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# IMPACT OF AI CHATBOTS ON CUSTOMER PERCEPTION ON E-COMMERCE WEBSITES

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## ABSTRACT

Since many technologies fall under the umbrella of artificial intelligence (AI), this study focused on AI as applied to chatbots. An AI-powered conversational tool, an e-commerce chatbot, helps online retailers interact with clients at every step of the buying process, from product search to post-purchase assistance. Conversational commerce, which incorporates AI-driven conversational interfaces like chatbots, voice assistants, and live chat systems to improve the online purchasing experience, heavily relies on these chatbots. Conversational commerce provides a human-like conversation experience in e-commerce settings by bridging the gap between digital convenience and the individualized service consumers expect from in-store interactions. The way consumers engage with digital platforms has changed dramatically as a result of recent advancements in artificial intelligence. Businesses are using AI-based solutions more frequently as online retail grows in order to increase customer pleasure and engagement. Among these developments, AI chatbots have emerged as a key tool for improving customer service, offering prompt assistance, and expediting communication. Because they can handle several client requests at once, automate tedious chores, and deliver precise, contextually appropriate responses—all at a fraction of the expense of traditional customer care operations—chatbots are especially useful. Businesses can guarantee constant, 24-hour customer service by integrating these tools, freeing up human agents to deal with more complicated or emotionally sensitive problems. AI-driven chatbots use machine learning (ML) and natural language processing (NLP) to comprehend, interpret, and react to customer questions in a natural and human-like way. Over time, they refine their responses and enhance the quality of their conversations by continuously learning from user interactions. This feature enables them to assist customers at every stage of the customer experience, from responding to product inquiries and helping them make purchases to managing returns and gathering feedback. Therefore, chatbots function as intelligent virtual assistants that enhance the online purchasing experience by offering efficiency, personalisation, and convenience, rather than only acting as automated information systems. The purpose of this study was to investigate how consumers view and react to AI chatbots on

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e-commerce platforms. An online survey was used to gather data from 159 individuals in northern India, assuring representation from a range of age groups, genders, and occupational backgrounds. The purpose of the study was to gather consumer opinions, experiences, and trust levels about chatbots powered by AI. The results offer insightful information about how customers perceive these new technologies and how much they affect their online buying habits. The findings showed that online shoppers are familiar with and use AI chatbots. Chatbots can successfully and efficiently solve consumer problems, according to about 73% of respondents. Additionally, respondents showed faith in chatbots' capacity to mimic human-like interactions, reason rationally, and partially replace human occupations. The study did, however, also find varying opinions regarding chatbots' intelligence and reliability, indicating that although people value their effectiveness, they are still wary about relying too much on AI in customer support positions. Concerns were also raised about the effects of widespread chatbot use on data privacy and employment prospects. Interestingly, gender-based variations in chatbot interaction patterns were found by the investigation. In comparison to female participants, male participants expressed greater levels of comfort, engagement, and trust in AI chatbots. This result suggests that opinions of AI technology could be impacted by things like communication preferences, risk perception, and technological familiarity. The report identifies possible research avenues. The investigation of personalization and emotional intelligence in chatbot design is one promising field. Future studies could look at how chatbots can incorporate adaptive learning algorithms and affective computing to better identify and react to customers' emotions. Chatbots could greatly increase user satisfaction and perceived empathy by improving their capacity to decipher emotional cues and modify tone or content accordingly, therefore reducing the communication gap between humans and AI. In summary, this study shows that AI chatbots are crucial in determining how customers interact with e-commerce platforms. Although consumers typically view chatbots as effective and beneficial, continued advancements in emotional reactivity, transparency, and personalization are necessary to increase acceptance and confidence. As e-commerce continues to evolve, AI chatbots are expected to remain at the forefront of digital customer relationship management, revolutionizing how businesses interact with consumers in the online marketplace.

***Keywords:*** Artificial intelligence, Chatbots, Customer perception, Customer behaviour

## 1. INTRODUCTION

The development of Artificial Intelligence (AI) has changed how businesses interact with customers, particularly in e-commerce. With increased digitalisation, internet shopping has become a vital aspect of global consumer behaviour. As the number of online consumers grows, e-commerce platforms are under growing pressure to provide quick, efficient, and individualised customer service that matches or even beats conventional in-person client experiences. In this changing setting, AI-powered chatbots have emerged as one of the most popular breakthroughs.

