by AI, marketer can make their strategy accordingly to provide better service to their customer. Artificial Intelligence helps not only in collecting and analyzing the data but also plays an important role to understand the behavior of consumers. Thus AI plays a vital role in marketing as consumer behavior is a very crucial and important factor to be studied by marketers [11].

Marketing manager makes decision on the basis of product, competitor, geographical area, substitute of product available in market, price of substitute product, behavior of their customers, according to taste and preference of the customers, political environment of country or state, economic conditions of country and many other factor involves in it [2] [10], which makes decision process a very tough task. It is very difficult to analyze all the factors analytically and mathematically, however Artificial Intelligence provides accurate data about the market which makes the decision process much easier.

Data mining in marketing

We are living in the world where almost everyone is connected online and most of the organization have social media page. Social media plays an important role for marketing not only for educating the customer about the product or promoting the product but also for getting the information about product preferences of customers [12]. This is very helpful to understand the customer needs so that companies can serve them better gaining their trust. In addition, it is also very helpful in implementing target marketing.

But the question arises how they get such information from the tons of data. As per [4], at Facebook there is about 2.5 billion content and 500+ terabytes of data generated in one day. Thus, creating a large amount of data to be processed and analyzed which could take a huge amount of time and manpower to get meaningful information. For this process, Data Mining comes to rescue. It is the process to get meaningful information from the huge amount of data.

The data surfed by an online user or product searched by a customer and the product bought online by a consumer leaves the data behind which is useful information for the company. This information may be about the taste, preferences or needs of the consumers which is very useful for any organization. For instance, Google saves the data of their users to improve their online experience and displays advertisements of relevant products and services. This not only useful for organization but somewhere it is also useful for the customer because they don't need to search a lot for their product. Google get the

data every time users surf in Google or any Google product such as by scanning Gmail, maps, YouTube, twitter etc.

The best example of data mining is when a user is looking for flights, the advertisements that appear are related to best hotel, offer regarding the trip etc. This type of advertisement appears because these services are related to the flight a user is looking for.

Improve customer Services

AI also helps to improve the customer services in many ways such as guiding the customer about product or to handle a complicated situation. Recently, organizations are using BOTs to understand the problem of consumers. A BOT is smart enough to solve the problem on their end. These BOTs are changing the whole meaning of customer support [1] [9]. As technology is growing rapidly, so to stay in the market organizations must meet up with it and make the strategies according. There is a great opportunity in AI for marketers to attract the new customers and build a brand image.

Forecasting with AI

AI can be very useful tool for effective and efficient forecasting. Forecasting becomes more accurate because AI analyzes the data in more efficient way which gives a chance to organizations to understand their customers more deeply. Marketers can use AI as a tool to know exactly what does a customer thinks about their organization, about their product and about their after sale services. It gives the proper picture to understand where they need to improve themselves and in which sector they need to be more focused.

Voice recognition

Voice search is also an integral part of Artificial Intelligence. In manual voice processes it is very difficult to understand what the consumer actually means due to difference in pronunciation and accent used. However, with AI voice recognition tool it becomes quite simple to recognize varied accent and pronunciations. It contains a large data of different languages, dialects, pronunciations and accents which assists the machine to quickly understand the exact context of the user. Moreover, the more it is being used the more it gets better due to its learning capability. In addition to the accuracy of understanding, the more usage of this tool results in enhancing of the voice database [5]. Voice search is thus one of the major tools of marketing because study shows that most of the people look for conversations when it comes to queries [8] thereby making it important for the organizations to understand the importance of the voice recognition service. Some of the key words which are mostly used in voice search when it comes to queries are What, Who, Where, When, How, Why and many more.

Methods and tools used for marketing

There are many tools available for marketing function provided by various companies among which those provided by Google are most trusted and that too free of cost. Google explains that they want to enhance the experience of the users and provide them better quality of services. The tools which are not provided by Google are mostly paid which are usually used for research, data mining and for analytical purposes which helps to know the mindset of the customers, get information regarding their choices and know what they are looking for or what they might want in future. It is quite common that a user gets advertisements

online which are relevant to their recent search or online purchase. These advertisements appear due to the data generated and analyzed online which organizations get with the help of the AI tools [6].

Some of the AI tools used for marketing are [15]-

Brideside – This tool is used for the planning purpose.

Atomic Reach – This is used for the production purpose to make production more efficient.

Drift – Drift is used for making buying experience of customer easier.

Onespot – Onespot is used for promotion of the products.

PaveAI – It is an analytical tool provided by Google for insights purpose.

Organizations using Artificial intelligence

There are many organizations which are using artificial intelligence for their own benefits and to provide better experiences to their customers [7] [11]. The consumers are well aware of the importance about product information along with the company profile and after sales service. Accordingly, the task of marketers has become complicated which can be made easy with the use of AI. Moreover, AI used by such firms also have a fruitful impact on consumer behavior [14].

