

**AI CHATBOTS IN ECOMMERCE: CONSUMER TRUST, PURCHASE INTENTION, AND CUSTOMER-BRAND RELATIONSHIP FORMATION****Arzoo Bansal****M.Com, JRF (Qualified)**

ABSTRACT AI-powered chatbots will be a key part of eCommerce, serving as virtual service agents capable of handling customer inquiries, directing product searches, and providing after-sales support. The current paper is a secondary analysis of sixteen peer-reviewed articles (2020–2026, Scopus-indexed) exploring the impact of AI chatbots on consumers' trust, purchasing intent and customer-brand relationship establishment. The review follows four goals, including identifying the dimensions about chatbot quality, looking at the existing theoretical frameworks, reviewing the chatbot use in various industries, and mapping research gaps. The review is based on the models such as technology acceptance model, service quality theory, consumption values theory and elaboration likelihood model. A conceptual model is offered (Enriched Chatbot Acceptance and Outcomes Framework), where consideration of the design of a chatbot is tied to its impact on consumer perceptions and behaviours, and placed amidst a moral governance framework. Results indicate that consumers trust is the key mediator in all of the contexts reviewed, while both hedonic and utilitarian value play a role in good chatbot design. Four major research gaps are identified and future directions and limitations are given.

KEYWORDS : AI Chatbots, eCommerce, Consumer Trust, Purchase Intention.**1. INTRODUCTION**

From eCommerce to the hospitality and retail sector, AI chatbots are now engaging millions of customer interactions, thanks to the progress made in natural language processing and large language models. In the field of eCommerce, AI chatbots have been increasingly adopted to handle millions of customer interactions, from retail to the hospitality industry (Nguyen et al., 2023; Xia & Shannon, 2024).

2. Research Objectives

This paper integrates these quality dimensions of chatbots to establish the steps that boost the trust between the chatbot and the user, review competing models (TAM, service quality, consumption values, ELM), and identifies the gaps in the research to create a conceptual model.

3. Literature Review

Several themes can be distilled from the literature reviewed. The quality of a chatbot's performance in terms of communication skills, humanization, entertainment and responsiveness consistently correlates with trust and purchase intention (Nguyen et al., 2023; Ding & Najaf, 2024). TAM remains dominant but it neglects hedonic and relational value of consumption, which is incorporated in recent studies by developing consumption-values theory, service-quality models, and elaboration likelihood model (E.L.M) (Putra et al., 2026; Yue et al., 2024; Chen et al., 2025). In eCommerce, perceptions of value are enhanced when viewing content from a partner perspective, and the results of the sector studies indicate these trends in the context of fashion, luxury and food eCommerce (Kim et al., 2026; Meng et al., 2025; Jeneffa et al., 2025). There are sixteen studies reviewed here, and a summary of the reviews is provided in Table 1.

Year	Author(s)	Framework	Key Finding
2020	Li et al.	TAM	Improves attitude, loyalty
2023	Nguyen et al.	Service Quality	Trust drives booking
2023	Butt & Ahmad	Innovation Theory	Drives satisfaction, eWOM
2024	Xia & Shannon	TAM + RM	Builds brand relationships
2024	Yue et al.	Consumption Values	Predicts continuance intention
2024	Ding & Najaf	Psychology/ TAM	Top trust drivers
2025	Jangra et al.	Behavioral	Boosts purchase decisions
2025	Meng et al.	Service Quality	Differentiates fashion outcomes
2025	Pham Thi & Duong	TAM	Drives shopping adoption
2025	Rajesh et al.	Interaction Theory	Boosts perceived value
2025	Chen et al.	ELM	High-involvement persuasion
2025	Kavitha et al.	Chatbot Design	Supports shopping assistance

2025	Jeneffa et al.	Extended TAM	Boosts food eCommerce adoption
2026	Putra et al.	TAM+ECTM+TPB	Improves prediction accuracy
2026	Hsiao et al.	Affordance Theory	Mediates purchase intention
2026	Kim et al.	Brand Loyalty	Drives luxury loyalty

Compiled by author, Scopus 2020–2026 is the best place to find this information.

