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Impact of AI Chatbot Performance on Customer Satisfaction in Online Shopping

Dr. Aparna devi M.^{1*}, Dr. Shyma K.², and Dr. Jayanthi K. C.³

^{1,3} Assistant Professor, PG Department of Commerce, Pazhassi Raja NSS College, Mattanur, Kerala, India

² Principal, MES College, Kuthuparamba, Kannur, Kerala, India

Corresponding Author: * Dr. Aparna devi M.

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Abstract

AI chatbots are now common in online shopping. They help customers search for products, track orders, and make complaints. The study 'Impact of AI Chatbot Performance on Customer Satisfaction in Online Shopping' examines chatbot awareness, use, performance, and customer satisfaction in Kannur district, Kerala. Primary data were collected by using Convenience sampling from 75 respondents with the help of a structured questionnaire. Data were collected from 75 respondents using a structured questionnaire and convenience sampling. The data were analysed using percentages, weighted averages, independent sample t-tests, ANOVA, correlation, and multiple regression. The results showed moderate awareness (3.35) and use (2.41) of AI chatbots. Chatbot performance had a weighted average of 2.09. Customer satisfaction was low, with a weighted average of 2.95. Incorrect information and poor understanding were the main problems (18.67% each) faced by them. Chatbot performance had a significant positive relationship with customer satisfaction ($\rho = 0.357$, $p < 0.05$). Regression results showed that chatbot performance and use were a significant predictor of satisfaction ($\beta = 0.617$, $\beta = 0.205$, $p < 0.001$). Awareness ($p = 0.277$) was not significant predictors. Therefore, online shopping platforms should improve the accuracy and quality of response. They should also provide human support if needed.

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KEYWORDS: AI Chatbots, Chatbot Performance, Chatbot Use, Artificial Intelligence, Online Shopping, Customer Satisfaction.

1. INTRODUCTION

Many online shopping platforms use AI chatbots to help customers. These chatbots provide product details, track orders and assist with returns and refunds. Chatbots can make shopping easier. However, they may give wrong information or fail to understand questions. This can affect the shopping experience and customer satisfaction. So, it is important to understand how customers use chatbots and what they think about their performance. This study examines AI chatbot services from the customers' point of view. It focuses on online shoppers in Kannur district. The study assesses their awareness and use of chatbots. It also examines chatbot performance, customer satisfaction and the problems faced by them while using chatbots.

LITERATURE REVIEW

Luo et al. (2019) examined how disclosing a chatbot's identity can influence customer purchasing decisions. They understood that customers' purchase decisions will be affected when they knew they were talking to a chatbot. Their study also highlighted the importance of customer trust and perception. Ashfaq et al. (2020) investigated customer satisfaction with AI chatbots. Their study emphasised the importance of service quality in shaping satisfaction and continued use.

Rese et al. (2020) examined customer acceptance of chatbots in retail communication. They examined why customers choose to interact with chatbots. Their study helps to understand the knowledge, acceptance and use of chatbots in online shopping. Adam et al. (2021) studied the application of AI chatbots in serving customers and their effects on user responses. Their research highlights the importance of chatbot design and interaction style.

Siow et al. (2025) studied AI chatbot adoption in online retailing by considering the usability and responsiveness. Ahmad et al. (2026) investigated customers' intention to use AI chatbots in e-commerce. Their study shows that good chatbot service can encourage customers to use chatbots again.

Statement of the Problem

Online shopping websites now use AI chatbots to help customers. They provide product details, track orders and answer questions of customers. However, they may not give correct or helpful answers always. Some customers may have difficulties in using them. As a result, customers may not always satisfy with chatbot services. Their ability to help customers influences the online shopping experience. Therefore, this study examines customers' awareness and use of AI chatbots in online shopping. It also studies chatbot performance, customer satisfaction and the main problems customers face when using chatbots.

Importance of the study

The study provides information about customers' experiences with AI chatbots in online shopping in Kannur district. It identifies the functions for which respondents use chatbots, assesses their views of chatbot performance and satisfaction, and the main difficulties they are facing. It also tries to understand the relationship between chatbot performance and satisfaction. The findings of the study may help online

shopping platforms to understand customer needs and improve their chatbot services.

