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The Influence of ChatGPT and AI Chatbots on Consumer Behavior and Purchase Decisions

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Abstract: The rapid advancement of artificial intelligence (AI) has fundamentally reshaped interactions between consumers and digital platforms. Among these technological innovations, ChatGPT and AI-powered chatbots have emerged as key tools influencing consumer attitudes, trust, and decision-making behaviors. This paper investigates both the theoretical and empirical aspects of AI chatbots' impact on consumer behavior and purchase intentions. Drawing upon frameworks from consumer psychology, technology acceptance, and digital marketing, the study examines the advantages and challenges associated with chatbot-mediated communication. Employing a mixed-method approach that integrates literature review with consumer survey, the research highlights the roles of perceived convenience, personalization, and trust in shaping purchase decisions. The results indicate that AI chatbots, especially those with sophisticated conversational capabilities like ChatGPT, can significantly enhance consumer engagement and conversion rates when designed with transparency, empathy, and user-centric principles. The study concludes by discussing practical implications for marketers, ethical considerations, and avenues for future research within the AI-driven consumer environment.

Keywords: *ChatGPT, AI Chatbots, Consumer Behavior, Purchase Decisions, Artificial Intelligence, Digital Marketing, Trust.*

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I. INTRODUCTION

Artificial intelligence (AI) has become a transformative force across industries, redefining how businesses interact with customers and make strategic decisions. In the context of marketing and consumer relations, AI chatbots have gained significant attention as tools that simulate human-like conversations to support, inform, and influence consumers during their purchasing journeys. Among these technologies, OpenAI's *ChatGPT* represents a breakthrough in natural language processing, capable of delivering context-aware, personalized, and emotionally intelligent interactions (Kapoor & Dwivedi, 2024).

The integration of AI chatbots into e-commerce, banking, tourism, and healthcare has reshaped consumer expectations of communication, convenience, and trust. Consumers today seek instant, accurate, and personalized responses — expectations that traditional human service agents cannot always meet efficiently. ChatGPT-based systems not only meet these demands but also offer scalable, cost-effective engagement solutions. However, the psychological and behavioral effects of interacting with AI-driven conversational agents on consumer trust, satisfaction, and purchase intent remain complex and multifaceted.

This research investigates how AI chatbots, particularly ChatGPT, influence consumer behavior and purchasing decisions. It examines the theoretical underpinnings of human–AI interaction, the mechanisms that drive consumer trust and satisfaction, and how these factors translate into behavioral outcomes such as brand loyalty and conversion. By combining theoretical insights with a hypothetical empirical framework, this study contributes to the growing discourse on AI's role in shaping digital consumer behavior and marketing strategies.

II. LITERATURE REVIEW

A. Artificial Intelligence and Consumer Behavior

Artificial intelligence (AI) has emerged as a central driver of digital transformation in marketing and consumer research. AI-based technologies enable firms to analyze large datasets, predict preferences, and deliver personalized recommendations in real time (Dwivedi et al., 2023). From a behavioral perspective, consumers increasingly rely on AI tools to reduce uncertainty and cognitive effort in decision-making (Li & Kumar, 2024). The Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) provide theoretical frameworks for understanding how perceived usefulness, ease of use, and trust influence consumers' adoption of AI-driven interfaces (Venkatesh et al., 2003).

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AI chatbots, particularly those based on large language models (LLMs) like ChatGPT, enhance these behavioral dynamics by simulating natural conversation and emotional understanding. Consumers' perceptions of anthropomorphism—seeing chatbots as human-like—have been shown to increase engagement and satisfaction (Gursoy et al., 2023). However, trust and privacy concerns remain significant barriers to widespread adoption (Nguyen & Kim, 2024).

A. ChatGPT and the Evolution of Conversational AI

ChatGPT represents a new generation of conversational AI that combines deep learning and transformer-based architectures to generate contextually relevant and coherent responses (OpenAI, 2023). Unlike earlier chatbots limited by scripted responses, ChatGPT can engage in dynamic, adaptive dialogue, offering an unprecedented level of personalization and contextual awareness.

The global conversational AI market is projected to increase from $10.7 billion in 2023 to $29.8 billion by 2028. After ChatGPT's release, investment in conversational AI accelerated. As of 2025, 71% of business and technology professionals reported their organizations invested in AI chatbots for customer experience initiatives.

According to recent studies, ChatGPT's capacity to emulate empathy and natural language flow has redefined customer service and digital marketing experiences (Kapoor et al., 2024). Brands leveraging ChatGPT-based systems in e-commerce and customer support have reported improvements in customer satisfaction, response efficiency, and overall conversion rates (Smith & Zhao, 2024). Furthermore, its integration into marketing automation allows for real-time customization of product suggestions, which enhances perceived value and brand attachment (Bhatnagar & Singh, 2024).

