# A Study on Impact of Revised GST on Retailers In Coimbatore

**Dr. S. NAMASIVAYAM[1], K ASWINI[2]**
[1]AssistantProfessor, Dept of B.com Business Process Services
[2]Dept of B.com Business Process Services
[1, 2] Dr. N.G.P Arts and science College, Coimbatore.

***Abstract-*** *In the past decade, the rapid growth of the internet and digital technologies has transformed the way people shop. Traditional retail methods, where customers physically visit stores, are increasingly being replaced by online shopping platforms. E-commerce platforms like Amazon, Flip-kart, Anibal, and Mantra provide consumers with access to thousands of products across various categories, from electronics to clothing, in just a few clicks. While this growth has made shopping convenient, it has also introduced new challenges. Customers are often faced with an overwhelming number of choices, making it difficult to select products that best suit their needs. In such a competitive environment, businesses are constantly searching for innovative methods to attract and retain customers. One of the most significant solutions in recent years has been the use of Artificial Intelligence (AI) in online shopping. Artificial Intelligence, broadly defined, refers to computer systems capable of performing tasks that typically require human intelligence.*

## I. INTRODUCTION

The role of AI in personalizing online shopping is multifaceted. One of the most visible applications is product recommendation systems. These systems analyze customers' past purchases, browsing history, search queries, and even social media interactions to suggest products that match their interests. For instance, if a customer frequently searches for sports shoes, the AI recommendation engine can suggest similar products or notify them about new arrivals and discounts in that category. This not only enhances the convenience for the customer but also increases the likelihood of purchase for the retailer. Companies like Amazon have reported significant increases in sales through AI-based recommendations, highlighting the importance of professionalization in online shopping. Another important application of AI in e-commerce is chat-bots and virtual assistants. AI-powered chat-bots interact with customers in real-time, answering queries, assisting in product searches, and even helping with checkout processes. Unlike traditional customer support, chat-bots are available 24/7, providing instant assistance and reducing waiting times.

## II. REVIEW OF LITERATURE

1.  **Rao, S. and Velma, A. (2025)** studied the impact of AI personalization on customer engagement in e-commerce platforms. The research focused on AI tools such as recommendation systems, chatbots, and predictive analytics. The study found that AI significantly improves product discovery and customer convenience. Personalized suggestions based on browsing and purchase history increased purchase intention. AI also reduced decision-making time and enhanced overall satisfaction.

2.  **Sri Tulasi and Inayath Ahamed (2025)** examined advanced AI techniques such as deep reinforcement learning for e-commerce personalization. The study highlighted real-time adaptation of AI models to customer behavior. Personalized product recommendations increased engagement and conversion rates.

### OBJECTIVES

1.  To understand how AI recommends suitable products to customers, making online shopping faster and easier.
2.  To explore how AI saves customer time by displaying the most relevant products based on preferences and behavior.
3.  To analyze different AI tools used in online shopping, such as chatbots, recommendation engines, and virtual assistants.

## III. RESULTS AND DISCUSSION

**TABLE NO.:4.1**
**SIMPLE PERCENTAGE**
**AGE OF THE RESPONDENTS**

| S.NO | OPTIONS | NO. OF RESPONDENT | PERCENTAGE |
|---|---|---|---|
| 1 | BELOW 18 | 6 | 5.4% |
| 2 | 18–25 | 31 | 27.7% |
| 3 | 26–35 | 41 | 36.6% |

| 4 | 36–45 | 29 | 25.9% |
| 5 | 46 AND ABOVE | 5 | 4.5% |
| | TOTAL | 112 | 100.0% |

*(SOURCE: PRIMARY DATA)*

**INTERPRETATION**

From the above table, it is observed that the majority of the respondents (36.6%) belong to the 26–35 age group. This is followed by 27.7% of respondents in the 18–25 age group and 25.9% in the 36–45 age group. A smaller proportion of respondents fall under the Below 18 category (5.4%) and the 46 and above category (4.5%).

**INFERENCE:**

Most of the respondents belong to the 26–35 age group, indicating that young and middle-aged adults form the dominant segment of the study.