OBJECTIVES

1. To assess awareness of AI chatbots among customers in Kannur district.
2. To examine the use of AI chatbots among online shoppers in Kannur district.
3. To evaluate the customer's perception of AI chatbot performance in online shopping.
4. To measure the satisfaction of customers in Kannur district with AI chatbot services.
5. To identify the major problems faced by customers while using AI chatbots.
6. To examine the relationship between chatbot performance and customer satisfaction.
7. To analyse the effect of awareness, use and performance of AI chatbot on customer satisfaction.

HYPOTHESES

H₀₁: There is no significant difference in awareness of AI chatbots between male and female respondents.

H₀₂: There is no significant difference in awareness of AI chatbots among respondents with different educational qualifications.

H₀₃: There is no significant relationship between awareness and use of AI chatbots.

H₀₄: There is no significant difference in customer satisfaction with AI chatbots between male and female respondents.

H₀₅: There is no significant relationship between the use of AI chatbots and customer satisfaction.

H₀₆: There is no significant relationship between chatbot performance and customer satisfaction.

H₀₇: Awareness, use and chatbot performance have no significant effect on customer satisfaction.

H₀₈: There is no significant relationship between problems faced and customer satisfaction.

METHODOLOGY

The study used a descriptive and analytical research design. The population of the study consisted of online shoppers in Kannur district, Kerala, who are using AI chatbots on online shopping platforms. Primary data were collected by using Convenience sampling method from 75 respondents with the help of a structured questionnaire. The collected data were analysed using percentage analysis, weighted averages, Pearson correlation, independent samples *t*-test, one-way ANOVA and multiple regression analysis.

DISCUSSION

Data from 75 respondents were analysed as follows.

Table 1: Demographic Profile

Variables	Group	Frequency	Percentage
Age	Less than 20	9	12.00
	21-30 years	35	46.67
	31-40 years	17	22.67
	41-50 years	9	12.00
	Above 50 years	5	6.67
Gender	Male	31	41.33
	Female	44	58.67
Educational Qualification	Higher Secondary	15	20.00
	Undergraduate	25	33.33
	Postgraduate	26	34.67
	M.Phil./Ph.D.	5	6.67
	Diploma	2	2.67
	Other	2	2.67
Occupation	Student	16	21.33
	Salaried Employee	24	32.00
	Self-employed	12	16.00
	Business	10	13.33
	Homemaker	6	8.00
	Other	7	9.33
Monthly Personal Income	No personal income	7	9.33
	Below ₹10,000	12	16.00
	₹10,001 - ₹25,000	21	28.00
	₹25,001 - ₹50,000	20	26.67
	₹50,001 - ₹75,000	8	10.67
	Above ₹75,000	7	9.33
Total		75	100.00

Most of the respondents were in the 21–30 age group (46.67%). Respondents below 20 years were 12.00%. The 31–40 age group accounted for 22.67%, while those above 50 years accounted for 6.67%. 12.00% were in the age group of 41–50. Female respondents were 58.67% and male respondents were 41.33%.

Most of the respondents were postgraduates (34.67%). Undergraduates were 33.33%, and 20% had Higher Secondary education. M.Phil./Ph.D. holders were 6.67% and Diploma and other qualifications were 2.67% each.

Among the respondents, 32% were salaried employees followed by Students (21.33%), self-employed persons (16%) and businesspersons (13.33%). Homemakers were 8% and 9.33% were in other occupations.

28% earn income between ₹ 10,001 and ₹ 25,000. 26.67% earned ₹ 25,001 - ₹ 50,000 and 16% earned below ₹ 10,000. Those earning ₹50,001- ₹75,000 were 10.67%. Respondents with no personal income and those earning above ₹ 75,000 were 9.33% each.

Table 2: Frequency of Online Shopping

Frequency of Online shopping	Frequency	Percentage
More than once a week	13	17.33
Weekly	8	10.67
2–3 times a month	21	28.00
Monthly	15	20.00
Occasionally	12	16.00
Rarely	6	8.00
Total	75	100.00

Most respondents shopped online two to three times a month (28%). About 10.67% shopped online every week. Another 16% shopped occasionally. Around 20% shopped once a

month. About 17.33% shopped more than once a week, while 8% rarely shopped online.

Table 3: Category of Shopping

Shopping Category	Frequency	Percentage
Beauty products	19	25.33
Grocery	14	18.67
Food	21	28.00
Electronics	15	20.00
Clothing items	35	46.67
Travel/Services	12	16.00
Other	17	22.67

Note: Multiple responses were allowed, so the total frequency is more than 75

Clothing items were the most popular shopping category, selected by 46.67% of respondents. Food came next at 28%. Beauty products were purchased by 25.33% of respondents. Other items accounted for 22.67%, while electronics represented 20%. Grocery shopping accounted for 18.67%. Travel and services were the least popular category, at 16%.