4. Research Gap

There are four gaps which have not yet been addressed: First, there is no longitudinal trust data; second, there is limited cross-cultural research; third, there are under-represented high stakes categories; and fourth, there is a lack of examination of LLM chatbot ethics as shown in table 2.

Gap	Evidence	Missing	Approach
Longitudinal trust	Cross-sectional only	Trust evolution	Longitudinal panels
Cross-cultural variation	Western/Asian samples	Cultural moderators	Multi-country designs
High-involvement categories	Low-involvement focus	Luxury, finance, health	Sector experiments
LLM chatbot ethics	Technical focus only	Privacy, manipulation risk	Ethics frameworks

5. Conceptual Framework

The Enriched Chatbot Acceptance and Outcomes Framework (ECAOF) (Figure 1) builds upon the original TAM by adding the additional user perceptions of humanness and entertainment value, and social presence, which moderate the relationship between chatbot attributes and user's perceptions. The Enriched Chatbot Acceptance and Outcomes Framework (ECAOF) (Figure 1) extends the original TAM by incorporating additional perceptions of user towards chatbots such as humanness, entertainment value, and social presence, as moderators between chatbot attributes and outcome perceptions.

Chatbot Design Attributes	Consumer Perceptions	Immediate Outcomes	Behavioral Outcomes
Communication Quality Humanness Intelligence Entertainment Value Responsiveness	→ Perceived Usefulness Consumer Trust Social Presence Hedonic Value	→ Satisfaction Engagement eWOM Flow Experience	→ Purchase Intention Continuance Intention Brand Loyalty Repurchase
	↑ Moderated by: Product Category · Cultural Context · Prior AI Experience ↓		

ETHICAL BOUNDARY CONDITION: Data Privacy · Transparency · Non-Manipulation · Informed Consent

Enriched Chatbot Acceptance and Outcomes Framework, as shown in figure 1.

6. Methodology

The paper adopted secondary analysis of the 16 selected peer-reviewed articles from the database Scopus indexed during the period 2020–2026 related to the study of AI chatbots, consumer trust and consumer purchase intention.

7. FINDINGS AND DISCUSSION

Overall, the chatbot quality – behavioural intention link is mediated by trust across all reviewed contexts, highlighting the importance of the chatbot's humaneness, responsiveness and transparency, in addition to its efficiency. Hedonic features – enjoyment and entertainment – predict satisfaction independently, particularly in fashion and luxury, a sign of TAM's utilitarian bias. Chatbots based on LLM like LazzieChat (Yue et al., 2024) already demonstrated higher satisfaction with user compared to scripted chatbots and Putra et al.'s (2026) framework raised concerns about privacy and manipulated conversation.

8. CONCLUSION

In this paper, four aimings were covered, which delve about the quality dimensions of chatbots, theoretical frameworks, sector applications, and research gaps. The overall sense is of trust as the universal mediator, the challenge of TAM over the hedonic/utilitarian balance, and the LLM chatbots marking a trend toward newfound advanced LLM capabilities.

8.1 Limitations

Only 16 studies were found and included in this review and they were published in Scopus indexed journals without formal meta-analysis. Results may not reflect current abilities as the LLM Chatbot field will continue to change rapidly.

8.2 Directions for Future Research

Longitudinal studies of trust, cross-country studies, sector specific studies and audit frameworks for conversational commerce should be continued.