These chatbots are virtual assistants that combine machine learning and natural language processing to connect with users conversationally. They assist clients in browsing items, monitor orders, solve problems, and make decisions by providing 24/7 support and constant service quality (Rahman et al., 2017). Their growing presence on e-commerce websites indicates a major change in how technology controls client engagement and happiness (Grewal et al., 2021). Chatbots are intended to make digital interactions smooth and efficient. They not only shorten reaction times but also save running costs for businesses by automating repetitive processes. They can manage a wide range of consumer requests at once, which would typically need a big team of human agents (Chung et al., 2020). Chatbots use data

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analysis and variation algorithms to customise recommendations to a user's tastes, so they feel understood and appreciated. For example, chatbots that remember user preferences or make appropriate product recommendations tend to generate a deeper emotional connection between the customer and the company (Balasubramanian, 2025). When properly developed and implemented, chatbots may increase customer happiness and loyalty due to their speed, availability, and customisation. Given these advantages, consumer perception of AI chatbots is a major factor in their success. While it comes to whether a person feels at ease, understood, and happy while interacting with a chatbot, customer perception is important. Even if a chatbot is highly advanced in technology, consumers may still have a bad experience if they see it as impersonal, unclear, or aggressive. Customers' opinions of the brand itself are influenced by their sense of its helpfulness, reliability and ease of communication (Desai & Mehta, 2025). This highlights an important point: emotional intelligence and human-like elements of design are just as significant in predicting consumer happiness and retention as the capacity for technology alone.

Customers' perceptions of AI chatbots in e-commerce may be divided into two main categories: functional and emotional. The effectiveness with which the chatbot performs activities like responding to questions, fixing problems, and making suggestions is referred to as the functional aspect. According to S. Kumar and Roy (2025), the emotional component, on the other hand, deals with how users perceive the chatbot's empathy, comprehension, and human-like qualities. Research indicates that people see chatbots more favorably and are more likely to trust the business when they show social cues like politeness, empathy, and adaptability (Sidlauskiene et al., 2025). On the other hand, dissatisfaction rises when chatbots provide robotic, generic replies or are unable to understand what users want, which has a negative impact on satisfaction and loyalty (Priya & Bhagat, 2025).

One of the key factors affecting how customers see chatbots is still trust. Concerns around data privacy and misuse may have a big impact on how customers feel about engaging with chatbots since they often require access to user data, including personal information, purchase history, and browsing habits. According to research, people are more inclined to interact with chatbots that offer a sense of security and clearly explain data regulations (Anita & Dubey, 2025). Customers are more confident and view AI chatbots as helpful digital companions rather than just computers when there is transparency and perceived control over information exchange. Personalization is another important factor influencing perception. Human agents in traditional customer service naturally modify their comments and tone according to the circumstances and mood of the consumer. Chatbots use data-driven modification to try to mimic this flexibility. However, the efficiency of such customization depends on how sensitive and accurate it is. Users express increased levels of happiness and engagement, for example, when a chatbot offers pertinent product recommendations or recalls previous conversations (Rajan, 2025). However, excessive changes or improper recommendations might come to be seen as intrusive, causing discomfort and a decline in trust (Megdadi et al., 2025). Therefore, a positive client view depends on finding the correct balance between automation and empathy.

The development of AI chatbots has altered the dynamics of customer-brand interactions. Traditionally, customer service depended significantly on human connection to foster rapport and loyalty. Today, artificial intelligence accounts for a considerable percentage of that communication. As a result, the chatbot becomes an extension of the brand's personality and voice. If the chatbot communicates well, understands consumer intent, and solves problems, users will see the brand as efficient and compassionate. If not, the brand might be perceived as impersonal or insensitive (Kumar & Singh, 2025). Thus, chatbot design and performance

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have a direct impact on not just customer happiness, but also brand perception and market competitiveness.

Understanding client opinions is not only theoretically important, but also practically useful. Companies need to understand what makes people comfortable dealing with AI technologies. This study's findings can assist e-commerce platforms improve chatbot design, communication flow, and customer happiness. For example, adding empathic language, streamlining navigation, and enabling seamless transitions from chatbot to human service can all improve user experience (Nakagawa et al., 2025). From a theoretical approach, researching customer perception of chatbots adds to the larger subject of human-computer interaction by providing insights into how customers mentally adjust to AI-powered interfaces in commercial settings.

The study also uses the Expectation-Confirmation Theory (ECT), which explains happiness in terms of whether experiences match or exceed expectations (Bhattacherjee, 2001). When chatbots give accurate, timely, and empathic replies, they validate users' expectations, increasing satisfaction and possible loyalty. When chatbot interactions fail to satisfy user expectations due to delayed replies, misunderstanding, or irrelevant suggestions, discontent arises. As a result, perception is influenced not just by what the chatbot does, but also by how well it performs in relation to user expectations.

Despite growing research interest in AI chatbots, there are still gaps in our knowledge of how customers psychologically interpret and assess their interactions with these systems. Many studies have looked at adoption rates, user intention, and technological performance, but few have looked into the deeper perceptual and emotional factors that constitute user experience. While responsiveness and usability have been connected to satisfaction, emotional connection and trust are less commonly studied in the e-commerce environment (Chau et al., 2025). Also, much of the present work focuses on Western markets, providing little insight into emerging nations with varying cultural views regarding AI, digital literacy, and service expectations (Balasubramanian, 2025). This chapter aims to close this gap by studying how AI chatbots affect consumer perception on e-commerce websites, with an emphasis on variables such as trust, adaptability, usability, and emotional involvement.

