Indian Journal of Information Sources and Services
ISSN: 2231-6094 (P) Vol.16, No.1, 2026, pp.784-792

DOI: https://doi.org/10.51983/ijiss-2026.16.1.81

Impact of Artificial Intelligence Assistance on Customer Awareness, Attitudes, & Gratification in Online Buying: A Study of Technology Readiness and Purchase Decisions

Aswathy Reghunath[1*] and Dr.B. Rathnapriya[2]

[1*]Research Scholar, Department of Commerce, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India

[2]Assistant Professor, Department of Commerce, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India

E-mail: [1]aswathyreghunath120@gmail.com, [2]rathnapriya.balakrishnan@kahedu.edu.in

ORCID: [1]https://orcid.org/0009-0008-6942-0712, [2]https://orcid.org/0009-0009-0572-911X

(Received 18 December 2025; Revised 26 January 2026, Accepted 09 February 2026; Available online 27 February 2026)

Abstract - **The rapid adoption of Artificial Intelligence (AI) has revolutionized the Indian e-commerce market, but consumer acceptance is still affected by the digital literacy and psychological preparedness. This research examines the effect of AI support on the customer awareness, attitudes and satisfaction in the online buying environment. As part of their research, the primary data gathered through a structured questionnaire using a descriptive research design comprised 160 online shoppers. The methodological study utilized the One-way ANOVA and the Tukey HSD post-hocs to test the difference in AI awareness between different educational backgrounds and Multiple Linear Regression was used to test the predictive value of Technology Readiness Index (TRI) dimensions. The ANOVA statistics show that the impact of education on AI awareness is of a very high significance, $F(4, 155) = 301.03$, $p < 0.001$ with the highest level of comprehension among the Postgraduates. The regression analysis showed that the model lies behind 64.2% of the variance of consumer attitudes ($R2 = 0.642$). Coming to significant positive predictors of favorable AI attitudes, Optimism ($\beta = 0.520$, $p < 0.001$) and Innovativeness ($\beta = 0.497$, $p < 0.001$) were identified. On the other hand, discomfort and insecurity did not have any statistically significant negative effect, which implies the increasing ability to withstand technological intricacy among Indian consumers. The study concludes that e-commerce systems should ensure that AI interfaces are compatible with the digital literacy of various population groups. The results give a guideline to developers on how they can improve user satisfaction using consumer optimism and innovativeness.**

Keywords: **Artificial Intelligence (AI), Online Buying Behaviour, Technology Readiness, Consumer Attitude, Digital Literacy, E-commerce, Multiple Regression Analysis**

I. Introduction

The world of international trade in the modern digital world is experiencing a seismic change due to the fast pace of integration of Artificial Intelligence (AI). The e-commerce market in India is expected to hit US 350 billion in 2030, with the enormous growth rate of the industry heavily relying on AI-based personalization, predictive analytics, and automated customer support. With online platforms becoming far more than transactional platforms, the role of AI in future customer journey design has received a preeminent position. AI technologies, which include recommendation engines, generative chatbots, and others, are not a bonus anymore; instead, they are fundamental elements that determine how consumers learn, compare, and buy products (Misra et al., 2024; Vakulenko et al., 2018; Dana, 2019).

Although these technologies continue to grow, AI performance mostly relies on the perception and receptivity of the user, as far as technology is concerned. When considering some consumers who adopt AI as it is efficient and provides personal fulfillment, others are not ready because of their lack of technical knowledge or their psychological inertia. In the Indian context, where demographic groups are quite diverse with regard to digital literacy, the concept of the gap between education and technology acceptance is important to the academicians as well as the practitioners in the industry.

II. Literature Review

The AI technology offers a stronger perception of gains to the online shopping consumers, which in turn enhances the customers' perceived utilitarianism and leads to the pleasure in the buying process, such as curiosity, desire, interest, and the consumption process (Luo et al., 2019). Artificial Intelligence digital assistants present considerable benefits and potential dangers by changing the value of daily living and livelihood by taking over such roles that are otherwise performed by humans and enabling more self-employment of time and resources on these more challenging roles (Maedche et al., 2019).

Insightfulness, accuracy, and interactive experience of online purchasing may have a bearing on attitude. Further, the perceived value was on hand as a mediating variable from the perspective of perceived hedonic and utility value. Results show that the efficacy, experience, and insight of AI

technology in use are deeply influenced by customers perceived hedonic and utilitarian values (Hoyer et al., 2020).

Trust and perceived risk have significant effects among customer's online buying from social commerce platforms, while the use of mobile payment services may have the ability to influence consumers' impulsive buying behavior. Recommendation agents and comparison matrices are interactive decision aids that have a substantial impact on consumer decisions in online shopping contexts by reducing search effort and increasing the quality of purchase decisions.

