#### ARTIFICIAL INTELLIGENCE'S IMPACT ON CONSUMER PURCHASE BEHAVIOUR

#### Dr. Suchitra Labhane<sup>1</sup>

Assistant Professor Department of MBA Datta Meghe Institute of Management Studies, Nagpur – 440022

#### Ms. Ruchika Paidalwar<sup>2</sup>

Student Scholar Department of MBA Datta Meghe Institute of Management Studies, Nagpur – 440022

#### Piyush Bangar<sup>3</sup>

Student Scholar Department of MBA Datta Meghe Institute of Management Studies, Nagpur – 440022

#### Abstract

Artificial intelligence commonly known as AI has permeated virtually all sectors over the last couple of years, with an impact on consumer purchasing behaviour. This study looks at the consumer side of AI in online shopping, together with personalized suggestions to customers and market analysis support. With analysis of predominant trends and some case studies, this study exposes the ways AI is transforming consumer experience as well preparing businesses with a competitive edge.

# Keywords: artificial intelligence, purchasing behaviour, trends, AI integration, market analysis

#### Introduction

AI is revolutionising the way consumers communicate with the technology. AI integration added to these platforms' offerings in the retail, e-commerce, and customer service sectors greatly facilitates consumer purchasing experiences by offering tailored recommendations, quick, efficient, and insightful market data. Explore how AI is influencing consumer purchasing behaviour by reading on for information on its uses, advantages, and drawbacks. Artificial Intelligence is revolutionising the way consumers interact with technology. Artificial Intelligence integration added to these platforms' offerings in the retail, e-commerce, and customer service sectors greatly facilitates consumer purchasing experiences by offering tailored recommendations, quick, efficient, and insightful market data. Explore how AI is influencing consumer purchasing behaviour by reading on for information on its uses, advantages, and drawbacks. [1]Luo et al. in their research study using data from over 6,200 clients, investigates how successful chatbots are when used in outbound sales calls in comparison to human personnel. For boosting client purchases, unannounced chatbots are shown to be four times more effective than novice personnel and as effective as skilled human workers. But revealing the chatbot's identity ahead of time drastically cuts down by more than 79.7% on purchase rates and shortens the duration of the call. Because of a subjective bias against machines, customers tend to buy less when they are aware that they are engaging with a chatbot because they see the bot as less informed and empathic. Delaying the disclosure and considering the customer's past AI experience are two strategies that can assist lessen the detrimental effects of chatbot disclosure on consumer behaviour. Whereas, [2] according to Davenport et al, Future marketing plans and consumer behaviour are anticipated to be greatly impacted by artificial intelligence (AI), with a multifaceted framework being suggested to help comprehend this impact. Facial recognition, bio-scans, speed reading, and emotional connection with clients are examples of advanced AI capabilities that have the potential to replace human and animal partners. Prospective study domains encompass investigating the effects of artificial intelligence on several sectors, customer support alternatives, and possible moral dilemmas such as biasness.

#### **Objective of the study**

- To understand the AI's Potential to Improve the Customer Experience
- To Evaluate AI-Driven Market Analysis's Effectiveness
- To Investigate AI's Effect on Purchasing Choices
- To Assess Retail AI Case Study Implementation Evaluation
- To Recognize Difficulties and Moral Issues
- To Evaluate the Impact of AI on Post-Purchase Behaviour

# 1) AI's influence on consumer choice behaviour

#### **1.1) Personalized Suggestions**

Artificial Intelligence sifts through massive volumes of customer data to make suggestions for products. It suggests an item to the customer based on browsing, preference, and past buying history. This degree of customization decreases the amount of period and effort required to search for products, making buying system lot easier.