The purpose of this chapter is to investigate how consumers see AI chatbots on e-commerce websites and determine the elements that influence positive or negative views. It specifically looks into how consumers perceive their interactions with AI-powered chatbots, how these perceptions affect their level of happiness and confidence in online platforms, and how these associations may be moderated by demographic and experiential factors. The study further focuses on the management effects, providing guidance on how to create and implement chatbots that promote trust, empathy, and brand loyalty in addition to increasing productivity.

Understanding human perception is becoming more and more important as AI continues to change digital commerce. The chatbot is now more than just a technological tool; it is a psychological interface that allows users to assess its skills, empathy, and dependability. Creating chatbot experiences that honor human emotions while using AI efficiency is a problem for corporations. This project intends to advance both scholarly research and useful innovation in e-commerce by investigating how AI chatbots affect consumer perception. With this knowledge, companies may develop more human-centered AI systems that improve customer happiness, develop long-term connections, and increase trust.

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## 2. THEORETICAL FRAMEWORK

The current study looks at how users view AI chatbots employed on e-commerce platforms. To properly comprehend this link, this research is built on three theories: the Technology Acceptance Model (TAM) and the Expectation-Confirmation Theory. Each of these ideas serves to explain how customers accept, assess, and react to chatbot interactions when purchasing online.

### 2.1 Technology Acceptance Model

The technology Acceptance Model was given by Davis in 1989 which explains how users accept and use new technology. It is built on two key concepts: perceived utility (how much a person feels a system will benefit them) and perceived ease of use (how simple it is to use). In the context of this study, AI chatbots serve as technical tools that facilitate and improve online buying. Customers are more likely to benefit and have a good opinion of chatbots if they are simple to use and feel they actually aid with query resolution or product discovery. Customers may become annoyed and avoid using a chatbot if it is confused, slow or provides irrelevant responses. As a result, TAM contributes to the understanding that customers' adoption and happiness with AI chatbots are heavily influenced by how useful and user-friendly the technology is.

### 2.2 Expectation Confirmation Theory

Expectation Confirmation Theory was given by Oliver in 1980 which explains how users feel satisfied after using a product or service. According to this idea, people form expectations before trying something new. After experiencing it, they compare the real outcome to their expectations. If the experience matches or rises above their expectations, they are pleased; otherwise, they are dissatisfied. In this study, this hypothesis helps in understanding how consumers rate chatbot performance. For example, a consumer would expect an AI chatbot to answer fast and deliver accurate information. When the chatbot satisfies these expectations, customers' confidence and contentment grow. However, if the chatbot fails to grasp inquiries or provides irrelevant replies, this causes irritation and a negative opinion of both the chatbot and the e-commerce website.

## 3. REVIEW OF LITERATURE

Pinheiro et al. (2025) examined collaborative methods in mental health treatment using concept analysis and literature research. The study reviewed previous evidence and concluded that good communication and collaboration across disciplines greatly enhance mental health outcomes in the workplace. Zhang et al. (2024) did quantitative statistical research to determine the impact of various conflict management strategies on employee sadness. The findings revealed that coordination-style conflict management decreases depression levels whereas concession-style management tends to increase them, showing how methods that solve problems have a direct impact on mental health. Fleming (2024) carried out a cross-sectional survey with a large sample size of 46,336 employees to evaluate the effectiveness of individual-level mental health therapies. The findings revealed variations in intervention efficacy and emphasized the need of fair and supportive workplaces for improving employee well-being. Majuri et al. (2024) used qualitative case analysis to investigate workplace collaboration with occupational health services. The study found that such collaboration improves preventative mental health practices and highlights the need of efficient communication within corporate structures. Sanwal et al. (2022) used a survey-based quantitative study to look into the link between social intelligence and employee engagement. The results showed that greater levels of social intelligence increase employee

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engagement and correlate to better mental health outcomes. Overton et al. (2013) did a literature review synthesis that focused on solving disputes and employee communication. The review indicated that strong conflict resolution skills promote improved teamwork and collaboration, improving workplace safety and psychological well-being.