Some of the popular organizations which are using Artificial Intelligence as a Marketing tool are-

- 1- Flipkart –Flipkart is an E-Commerce organization. Flipkart use AI to improve the experience of their customers due to which they are able to enhance the customer satisfaction by providing them an ideal product as per their needs and wants.
- 2- Samsung Samsung is a multinational organization which deals in many sectors but mainly in electronics. In many of their electronics product Samsung provide Artificial Intelligence to make them better and user friendly. In particular, when it comes to marketing, Samsung use Chat BOTs to handle the queries of the customers. Chat BOTs are one of the greatest daily life example of Artificial Intelligence
- 3- Fluid.ai –Fluid.ai is B2B organization based on Artificial Intelligence technology which provides services in many sectors but mainly in finance and marketing. They provide best customer support to their individual customers and provide solution regarding marketing with the help AI.
- 4- Asplor Asplor is a Market research organization based on Artificial Intelligence. They mainly do research in healthcare and pharmaceuticals. They do market research on the basis of client need. They give the answer of some question such as How much, what, where, why etc.
- 5- Paytm Paytm is now going to use AI for cloud commuting to make the payment process much easier than ever. In addition to payment process, they are also incorporating AI for customer support services.

Conclusion

Marketing with Artificial Intelligence have too much potential in it. Either it is about getting information from huge data by using Data mining or improving the product finding or customer support using voice recognition. Forecasting becomes more realistic when it comes to Artificial Intelligence. In service sector

also it proves to be equally helpful to provide better service experience to people not only in private sector but also in government sector. In India, AI is in its initial stage but gaining popularity rapidly. As India is a developing nation, Artificial Intelligence can be very helpful in many sectors to facilitate effective and efficient growth. There are many startups which are doing tremendous work in field of marketing which further paves road for AI implementation. The scope of AI in India is thus very vast and can be applied in strategic ways for development of every sector.

References

- [1] "Artificial Intelligence (AI)", *Everything is HERE*, 2018. [Online]. Available: https://cuatmyplace.wordpress.com/2018/01/16/artificial-intelligence-ai/.
- [2] P. Kotler and G. Armstrong, Principles of marketing (12th ed.) Pearson Prentice Hall: New Delhi, 2008.
- [3] N. Borden, "The concept of the marketing mix.", *Journal of Advertising Research*, vol. 4, pp. 2-7, 2018.
- [4] J. Constine, "How Big Is Facebook's Data? 2.5 Billion Pieces Of Content And 500+ Terabytes Ingested Every Day", *TechCrunch*, 2018. [Online]. Available: https://techcrunch.com/2012/08/22/how-big-is-facebooks-data-2-5-billion-pieces-of-content-and-500-terabytes-ingested-every-day/.
- [5] "How Will Voice AI Impact Marketing & Copywriting? B&T", B&T, 2018. [Online]. Available: http://www.bandt.com.au/marketing/will-voice-ai-impact-marketing-copywriting.
- [6] F. Bureau, "Artificial Intelligence: Shaping the future of marketing", *The Financial Express*, 2018. [Online]. Available: https://www.financialexpress.com/industry/artificial-intelligence-shaping-the-future-of-marketing/1275821/
- [7] "Artificial Intelligence Market by Offering & Technology -Global Forecast to 2025 | MarketsandMarkets", *Marketsandmarkets.com*, 2018. [Online]. Available: https://www.marketsandmarkets.com/Market-Reports/artificial-intelligence-market-74851580.html.
- [8] D. Faggella, "Artificial Intelligence in Marketing and Advertising 5 Examples of Real Traction", *TechEmergence*, 2018. [Online]. Available: https://www.techemergence.com/artificial-intelligence-in-marketing-and-advertising-5-examples-of-real-traction/.
- [9] "How Artificial Intelligence Helps Marketers Work Smarter", *Ama.org*, 2018. [Online]. Available: https://www.ama.org/partners/content/Pages/how-artificial-intelligence-helps-marketers-work-smarter.aspx.
- [10] "How artificial intelligence is changing advertising", *Information Age*, 2018. [Online]. Available: https://www.information-age.com/artificial-intelligence-advertising-123471781/.
- [11] F. J. Martinez-Lopez and J. Casillas, "Artificial intelligence-based systems applied in industrial marketing: An historical overview, current and future insights.", *Industrial Marketing Management*, vol. 42, 2013.

- [12] A. Papadimitriou, "The Future of Communication: Artificial Intelligence and Social Networks", http://muep.mau.se, 2016. [Online]. Available: http://hdl.handle.net/2043/21302.
- [13] S. Shetty, "Artificial Intelligence Marketing in India Sanjay Shetty", *Sanjay Shetty*, 2018. [Online]. Available: http://www.sanjayshetty.com/blog/artificial-intelligence-marketing-india/.
- [14] "The Impact of Artificial Intelligence on Consumer Behaviour", *Medium*, 2018. [Online]. Available: https://medium.com/@FlexMR/the-impact-of-artificial-intelligence-on-consumer-behaviour-28e0927f22bd.
- [15] N. Williams, "A Marketer's Guide to AI and 45 AI Marketing Tools to Get Started With", *Blog.capterra.com*, 2017. [Online]. Available: https://blog.capterra.com/a-marketers-guide-to-ai-and-45-ai-marketing-tools-to-get-started-with/