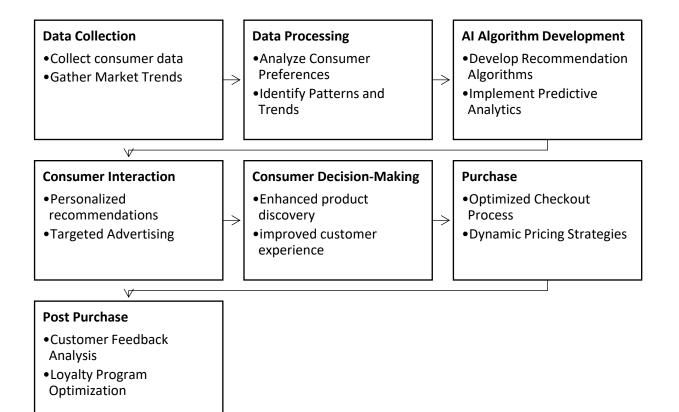
# **1.2)** Customer Relations

The way AI-powered computer-generated assistants and chatbots are transforming customer service. There are technologies that can answer your questions, provide for on-demand assistance, and guide clients through the purchasing process. No human agent could have handled more than one as the most recent inquiry in simultaneously like they can. This indicates that it can boost sales and satisfy customers.

#### **1.3)** Market Analysis

AI technologies assist businesses in comprehending and analysing shifts in consumer behaviour and dynamics of the market. This supports businesses understand what customers want, estimate likely request, and create marketing campaigns that are targeted. In market analysis this is where artificial intelligence (AI) comes in. Companies are able to make intelligent decisions based on data that, when done with consideration for how superlative to meet customer requirements and satisfy them in relation to current MNCs, case-study businesses using what they have.

Identifying the crucial phases and interactions where AI is involved is necessary to understand how AI affects consumer purchasing behaviour.



# 2) Case Studies

# 2.1) Amazon's Recommendation System

AI As we all know, Amazon is just another excellent illustration of an AI package offer. Amazon presents product recommendations on the front end using a combination of machine learning techniques and collaborative filtering, in this case known as item-to-item. This has significantly increased consumer happiness and boosted sales growth for Amazon and the entire industry.

[3]It describes the use of machine learning (ML) models to categorise and products recommendations based on reviews and ratings of end users, with the goal of improving ecommerce product suggestions. The system was developed utilising sentiment analysis and machine learning algorithms for Amazon. User comments are analysed by system on natural language processing, collaborative algorithms to improve precision, and cosine similarity to find similarities between things for suggestions. The dataset containing product ratings, reviews, and descriptions that is required to train the recommendation engine are also discussed in the case study.

# 2.2) The Virtual Artist at Sephora

An AI-powered community tool for makeup trials using Sephora's Virtual Artist, which combines AI and augmented reality (AR), provides a modification as per customer requirement, interactive purchasing experience. As it helps customers to make more educated purchasing decisions, this has improved customer engagement and increased online sales.

[4] In the cosmetics industry, Sephora a pioneer, has embraced digital transformation, utilising tools like RFID, augmented reality, and artificial intelligence to improve consumer experiences. Through interactive scent sampling, AI-based skin tone matching, and virtual makeup trials, the company aims to personalise the purchasing experience for its clients. Established in 2015, Sephora's Innovation Lab prioritises customer-centric solutions while driving the development and introduction of innovative technologies and offers for both instore and online purchasing. Successful business strategies are shaped by the expectations and behaviours of customers, which are influenced by digital improvements. This highlights the need of comprehending and adjusting to the changing needs of customers. Through tailored experiences and interactive conversations, Sephora's comprehensive digital strategy extends across online, in-app, and in-store channels.

# 3) AI-Powered Consumer Buy Behaviour:

# **1.1)** Improved Personalization

AI improves the level of personalize experience, improving the customer's understanding and making the purchase more related. These tailor-made recommendations and promotional materials further increase the prospect that every unique customer will make a buying and come back later.

# **1.2)** Enhanced Productivity

AI can maximize a number of purchasing processes, including post-purchase help and product research. As a result, the client expedition experiences not rougher, increasing conversion rates and uplifting customer happiness.