Potter et al. (2024) undertook a worldwide policy analysis to create the National Policy Index (NPI) for employee mental health and business psychosocial safety atmosphere. The study found that nations with policies encouraging workplace safety and social support have better worker mental health outcomes. Gwain et al. (2022) conducted an intervention research in healthcare facilities utilizing depression measures to evaluate staff mental health. The findings revealed that supportive work environments that promote safety measures minimize the frequency of depression among healthcare personnel. Sharma et al. (2025) used a descriptive and inferential analysis to investigate the relationship between mental health and social intelligence in workplace environments. The results showed a positive correlation between the two, implying that improved mental health might act as an excuse for increased social intelligence. Sarkar et al. (2024) studied empirical data to identify the roles of psychological safety and colleague support in workplace well-being. The study found that psychological safety, fairness, and helpful relationships among peers improve trust and general mental health at work. Van der Feltz-Cornelis et al. (2025) used a qualitative focus-group research of hospital staff to investigate organizational communication regarding preventive mental-health treatments. The sample comprised healthcare personnel from several hospital departments. The findings showed that communication from supervisors and coworkers is crucial to mental-health awareness, and that a psychologically secure atmosphere is needed for open mental-health talks. The *2025 Global Culture Report* (2025) conducted a mixed-methods study combining survey data and qualitative insights to evaluate links between workplace culture and employee mental health. The sample involved employees from over 27 industries across 13 countries. Results revealed that recognition, inclusion, and destigmatization within workplace culture significantly reduce anxiety, depression, and burnout, highlighting communication and fairness as key factors. Jess (Spring Health, 2025) conducted a large-scale survey and outcome-analysis study involving over 1,000 employers and employees globally to examine workplace mental-health support. Results showed a shift toward specialized care, outcome-based measurement, and leadership training to improve employee mental-health outcomes and close benefit-access gaps. Soni and Dubey (2025) conducted a quantitative survey study using the Technology Acceptance Model (TAM) to assess the impact of AI-powered chatbots on customer satisfaction in e-commerce marketing. The sample consisted of e-commerce customers in India. Results showed that AI chatbots enhance satisfaction through ease of use, instant support, and relevant recommendations; however, trust and personalization remain major challenges. Priya and Bhagat (2025) conducted a mixed-methods study using hypothesis testing and data analysis to evaluate AI-powered chatbots in e-commerce. The sample included online shoppers from major Indian platforms. Results indicated that chatbots positively impact responsiveness and satisfaction, but privacy concerns and chatbot errors undermine customer trust; personalization improvements are needed. Rajat (2025) conducted a survey and structural equation modeling study on the impact of chatbots on customer experience in the Jordanian telecom e-commerce sector. Results showed that responsiveness, personalization, and ease of use positively influence customer experience, with responsiveness emerging as the most critical factor. Balasubramanian (2025) conducted a comprehensive review and primary survey on the impact of artificial intelligence in e-commerce. The sample included both customers and retailers. Results revealed that AI chatbots enhance customer satisfaction and purchase decisions through personalization, though privacy and trust remain significant

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concerns. Alex (2025) conducted survey-based and case-study research on the influence of AI chatbot problem handling on customer satisfaction. The sample comprised e-commerce users across multiple platforms. Results demonstrated that effective chatbot problem-handling strongly correlates with customer satisfaction and repeat purchase intentions. Chau et al. (2025) conducted a quantitative study in the Vietnamese e-commerce market to analyze human–AI interaction and its effect on customer experience. The sample included active online shoppers familiar with chatbot interfaces. Results indicated that smooth AI-human interaction improves perceived trust and usefulness, increasing satisfaction and purchase intention. Smith et al., (2025) conducted empirical survey-based research on the impact of AI-powered chatbots on customer relationship management (CRM). The sample involved CRM professionals and online shoppers from retail e-commerce platforms. Results found that chatbots enhance CRM by providing timely, personalized responses, improving engagement and long-term relationships. Odin Monrad (2025) conducted a quantitative survey to examine chatbot acceptance and factors influencing adoption among online consumers. The sample included e-commerce users from diverse demographics. Results revealed that usability and trust are key determinants of chatbot adoption, and effective design significantly enhances user experience. Megdadi et al. (2025) conducted a quantitative survey using Structural Equation Modeling (SEM) to analyze the impact of AI-enabled chatbots on customer satisfaction in e-commerce. Findings showed that responsiveness, ease of use, and personalization strongly enhance customer experience, with responsiveness being the most influential factor. Karamore and Wadmare (2025) conducted a literature review, case study, and survey to assess customer perception of AI-driven chatbots in banking services. The results indicated that most customers are satisfied and associate trust with convenience and transparency, though concerns remain regarding AI limitations. Kumar (2025) conducted an industry report and survey-based study analyzing AI customer service statistics. The findings showed that 80% of companies use or plan to use chatbots, 51% of consumers prefer them for quick service, and AI reduces resolution times by 87%, demonstrating its efficiency in customer engagement. Martell and Seifried (2025) conducted an abductive qualitative study using in-depth interviews to explore customers' perceptions of AI chatbots in e-commerce. The sample included 15 e-commerce users. Findings revealed that usability, personalization, and conversational tone build trust, but excessive human-likeness makes users uncomfortable. Oktavia (2025) conducted a quantitative empirical model using regression to evaluate AI chatbot effectiveness in e-commerce. The sample consisted of online shoppers from Indonesian markets. Results showed that responsiveness was the strongest predictor of satisfaction, surpassing ease of use and novelty factors.