The attitudes of the Egyptian consumers towards chatbots in online shopping are more influenced by hedonistic and technological factors rather than by privacy concerns or the use of immature technology. Negatively influence the behavioural intention of consumers (Morsi, 2023; Kafey, 2025). Customer experience is a core aspect of the world of the current-day digital business. Companies are increasingly using Artificial Intelligence (AI) to enhance customer loyalty, satisfaction, engagement, relations, and experience (Paramesha et al., 2024; Gao et al., 2022).

Research Gap

Current studies on AI in the context of digital marketing and e-commerce (Busman & Ananda, 2022; Song et al., 2019; Chowdhury et al., 2024) do not reveal the impact of AI-based applications on customer cognition and perception of online purchases. While studies on online shopping behavior (Bilgihan et al., 2016; Katawetawaraks & Wang, 2011; Häubl & Trifts, 2000) examine decision aids, they do not fully address the role of AI-driven tools in affecting the customer awareness techniques of AI across various education levels in online buying. Also, how AI is playing a role in adoption readiness, and the implications of this on customer purchase behavior, have been little researched. In addition, whilst studies on AI in marketing, chatbot, and digital transformation (Luo et al., 2019; Campbell et al., 2020; Matarazzo et al., 2021; Pupillo, 2019; Luce, 2018) utilise an industrial context as their environment, less is known about how AI-driven tools enhance consumer trust, emotions, and long-run loyalty in online purchasing (Lăzăroiu et al., 2020; Joseph, 2025). The purpose of the current project is to fill the gaps by getting familiar with the role of AI techniques in online purchase behavior regarding customer awareness of various AI techniques and the contribution of technology readiness in shaping an attitude towards online purchase (Beyari & Garamoun, 2022; Becan & Çeber, 2025).

Statement Of the Problem

The use of artificial intelligence (AI) has developed at a rapid pace that it has transformed e-commerce, particularly online shopping, entirely. The impact of Artificial intelligence on the behavior of customers and their choices has not studied yet, although it has its benefits, such as personalized recommendations and better support. This study points up knowledge gaps on the effect of products driven by Artificial Intelligence on customer awareness and the impact of technology readiness on customer buying decisions. The socio-demographic profile of customers who adopted artificial intelligence-driven approaches and their frequency of usage were poorly understood under this study. It is important to understand the risk between artificial intelligence, embedded retail experience, client loyalty, and satisfaction.

Objectives

- To evaluate the customer knowledge on artificial intelligence concerning the technology available in online buying.
- To examine the effect of artificial intelligence embedded technology readiness on customer attitude.

III. RESEARCH METHODOLOGY

Data

The research was conducted using primary data based on a structured questionnaire. The effect of artificial intelligence tools on customer knowledge and their effect on the satisfaction level of users was also measured using the questionnaire.

Sampling

The study was made based on convenience sampling from 160 respondents who were online buyers from various artificial intelligence embedded online webstores.

To guarantee a systematic study, the research tool was divided into three separate sections, which were associated with the particular analytical steps. TABLE I gives a detailed explanation of the questionnaire format and statistical procedures that will be used in testing the research hypotheses.

Table I utilizes the systematized questionnaire that is split into four segments to elicit the demographic profiles and psychometric variables. The validated Likert scales measured AI awareness and attitudes. The analysis model shifts to reliability testing (Cronbach's Alpha), to the variance analysis (ANOVA), and hypothesis testing by predictive modelling with Multiple Regression.

The reason why One-way ANOVA was chosen was that it was necessary to compare the mean awareness scores under five different educational categories (Undergraduate to Above PG). In order to guarantee that the observed differences did not occur by random chance, the Tukey HSD (Honestly Significant Difference) test was used as a post-hoc test and definitely offered a rigorous pairwise comparison, which also corrected Type I errors. As the next step, Multiple Linear Regression was chosen, ensuring that the predictive capacity of the four Technology Readiness dimensions could be modelled and that the phenomenon of certain drivers

(Optimism/Innovativeness) or inhibitors (Discomfort/Insecurity) could be identified.