Table 4: Frequency of AI Chatbot Use

Frequency of AI Chatbot Use	Frequency	Percentage
Never	8	10.67
Rarely	11	14.67
Sometimes	19	25.33
Often	22	29.33
Very often	15	20.00
Total	75	100.00

Most respondents used AI chatbots often (29.33%). 25.33% used chatbots sometimes and 20% used them very often. 14.67% rarely used chatbots, and 10.67% respondents never used them.

Table 5: Awareness of AI Chatbots

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Weighted Average
I know about AI chatbots.	3	12	20	30	10	3.43
I can identify AI chatbots.	4	13	19	29	10	3.37
I know the basic functions of AI chatbots.	5	14	18	28	10	3.32
I know chatbots provide product information.	3	11	17	32	12	3.52
I know chatbots provide order assistance.	4	13	20	28	10	3.36
I know chatbots handle customer complaints.	7	16	22	22	8	3.11
Overall awareness						3.35

The weighted average for knowing about AI chatbots was 3.43 and for identifying AI chatbots was 3.37. Knowledge of their basic functions had an average weight of 3.32. Awareness that chatbots provide product information had the highest weighted average (WA= 3.52), followed by awareness of order assistance at 3.36. Awareness that chatbots handle customer complaints had the lowest average of 3.11. The overall average score was

3.35 indicating the respondents have a moderate awareness regarding AI chatbots.

Awareness of AI Chatbots between Male and Female Respondents

H₀₁: There is no significant difference in awareness of AI chatbots between male and female respondents.

Table 6: Awareness of AI Chatbots between Male and Female Respondents

Gender	Mean	SD	t-value (Independent Samples t-Test)	p-value	Remarks
Male	3.38	0.64	0.34	0.737	Not significant
Female	3.33	0.62			

Male respondents showed marginally higher awareness, with a mean score of 3.38 compared with 3.33 among females. However, the difference is not statistically significant ($p = 0.737$). Thus, the null hypothesis is accepted.

Awareness of AI Chatbots based on Educational Qualification

H₀₂: There is no significant difference in awareness of AI chatbots among respondents with different educational qualifications.

Table 7: Awareness of AI Chatbots based on Educational Qualification

Educational Qualification	Mean	SD	F-value (One-Way ANOVA)	p-value	Remarks
Higher Secondary	3.23	0.78	0.567	0.785	Not significant
Undergraduate	3.42	0.62			
Postgraduate	3.71	0.58			
M.Phil./Ph.D.	3.20	0.69			
Diploma	3.30	0.24			
Other	3.00	0.47			

Postgraduate respondents had the highest mean score (3.71), followed by 3.42 among undergraduates and 3.26 among respondents with Higher Secondary. Respondents in the

“Other” category had the lowest awareness (WA=3.00). The ANOVA result was not statistically significant ($F = 0.567$, $p = 0.785$) and null hypothesis accepted.

Table 8: Use of AI Chatbots

8	Disagree	Neutral	Agree	Weighted Average
Use chatbots for getting product information.	12	18	45	2.44
Use chatbots for clarifying doubts	10	17	48	2.51
Use chatbots for tracking the order.	16	16	43	2.36
Use chatbots to solve problems in shopping	8	24	43	2.47
Use chatbots for knowing returns and refunds.	18	19	38	2.27
Overall Use				2.41

The highest weighted average is for clarifying doubts (WA = 2.51), followed by solving shopping related problems (WA = 2.47). Obtaining product information had WA of 2.44, while order tracking had 2.36. The lowest weighted average was for obtaining information about returns and refunds (WA = 2.27).

The overall weighted average was 2.41 indicating a medium level of use.

Relationship between Awareness and Use of AI Chatbots

H₀₃: There is no significant relationship between awareness and use of AI chatbots among respondents in Kannur district.

Table 9: Relationship between Awareness and Use of AI Chatbots

Variables	Spearman's rho (ρ)	p-value	Remarks
Awareness and Use	0.381	0.001	Significant positive relationship

Awareness and use of AI chatbots were positively correlated ($\rho = 0.381$, $p = 0.001$). The association was statistically significant. Hence, the null hypothesis is rejected. As such,

there is a significant relationship between awareness and use of AI chatbots.