REFERENCES

- Butt, A., & Ahmad, H. (2023). AI Chatbot Innovation – Leading toward Consumer Satisfaction, Electronic Word of Mouth and Continuous Intention in Online Shopping. *Journal of Telecommunications and the Digital Economy*, 11(4), 156–184. <https://doi.org/10.18080/jtde.v11n4.735>
- Chen, Q., Yin, C., & Gong, Y. (2025). Would an AI chatbot persuade you: an empirical answer from the elaboration likelihood model. *Information Technology and People*, 38(2), 937–962. <https://doi.org/10.1108/ITP-10-2021-076>
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Ding, Y., & Najaf, M. (2024). Interactivity, humanness, and trust: a psychological approach to AI chatbot adoption in e-commerce. *BMC Psychology*, 12(1). <https://doi.org/10.1186/s40359-024-02083-z>
- Hsiao, M., Li, J., & Doong, S. (2026). AI chatbot affordances as drivers of purchase intentions: the roles of entertainment value and privacy concerns. *Journal of Marketing Analytics*. <https://doi.org/10.1057/s41270-026-00461-7>
- Jangra, M., Jangra, G., Kamal, Attri, R., & Anguralia, N. (2025). Enhancing Consumer Experience and Purchase Decisions through AI-Based Chatbot Systems in eCommerce. *Proceedings of the 2025 International Conference on Artificial Intelligence and Emerging Technology, Global AI Summit 2025*, 768–773. <https://doi.org/10.1109/AISummit66170.2025.11411198>
- Jenefa, L., Hameed, S., Abinash, M., Jeshurun, S., Ravikumar, A., & Jayakumar, M. (2025). Enhancing Food E-Commerce Through Immersive Virtual Reality: An Extended Technology Acceptance Model Approach for Consumer Adoption in the Post-Pandemic Era. *Proceedings of the 2025 International Conference on Computational Innovations and Sustainable Technologies, ICCIST 2025*. <https://doi.org/10.1109/ICCIST67338.2025.11438400>
- Kavitha, M., Nijagunarya, Y., & Srinivasa, K. (2025). A Conversational AI Chatbot for Shopping Assistance and Product Recommendations. *16th International Conference on Advances in Computing, Control, and Telecommunication Technologies, ACT 2025*, 62–67.
- Kim, S., Jai, T., & Chang, H. (2026). Exploring drivers of brand loyalty in luxury e-commerce: The role of AI chatbots. *Journal of Global Scholars of Marketing Science*, 36(2), 242–264. <https://doi.org/10.1080/21639159.2026.2622304>
- Li, C., Pan, R., Xin, H., & Deng, Z. (2020). Research on Artificial Intelligence Customer Service on Consumer Attitude and Its Impact during Online Shopping. *Journal of Physics: Conference Series*. <https://doi.org/10.1088/1742-6596/1575/1/012192>
- Meng, H., Li, Z., Xu, X., Wang, J., Zhang, X., & Chen, M. (2025). Does AI chatbot really benefit fashion consumption: empirical evidence from various online customer service. *Journal of Fashion Marketing and Management*, 1–18. <https://doi.org/10.1108/JFMM-02-2025-0081>
- Nguyen, V., Phong, L., & Chi, N. (2023). The impact of AI chatbots on customer trust: an empirical investigation in the hotel industry. *Consumer Behavior in Tourism and Hospitality*, 18(3), 293–305. <https://doi.org/10.1108/CBTH-06-2022-0131>
- Pham, T. T., & Duong, N. (2025). Consumers' Intentions to Use AI Chatbots on Online Shopping Platforms. *Journal of Computer Information Systems*. <https://doi.org/10.1080/08874417.2025.2456750>
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, 19, 123–205. [https://doi.org/10.1016/S0065-2601\(08\)60214-2](https://doi.org/10.1016/S0065-2601(08)60214-2)
- Putra, A., Wahono, P., & Wibowo, A. (2026). Exploring User Acceptance of Chatbot AI: A Triangulated Framework Integrating TAM, ECTM, and TPB Constructs. *Journal of Applied Data Sciences*, 7(2), 1393–1407. <https://doi.org/10.47738/jads.v7i2.1287>
- Rajesh, J., Rajaguru, R., Thanigan, J., Siriwardana, S., McMurray, A., & Pare, V. (2025). Master-Servant-Partner interaction styles with artificial intelligence chatbots and perceived value co-creation. *Asia Pacific Journal of Marketing and Logistics*, 1–17. <https://doi.org/10.1108/APJML-02-2025-0226>
- Xia, Z., & Shannon, R. (2024). Conceptualizing AI-chatbot application as an e-service agent to develop a customer-brand relationship. *Operational Research in Engineering Sciences: Theory and Applications*, 7(1), 309–331. <https://doi.org/10.31181/oresta/070115>
- Yue, Y., Ng, S., & Basha, N. (2024). Consumption Values, Attitudes and Continuance Intention to Adopt ChatGPT-driven E-Commerce AI Chatbot (LazzieChat). *Pakistan Journal of Commerce and Social Sciences*, 18(2), 249–284.