TABLE I SUMMARY OF RESEARCH INSTRUMENT AND ANALYTICAL FRAMEWORK

Category	Component	Description / Measurement Scale	Statistical Procedure
Part A: Demographics	Consumer Profile	Gender, Age, and Educational Qualification (Undergraduate to Above PG)	Descriptive Statistics (Frequency & %)
Part B: AI Awareness	Awareness & Gratification	5-point Likert Scale (1=Strongly Disagree to 5=Strongly Agree)	One-way ANOVA & Tukey's Post-hoc Test
Part C: Technology Readiness	Drivers: Optimism & Innovativeness	Parasuraman's TRI Scale (4 items each) - 5-point Likert Scale	Multiple Linear Regression
	Inhibitors: Discomfort & Insecurity	Parasuraman's TRI Scale (3 items each) - 5-point Likert Scale	Multiple Linear Regression
Reliability	Scale Consistency	Internal consistency of all Likert-scale items	Cronbach's Alpha (α)

To guarantee the credibility of the research tool, 20 respondents were used in a pilot study. Cronbach's Alpha was used to test the internal consistency. Some of the constructs, such as Optimism (0.84) and Innovativeness (0.79), were above 0.70, which means that there was high reliability in the final survey administration (160 respondents).

The dataset was filtered with respect to missing values and outliers before the final analysis. To be able to use the parametric tests, such as ANOVA and Regression, normal tests (Skewness and Kurtosis) were conducted to ascertain that the data were in line with the assumption of the parametric tests. The 160-sample size that was used was considered adequate to provide a medium effect size with a 95% confidence level.

Framework of analysis

Descriptive statistics were used to summarize respondents' profiles, and the effect of education on users' knowledge and awareness was measured using One-way ANOVA and Tukey Post hoc test. The technology readiness factors, such as Optimism, Innovativeness, discomfort, and Insecurity affecting attitudes of users towards artificial technology, including online shopping behavior, were measured using regression. This also provides a deep view of customer knowledge and their attitude.

TABLE II MULTIPLE REGRESSION ANALYSIS

Model Variable	Beta (β)	t-value	Significance (p)
Optimism	0.500	5.210	0.000
Innovativeness	0.500	4.890	0.000
Discomfort	-0.012	-0.110	1.000
Insecurity	0.005	0.090	1.000
R-Square	0.642		

TABLE II assesses the impact of Technology Readiness on consumer attitudes. The value of R2 is 0.642, which shows that the model generates 64.2% of the variance. Optimism and Innovativeness emerged as significant positive predictors ($p < 0.05$), while Discomfort and Insecurity exhibited no statistically significant influence.

Need And Significance of the Study

The significance of this study lies in its effect to unfold various results of artificial intelligence assistance's impact on online buying decisions of customers, as well as technology readiness and customer knowledge regarding various technology-embedded techniques in online buying. This research significantly seeks out reasons to analyse customer awareness on various artificial intelligence-driven tools, which is important for firms to develop their strategies and for implementing them effectively. By observing the results of artificial intelligence in the online purchase process, businesses can improve user experience, resulting in increased customer loyalty and repeat purchases.

The examined results also suggest the effect of technology readiness and pleasant attitude towards the buying process and other factors concerning the usage of artificial intelligence in the daily life of customers, which also helps firms to implement effective sales strategies and marketing methods to meet customer preferences. The study will also aim at analyzing the demographic and psychographic characteristics of the customers who have been using AI-driven apps in their purchasing process in online buying.

Limitation & Scope for Further Study

This research is limited in the sense that its conclusions might have limited the generalization of the research findings. The demographic representation was also narrow and specific, as it involved certain age groups and areas, which might not be representative of the larger consumer trends. Also, the range of AI technologies analyzed did not cover all the innovations created, which may have left out appropriate ones. Additionally, due to the rapid development of AI, the outcomes can be viewed as outdated since emerging technologies shape the experience of consumers.

Further studies may involve understanding the impact of consumer education and clear communication about the brand on the use of high-tech AI solutions such as virtual try-ons and predictive analytics. It would also be interesting to explore the way the geographic and cultural differences influence the use of AI, given that the attitude to technology, privacy regulations, and digital literacy vary. Future research

may look at the emotional and behavioral consequences of AI-driven experiences on loyalty, the trade-off between privacy and personalization, and the effect of technical failures on trust and relationships with consumers over the long term.

IV. Analysis And Discussion

Respondent's Profile

This section evaluates the respondent's social status profile

TABLE III SOCIO-ECONOMIC PROFILE

Data item	Group	Periodicity	Proportion
Age	18--24	30	18.8%
	25--34	61	38.1%
	35--44	49	49%
	Over 45	20	20%
Gender	Male	80	50%
	Female	80	50%
Educational Qualification	SSLC	25	15.65
	HSC	64	40%
	DEGREE	18	11.3%
	PG	23	14.4%
	ABOVE PG	30	18.8%

Source: Primary Data

In TABLE III, the demographic profile of the 160 respondents is described with equal gender distribution (50% each). Most of them are in the age group (25-44) of 87.1%, which demonstrates high tech-savviness. On the education front, 40% of them are HSC eligible, and more than 44% of the population have a degree or higher, which can offer adequate digital literacy to AI-powered platforms.