Table 10: Chatbot Performance

Chatbot Performance Statements	Disagree	Neutral	Agree	Weighted Average
Quick responses	12	16	47	2.47
Accurate information	21	37	17	1.95
Useful product information	17	23	35	2.24
Relevant answers	30	21	24	1.92
Understanding customer questions	22	17	36	2.19
Return assistance	27	19	29	2.03
Order tracking	15	21	39	2.32
Problem-solving ability	38	20	17	1.72
Product recommendations	23	31	21	1.97
Overall performance				2.09

Quick responses received the highest weighted average of 2.47, followed by order tracking (WA = 2.32) and useful product information (WA = 2.24). Understanding customer questions had WA of 2.19, and return assistance had 2.03. Product recommendations (WA = 1.97), accurate information (WA = 1.95), and relevant answers (WA = 1.92) got lower weighted

average. Problem-solving ability received the lowest weighted average of 1.72. The overall weighted average for chatbot performance is 2.09. It means the respondents from Kannur district felt that AI chatbots performed at an average level in online shopping.

Table 11: Customer Satisfaction with AI Chatbots

Customer Satisfaction Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Weighted Average
I am satisfied with the chatbot.	4	21	24	26	0	2.96
The chatbot meets my expectations.	7	16	36	16	0	2.81
I am satisfied with chatbot responses.	5	16	39	15	0	2.85
I am satisfied with chatbot convenience.	1	14	31	29	0	3.17
The chatbot improves my shopping experience.	4	15	38	18	0	2.93
The chatbot makes shopping easier.	6	16	28	25	0	2.96
Overall Customer Satisfaction						2.95

Satisfaction with chatbot convenience had the highest weighted average of 3.17, followed by satisfaction with the chatbot and ease of shopping (WA=2.96 each). Satisfaction with chatbot responses scored 2.85 and meeting customer expectations had the lowest score of 2.81. The overall weighted average for

Customer Satisfaction is 2.95 indicating a moderate level of satisfaction among respondents.

Difference in Customer Satisfaction by Gender

H₀₄: There is no significant difference in customer satisfaction with AI chatbots between male and female respondents.

Table 12: Difference in Customer Satisfaction by Gender

Gender	Mean	SD	t-value	p-value	Remarks
Male	2.604	0.553	0.138	0.890	Not significant
Female	2.584	0.621			

Male respondents had a slightly higher level of satisfaction ($M = 2.604$) than female respondents ($M = 2.584$). However, the p-value of 0.890 indicating that the difference is not statistically significant. Therefore, the null hypothesis is accepted.

Relationship between Use and Customer Satisfaction

H₀₅: There is no significant relationship between the use of AI chatbots and customer satisfaction in online shopping.

Table 13: Relationship between Use and Satisfaction

Variables	Spearman's Correlation (ρ)	p-value	Remarks
Use and Customer Satisfaction	0.122	0.04	significant

The correlation coefficient is 0.122, with a p-value of 0.298. This shows a weak positive relationship between use and customer satisfaction. Therefore, the null hypothesis is rejected.

Relationship between Performance and Satisfaction

H₀₆: There is no significant relationship between chatbot performance and satisfaction.

Table 14: Relationship between Performance and Satisfaction

Variables	Spearman's Correlation (ρ)	p-value	Remarks
Chatbot Performance and Customer Satisfaction	0.357	0.001	Significant positive relationship

The Spearman's correlation coefficient between performance and customer satisfaction is 0.357 indicates a weak positive relationship ($p < 0.05$). Thus, the null hypothesis is rejected. The relationship was statistically significant and moderate in strength.

Effect of Awareness, Use and Performance on Satisfaction

The multiple regression model examined customer satisfaction as the dependent variable and awareness, usage and chatbot performance as predictors.

H₀₇: Awareness, usage and chatbot performance have no significant effect on customer satisfaction in online shopping.

Table 15: Model Summary on Effect of Awareness, Use and Performance on Satisfaction

Model statistics	Value
Multiple correlation coefficient (R)	0.527
R Square (R^2)	0.278
Adjusted R Square	0.248
F-value	9.118
Significance (p-value)	< 0.001
Sample size (N)	75

The model summary reported $R = 0.527$, $R^2 = 0.278$, adjusted $R^2 = 0.248$ and $F = 9.118$, with $p < 0.001$. The R^2 value of

0.278 indicates that awareness, use and performance together explain approximately 27.8% of the variation in satisfaction.