**CHART NO.: 4.1.1**
**AGE OF THE RESPONDENTS**
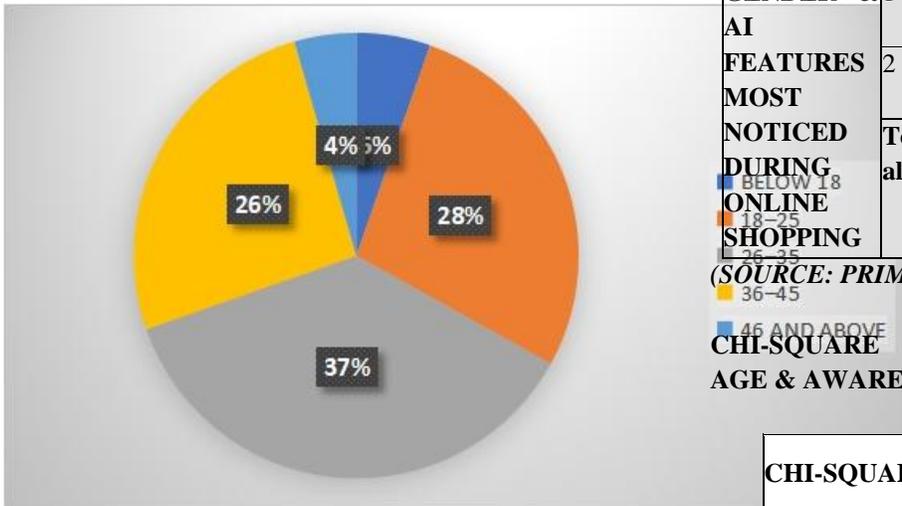


**TABLE NO.: 4.28**
**ONE - WAY ANOVA**

| PARTICULARS | | N | Mean | SD | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Lower Bound | Upper Bound | | |
| AGE & EFFECTIVENESS OF AI PERSONALIZATION IN ONLINE SHOPPING | 1 | 23 | 2.83 | 1.230 | .257 | 2.29 | 3.36 | 1 | 5 |
| | 2 | 24 | 2.88 | .850 | .174 | 2.52 | 3.23 | 2 | 5 |
| | 3 | 28 | 3.14 | 1.079 | .204 | 2.72 | 3.56 | 1 | 5 |
| | 4 | 37 | 2.97 | .763 | .125 | 2.72 | 3.23 | 2 | 4 |
| | Total | 112 | 2.96 | .967 | .091 | 2.78 | 3.15 | 1 | 5 |
| GENDER & AI FEATURES MOST NOTICED DURING ONLINE SHOPPING | 1 | 87 | 2.67 | 1.064 | .114 | 2.44 | 2.89 | 1 | 4 |
| | 2 | 39 | 3.00 | .827 | .132 | 2.73 | 3.27 | 1 | 4 |
| | Total | 126 | 2.77 | 1.005 | .090 | 2.59 | 2.95 | 1 | 4 |

*(SOURCE: PRIMARY DATA)*

**CHI-SQUARE**

**AGE & AWARENESS OF AI IN ONLINE SHOPPING**

| CHI-SQUARE TESTS | | | |
|---|---|---|---|
| | VALUE | DF | ASYMPTOTIC SIGNIFICANCE |
| Pearson Chi-Square | 9.053[a] | 12 | .698 |
| Likelihood Ratio | 9.326 | 12 | .675 |
| N of Valid Cases | 112 | | |

**INTERPRETATION:**

The calculated Pearson Chi-Square value is **9.053** with **12 degrees of freedom** and the corresponding **p-value is 0.698**.

**H₀ (Null Hypothesis):**

There is no significant relationship between age and awareness of AI in online shopping.

**H₁ (Alternative Hypothesis):**

There is a significant relationship between age and awareness of AI in online shopping.

Since the p-value (0.698) is greater than the significance level of 0.05,

## IV. FINDINGS

- Most of the respondents belong to the 26–35 age group, indicating that young and middle-aged adults form the dominant segment of the study.
- Most of the respondents are female, indicating that women form the dominant group in the survey.
- Most of the respondents are married, indicating that married individuals form the dominant group in the study.
- Most of the respondents possess higher educational qualifications, with postgraduates forming the dominant group in the study.
- Most of the respondents are employed in the private sector, indicating that private sector employees form the dominant occupational group in the study

## V. SUGGESTION

- E-commerce platforms should invest in advanced AI nationalization tools to better understand customer preferences and buying behavior.
- Personalized product recommendations must be accurate, relevant, and regularly updated to improve customer satisfaction.
- Online retailers should ensure transparency in how customer data is collected and used to build trust.
- Strong data privacy and security measures should be implemented to protect consumer information.
- AI-powered chat-bots should be enhanced to provide quick, human-like, and multilingual customer support.

## VI. CONCLUSION

In conclusion, AI plays a vital role in personalizing online shopping experiences by making them more interactive, efficient, and customer centric. When implemented responsibly, AI-driven professionalization not only enhances consumer satisfaction but also drives sustainable growth and innovation in the e-commerce industry. Artificial Intelligence has become a transformative force in personalizing online shopping experiences, reshaping how consumers interact with digital marketplaces. By analyzing vast amounts of customer data such as browsing history, purchase behavior, preferences, and feedback, AI enables e-commerce platforms to deliver highly customized and relevant shopping journeys. Personalized product recommendations.

## REFERENCES

[1] Rao, S., & Verma, A. (2025). Impact of AI professionalization on customer engagement in e-commerce platforms. *International Journal of E-Commerce and Digital Marketing, 12*(1), 45–56.

[2] Sri Tulasi, & Inayath Ahamed. (2025). Advanced AI techniques for real-time professionalization in online retail. *Journal of Artificial Intelligence in Business, 9*(2), 60–72.

[3] Mehrotra, P. (2025). Artificial intelligence applications in enhancing online shopping experience. *Journal **of Digital Retailing, 14*(1), 30–42.**