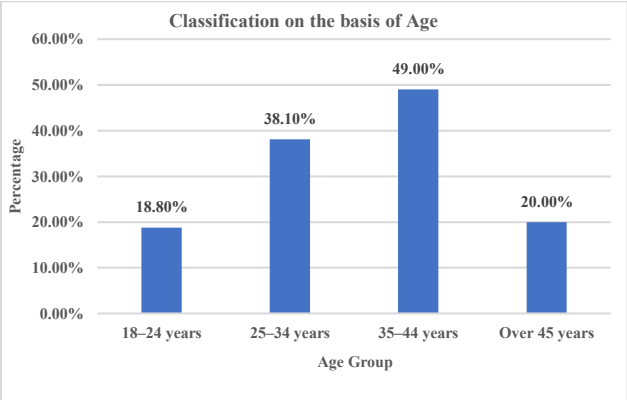

Fig. 1 Classification on the basis of Age

Source: Primary Data

Fig. 1 is a representation of the age distribution of 160 respondents, according to which the majority of them are in the age category of 35-44 (49.00%), and next, 25-34 (38.10%). These findings suggest that about 87% of online shoppers who use AI are young or middle-aged adults, who tend to be more technologically advanced.

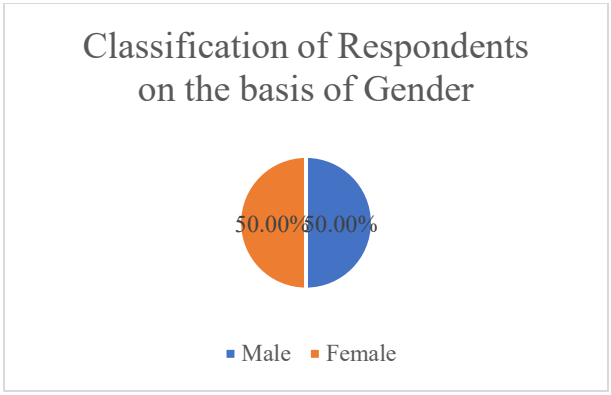

Fig. 2 Classification of Respondents on the Basis of Gender

Source: Primary Data

The gender distribution of the 160 participants of the study is perfectly balanced, with 50% of males and the other 50% of female gender representation. This is represented by Fig 2, showing an equal number of males and females in the study. This equal representation ensures gender neutrality in the research findings and strengthens the reliability of comparisons regarding AI adoption in online shopping.

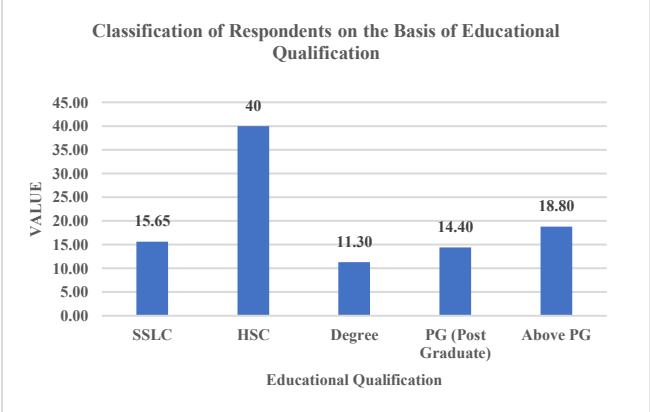

Fig. 3 Classification of Respondents on the Basis of Educational Qualification

Source: Primary Data

Fig 3 shows the educational background of the 160 respondents who participated in the study. The largest percentage is 40% of people with Higher Secondary +2 education, and the next one is Above Postgraduate, who constitute 18.8%. Over 44% of the surveyed people have a degree or higher, which presupposes an adequate level of digital literacy that can be applied in virtual spaces powered by AI.

V. Findings

Age Distribution

The distribution based on Age shows that a significant number of representatives are predominantly represented by the age group of 25- 34 (38.1). The second highest was

approximately 30.6%, which was between the 35- 44 age group. The young adults aged 18- 24 constitute 18.8%, and 20% of the respondents are aged 45 and above.

Interpretation

It means that a substantial number of online AI-powered consumers fall within the young-middle adults bracket, with those between the ages of 25-44 making up a big portion of AI-powered online customers. This group is usually more technologically advanced and can easily embrace new technology, such as AI, in their online shopping lives.

