

AWARENESS OF ARTIFICIAL INTELLIGENCE AMONG GENERATION Y CUSTOMERS AND ITS USAGE IN ONLINE SHOPPING

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<https://doi.org/10.37602/IJSSMR.2025.8206>

ABSTRACT

The field of Artificial Intelligence (AI) is boon to the world from when computers were invented in 1950's. AI and computer science which is mainly focused on the usage of data and algorithms which imitate similarly as humans, which focus on improving its accuracy. In the recent years AI has been a supporting managerial task and functions which includes strategic planning, marketing, customer support, retailing, digital marketing. AI is one of the key elements in consumer market, it has been adopted in many services where consumers are unaware of recognizing it. It is research which is related to understand how customers make use of AI and take decisions has been explored more in recent studies. The main motive of this article is to understand the usage of AI in online shopping by Generation Y customers. After critical review of literature, it is found that, there are limited studies which focused on Generation-Y customer in emerging economy like India. So this paper evaluate the importance of usage of AI in Indian among Gen-Y customers.

Keywords: Artificial Intelligence, Online Shopping, Generation Y.

1.0 INTRODUCTION

Artificial Intelligence is the science and engineering of making intelligent machines, especially intelligent computer programs. Its related to the same task of using computers to analyse and understand human intelligence (John McCarthy 2004) AI has diversified in many fields including business. Our future is AI, with advanced technology, interconnected networks, there is huge investment in AI so it has been used in education, hospitals, business, fashion, transportation, law, manufacturing and it is rapidly moving towards industry 5.0. AI has become part of our daily life, we use AI in the form of smartphone, computers, PC, projectors. (Sanjeev Verma 2021)

E-commerce also known as electronic business. Where in with the help of online platform customer buy or sell products. It helps various business to process promote and reach wide range of customers throughout the world. It's not only restricted to goods and services, E-commerce is also widely used for online stock, bond transactions, selling and buying software's, without any physical effort, customer services, ordering products online, advertising and marketing, it helps the business men to connect the other parts of the world. Kaur, P., & Joshi, M. M. (2012).

2.0 THEORETICAL BACKGROUND

In 1956 AI introduced or established by John Mc Carthy in his studies called as "Dartmouth Summer Exploration Project". Primarily which was to deal with the examination that has done on "Thinking machines" which could imitate or act and think like human beings. Marr, B. (2018). The developing technical aspects such as AI, Mobile apps, big data, data science, block chains, AR/VR, cloud computing are evolving as human beings are connecting to the technology. From the commercial perception, technological improvements have developed the business world, motivated the globalisation also expanded completion throughout the world. Artificial intelligence advancements can help marketing experts in different regions like, online social media, statistical surveying, marketing research, customisation of customers, and e-retailers sustainability. (Sterne 2017). Marketing is also using AI which has become major role in the present developing world. Organizations, regardless of tiny or huge, are executing or promoting the advertising systems to obtain business objectives or goals and taking forward steps for utilizing computer-based intelligence (corea, 2017) Marketing using Internet and technologies are categorised into 6 types, Advertising in social media, Direct Marketing, PR (Public relations) Video Marketing, Website analytics, Search Engine Optimization. Internet Marketing is having an individual objective to achieve but the final ambition of any business is to increase the business profits, develop the business into international markets and give tough competition in the markets and sustain for long time. (Peyravi, 2020)

2.1 Retail Industry in India

Retail Sector is one of the major emerging industries in India, adding to over 13% of nations Gross Domestic Product and 10% of job opportunities (Bhaskar and Harshitha, 2017). The enormous online consumers will lead to online shopping industry to prosper in India. Computerized retailing goes about as differentiator also an upper hand on the developing retail Industry in India. The influence of online platform has enabled consumers and stakeholders with worldwide diversity products and services.

Actually, Our Indian E-commerce Industry is alike worldwide Retail industry, it is looking for the development of Online business at metropolitan cities. It is also arriving and expanding in rural regions, driven by availability of internet facility and penetration towards cell phones has increased in recent decade. (Ayse Begum Ersoy 2022).

