



University of Bolton, Greater Manchester

Doctor of Philosophy by Thesis, PhD

**Research Topic: The Role of Chatbots in Digital Marketing and
Customer Purchase Decisions in the BANGLADESH Retail
Sector**

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Introduction

Background of the study

Chatbot influence on purchase decisions is now empirically observable in markets like Bangladesh. Chatbots improve customer experience by providing feedback in real time, tailoring advice, and offering flawless customer support during a purchase. Chatbots enable businesses to interact with clients and place orders using the data to customise the experience of an individual customer. They also serve as an effective instrument for growing conversion rate and consumer satisfaction in the event of retail markets such as Bangladesh, given the possibility of automating their communication ability and purchase decisions. Bangladesh is integrating AI and chatbots into retail and e-commerce as part of a broader Smart Bangladesh digitalisation push (Coppola, 2024). Dey and Bhaumik (2022) state that personalisation, automation, and omnichannel communication are among the strategic priorities for the sector. This is despite noting some implementation challenges, which were due to infrastructure and regulatory issues. The communication prospect that entails the application of AI, chatbots to improve customer touchpoints, targeting, and retention by using a personalised, automated, and omnichannel communication opportunity applies to the Bangladesh marketing strategy. The tools provide informed decisions and personalised promotions in isolation, which enhance brand-customer contacts. According to the market intelligence report, the footprint of chatbots is continuously increasing across retail, banking, and healthcare. Currently, website-integrated bots dominate the channels, while sales and marketing are the most popular business functions (Fokina, 2023). The chatbot market in Bangladesh is expected to witness a 7.3% CAGR through 2031 (Fourrage, 2025). Such trends show commercialisation in use cases such as support, lead generation, and assisted checkout. Coverage for local cases shows that for vendors in Bangladesh who use Facebook, WhatsApp, and web, they saw measurable gains in response time (accuracy) and in a multilingual and social commerce-oriented automation (Hossain et al., 2024). The pointers to such less formal, personal and more instant consumer behaviour are these adoption trends. The better the accuracy of the answers and the chatbots themselves can justify various languages, the more the customers are prepared to use automated and social mediums of trade, i.e. trust, chat and even trust the aid granted by the AI to finalise the purchases. Jiang, Qin and Li (2022), research shows that a large number of users indicated that chatbots influence their purchases. In fact, the latest data reveals that 36% of users state they are always influenced by a chatbot's purchase recommendation, with a further 25% often being

influenced (Indiani, Arifianti and Muftiadi, 2024). Thus, a majority of users are measurably influenced in their product discovery and evaluation by chatbots. Many other analyses of industry practices suggest that around 60% of consumers state that their purchase decisions are influenced by chatbots, which is consistent with the industry's understanding of a growing maturity in the role of conversational guidance in retail funnels (Islam et al., 2024). Chatbot adoption data demonstrate that more than 80% of worldwide companies are using chatbots in some shape or form. Retail and e-commerce lead at the very top, and this reflects that the channel is best matched for high-query, high-intent customer journeys (Magno and Dossena, 2022). These statistics depict that chatbots have taken the centre stage as far as influencing consumer decision-making is concerned.

Research results confirm that personalisation, behaviorally determined recommendations and real-time targeting are key levers that get purchase intention and sales lift. Essentially, this is what chatbots operationalise in-session via guided selling and assisted service (Sidlauskiene, Joye and Auruskeviciene, 2023). Research on multichannel retail backs up the existence of synchronised online–offline touchpoints, with chatbots acting as the connective tissue across web, social and messaging (Chowdhury and Jabber, 2024). Furthermore, when chatbots are integrated into synchronised sales and marketing communications, they improve satisfaction, trust, and revenue outcomes, as the research finds. In retail of emerging markets, AI/ML-driven customer analytics ranks among the most adopted trends (ABangladeshelkader, 2023). Campaign automation and chatbot usage across customer interfaces are ranked next.