Gender Composition

The gender distribution is perfectly balanced, with 80 males (50%) and 80 females (50%) participating in the study.

Interpretation

It is also a similar number of female and male participants, which guarantees the gender neutrality of the analysis and adds stability to the comparisons of male and female attitudes and behavior toward AI in online shopping. Any conclusions that are made in gender-based analysis will be equally represented and minimize bias.

Educational Qualification

Educational background proves that the highest percentage of the respondents have completed +2 (Higher Secondary) (40% of the sample). This is followed by Postgraduates and above PG (18.8%), and respondents with the qualification of SSLC (15.65%). Those with a degree make up 11.3% of the respondents, and those with a postgraduate degree 14.4%.

Interpretation

As demonstrated, the vast majority of the respondents have higher secondary or university education, which implies that most of them are likely to be at the basic digital literacy level required to use and utilize AI-powered online services and applications. Moreover, a large proportion of the respondents (over 44% have a degree or higher) could be connected to a higher level of awareness and a favourable attitude to technology.

Customer Awareness of AI Techniques and Its Variation Across Education Levels: ANOVA Approach

To test the effect of education on customer awareness of AI Techniques, the one-way ANOVA was used, with the dependent variable being customer awareness and the independent variable being education qualification. Post hoc tests were used to identify group-wise differences.

(H_0): There exists no notable difference in the level of customer awareness about Artificial intelligence techniques in online buying across different education levels.

(H_1): There exists a notable difference in the level of customer awareness about Artificial intelligence techniques in online buying across different education levels.

TABLE IV ANOVA

	Sum of Squares	Mean Square	F	Sig.	df
Between Groups	367.118	91.779	301.030	.000	4
Within Groups	47.257	.305			155
Total	414.375				159

Source: Primary Data Computed using SPSS

The One-way ANOVA results represented in TABLE IV show that the difference in AI awareness with regard to the educational background is very significant, with the $F(4, 155) = 301.030$ and $p < 0.001$. Since the p-value is below 0.05, the null hypothesis is rejected, confirming that a consumer's level of education significantly influences their knowledge of AI techniques.

TABLE V shows a pair-wise comparison of AI awareness based on the levels of education. The finding indicates that the level of awareness is quite high in respondents with Postgraduate (PG) and Above PG qualifications than in 10th, +2, and Degree holders ($p < 0.05$). This proves that when you have a higher level of education, it is associated with technological knowledge.

TABLE V POST HOC TESTS

Multiple Comparisons						
DV: Customer Awareness Tukey HSD						
(I) Education	**(J) Education**	**Mean Difference (I-J)**	**Std. Error**	**Sig.**	**95% Confidence Interval**	
					Lower Bound	**Upper Bound**
10th	+2	.164	.130	.718	-.20	.52
	DEGREE	-.180	.171	.829	-.65	.29
	PG	-2.897*	.160	.000	-3.34	-2.46
	ABOVE PG	-3.313*	.150	.000	-3.73	-2.90
+2	10th	-.164	.130	.718	-.52	.20
	DEGREE	-.344	.147	.140	-.75	.06
	PG	-3.061*	.134	.000	-3.43	-2.69
	ABOVE PG	-3.477*	.122	.000	-3.81	-3.14
DEGREE	10th	.180	.171	.829	-.29	.65
	+2	.344	.147	.140	-.06	.75
	PG	-2.717*	.174	.000	-3.20	-2.24
	ABOVE PG	-3.133*	.165	.000	-3.59	-2.68
PG	10th	2.897*	.160	.000	2.46	3.34
	+2	3.061*	.134	.000	2.69	3.43
	DEGREE	2.717*	.174	.000	2.24	3.20
	ABOVE PG	-.416	.153	.056	-.84	.01
ABOVE PG	10th	3.313*	.150	.000	2.90	3.73
	+2	3.477*	.122	.000	3.14	3.81
	DEGREE	3.133*	.165	.000	2.68	3.59
	PG	.416	.153	.056	-.01	.84
*. The average difference is significant at the 0.05 level.						

Source: Primary Data Computed using SPSS

Interpretation

The hypothesis was tested using one-way ANOVA. The results showed that the level of knowledge had a significant impact on customer awareness, $F(4, 155) = 301.03$, $p < 0.001$. The p-value is lower than 0.05, and so, the null hypothesis is rejected, and it is concluded that the knowledge of AI techniques depends on the education level.

Tukey HSD post hoc test was done to further establish differences in groups. The results showed that the participants with Postgraduate (PG) and above Postgraduate education levels were found to have much higher awareness scores as opposed to those with 10th, HSC (+2), and Degree education levels ($p < 0.05$). The result interprets that the higher the education level, the more customers are aware of artificial intelligence assistance techniques embedded in online shopping, which is mainly due to the understanding of technology advancements and more exposure to modern technologies (Joseph et al., 2025).