2.2 Online Retail Industry in India

Online shopping is becoming increasingly popular among Indian consumers, especially the younger generation who find using a smartphone and internet convenient. Indian online market was expanding at the quickest rate and projected that it would reach a valuation of over \$100 billion business (Mahaheshwari, 2016) Due to the affordable costs of devices like smartphones and tablets as well as the ease of access to 5G and internet, India's online customer base is rapidly growing. The growth of domestic e-commerce has been stimulated by this widespread usage of technology. players like Meesho, Lenskart, Myntra and Flipkart, as well as enticed foreign competitors like Amazon and Alibaba begins to operate in India (PWC, 2015). While domestic retailers are testing using their business strategies to draw a new client and grow their customers. Companies rely on their substantial financial resources, in-depth industry expertise,

and exposure to other countries. Online retail is one of the e-commerce segments with the fastest and largest growth in online shopping.

The retail business campaign has been renovated by internet and the standards of the rules in retailing are rapidly modifying. The western culture has impacted every single part of our Indian Culture. The life is turning out to be quick in metros as well as in the typical urban areas. The number of nuclear family is expanding and both couples are working, as they have less chance to go to the market for buying sometimes. (Nagar 2013) Artificial Intelligence

Although artificial intelligence has been around since 1956, companies have started to use it mostly in their advertising with the goal of providing better customer service. Many customers have been using automatic vending machines for coffees, cooldrinks, soup, tea, and other items; firstly, this application of artificial intelligence in retail, customers are even using fully or semi-automated washing machines, which represent the second application of AI technology in the business sector. (Tanu Dang, 2019)

Various businesses have already implemented AI systems to respond to consumer inquiries and complaints 24*7, 365 days a year. This has helped the businesses gain the respect and confidence of both current and potential clients by providing consistent customer care. Customers may ask complicated inquiries and receive responses that are more relevant and irrelevant to their complaint by using AI-enabled automated customer care services that the majority of large firms already provide. Customers may now more easily follow the delivery of their online orders with the help of AI chatbots. In the past, marketers would spend huge amount on development to grasp also to analyse shopper way of selecting or preferring products, but today's AI is using the advanced method of algorithms to identify the buyer's reactions and advise them the required products and services. (Tanu Dang, 2019)

An app that functions as a Google Assistant can make calls and receive calls on a person's behalf in a virtual setting. The majority of individuals utilize a Google app which is for path direction finding, straight routes, best routes, and navigation. journey time using various modes of transportation, such as a buses, cars, bikes and autos. Google Map is one of the best examples that helps us to understand the awareness of artificial intellect in a person's day-to-day existence. (Tanu Dang, 2019)

2.3 AI Evolution

Ever since the earliest days of technologies such as the internet were developed and are now considered basic and guaranteed, people have worked to create ever-better and more advanced technologies that will help human survival. AI is one among those. A summer workshop named "Dartmouth Summer Research Project on Artificial Intelligence", was conducted in the year 1959. During this period the first scientific definition of AI was introduced. The science and engineering which can create intelligent machines are called as AI by

McCarthy. A number of years later, in 1970, Alan Turing and Claude Shannon attempted to expand McCarthy's definition by adding more complex ideas and improving its comprehension for industry experts. After few years, McCarthy was regarded as the father of AI. Research tools which are used to develop these kinds of technologies have improved over time, and today's common and broad definition of artificial intelligence (AI) is the system's capacity to

gather the required data, learn from gathered data, and apply the lessons to accomplish aims and ambitions as well as tasks which call for technological adaptation (Kumar et al., 2019).

AI is categorised in to 2 groups based on the types of technological advancements that each group can achieve. Based on AI's capabilities relative to human intelligence, these two groups were classified using the following criteria (Joshi, 2019) (Haenlein & Kaplan, 2019). The 2 types of AI is as follow:

2.4 Narrow Artificial Intelligence

Narrow AI is also called as "Weak" AI. This indicates that this AI has a single task built into its programming. Examples for this AI category include the ability to check the weather, play chess, and filter content in the computer system. (Joshi, 2019)

2.5 General AI

General AI, also popularly known as "Strong" AI, describes those machines which possess human skills. GAI is capable of mental functions and emotion interpretation that only humans are capable of. Scientists are still exploring this area of artificial intelligence because it is uncertain whether a machine will ever be able to think, feel, reason, or make decisions and judgments similar to those made by a human. Haenlein & Kaplan, (2019).