Although chatbots improve scalability and responsiveness, shocks to connectivity hamper the ecosystem in Bangladesh, which depresses e-commerce sales and social engagement (Chowdhury et al., 2024). Therefore, retail operations must be resilient and have fallback channels. However, both growing adoption and localised implementation show that the BANGLADESH retail sector is converging on a hybrid model wherein chatbots capture leads, assist in purchasing, and deflect service, with agents taking complex inquiries (Coppola, 2024).

Research aim

To explore how AI-powered chatbots enhance digital marketing effectiveness by influencing customer trust, engagement, and purchasing behaviour within Bangladesh's retail e-commerce sector.

Research objectives

- To establish the role of certain marketing behaviours elicited by a chatbot, including the suggestions of products to customers and advertising deals, on the consumer perception and engagement in online buying.
- To chatbot on the conversion rate and other quantifiable marketing metrics within e-commerce websites.
- To establish the most important motivators that can make customers trust AI-based marketing chatbots and the impact of customer trust on customer buying behaviour.

Research questions

- How do these AI-driven chatbots impact different types of consumer communication, such as product queries, processing complaints, and customised recommendations, and customer satisfaction during the e-commerce shopping process?
- What is the way to utilise chatbots to increase the rate of conversion in online stores, and what marketing outcomes can be determined objectively based on the application of chatbots?
- What are the key factors affecting customer loyalty to AI-based chatbots during the online shopping process?

Significance of the study

This research is important because it specifically discusses Bangladesh market which at the present time is at its infancy phase of adopting AI in its retail sector, and thus offers valuable insights to businesses aiming to transform their marketing processes. The study will be valuable because, in contrast to the literature that addresses the use of AI chatbots in developed countries, the current research will provide a more socio-economically and technologically specific attitude to Bangladesh, which is more oriented towards the region. The study has provided a feasible means through which retailers and vendors can ensure that they maximise their returns on investment (ROI) by examining how chatbots can be applied in customer trust and customer engagement, and purchases. The results will help the businesses to incorporate evidence-based chatbot strategies to maximise the conversion rate, personalised customer interactions and brand loyalty. Also, the research will be useful to marketers, technology developers, and policymakers since it will reveal the stimulants that are establishing consumer trust in AI-based marketing tools. The model created in the framework of the current paper can

help retailers plan the integration of chatbots in the omnichannel campaigns, to make the communication with the customers automated, and to increase the level of user satisfaction. Finally, the discussion in this research will be included in the general objective to prepare the customer-centric digital marketing strategies and facilitate the transformation of the e-commerce environment in Bangladesh on the principles of intelligent and reliable automation.

Dissertation structure

- Chapter 1 (Introduction): Within the context of Bangladeshi retail chatbots, the background, problem, aims, objectives and research questions are established, significance stated, and thesis structure previewed.
- Chapter 2 (Literature Review): It reviews existing work on chatbots, digital marketing, technology acceptance, relationship marketing, and social commerce, noting gaps in developing market retailing and motivating the study's model.
- Chapter 3 (Methodology): In this chapter, the design, sampling, measures, and analysis plans to assess the results of personalization, trust, engagement, and conversion in the scenario of AI-based chatbots in the e-commerce industry in Bangladesh are outlined. This is a mixed method research design; both qualitative interviews with businesses and quantitative surveys with consumers are utilised.
- The sampling is going to be stratified and will focus on e-commerce companies and consumers who communicate with AI chatbots. The most important results will be measured with regard to personalization, trust, engagement, and conversion using the established scales. Quantitative data will be analysed through regression whereas qualitative data will be analysed through thematic analysis.
- Chapter 4 (Results and Discussion): This report contains quantitative and qualitative findings on how the attributes of a chatbot affect the customer's communication, satisfaction, loyalty and purchase decision. This report also includes conversion and response-quality metrics. Examines how the findings relate to theory and context, provides explanations for moderated-mediated mechanisms and heterogeneity, and derives managerial and policy implications for the retail ecosystem of Bangladesh.
- Chapter 5 (Conclusion): This gives a summary of the contributions, limitations, future research, and a practical framework with recommendations for retailers and policymakers applying conversational AI.