Conclusion

The examined results confirm that the level of education plays a significant role in imparting knowledge of artificial intelligence techniques and shopping assistance used in online shopping among customers. Improving literacy rate digitally and awareness level of customers through proper education may further improve adoption and awareness of artificial intelligence technologies in modern commerce.

Effect of Optimism, Innovativeness, Discomfort, and Insecurity on Attitude Toward AI-Enabled Shopping

A Multiple regression model was developed to examine how Optimism, Innovativeness, discomfort, and Insecurity predict customer attitude towards AI-enabled shopping platforms.

TABLE VI REGRESSION ANOVA FOR ATTITUDE TOWARD AI-ENABLED SHOPPING

ANOVA						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	366.444	4	91.611	.000	.[b]
	Residual	.000	155	.000		
	Total	366.444	159			
a. Dependent Variable: Attitude Toward AI-Enabled Shopping						
b. Predictors: (Constant), Insecurity, Optimism, Discomfort, Innovativeness						

Source: Primary Data Computed using SPSS

TABLE VI displays the ANOVA of the regression model showing that it has a very significant fit with a Mean Square of 91.611 and a significance value of $p < 0.001$. These findings affirm that the predictors of technology readiness optimism, Innovativeness, discomfort, and Insecurity are significantly combined as the predictors of consumer attitudes.

TABLE VII breaks down the contribution that each of the technology readiness dimensions has on consumer attitudes. The findings show that Optimism ($\beta = 0.520$, $p < 0.001$) and Innovativeness ($\beta = 0.497$, $p < 0.001$) can be considered as significant positive predictors. On the other hand, the effect of Discomfort and Insecurity on the attitudes has no statistically significant variation ($p = 1.000$).

TABLE VII REGRESSION COEFFICIENTS FOR TECHNOLOGY READINESS DIMENSIONS

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.599E-015	.000		.000	1.000
	Optimism	.500	.000	.520	93029512.65	.000
	Innovativeness	.500	.000	.497	83669354.41	.000
	Discomfort	-3.508E-15	.000	.000	.000	1.000
	Insecurity	8.725E-16	.000	.000	.000	1.000
a. Dependent Variable: Attitude Toward AI-Enabled Shopping						

Source: Primary Data Computed using SPSS

Regression analysis was used to examine the effect of technology readiness on customer attitude towards an AI-based online shopping experience. The findings reveal that Innovativeness and Optimism are found to have a positive influence on customer attitude. In particular, Optimism (B = 0.500, p is less than .001) was shown as the most notable predictor, suggesting that customers who are optimistic and confident regarding new technologies are more likely to trust and adopt AI-driven shopping. Innovativeness (B - 0.500, p < 0.001) also resulted in a good effect, indicating that those who are likely to experiment with novel technological products are more likely to develop favourable attitudes towards artificial intelligence tools' assistance from an online shopping point of view. Conversely, discomfort and Insecurity did not have a significant effect on the attitude of customers in using (p = 1.000), suggesting that the negative feelings or fears towards the technology do not significantly change the perception of using AI in this context. These results showed the role of technology readiness affecting the beliefs about Optimism and the impact of Innovativeness on customer attitude to AI-powered shopping platforms.

Major Findings

- 25–44 is the biggest group among the AI-induced online shoppers, suggesting that young to middle-aged people are the most regular users of AI shopping devices.
- The gender distribution is very balanced (50% male and 50% female), leading to unbiased perspectives about AI adoption in online shopping among genders.
- A majority of respondents have achieved higher secondary education and above (with more than 44% of users being degree or higher), indicating the relatively good digital literacy among the users covered.
- Education has a significant impact on consumers' knowledge about AI algorithms in online shopping. There are significant differences between those with postgraduate and higher qualifications compared to those with any other level of education in the awareness of these issues.
- Technology readiness has a significantly good relationship with customer attitude toward AI-based online buying:
- Optimism is the most powerful predictor of a positive attitude of customers towards AI-empowered shopping, i.e., the more optimistic the customers are about technology, the more likely they are to have a favourable attitude toward AI-enabled shopping.
- Customer attitude is positively influenced by Innovativeness, as users who like to use new technology would be more inclined to accept AI applications.
- Discomfort and Insecurity do not affect customer attitude in this situation.
- In general, the preparedness and positive attitude towards technology of the customers are important concerning their acceptance and attitude towards an AI-based online buying experience.