Table 16: Regression Coefficients

Independent variable	B	Standard Error	Standardised Beta (β)	t-value	p-value	Remarks
Constant	1.681	0.347	—	4.844	< 0.001	Significant
Awareness	0.126	0.115	0.135	1.096	0.277	Not significant
Usage	0.540	0.190	0.205	2.842	0.006	Significant
Chatbot Performance	0.484	0.120	0.617	4.033	< 0.001	Significant

Chatbot performance and use have a significant positive effect on customer satisfaction ($\beta = 0.617$, $\beta = 0.205$, $p < 0.001$). Awareness ($p = 0.277$) does not have statistically

significant individual effects. Therefore, the null hypothesis that all three predictors have no effect on customer satisfaction is rejected as the overall regression model is statistically significant.

Table 17: Problems Faced While Using AI Chatbots

Problems	Frequency	Percentage
Slow responses	2	2.67
Incorrect information	14	18.67
Poor understanding	14	18.67
Repeated responses	4	5.33
Limited information	8	10.67
Complex problem handling	5	6.67
Lack of human support	10	13.33
Privacy concerns	6	8.00
Technical problems	0	0.00
No major problem	12	16.00
Total	75	100.00

Incorrect information and poor understanding were the most common problems with AI chatbots (18.67% each). Lack of human support was reported by 13.33%, while 10.67% faced

problems due to limited information. Privacy concerns were reported by 8% of respondents, and 6.67% experienced difficulties when chatbots handled complex problems.

Repeated responses were reported by 5.33% and only 2.67% identified slow responses as a problem. No respondents faced technical problems, and 16% did not face any major problems while using AI chatbots.

Relationship between Problems Faced and Customer Satisfaction

H₀₈: There is no significant relationship between problems faced and customer satisfaction.

Table 18: Correlation Between Problems Faced and Customer Satisfaction

Variables	Spearman's Correlation (ρ)	p-value	Remarks
Problems and satisfaction	0.31	0.063	Not significant

Problems faced and customer satisfaction have a weak positive relationship ($\rho = 0.31$). However, the relationship is not statistically significant ($p=0.063>0.05$). therefore, the null hypothesis is accepted.

Findings

- Most of the respondents were in the 21–30 age group (46.6%). Respondents below 20 years were 12%. The 31–40 age group accounted for 22.6%, while those above 50 years accounted for 6.7%. 12% were in the age group of 41–50.
- Female respondents were 58.6% and male respondents were 41.3%.
- Most of the respondents were postgraduates (34.67%). Undergraduates were 33.33%, and 20% had Higher Secondary education. M.Phil./Ph.D. holders were 6.67% and Diploma and other qualifications were 2.67% each.
- Among the respondents, 32% were salaried employees followed by Students (21.33%), self-employed persons (16%) and businesspersons (13.33%). Homemakers were 8% and 9.33% were in other occupations.
- 28% earn income between ₹ 10,001 and ₹ 25,000. 26.67% earned ₹ 25,001 - ₹ 50,000 and 16% earned below ₹ 10,000. Those earning ₹50,001- ₹75,000 were 10.67%. Respondents with no personal income and those earning above ₹ 75,000 were 9.33% each.
- Most respondents shopped online two to three times a month (28%). About 10.67% shopped online every week. Another 16% shopped occasionally. Around 20% shopped once a month. About 17.33% shopped more than once a week, while 8% rarely shopped online.
- Clothing items were the most popular shopping category, selected by 46.67% of respondents. Food came next at 28%. Beauty products were purchased by 25.33% of respondents. Other items accounted for 22.67%, while electronics represented 20%. Grocery shopping accounted for 18.67%. Travel and services were the least popular category, at 16%.
- Most respondents used AI chatbots often (29.33%). Around 25.33% used them sometimes, and 20% used them very often. 14.67% used chatbots rarely, and 10.67% never used them.
- The weighted average for knowing about AI chatbots was 3.43 and for identifying AI chatbots was 3.37. Knowledge of their basic functions had an average weight of 3.32. Awareness that chatbots provide product information had the highest weighted average (WA= 3.52), followed by

awareness of order assistance at 3.36. Awareness that chatbots handle customer complaints had the lowest average of 3.11. The overall average score was 3.35 indicating the respondents have a moderate level of awareness of AI chatbots.