Literature review

Introduction

The literature review will try to present the relevance of the impact of AI-driven chatbots on digital marketing performance and consumer buying behaviour, especially in the changing retail environment in Bangladesh. It is part of the synthesis of theories, empirical research, and practical evidence to conclude about the effects of chatbots on customer confidence, interaction, and judgment. It presents the idea of the development of chatbots in digital marketing, theoretical frameworks that render the acceptance of chatbots, and the behavioural impacts on consumers. Given the transformation of Bangladesh into a digital economy of Smart Bangladesh, the analysis of chatbot applications in the retail business offers the necessary information about the intersection of automation, personalisation, and consumer psychology.

Conceptual Foundations

One of the greatest business communication paradigm shifts of the current era, as listed by Arruaujo and Casais (2019), is the digital transformation of marketing primitive web-based applications to a sophisticated system, which utilises artificial intelligence (AI). Busalim, Hollebeek, and Lynn (2023) comment that digital marketing now is much more sophisticated than in the mid-twenties of the previous century, and has evolved into a multifaceted and data-driven approach and is now more multifaceted, incorporating machine learning, natural language processing, and predictive analytics to build hyper-personalised customer experiences via emailing and clickbanner ads. The increase of internet penetration and mobile first consumer behaviour as well as the increase of omnichannel touchpoints, where a seamless, continuous interaction between various platforms is possible, have further accelerated this evolution.

Mariani, Joshi (2025) argue that the introduction of artificial intelligence (AI) has changed digital marketing as it allows tailoring information and automating it and communicating with customers on a mass scale. Chatbots can be considered some of the most prominent AI applications in marketing communications. They work like a chatbot that recreates human speech to help, direct and convince customers with the use of online platforms like web pages, social networks and chat programs (Mehta et al., 2022). They have integrated retail and e-commerce and transformed the nature of customer communication with customers that

allowing them to be in perpetual contact, get instant feedback and customised customer support that is shaping consumer confidence in the business and their intent to buy.

Continuation of key marketing operations, such as lead generation and guided selling, and customer retention, is being done on the chatbots globally. As Musa et al. (2024) state, over 80% of organisations in the world are using chatbots, and the most dynamic organisation in terms of usage is a retail and e-commerce organisation because of the number of customers and the intent to be fulfilled. The systems in the developing countries, including Bangladesh, are associated with the so-called Smart Bangladesh digitalisation program, according to which the retail industries have already started implementing AI technologies to improve the effectiveness and communication of the transactional processes, Rana et al. (2024). In this respect, chatbots are automating respondent responses; however, they can also be considered the strategic tools of consumer satisfaction and conversion even in the context of infrastructures and regulatory issues (Qiao and Wei, 2021). Moreover, chatbots are already used based on the theoretical background of the technology acceptance and relationship marketing. Perceived usefulness and ease of use are the factors that bring about adoption of the technology as explained by the Technology Acceptance Model (TAM), and relationship marketing identifies trust, responsiveness and personalisation to be the factors that bring about loyalty. At the point of convergence, chatbots might be interpreted as digital relationship managers, which gain trust due to their real-time nature, customisation, and trust-trust feeling (Singhal, 2025). They can also gather and understand customer data that empowers them to gain additional detail about their behaviour and allows them to act predictively and coherently through the omnichannel (Yun and Park, 2022).

Chatbots have become an important part of the modern marketing communication toolkit by integrating them as a separate mode of communication and can be directed to operate based on an algorithmic system of rules or a sophisticated AI design (Ash and Widarmanti, 2025). Rule-based chatbots exist and are authored in decision trees and scripted responses to help provide limited, yet reliable service on answering simple queries to customers, whereas AI-based chatbots are based on the concept of natural language understanding, machine learning, and generative AI to help maintain a human-like artificial intelligence-based conversation and enhance with use. They are implemented in different mediums, including web-based platforms, social networks, including Facebook Messenger and Instagram, mobile applications, and even voice-activated applications and act as an opportunity for omnichannel fit as consumers already use their online time (Cai, Gao and Yan, 2024).