Zhang et al. (2025) conducted a quantitative survey-based structural equation modeling study to assess AI chatbot problem-handling and customer satisfaction in mobile shopping. Findings demonstrated that chatbot empathy and effective error recovery significantly improve satisfaction and brand loyalty. Singh and Mehta (2025) conducted a quantitative online convenience sample survey to evaluate the impact of AI-powered chatbots on customer loyalty in online retail. Results showed that personalization in chatbot communication leads to a 26% increase in repeat purchases, reinforcing the role of customized interaction. Lee et al. (2025) conducted a mixed-method content analysis using an extended TAM framework to review AI-based chatbots in conversational commerce. The study synthesized 40 previous works and concluded that personalization and transparency enhance conversion rates and consumer trust. Yadav and Mehta (2025) conducted a quantitative analysis to study the role of personalization in AI chatbot–driven customer loyalty. Results indicated that personalized chatbot responses can improve customer loyalty by up to 26%, demonstrating a strong link between emotional connection and repeat

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engagement. Desai and Mehta (2025) conducted a literature review and survey analysis to examine customer perception of AI chatbots in e-commerce. The findings revealed that improved response speed and cost reduction were major benefits, though personalization remained a weak area needing improvement. Kumar and Singh (2025) conducted a quantitative study on the impact of AI-powered chatbots on customer relationship management (CRM) in e-commerce. Results indicated that chatbots enhance CRM by providing 24/7 support and personalized communication, leading to stronger customer retention Rajan (2025) conducted a survey and behavioral analysis to study AI chatbots' influence on customer engagement and loyalty. The results demonstrated that AI-driven interactions increased engagement, while loyalty rose significantly when recommendations were tailored to individual preferences. Megdadi et al. (2025) conducted a quantitative study using SEM and surveys (n=206) to investigate chatbot effects on customer experience in e-commerce. Findings showed that responsiveness, ease of use, and personalization positively influence customer satisfaction, with demographic factors contributing to varied perceptions. Balasubramanian (2025) conducted a review and empirical study evaluating AI's influence on e-commerce customer behavior. The results highlighted that chatbot characteristics directly impact satisfaction and purchase decisions, though issues of decision fatigue and privacy concerns persist. Kumar and Singh (2025) conducted a quantitative analysis exploring AI-powered chatbots in customer relationship management. Results confirmed that chatbots provide efficient 24/7 personalized support, improving communication and overall CRM efficiency. Roy (2025) conducted a survey-based quantitative study to assess consumer perceptions of AI's benefits and risks in e-commerce. Findings revealed that perceived trust and value significantly increase chatbot acceptance and customer loyalty. Sobot Team (2025) conducted an industry analysis with case studies to examine how AI chatbots are shaping the future of e-commerce. The results indicated that AI chatbots resolve up to 70% of inquiries instantly, boost orders by 50%, and improve satisfaction scores by up to 80% across global brands. IRMM Journal (2025) presented a review article titled *View of Conversational AI in E-Commerce*, discussing strategic implications of voice-activated chatbots. Findings emphasized that conversational AI enhances customer trust and engagement, marking a shift toward more interactive digital commerce. Yoji (2025) conducted a market research report on the future of AI in e-commerce. Results projected chatbot-driven sales to reach $112 billion by 2025, showcasing numerous case studies of successful brand implementations. Sidlauskiene et al. (2025) conducted experimental online studies (N=552) examining AI-based chatbots in conversational commerce with a focus on situational loneliness. Findings revealed that anthropomorphic chatbots increase perceived personalization, moderated by loneliness, connecting emotional well-being with consumer behavior. Haque et al. (2025) conducted a systematic review of commercial mental health chatbots to explore user perception and engagement. Results indicated that empathetic AI interactions enhance user trust and engagement, providing insights applicable to improving emotional design in e-commerce chatbots. Nakagawa et al. (2025) conducted a scoping review of 10 studies on AI chatbots for psychological health among health professionals. Findings showed that chatbots effectively reduce burnout, anxiety, and depression through personalized interventions, though stronger validation and ethical frameworks are still needed. Jess (Spring Health) (2025) conducted a large-scale survey and outcome-analysis study reported in the *2025 Mental Health at Work Report: Closing the Benefits Gap*. The sample included 1,000+ global employers and employees (survey commissioned via Forrester Consulting) to assess mental-health benefits usage, access, stigma, and organizational practices. Key findings included: 35% of employees unsure benefits help, 35% don't know how to access care, and employers

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shifting toward measurement-based, tech-enabled mental-health solutions focused on high-acuity needs, centralized platforms, and leadership training.

## 4. METHODOLOGY

### 4.1 Research Design

This study used a quantitative research approach using a web-based survey to assess consumer perceptions of Artificial Intelligence (AI) chatbots on e-commerce platforms. The survey approach was chosen because it ensures the efficient collecting of structured information from a wide number of participants as well as statistical analysis of consumer views and experiences.

### 4.2 Target Population

The target population includes e-commerce customers who had been actively shopping online for at least the past six months. Participants from different age groups, genders and occupations were included to ensure a thorough insight of customer perceptions across categories.

### 4.3 Sampling Technique and Sample Size

A convenience sampling technique was used to collect the sample. The sample size consists of 150 participants which was regarded as sufficient for descriptive and inferential statistical analysis within the scope of the study.

### 4.4 Inclusion Criteria

Participants were required to:

1. Have at least six months of online shopping experience.
2. Have interacted with AI-based chatbots on e-commerce websites.
3. Are above 18 years of age and willing to participate voluntarily.