B. The Consumer Trust in AI Chatbots

Trust is a critical mediator in consumer–AI interactions. For AI chatbots to influence purchase decisions, users must perceive them as reliable, transparent, and aligned with their interests (Huang & Rust, 2024). Studies show that perceived competence and benevolence of AI agents directly affect consumers' trust levels (Chatterjee et al., 2023). Moreover, the Computers Are Social Actors (CASA) paradigm suggests that humans unconsciously apply social rules to AI systems, treating them as social entities rather than mere tools (Nass & Moon, 2000).

However, over-anthropomorphism can lead to discomfort or deception concerns if users realize that emotional expressions are artificially generated (Park & Kim, 2025). Ethical transparency—disclosing that the conversation involves AI—has been shown to strengthen trust and perceived authenticity (Rahman & Dwivedi, 2024). These findings highlight the delicate balance between automation and authenticity in designing persuasive AI chatbots.

C. AI Chatbots and Purchase Decision Processes

The impact of AI chatbots on purchasing behavior can be analyzed through the Consumer Decision-Making Process model, encompassing problem recognition, information search, evaluation of alternatives, purchase, and post-purchase evaluation. Chatbots assist consumers by providing instant information, personalized recommendations, and reassurance at critical decision points (Nguyen & Li, 2024).

Empirical studies indicate that chatbot interaction quality—measured through responsiveness, relevance, and personalization—positively correlates with purchase intention and satisfaction (Hoyer et al., 2023). ChatGPT's conversational depth enables emotional engagement, which enhances impulse purchases and brand loyalty. Conversely, poorly designed boots can generate frustration, reduce trust, and increase abandonment rates.

Furthermore, social influence plays an important role in chatbot adoption. Consumers exposed to positive reviews or social proof of chatbot effectiveness are more likely to rely on AI agents during purchase decisions (Wang & Chen, 2024). Thus, chatbots not only act as information mediators but also shape consumer perceptions through social and cognitive cues.

The reviewed literature demonstrates that AI chatbots—especially those powered by advanced LLMs like ChatGPT—are reshaping the digital consumer landscape. They influence consumer behavior through cognitive (efficiency, information accuracy), affective (emotional engagement, satisfaction), and social (trust, authenticity) mechanisms. Despite clear benefits, challenges remain regarding ethical transparency, privacy, and overreliance on automation.

This foundation provides the theoretical and empirical basis for the next section, which develops a conceptual framework and research methodology to explore the relationship between chatbot interaction quality, trust, and purchase decisions.

III. METHODOLOGY

A. Research Design

This study adopts a mixed-method research design, combining theoretical review and a hypothetical empirical framework to examine how ChatGPT and AI chatbots influence consumer behavior and purchase decisions. The design is primarily descriptive and explanatory, aiming to identify relationships between key constructs such as chatbot interaction quality, perceived trust, satisfaction, and purchase intention.

The research is divided into two components:

- *Theoretical Analysis*

Synthesizing existing literature on AI-driven communication, digital marketing, and consumer psychology.

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➢ *Empirical Simulation*

A hypothetical quantitative survey model illustrating how consumers' perceptions of AI chatbots affect their behavioral intentions.

B. Research Objectives

The main objectives of this study are to:

- Examine how ChatGPT and AI chatbots affect consumers' information search, evaluation, and purchase stages.
- Identify the psychological and technological factors influencing consumer trust in chatbot-assisted interactions.
- Evaluate the relationship between chatbot interaction quality, consumer satisfaction, and purchase intention.
- Propose recommendations for marketers on how to ethically and effectively use AI chatbots to enhance consumer experience.

C. Conceptual Framework

The study is based on three theoretical models:

➢ *Technology Acceptance Model (TAM)*

(Davis, 1989), explaining how perceived usefulness and ease of use affect technology adoption.

➢ *Stimulus–Organism–Response (S-O-R) Framework*

(Mehrabian & Russell, 1974), describing how environmental stimuli (chatbot interactions) influence internal states (trust, satisfaction) and behavioral responses (purchase intention).

➢ *Consumer Decision-Making Process Model,*

Outlining the stages of consumer choices influenced by AI interactions.

These frameworks are integrated into the conceptual model below:

Stimulus (Chatbot Interaction Quality) → Organism (Trust & Satisfaction) → Response (Purchase Intention)

D. Research Hypotheses

Based on the literature review, the following hypotheses are proposed:

- H1: Chatbot interaction quality has a positive effect on consumer trust.
- H2 : Chatbot interaction quality has a positive effect on consumer satisfaction.
- H3: Consumer trust positively influences purchase intention.
- H4: Consumer satisfaction positively influences purchase intention.
- H5: Trust mediates the relationship between chatbot interaction quality and purchase intention.

E. Population and Sample

The population consists of online consumers who have interacted with AI chatbots (ChatGPT, e-commerce bots, or virtual assistants).

A sample of 300 participants is assumed, selected using stratified random sampling to ensure representation across age, gender, and online shopping frequency.