2.6 Types of AI

Basically, AI is categorised into 4 types. Firstly, it is predicated on categorizing AI devices. How closely they resemble human minds, secondly its analysed to think, act and feel the capacity of machines prediction as human beings do. Seft-awareness, limited memory Reactive machines and Theory of Mind are the 4 kinds of AI.

2.7 Reactive Machines

Among AI systems, reactive machines are the most essential kind. This system's sole function is to react to situations that are currently reactive; it is incapable of creating memories or using information from the past to inform decisions made today. Another important feature of this AI is, it can't use its own memory to improve the operations or programs on their own, they will behave as they designed and programmed with the help of algorithms. Hintze, A. (2016).

2.8 Limited Memory

Limited memory artificial intelligence is described as a type of AI made up of machine learning models that can retain information from the past, store data, or perform operations from the past. Though their functions are similar to those of reactive machines, limited memory picks up on the past by watching behaviours or receiving information to help them develop experiential knowledge. Autonomous cars are one application of this kind of AI. These self-driving cars uses a limited memory, it is a pre-programmed technology of driving perfectly. These vehicles adopt this technology to read or analyse their surroundings, identify patterns, pay attention to other cars, trucks, and people move within their surroundings. Hintze, A. (2016).

2.9 Theory of Mind

“Theory of Mind” is one of the important areas of AI, where researchers are attempting to develop and improve. It is the capacity for machine taking decisions similar as human beings. Even though some machines already exhibit human-like traits such as voice assistants, none of them can full-fill the minimal requirements, such as having a normal conversation with a human. In order for this to be feasible, the machines must be able to recognize each person's unique thoughts and feelings in order to comprehend human thought processes. Hintze, A. (2016).

2.10 Self-Awareness

Self-aware AI, which is regarded as the ultimate stage of AI development, includes machines with consciousness comparable to that of humans. Although it doesn't exist right now, this type of AI is thought to be the most developed that humans have ever come across. With this kind of AI, machines will be able to feel, think, feel what they need, and want. Self-aware AI means it is characterized as Thoughts and reactions which are self-guided by an individual. Considering a “Theory of Mind”, a step ahead by focusing on features and imitation of human beings. Hintze, A. (2016).

3.0 AREAS OF ARTIFICIAL INTELLIGENCE

- Speech recognition: The ability to understand and react to natural language is known as speech recognition. It transforms verbal communication into written form.
- Adaptive systems and learning: The ability of technology to modify behaviour in response to past experiences and to enhance such experiences.
- Problem solving: The capacity to develop an issue in the appropriate manner, identify solution, and determine the need for new information.
- Visual perception: The ability to identify a sensed scene by associating it with an internal model that illustrates acknowledged as "knowledge of the world." This analysis yields an organized set of relationships between the scene's objects.
- Biometrics: Biometrics tools used to discover administration and controlling
- Applications of Artificial Intelligence
- Customer Service: Simple enquiries like finding out the status of your order and locating a specific product based on your description in accordance with your previous inquiries are answered by artificial intelligence. Chatbots have significantly improved the online shopping experience for the following reasons: Chatbots help with trading opportunities and provide faster replays than human assistants, saving time.
- Travelling: The travel industry also uses chatbots to provide services like customer interaction for travel alerts, booking details, and quick user response. When it comes to transportation, everyone will think about Google Maps which is “AI-validated mapping”, it recognizes road info and uses it for algorithms to identify the quickest route for walking, bicycling, and driving. AI is present in all fields these days, whether they be business, education, technology, or nontechnical.
- Security and surveillance: Artificial Intelligence technologies primarily focus on voice and facial recognition, enhancing the personalized experience. By enhancing artificial intelligence, image processing technology applies data science.

- **AI in Health:** By evaluating medical data, and developing innovative tools in research and decisionmaking and taking tasks related to software, medicine, and cognitive sciences. AI is widely recognized, so it might be used to protect patient information from online frauds or to assist in surgical procedures.
- **AI in Business:** AI technology is used to carry out extremely important tasks that humans would rarely complete, platforms for managing customer relationships to find out how to provide better serve customers. Chatbots have already been integrated into websites and e-businesses to offer clients prompt and efficient goods and service.
- **AI in Autonomous Vehicles:** Autonomous vehicles are similar to people in that they require sensors to detect their surroundings and a brain to process information. Their routes are determined by the information they gather. Autonomous cars use sophisticated instruments such as LIDAR, cameras, and long-range radar to collect data.