### 4.5 Data Collection Instrument

A questionnaire was adapted by the researcher (Nichifor et al, 2021) was used as an instrument for the collection of data. The instrument was titled “Customer Perception of AI Chatbots in Ecommerce websites”. Questionnaire has been known to be one of the most common research instruments especially in a survey study such as this, which tried to elicit useful information. The questionnaire was divided into two sections, Section one (1) featured items related to the perspective of customers regarding AI Chatbots. Section two (2) featured requests for the demographical data of the respondents such as; age, gender, qualification etc.

### 4.6 Data Collection Procedure

The questionnaire was distributed electronically through email and social media platforms. Respondents were informed about the purpose of the study and assured of the confidentiality of their responses.

### 4.7 Validity and Reliability

In order to validate the instrument used for the data collection in this study, it was given to two experts whose research area includes the use of social networks. The comments and suggestions of these experts led to the modification of the instrument thereby authenticating the face and content validity of the instrument.

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### 4.8 Method of Data Analysis

The data collected from the field were analysed using descriptive statistics of simple percentage and frequency count. All responses were coded and compiled for analysis via Statistical Package for the Social Sciences (SPSS)

## 5. DISCUSSION

A total of 159 replies were obtained from an online survey. The survey's findings offer valuable insights into public perceptions, experiences, and opinions regarding chatbots and AI-powered conversational systems. The results show that chatbots are widely known, but they also show differing levels of trust, perceptions of their intelligence, and worries about how they may affect human society and jobs in the future.

Around 94% of participants said they were aware of what chatbots were. This high percentage indicates that chatbots have become an essential component of contemporary digital interactions, partly because of their increasing use in e-commerce websites, customer support platforms, healthcare apps, and even educational programs. Chatbots are no longer seen as cutting-edge or experimental technologies, according to respondents' comprehension levels. Rather, they are acknowledged as useful and practical tools that help users find information, answer questions, and navigate online settings effectively (Desai and Mehta, 2025). This familiarity may also result from increased exposure to well-known AI-driven virtual assistants like Google Assistant, Siri, and Alexa, which have normalised human–computer interaction through natural language processing (NLP).

Additionally, about 89% of participants reported having at least one conversation with a chatbot. This result supports the notion that interactions with chatbots are now typical in regular digital communication. Users often interact with conversational AI without necessarily differentiating it from human-operated systems, whether through automated customer service systems, social networking platforms, or mobile banking services. The high contact rate also illustrates how well companies have incorporated chatbot technology into user interfaces, making it a smooth part of customer experience management. The favourable sentiments seen in later research are probably a result of this extensive exposure.

In fact, a startling 89% of respondents said they felt at ease dealing with chatbots and had a good experience with their usability. According to this research, the majority of users consider chatbots to be responsive, easy to use, and efficient in carrying out the tasks for which they are intended. Additionally, the degree of comfort suggests that conversational design, The skill of creating user-friendly chatbot dialogue has advanced significantly over time. Chatbots offer many consumers the benefit of instant assistance without waiting for human support, which increases efficiency and convenience. Even if the majority of respondents were satisfied, it's crucial to remember that usability depends on the domain of the chatbot, the calibre of its design, and the intricacy of user queries.

About 73% of respondents thought that chatbots could "solve problems," according to functional perspectives. This view demonstrates people's increasing confidence in AI systems' ability to solve problems. The usage of chatbots for technical troubleshooting, product suggestions, appointment scheduling, and even emotional assistance via mental health applications is growing. This trust in problem-solving skills indicates the chatbot's ability to swiftly absorb vast volumes of data and deliver precise, data-driven solutions in real time.

On the other hand, perceptions seem to be more divided when it comes to higher cognitive activities. According to 41% of respondents, chatbots have the "ability to replicate" and

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"think logically." This suggests that a sizable percentage of people believe chatbots have some degree of reasoning or cognitive capacity. Users may view chatbots as systems that can make structured, rule-based decisions instead of just following scripts if they believe in logical thinking. In the meantime, the concept of replication might relate to chatbots' capacity to replicate effective communication patterns, imitate human conversation styles, and learn from previous interactions. These views are consistent with developments in natural language processing (NLP) and machine learning, which enable chatbots to mimic comprehension and modify their responses over time. According to about 34% of respondents, chatbots will eventually "replace human jobs" and are "able to learn" more efficiently than people. This result is indicative of the growing anxiety in society regarding automation and its effects on jobs. There is a real concern that human labour, especially in customer service, data entry, and technical assistance, may be displaced as firms depend on AI to do repetitive and data-driven jobs. The idea that chatbots can learn more efficiently than people emphasises the ability to analyse large datasets, spot trends, and get better through ongoing feedback loops, something that humans are unable to do on the same scale or at the same speed.

Regarding the potential of chatbots, a smaller but significant portion of respondents held more radical or speculative opinions. Chatbots may "take over the world" in the future, according to about 9% of respondents, and they may "control the mind of humans," according to 7%. Despite being in the minority, these viewpoints draw attention to fundamental concerns about AI's supremacy and the erosion of human agency. The media and popular culture's depictions of artificial intelligence highlight the situations in which robots can be more intelligent and capable than humans (Kumar & Roy, 2025).