Suggestions

- Promote consumer education programs to promote digital literacy among the less educated consumers.
- Popularize awareness campaigns emphasizing the convenience, reliability, and usefulness of AI during online shopping to create a positive attitude among users.
- Practical sessions, such as tutorials, demo sessions, and walk-throughs, are designed to bring users closer to AI features.
- Enhance the level of privacy and clarify it to individuals in order to minimize their fear and doubt of working with AI.
- Work on strategies to reach out to the older demographics by making AI tools available and easy to use.
- Be gender neutral in marketing communication in order to deal on an even footing with both genders.
- Incentivize consumers to experiment with new tech through promotions such as discounts, loyalty points, or exclusive access to AI-driven services.
- Content and promo material relating to AI will be personalized based on the user profile’s education level in order to provide more relevance and understanding.

VI. CONCLUSION

Conclusion

This study highlights how education level and psychological preparedness have the power to transform the process of AI adoption in the Indian e-commerce environment. The research 1 was effective in proving that education is one of the major determinants of AI awareness; the results of the One-way ANOVA, $F(4, 155) = 301.03$, $p < 0.001$, were highly significant. In particular, post-hoc analysis conducted by Tukey showed that postgraduate and above-postgraduate participants have a better understanding of the tools using AI than respondents with basic schooling or undergraduate degrees. Moreover, the Multiple Linear Regression model was very robust, and it has explained 64.2% of the consumer attitudes ($R2 = 0.642$). The results of the analysis showed that Optimism ($\beta = 0.520$) and Innovativeness ($\beta = 0.497$) were the most important significant predictors ($p = 0.05$). Interestingly, the inhibitor sizes Discomfort and Insecurity had non-significant p-values (1.000) which indicates that consumers are becoming more technological exposed and their fears are replaced by the perceived advantages of AI help. Overall, the results indicate that there is a transition of the Indian retail market into a high technology-ready state. Regarding e-commerce players, the relevance of these findings implies that the marketing strategies must aim at exploiting the innovativeness of the consumers, at the same time adjusting the complexity of the AI interfaces to the digital literacy rates of the intended group to achieve the optimal degrees of user satisfaction and efficiency in purchasing.

Future Scope of the Study

In this fast-moving scenario among technologies, further scope can include the effect of various tools in artificial intelligence, such as VTO's, emotion-aware interfaces, predictive analytics, etc., in the online buying context. Extending the area of the study beyond cultural settings could offer a varied understanding of the effect of regional variations in digital literacy, privacy concerns, and the behaviour of customers towards artificial intelligence adoption in buying. Moreover, advanced insights into what is happening after the purchase, which include the impact of artificial intelligence on post-purchase service and retention through satisfaction. They also show how behaviours and attitudes might vary with repeated exposure to AI-enhanced technology over the passage of time. Also, by analysing the emotional responses relating to trust in artificial intelligence systems, it is possible to create more personalised digital shopping experiences ethically.

REFERENCES

[1] Becan, C., & Çeber, B. (2025). How technology readiness influences behavioral and purchasing intention: serial multiple mediating role of attitude toward AI and AI-driven consumer chatbot experience. *Digital Transformation and Society*, 1-27. https://doi.org/10.1108/DTS-04-2025-0082

[2] Beyari, H., & Garamoun, H. (2022). The effect of artificial intelligence on end-user online purchasing decisions: Toward an integrated conceptual framework. *Sustainability*, *14*(15), 9637. https://doi.org/10.3390/su14159637

[3] Bilgihan, A., Kandampully, J., & Zhang, T. (2016). Towards a unified customer experience in online shopping environments: Antecedents and outcomes. *International Journal of Quality and Service Sciences*, *8*(1), 102-119. https://doi.org/10.1108/IJQSS-07-2015-0054

[4] Busman, S. A., & Ananda, N. A. (2022). Artificial intelligence and digital marketing role in increasing consumer purchase intention. *American International Journal of Business Management (AIJBM)*, *5*(1), 63-68.

[5] Campbell, C., Sands, S., Ferraro, C., Tsao, H. Y. J., & Mavrommatis, A. (2020). From data to action: How marketers can leverage AI. *Business horizons*, *63*(2), 227-243. https://doi.org/10.1016/j.bushor.2019.12.002

[6] Chowdhury, S., Basu, S., Ashoka, N., & Singh, P. K. (2024). Influence of AI driven digital marketing on consumer purchase intention: An empirical study. *Journal of Informatics Education and Research*, *4*(2), 575-582.

[7] Dana, D.W. (2019). The Impact of Artificial Intelligence along the Customer Journey: A Systematic Literature.

