



## INFLUENCE OF ARTIFICIAL INTELLIGENCE ON ONLINE BUYING BEHAVIOUR

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### ABSTRACT

*The study focuses on evaluating the influence of Artificial Intelligence on online buying behaviour of the consumers. It is an attempt to know to what extent the consumers are aware about the impact of Artificial Intelligence on the online shopping. The data were elicited from the equal number of male and female respondents using structured questionnaire. The correlation and Yule's coefficient of association were used to test the hypotheses formulated for the study. It is found that there is no significant association between gender and AI awareness on online shopping. The study also shows that the educational level and time spent on internet have significant association with influence of AI on online shopping.*

**KEYWORDS:** Artificial Intelligence (AI), online shopping, buying behaviour

### INTRODUCTION

The tremendous growth of internet has resulted in the growth of e-commerce in the country. Online shopping is a form of electronic shopping which allows consumers to directly buy goods and services from a seller over the internet using a web browser. It evokes the physical analogy of buying products or services at a regular bricks and mortar shopping centre. The ever changing market trends make it difficult for businesses to understand consumer behaviour accurately. A detailed insight is needed to understand buying and consumption pattern of consumers. Machine learning coupled with data analytics can present a crystal-clear picture of consumer behaviour.

Artificial intelligence (AI) is the simulation of human intelligence process by machines, especially computer system. It is true that AI plays a significant role in the background, monitoring consumer sentiments on the internet and social media. These social listening kits, driven by AI engines ensure that consumers easily find their preferences. Consequently, these consumers often receive pop-up advertisements from the relevant websites to find the products they need. It is also able to allow the consumers to save their data on an online domain without many processes such that it becomes comfortable to navigate the internet the next time one uses it.

Subsequently, all consumers are always looking for convenience and a sense of flexibility. The presence of artificial intelligence in the world is allowing people to live their dreams since they can get their duties done from the comfort of their homes. Looking at aspects of shopping, the consumers are able to conduct a long and wide research on the materials they need and even compare prices and reviews to allow them buy the most suitable product for them. Artificial intelligence search engines including Google necessitate the process; making it possible for consumers to shop online. Additionally, their shopping experience is even made easier because customers can conduct online payments and wait to receive their goods at home, this is made possible because machines record and process instructions and provide the relevant information.

### SIGNIFICANCE OF THE STUDY

In this machine era, AI is widely used in marketing by the players in order to capture and survive in this competitive environment. Artificial intelligence has the ability to collect data and decide which content is the most applicable based on things like location, historical data and past behaviour of consumers. AI is changing the way buyers behave. Making sense of all the data and understanding how AI is influencing consumers will help businesses and marketers to stay ahead of the curve. The more



business know about consumers the more they can adapt their business and marketing strategies so that business can give more of what consumers want. AI is able to use machine learning to uncover customer insights that encourage loyalty. Digital consumers have become exhausted by an endless stream of unsuitable product choices. If they can find an online solution that is able to recommend products they enjoy, they are more likely to stick with that solution. AI is able to meet this consumer demand. It can further help in improving the user experience.

## OBJECTIVES

The study is conducted with the following objectives:

- ❖ To evaluate the awareness level of consumers about AI and its impact on purchase decision based on demographic characteristics.
- ❖ To study the influence of AI in online shopping and consumer buying behaviour.

## HYPOTHESES

The study is based on the following hypotheses:

- H<sub>01</sub>: There is no significant association between gender and awareness about AI on online shopping.
- H<sub>02</sub>: There is no significant association between educational level and awareness about AI on online shopping.
- H<sub>03</sub>: There is no significant association between time spent on internet and influence of AI on online shopping.

## METHODOLOGY

### Sampling:

The study is both descriptive and analytical in nature. The influence of AI on online shopping is mainly assessed by eliciting data from the people in the age group between 16 years to 38 years using structured questionnaires. Accessing the internet is considered under different categories like home, work place, public facilities and others. The judgement sampling process was used for selecting the samples for the study.

### Data collection:

Both primary and secondary data were used for the study. Primary data were collected from 92 respondents consist of equal number of male and female gender using structured questionnaires. Secondary data were collected from the websites, magazines, journals etc. The opinions of respondents were collected using structured questionnaires. The opinion of respondents was marked on five point Likert-type scale.

## Tools used:

The data collected were analysed using SPSS. The correlation and Yule's coefficient of association were used to test the hypotheses.

## RESULTS AND DISCUSSION

The user browses on the internet every time AI collects the information related to the user's online behaviour and analyse the data. When respondents search for a particular product they are automatically directed to the related ads or purchasing platform either in social media or search engines whenever they comes online. This significantly influences the buying behaviour of consumers. Reading the consumers' minds through AI and finding their next move will significantly influence their purchase decision positively as it suits to their taste and preference. Thus businesses and marketers can use AI for customising products and thereby increasing the sales volume.

AI reduces the possibility of consumer purchase manipulation and vulnerability. It helps customers on their buying experiences ensuring that they make sensible buying choices because it allows marketing, gift selection, and virtual dressing. Most often, the customers easily identify with items since they are often advertised while they use the internet depending on their search history. Due to this, it becomes easy for consumers to access what they need making AI a very important tool to marketing. Searching for appropriate gift items online can be hard; AI software can blend in data from occasion details, recipient, sentiment and the modern trends to pick ideal gifts. Buyers are also exposed to virtual dressing rooms that allow clothing customization enhancing their experience. Most times, the customers see a three-dimensional model of their selected outfit lessening online shopping guesswork.

The results obtained from the analysis of the data collected were shown below:

### H<sub>01</sub>: There is no significant association between gender and awareness about AI on online shopping.

The results of the study show that the female respondents, the coefficient of association shows that the attributes namely pop-up Advertisements and purchase decision are completely disassociated (perfect negative association i.e., -0.22). It results that, the females are not that much influenced by exposure to online Ads and it doesn't lead them to make purchase decision.

While considering the male category of respondents, the coefficient of association shows that the attributes are completely associated (perfect positive association i.e., 0.297). Consequently male are more influenced by the pop-up Ads and it upshot



them to make purchase decision in online platform than the female.

**H<sub>02</sub>: There is no significant association between educational level and awareness about AI on online shopping.**

Correlation was used for identifying the relationship between educational level and awareness about AI on online shopping. The results from the study also show that these two variables are highly correlated (i.e., 0.75735) As the educational level of respondents increases they are much aware of the fact that their surfing data do has influence on the recommendations or related ads provided by marketers which results in customisation of products.

**H<sub>03</sub>: There is no significant association between time spent on internet and influence of AI on online shopping.**

The study result also depicts that the influence of AI in purchase decisions is directly proportional to the time spend on internet. There is a strong correlation between these two variables (i.e., 0.67232). Respondents who spend 25 + hours in a week are more exposure to advertisements which resulted in impulse or unplanned purchases.

## CONCLUSION

It can be concluded from the study that there is no significant association between gender and awareness about AI on online shopping. The study also shows that the educational level and time spent on internet have significant association with influence of AI on online shopping. It is true that artificial intelligence is a new trend in the 21st century making it necessary for people to accept and use it to establish benefits. Even though the consumers of AI find it intimidating, they are also embracing its ability to make life easier. The many influences of AI are seen across vast domains including retail, healthcare, crime investigation, and employment among others indicating that it is instrumental to the wellbeing of individuals. It is important for the society to identify the benefits and demerits of AI so that they can give it its appropriate place in the advancing world.

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