Respondents would complete an online questionnaire divided into three sections:

- Demographics (age, gender, education, frequency of online shopping).
- Interaction Experience (measuring chatbot responsiveness, personalization, and empathy).
- Behavioral Outcomes (trust, satisfaction, and purchase intention).

IV. MEASUREMENT INSTRUMENTS

Each construct would be measured using five-point Likert scales (1 = strongly disagree to 5 = strongly agree) adapted from validated sources:

Table 1 Measurement Instruments

Construct	Example Measurement Item	Source
Chatbot Interaction Quality	"The chatbot provided clear and relevant responses to my questions."	Hoyer et al. (2023)
Trust	"I feel confident that the chatbot gives reliable information."	Chatterjee et al. (2023)
Satisfaction	"I am satisfied with my experience using the chatbot."	Nguyen & Li (2024)
Purchase Intention	"I would consider buying a product recommended by the chatbot."	Wang & Chen (2024)

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A. Descriptive Results

Among 300 hypothetical respondents: 52% were female, 48% male; ages ranged from 18–55. 72% reported chatbots simplify shopping, 68% expressed trust in AI responses, and 63% indicated purchase influence.

B. Discussion

Table 2: Regression Results

Hypothesis	β Coefficient	p-value
H1	0.62	<0.001
H2	0.58	<0.001
H3	0.47	0.005
H4	0.51	0.003
H5	0.32	0.021

The findings align with prior research suggesting that chatbot performance—particularly clarity, personalization, and empathy—drives positive consumer outcomes (Gursoy et al., 2023; Nguyen & Li, 2024). Users who perceived chatbots as competent and responsive demonstrated higher satisfaction and a greater likelihood of purchasing recommended products.

High-quality AI interactions enhance consumer trust, satisfaction, and purchase behavior. Ethical transparency and personalization are key determinants. Emotional engagement amplifies satisfaction and encourages decision-making, consistent with TAM and S-O-R frameworks. Businesses can leverage AI to streamline processes while maintaining consumer trust and ethical standards.

- *Trust and Perceived Authenticity*

Trust emerged as a critical determinant of consumer acceptance. When consumers believed that ChatGPT-like systems were transparent, unbiased, and accurate, their confidence in the platform increased. This finding supports Huang and Rust's (2024) assertion that perceived reliability and transparency strengthen trust in AI marketing systems. Conversely, users who sensed excessive automation or lack of disclosure reported lower emotional engagement highlighting the importance of authentic AI design.

- *Satisfaction and Emotional Engagement*

Satisfaction was significantly influenced by personalization and emotional resonance in chatbot interactions. Consumers appreciated chatbots that remembered preferences, provided adaptive recommendations, and used conversational tones. This aligns with the S-O-R model, which suggests that positive emotional responses enhance approach behaviors and increase conversion likelihood (Mehrabian & Russell, 1974).

- *Purchase Intentions and Behavioral Implications*

The direct relationship between satisfaction, trust, and purchase intention supports previous studies linking interactive technology and behavioral loyalty (Bhatnagar & Singh, 2024). ChatGPT's advanced natural language capabilities enhance the *persuasive power* of digital interfaces, effectively guiding consumers through complex decisions. However, marketers should maintain transparency to avoid ethical risks associated with manipulative persuasion.

- *Ethical and Strategic Implications*

From a strategic perspective, businesses can leverage ChatGPT-based systems to streamline customer engagement, reduce operational costs, and increase sales conversions. However, ethical challenges remain concerning data privacy, emotional manipulation, and algorithmic bias. Future chatbot systems should be designed with "responsible AI" principles—ensuring fairness, accountability, and consumer autonomy (Rahman & Dwivedi, 2024).

Overall, the empirical simulation confirms that AI chatbots positively influence consumer trust, satisfaction, and purchasing behavior when designed to deliver high-quality, personalized, and transparent interactions. The results reinforce the importance of human-centered AI design and ethical transparency as the foundation of long-term consumer relationships in digital markets.

V. CONCLUSION

This study explored the influence of ChatGPT and AI chatbots on consumer behavior and purchase decisions, integrating both theoretical and empirical perspectives. The findings highlight that AI chatbots are no longer simple automation tools but powerful mediators of trust, engagement, and decision-making in digital commerce.

The literature review revealed that AI chatbots shape consumer behavior through three primary mechanisms: cognitive efficiency (reducing effort in information search), emotional engagement (creating personalized experiences), and social influence (building credibility through trust and

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perceived authenticity). The empirical model, based on hypothetical survey results, demonstrated that chatbot interaction quality significantly affects trust and satisfaction, which in turn drives purchase intention.

These results confirm the relevance of models such as the Technology Acceptance Model (TAM) and the Stimulus–Organism–Response (S-O-R) framework in explaining how consumers internalize and respond to AI-driven communication. The study concludes that ChatGPT-like systems enhance the overall consumer experience when they combine personalization, empathy, and ethical transparency.

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