- Male respondents showed marginally higher awareness, with a mean score of 3.38 compared with 3.33 among females. However, the difference is not statistically significant ($p = 0.737$).
- Postgraduate respondents had the highest mean score (3.71), followed by 3.42 among undergraduates and 3.26 among respondents with Higher Secondary. Respondents in the “Other” category had the lowest awareness (WA=3.00).
- The highest weighted average for the use of chatbots is for clarifying doubts (WA = 2.51), followed by solving shopping related problems (WA = 2.47). Obtaining product information had WA of 2.44, while order tracking had 2.36. The lowest weighted average was for obtaining information about returns and refunds (WA = 2.27). The overall weighted average was 2.41 indicating a medium level of use.
- Awareness and usage had a significant positive relationship ($r = 0.381$, $p = 0.0007$).
- Quick responses received the highest weighted average of 2.47, followed by order tracking (WA = 2.32) and useful product information (WA = 2.24). Understanding customer questions had WA of 2.19, and return assistance had 2.03. Product recommendations (WA = 1.97), accurate information (WA = 1.95), and relevant answers (WA = 1.92) got lower weighted average. Problem-solving ability received the lowest weighted average of 1.72. The overall weighted average for chatbot performance is 2.09. It means the respondents from Kannur district felt that AI chatbots performed at an average level in online shopping.
- Satisfaction with chatbot convenience had the highest weighted average of 3.17, followed by satisfaction with the chatbot and ease of shopping (WA=2.96 each). Satisfaction with chatbot responses scored 2.85 and meeting customer expectations had the lowest score of 2.81. The overall weighted average for Customer Satisfaction is 2.95 indicating a moderate level of satisfaction among respondents.
- Male respondents had a slightly higher level of satisfaction (M = 2.604) than female respondents (M = 2.584). However, the p-value of 0.890 indicating that the difference is not statistically significant.

- The correlation coefficient between usage and customer satisfaction is 0.122, with a p-value of 0.298. This shows a weak positive relationship between use and customer satisfaction. Similarly, The Spearman's correlation coefficient between performance and customer satisfaction is 0.357 indicates a weak positive relationship ($p < 0.05$).
- The model summary reported $R = 0.527$, $R^2 = 0.278$, adjusted $R^2 = 0.248$ and $F = 9.118$, with $p < 0.001$. The R^2 value of 0.278 indicates that awareness, use and performance together explain approximately 27.8% of the variation in satisfaction.
- Chatbot performance and use have a significant positive effect on customer satisfaction ($\beta = 0.617$, $\beta = 0.205$, $p < 0.001$). Awareness ($p = 0.277$) does not have statistically significant individual effects.
- Incorrect information and poor understanding were the most common problems with AI chatbots (18.67% each). Lack of human support was reported by 13.33%, while 10.67% faced problems due to limited information. Privacy concerns were reported by 8% of respondents, and 6.67% experienced difficulties when chatbots handled complex problems. Repeated responses were reported by 5.33% and only 2.67% identified slow responses as a problem. None had technical problems, and 16% did not face any major problems in using AI chatbots.
- Problems faced and customer satisfaction have a weak positive relationship ($\rho = 0.31$, $p = 0.063$) which is not statistically significant.

Suggestions

1. Chatbots should clearly tell customers that they are interacting with an AI system.
2. Chatbots should remember earlier messages and avoid asking the same questions again.
3. Online platforms should provide human support when chatbots cannot solve problems.
4. Chatbots should provide clear information about order tracking, returns and refunds.
5. Online platforms should collect customer feedback regularly to improve chatbot services.
6. Chatbots should support different languages to help more customers.
7. Online shopping platforms should make chatbot conversations simple and easy to understand.
8. Companies should check chatbot performance to improve customer satisfaction.

CONCLUSION

This study examined AI chatbot awareness, use, perceived performance and satisfaction among 75 online shoppers in Kannur district. AI chatbots help customers in online shopping. They had a moderate level of awareness and usage of AI chatbots in online shopping. But their satisfaction with chatbot services was low. Incorrect information and poor understanding were the main problems reported by the respondents in Kannur District. However, the chatbot performance had a significant effect on customer satisfaction. Providing human support, if

necessary, can also help to address customer concerns. Therefore, Online retailers should improve chatbot response quality. It helps to provide better shopping experience and customer satisfaction.

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