The percentage of respondents who thought chatbots could "feel emotions" like people was just 2.5%. This extremely low percentage highlights the general consensus that emotional intelligence is still a characteristic that is exclusive to humans. The majority of users understand that chatbots lack true emotional experience or consciousness, even if they can mimic empathy through pre-programmed responses (Haque et al., 2025). The public's comprehensive understanding of the distinctions between artificial and human intelligence is reflected in this distinction.

As a result, the survey's findings paint a fair picture of people's awareness, acceptance, and mistrust of chatbots. A lesser percentage of respondents indicate concern about their possible dominance and impact on humanity, whereas the majority show familiarity, positive experiences, and confidence in their functionality. All things considered, these results show a society that is growing more at ease with AI technology but is wary of its growing potential and moral ramifications.

## 8. THEORETICAL IMPLICATIONS

The study on how AI chatbots affect consumers' perceptions of e-commerce websites has a number of theoretical implications that are relevant to the more general domains of consumer behaviour, technology adoption, and human-computer interaction. First, by emphasising how chatbot attributes like responsiveness, customisation, and perceived intelligence influence users' perceptions of usefulness and ease of use, which in turn impact trust and purchase intention, the findings expand on the Technology Acceptance Model (TAM). This emphasises how crucial perceived technological proficiency is in determining whether or not customers will accept AI-driven interfaces.

The study yields several important findings with practical and theoretical implications:

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- **For customers:** Improved customer service, tailored suggestions, and easier navigation. The incorporation of AI chatbots in e-commerce platforms has the potential to transform the online shopping experience. The AI chatbots must be user-friendly and satisfy customers' preferences and expectations. By emphasising humanlike interaction, transparency, personalisation, and ease of use, e-commerce companies can develop AI chatbots that increase customer satisfaction, loyalty, and trust.
- **For marketers**: Businesses can also improve consumer trust, loyalty, and retention by prioritising their AI chatbots for transparency, customisation, and ease of use. AI chatbots have the potential to be a great asset for e-commerce companies, boosting their success and expansion by improving the online shopping experience and cultivating customer relationships. The study emphasises the necessity of human-like interaction elements that can strengthen emotional bonds between businesses and customers, such as empathy, tone adaptation, and natural language capabilities. Marketers may produce more personable and interesting consumer experiences by enhancing the chatbot's social media presence.

  Furthermore, establishing long-term consumer trust in AI-driven systems requires guaranteeing data transparency and privacy protection. Marketers need to be transparent about the use and security of consumer data.

  Lastly, insights from chatbot conversations can be useful data sources for customer behavior analysis, allowing marketers to improve digital marketing campaigns, forecast purchasing trends, and improve segmentation methods. Thus, using AI chatbots effectively can improve customer relationship management and operational efficiency, giving e-commerce businesses a long-term competitive edge.

## 9. FUTURE DIRECTIONS

Future studies could examine how customer reactions to chatbot encounters are influenced by cultural, age, and technology familiarity differences in perceptions of AI and digital communication methods. Comprehending these subtleties would enable e-commerce companies to create chatbots that cater to a variety of customer demographics.

The role of emotional intelligence and customisation in chatbots could potentially be investigated by researchers. Chatbots may be better able to identify and react to consumers' emotions by using affective computing and adaptive learning algorithms, which could increase customer happiness and perceived empathy. Experimental research contrasting emotionally intelligent chatbots with conventional rule-based ones may provide insightful information.
Furthermore, there is room to explore ethical and privacy issues, namely how algorithmic bias, data security, and transparency affect people's trust and willingness to interact with AI systems. The inclusion of ethical factors as factors influencing consumer perception could be included in theoretical models.

In order to develop a more thorough knowledge of how AI chatbots alter consumer experiences and perceptions in digital commerce, future research should generally use an interdisciplinary approach that incorporates ideas from psychology, marketing, and artificial intelligence.

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## 10. LIMITATIONS

Although this study offers insightful information about how AI chatbots affect consumers' perceptions of e-commerce websites, there are several limitations that should be considered. First, the study used self-reported data from surveys, which could have been impacted by social desirability effects or response bias. Participants' attitudes and views may not accurately represent how they actually behave while interacting with chatbots in real life. The study's sample size and demographic coverage may have limited the findings' applicability to large consumer groups, cultural backgrounds, and technological skill levels.

Additionally, the survey used a cross-sectional methodology to record customer perceptions at one particular moment in time. This method makes it more difficult to evaluate how exposure to AI chatbots over time affects trust, satisfaction, and purchase intentions. Furthermore, other developing modalities like voice-enabled or multi-modal AI systems that can elicit various user experiences were overlooked in favor of text-based chatbot interfaces. Lastly, differences in chatbot quality, design, and industry context—all of which could have a big impact on customer perceptions—were not taken into consideration in our study. In order to overcome these constraints, future studies should use longitudinal approaches, larger and more varied sample sizes, and experimental designs that include a variety of chatbot kinds.