# **1.3)** Data-Based Perspectives

This suggests that AI will make it possible for businesses to get more accurate and clean data that provides a greater insight of market trends and consumer behaviour. Industries will find this knowledge helpful in regulating to shifting consumer sense of taste and market dynamic forces in order to remain competitive.

# 4) Challenges and Considerations

# 4.1) Privacy Issues

When AI is used to impact customer purchasing behaviour, there are privacy problems. When processing customer data for analysis or distribution, it prioritises shielding consumer rights above all else while keeping data confidentiality laws in observance.

# 4.2) Algorithmic Bias

Unfairness occasionally give the impression in AI algorithms, which can result in unfair or subpar outcomes. For the digital upheaval to continue, AI systems must maintain consumer trust and ethical veracity. To do this, they must be clear as crystal, equal, and balanced.

#### **4.3)** Reliance on technology

A dependence on AI technology that is too great could be harmful. Despite all of AI's advantages, companies still need to make sure their systems are competent and harmless, since any fault could have a unfavorable effect on both consumer satisfaction and company image.

#### Conclusion

Artificial intelligence (AI) has totally transformed the way consumers behave when they purchase. AI uses projecting data to support with tasks like buyer care and effective store planning. Achievement requires overcoming challenges including bias in appropriate AI applications and data protection, even if there may be significant benefits. permitting the swift progress of technology and the incorporation of artificial intelligence (AI) into consumer purchase measures, thereby renovating the way customers engage with their goods.

#### **References:**

- X. Luo, S. Tong, Z. Fang, and Z. Qu, "Frontiers: Machines vs. Humans: The Impact of Artificial Intelligence Chatbot Disclosure on Customer Purchases," *Mark. Sci.*, vol. 38, no. 6, pp. 937–947, Nov. 2019, doi: 10.1287/mksc.2019.1192.
- [2] T. Davenport, A. Guha, D. Grewal, and T. Bressgott, "How artificial intelligence will change the future of marketing," *J. Acad. Mark. Sci.*, vol. 48, no. 1, pp. 24–42, Jan. 2020, doi: 10.1007/s11747-019-00696-0.
- [3] M. Z. Ahmed, A. Singh, A. Paul, S. Ghosh, and A. Chaudhuri, "Amazon Product Recommendation System," *IJARCCE*, vol. 11, Mar. 2022, doi: 10.17148/IJARCCE.2022.11356.
- [4] "How Sephora is leveraging AR and AI to transform retail and help customers buy cosmetics | TechRepublic." Accessed: Aug. 03, 2024. [Online]. Available: https://www.techrepublic.com/article/how-sephora-is-leveraging-ar-and-ai-to-transformretail-and-help-customers-buy-cosmetics/

[5] Kumar, V., & Reinartz, W. (2018). *Customer Relationship Management: Concept, Strategy, and Tools*. Springer.

[6] Chen, H., Chiang, R. H. L., & Storey, V. C. (2012). Business Intelligence and Analytics: From Big Data to Big Impact. *MIS Quarterly*, 36(4), 1165-1188.

[7] Russell, S., & Norvig, P. (2016). Artificial Intelligence: A Modern Approach. Pearson.

[8] Goodfellow, I., Bengio, Y., & Courville, A. (2016). Deep Learning. MIT Press.

[9] Jannach, D., Zanker, M., Felfernig, A., & Friedrich, G. (2010). *Recommender Systems: An Introduction*. Cambridge University Press.

[10] Shankar, V. (2018). How Artificial Intelligence (AI) is Reshaping Retailing. *Journal of Retailing*, 94(4), vi-xi.

[11] Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From Multi-Channel Retailing to Omni-Channel Retailing: Introduction to the Special Issue on Multi-Channel Retailing. *Journal of Retailing*, 91(2), 174-181.

[12] Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. *Journal of Marketing*, 80(6), 69-96.