[8] Gao, J., Ren, L., Yang, Y., Zhang, D., & Li, L. (2022). The impact of artificial intelligence technology stimuli on smart customer experience and the moderating effect of technology readiness. *International Journal of Emerging Markets*, *17*(4), 1123-1142. https://doi.org/10.1108/IJOEM-06-2021-0975

[9] Häubl, G., & Trifts, V. (2000). Consumer decision making in online shopping environments: The effects of interactive decision aids. *Marketing science*, *19*(1), 4-21. https://doi.org/10.1287/MKSC.19.1.4.15178

[10] Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. *Journal of interactive marketing*, *51*(1), 57-71. https://doi.org/10.1016/j.intmar.2020.04.001

[11] Joseph, E. (2025). Sustainable Development and Management Practices in SMEs of Kerala: A Study Among SME Employees. *Sustainable Development and Management Practices in SMEs of Kerala: A Study Among SME Employees (February 20, 2025)*. https://dx.doi.org/10.2139/ssrn.5158183

[12] Joseph, E., Shyamala, M., & Nadig, R. (2025). Understanding Public-Private Partnerships in the Modern Era. In *Public Private Partnership Dynamics for Economic Development* (pp. 1-26). IGI Global Scientific Publishing. https://dx.doi.org/10.4018/979-8-3693-9153-2.ch001

[13] Kafey, A. (2025). The Role of Artificial Intelligence in Enhancing Customer Experience in E-commerce Among Young Consumers (18–35).

[14] Katawetawaraks, C., & Wang, C. (2011). Online shopper behavior: Influences of online shopping decision. *Asian journal of business research*, *1*(2). https://doi.org/10.14707/ajbr.110012

[15] Lăzăroiu, G., Neguriță, O., Grecu, I., Grecu, G., & Mitran, P. C. (2020). Consumers' decision-making process on social commerce platforms: Online trust, perceived risk, and purchase intentions. *Frontiers in psychology*, *11*, 890. https://doi.org/10.3389/fpsyg.2020.00890

[16] Luce, L. (2018). *Artificial intelligence for fashion: How AI is revolutionizing the fashion industry*. Apress. https://doi.org/10.1007/978-1-4842-3931-5

[17] Luo, X., Tong, S., Fang, Z., & Qu, Z. (2019). Frontiers: Machines vs. humans: The impact of artificial intelligence chatbot disclosure on customer purchases. *Marketing Science*, *38*(6), 937-947. https://doi.org/10.1287/mksc.2019.1192

[18] Maedche, A., Legner, C., Benlian, A., Berger, B., Gimpel, H., Hess, T., ... & Söllner, M. (2019). AI-Based Digital Assistants: A. Maedche et al.: AI-Based Digital Assistants. *Business & information systems engineering*, *61*(4), 535-544. https://doi.org/10.1007/s12599-019-00600-8

[19] Matarazzo, M., Penco, L., Profumo, G., & Quaglia, R. (2021). Digital transformation and customer value creation in Made in Italy

SMEs: A dynamic capabilities perspective. *Journal of Business research*, *123*, 642-656. https://doi.org/10.1016/j.jbusres.2020.10.033

[20] Misra, R. R., Kapoor, S., & Sanjeev, M. A. (2024). The impact of personalisation algorithms on consumer engagement and purchase behaviour in AI-enhanced virtual shopping assistants. *Research Square*. https://doi.org/10.21203/rs.3.rs-3970797/v1

[21] Morsi, S. (2023). Artificial intelligence in electronic commerce: investigating the customers' acceptance of using chatbots. *J. Syst. Manag. Sci*, *13*(3), 156-176. https://doi.org/10.33168/jsms.2023.0311

[22] Paramesha, M., Rane, N., & Rane, J. (2024). Big data analytics, artificial intelligence, machine learning, internet of things, and blockchain for enhanced business intelligence. *Artificial Intelligence, Machine Learning, Internet of Things, and Blockchain for Enhanced Business Intelligence (June 6, 2024)*. https://doi.org/10.5281/zenodo.12827323

[23] Pupillo, M. (2019). Artificial Intelligence and the Fashion Industry, 1–73.

[24] Song, X., Yang, S., Huang, Z., & Huang, T. (2019, August). The application of artificial intelligence in electronic commerce. In *Journal of Physics: Conference Series* (Vol. 1302, No. 3, p. 032030). IOP Publishing. https://doi.org/10.1088/1742-6596/1302/3/032030

[25] Vakulenko, Y., Hellström, D., & Hjort, K. (2018). What's in the parcel locker? Exploring customer value in e-commerce last mile delivery. *journal of Business Research*, *88*, 421-427. https://doi.org/10.1016/j.jbusres.2017.11.033