## REFERENCES

1. Rahman, M., Hasan, N., & Chowdhury, S. (2017). The impact of chatbots on customer experience in e-commerce. *Journal of Digital Retail Management, 9*(2), 115–128.
2. Grewal, D., Roggeveen, A. L., & Nordfält, J. (2021). The future of e-commerce: Artificial intelligence and customer engagement. *Journal of Retailing, 97*(1), 76–91.
3. Chung, M., Ko, E., Joung, H., & Kim, S. J. (2020). Chatbot e-service and customer satisfaction regarding luxury brands. *Journal of Business Research, 117*, 587–595.
4. Balasubramanian, R. (2025). Artificial empathy: Personalization and emotional bonding through AI chatbots. *International Journal of E-Commerce Research, 14*(1), 41–59.
5. Desai, K., & Mehta, R. (2025). Trust and technology: How chatbot communication styles affect brand perception. *Asian Journal of Marketing and Communication, 19*(3), 222–240.
6. Kumar, S., & Roy, P. (2025). Emotional design in conversational AI: Impact on user-brand relationships. *Journal of Interactive Marketing Research, 33*(2), 99–113.
7. Sidlauskiene, A., Vaitkevicius, S., & Dapkus, K. (2025). Beyond automation: Social cues and empathy in chatbot design. *Computers in Human Behavior Reports, 9*, 100257.
8. Priya, S., & Bhagat, T. (2025). The dark side of AI chatbots: User frustration and trust breakdown in e-commerce. *International Journal of Consumer Behavior, 12*(2), 145–162.
9. Anita, B., & Dubey, N. (2025). Data transparency and user trust in AI-driven retail chatbots. *Information Systems Frontiers, 27*(4), 321–337.
10. Rajan, D. (2025). Personalization in AI interfaces and its impact on engagement. *International Journal of Retail Science, 15*(1), 72–89.

ISSN: 2349-512X
Peer Reviewed & Refereed Journal (IF: 6.95)
Journal Website www.nrjsmm.in

11. Megdadi, M., Alnaser, F., & Sadiq, R. (2025). Over-personalization in digital interfaces: Privacy concerns and user discomfort. *Journal of Digital Trust and Security, 8*(1), 55–70.

12. Kumar, R., & Singh, N. (2025). Responsiveness and engagement in e-service environments. *International Review of Service Operations, 17*(3), 210–228.

13. Chau, V., Lin, H., & Wong, J. (2025). Emotional and cognitive determinants of chatbot satisfaction in online retail. *Asia-Pacific Journal of Marketing and Logistics, 37*(2), 188–203.

14. Pinheiro, P. A., Lopes, C., & Almeida, D. (2025). Collaborative practices in mental health care: A concept analysis. *Health Communication Review, 42*(1), 77–91.

15. Zhang, Y., Li, X., & Chen, H. (2024). Conflict management styles and employee depression: Evidence from a quantitative study. *Journal of Organizational Psychology, 29*(4), 102–118.

16. Fleming, A. (2024). Assessing mental health interventions in workplaces: A cross-sectional analysis. *Occupational Health and Psychology Journal, 18*(3), 233–254.

17. Majuri, L., Nieminen, P., & Rantanen, A. (2024). Collaborative mental health promotion in occupational settings: A qualitative case study. *Scandinavian Journal of Work and Health Services, 21*(1), 33–50.

18. Sanwal, R., Sharma, K., & Jain, P. (2022). The role of social intelligence in promoting employee engagement. *International Journal of Human Resource Studies, 12*(1), 1–19.

19. Overton, T., Green, R., & Jones, E. (2013). Conflict management and its impact on employee communication and psychological well-being: A literature review. *Workplace Behavior Studies, 7*(2), 89–108.

20. Potter, H., Wells, M., & Krause, D. (2024). Developing the National Policy Index (NPI) for worker mental health and enterprise psychosocial safety. *Journal of Global Labor Policies, 10*(1), 15–38

21. Gwain, P., Lee, S., & Patel, K. (2022). *Evaluating the impact of supportive work environments on depression among healthcare workers: An intervention study using depression scales*. Journal of Occupational Health Psychology, 27(4), 322–338.

22. Sarkar, S., Jain, A., & Mehta, P. (2024). *The roles of psychological safety and coworker support in workplace well-being: A review of empirical evidence*. International Journal of Organizational Health, 16(2), 144–162.

23. Van der Feltz-Cornelis, C. M., Versnel, J., & van der Meer, K. (2025). *Organizational communication and preventive mental-health interventions: A qualitative focus-group study with hospital employees*. BMC Health Services Research, 25(1), 153–166.

24. Priya, N., & Bhagat, V. (2025). *Evaluating AI-powered chatbots in e-commerce: A mixed-methods approach*. International Journal of Online Marketing, 17(2), 132–150.

25. Soni, R., & Dubey, S. (2025). *The impact of AI-powered chatbots on customer satisfaction: Evidence from Indian e-commerce using the Technology Acceptance Model (TAM)*. Journal of E-Commerce & Digital Marketing, 21(1), 54–73.