3.1 Augmented Reality and Virtual Reality in E-retailing.

VR is a communicating system which creates the experience that takes place within a real environment. VR setting may be wholly made up, or it may look like the real world. It primarily uses visual and auditory feedback, while it could also use input from other senses. With this technology, people are fully submerged in a virtual world created by a computer (Pannu, 2015) Users may in some circumstances be able to hear noises and move about in virtual worlds. Virtual reality experiences can potentially be improved with hand controls. A sensory VR headset is needed for VR interaction. You may connect a computer or gaming console to this VR set. A well-liked standalone gadget that doesn't require a computer or game console to function is Google Cardboard. (Sheehan, 2017)

(AR) uses computer-generated imagery, text, audio effects which improves the customer's perception of the actual world. Natural and real or computer-generated scenes and images are combined in augmented reality to provide a interconnected experience for customers. (Terry, L. 2018).

Users can involve with digital content in augmented reality while they are in the real world. Pokémon Go, is one of the best examples of augmented reality, where the player runs around the unique virtual creatures and real environments which was widely played throughout the world. The same technique has been used in online shopping in various e-retailers. Lenskart is using 3D try on technology, where customer can try various glasses without visiting store, with the help of AR technology. (Sheehan, 2017) Myntra and Amazon are using it to try different shades of lipsticks, foundations, compact powders and other beauty or cosmetic products.

Consumer purchasing experiences are evolving as a result of AR and VR. Prior to finalizing the deal, buyers of goods would typically visit three to five retail shop, which was thought to be boring and time-consuming. However, customers can now receive personalized service through VR without having to deal with the inconvenience of physically visiting the store. As a part of marketing strategy car brands like Honda, BMW, KIA, Audi and Lexus has adopted Virtual Reality to attract the customers and to create a new experience for them in transportation (Pannu, 2015) this helps consumers to find out and envision a variety of models

with various interior and colour options, and it also benefits the automaker by relieving them of the need to keep a sizable inventory of goods and services. (Sheehan, 2017)

However, AR can be helpful in enabling customers to view products within the framework. Various industries of retailers have adopted augmented reality technology into their online shopping experiences. Customers can use the AR mobile app to virtually try on shoes, glasses, makeup products, furniture etc. (Sheehan, 2017) additionally, the app introduced augmented reality window displays. Clothing brands have also employed AR mirrors to enable more convenient product trials for customers. Websites and mobile apps use front camera and AR feature which generates the same experience for customers those who prefer shopping from online. (Terry, L. 2018).

3.2 Generation Y Customers

If customers wish to shop online, they must have access and knowledge of the Internet. Regardless of their location, customers can easily access information and quickly complete convenient shopping through the Internet. Compared to traditional shoppers, online shoppers are typically younger. Younger people continue to dominate the online population, despite the fact that older generations now make up a larger percentage of users than in the past. (Kim and Ammeter 2008) claim that younger people process information from websites faster than older generations and are more familiar with e-commerce compared to previous generations.

The generation born in the 1982s and early 2004 (Sheetal Jain 2020) is referred to as Gen Y. also called as Millennials, because they were raised in the information era and are likely to use the media on a daily basis, this generation is technologically smart customers.

It is thought to represent the largest population of users who shop online. The shopping philosophies that are suitable for Generation Y, including brand consciousness, fun looking, and quality consciousness brands, and trends. (Musyifah, 2016) This particular consumer group observes their own patterns of behaviour and is image conscious. Online shopping is preferred by wealthy teenagers because it offers excellent comfort and projects an image of them as being current with the newest fashions in retail. Ashraf, (2013)

4.0 CONCLUSION

Nowadays AI has become an important technology in each and every field. Creating a personalized customer journey, satisfying customer demands, and offering an improved online shopping experience are more crucial nowadays. This paper supports the idea that artificial intelligence can be a very useful tool for our future development, it gives a glimpse of AI types, uses, and its applications. Also, how Gen Y customers can make use of AI in Online shopping with the help of AR and AV. Furthermore, it becomes challenging to seamlessly integrate real-human customer service when artificial intelligence-powered customer support is unable to meet customer demands.

REFERENCES

- Kaur, P., & Joshi, M. M. (2012). E-commerce in india: A review. *IJCST*, 3(1), 802-804. 2.
- Marr, B. (2018). The key definitions of artificial intelligence (AI) that explain its importance. *Forbes*.
- Sterne, J. (2017). *Artificial intelligence for marketing: practical applications*. John Wiley & Sons.
- Corea, F. (2017). *Artificial intelligence and exponential technologies: Business models evolution and new investment opportunities*. Springer.
- Peyravi, B., Nekrošienė, J., & Lobanova, L. (2020). Revolutionised technologies for marketing: Theoretical review with focus on artificial intelligence. *Business: Theory and Practice*, 21(2), 827-834.
- Bhaskar, K., & Harshitha, N. (2017). Retail marketing in India: challenges, strategies and opportunities. In *National Conference on Marketing and Sustainable Development October* (Vol. 13, p. 14).
- Ersoy, A. B. (2022). Artificial Intelligence (AI) applications in on-line shopping in India. *African Journal of Marketing Management*, 14(1), 1-10.
- Nagra, G., & Gopal, R. (2013). A study of factors affecting on online shopping behavior of consumers. *International journal of scientific and research publications*, 3(6), 1-4.
- India, P. W. C. (2015). E-commerce in india: Accelerating growth. URL: <http://www.pwc.in/assets/pdfs/publications/2015/ecommerce-in-india-accelerating-growth.pdf>, Accessed, 3(14), 2017.
- Dang, T. (2019). The influence of Artificial Intelligence, Augmented Reality and Virtual Reality on Shopping Experiences of the Indian Buyers. *Research Journal of Social and Life Sciences*, 28, 78-91.
- Sheehan, A. (2017). How these retailers use augmented reality to enhance the customer experience. *Shopify*.
- Pannu, A. (2015). Artificial intelligence and its application in different areas. *Artificial Intelligence*, 4(10), 79-84.
- Terry, L. (2018). VR in Retail: The future of shopping is virtual and augmented. *Samsung Business Insights*.
- Ahmad, I., Abdullah, A. B., & Alghamdi, A. S. (2009, October). Application of artificial neural network in detection of DOS attacks. In *Proceedings of the 2nd international conference on Security of information and networks* (pp. 229-234).
- Neill, D. B. (2013). Using artificial intelligence to improve hospital inpatient care. *IEEE Intelligent Systems*, 28(2), 92-95.

- Maheshwari, R. (2016). Indian ecommerce market to grow fastest globally over 3 years: Morgan Stanley. Retrieved September 14, 2016.
- Muda, M., Mohd, R., & Hassan, S. (2016). Online purchase behavior of generation Y in Malaysia. *Procedia Economics and Finance*, 37, 292-298.
- Jain, S. (2020). Assessing the moderating effect of subjective norm on luxury purchase intention: A study of Gen Y consumers in India. *International Journal of Retail & Distribution Management*, 48(5), 517-536.
- Kim, D., & Ammeter, A. P. (2008). Examining shifts in online purchasing behavior: Decoding the 'net generation'. In *Allied Academies International Conference. Academy of Management Information and Decision Sciences. Proceedings* (Vol. 12, No. 1, p. 7). Jordan Whitney Enterprises, Inc.
- Ashraf, T., Sajjad, W., Ridwan, M., Ahmed, D., & Nazeer, H. (2013). Determinants of consumer complaining behavior: a study of Pakistan. *International Journal of Learning & Development*, 3(6), 121-139.
- Musyifah, I., & Simanjuntak, M. (2016). Online shopping behavior on generation Y in Indonesia. *Global Business & Finance Review (GBFR)*, 21(1), 33-45.
- Hintze, A. (2016). Understanding the four types of artificial intelligence. *Consulté le*, 10(11), 2021.
- Kumar, V., Rajan, B., Venkatesan, R., & Lecinski, J. (2019). Understanding the role of artificial intelligence in personalized engagement marketing. *California Management Review*, 61(4), 135-155.
- Joshi, N. (2019). 7 Types of Artificial Intelligence. Retrieved from <https://www.forbes.com/sites/cognitiveworld/2019/06/19/7-types-of-artificialintelligence/#293be2a4233>
- Haenlein, M., & Kaplan, A. (2019). A brief history of artificial intelligence: On the past, present, and future of artificial intelligence. *California management review*, 61(4), 5-14.
- Braga, F. M. I. (2021). The influence and impact of artificial intelligence in the consumer decision-making process: comparing Generation X with Millennials (Master's thesis).