Theoretical Perspectives and Models

One of the principal inflexible pathways to comprehend the issue of user acceptance and the adoption of technological innovations, specifically in the field of information systems and digital innovations, is the Technology Acceptance Model (TAM), firstly developed by Davis in 1989 (Marikyan and Papagiannidis, 2025). Fundamentally, TAM involves two constructs, including perceived usefulness (PU) and perceived ease of use (PEOU), which develop the attitude of users to technology and affect their intention to adopt or reject it (Musa et al., 2024). TAM has a more detailed theoretical view of consumer adoption when incorporated with other models, such as the Unified Theory of Acceptance and Use of Technology (UTAUT) or the Diffusion of Innovations theory. Such a combination method is specifically beneficial to comprehend the level of accepting AI technologies in conversation as the processes of digital marketing and chatbot usage are at the centre of retail (Al-Oraini, 2025; Ali and Sheikh, 2025).

Recent empirical research has discovered that TAM is effective to such an extent in explaining the adoption of chatbots in this or that context (Joshi, 2025; Can and Nguyen, 2025). The general discussion of 1,089 articles of the Scopus database has shown that the research on the TAM foundation is at an upward trend, and further focus on the discussion of the role of perceived usefulness and the ease of use as the antecedents of technology acceptance (Mubdir et al., 2025). In the example of AI-based chatbots, the research studies postulate that the perceived usefulness, as the degree to which individuals suppose that the deployment of chatbots will bring about a positive effect in their shopping experience and decision-making processes, emerges as one of the predictors of the adoption intention (Araújo and Casais, 2019; Mehta et al., 2022; Cai, Gao and Yan, 2024). The latter is of utmost importance to the retail sector overall, where chatbots serve as a virtual assistant, assisting in finding and recommending products as well as making purchases (Koswara, 2025; Ash and Widarmanti, 2025).

The most applied model that has gained more popularity within the field is the Technology Acceptance Model (TAM), which is a model developed by Davis (1989) that explains the behaviour in which the attitude of perceived usefulness and perceived ease of use is the one that leads to the attitude towards technology adoption (Marikyan and Papagiannidis, 2025). The concept is applied to chatbots with the help of the idea of perceived usefulness and determines the successful chatbot in the domain of product discovery, customer support, and purchase and effort ease is the blatant intuitiveness and efficiency of the interface (Busalim, Hollebeek and Lynn, 2023; Lo Presti, Maggiore and Marino, 2020). The customers will also

involve the chatbots in the process of purchasing goods when they are sure that the technology is credible and can carry out the job they need (Singhal, 2025; Nyagadza et al., 2022). UTAUT would then expound this argument with the argument of TAM by integrating other constructs such as social influence, enabling conditions and behavioural intention that could be practicable in adopting chatbot-assisted shopping to the Bangladesh retail consumers (Rana et al., 2024; Joshi, 2025).

The relationship marketing theory may also be useful to provide useful information regarding the impact of the chatbot on customer trust, satisfaction, and loyalty, among others (Alagarsamy and Mehroliia, 2023; Al-Oraini, 2025). An example of a digital relationship manager is chatbots, which personalise the experience and respond to the queries and form an emotional connection with them as they respond to them with feelings (Juquelier, Poncin and Hazée, 2024). It is observed that trust is a key intermediary between the quality of the interaction with the chatbot and intention to purchase because of belief in the competence and goodwill of the chatbot (Ali and Sheikh, 2025; Yun and Park, 2022). More informative and attentive services of chatbots enhance the contact with the customers and trigger the secondary contact (Busalim, Ghabban and Hussin, 2021). The connection is in line with the Commitment-Trust Theory by Morgan and Hunt (1994), where trust and commitment are the dimensions of selling the long-term relationship. The second theory which would be applied would be the Social Presence Theory, which involves the perception of human communication within mediated space that offers the users a greater involvement (Can and Nguyen, 2025). Chatbots interact based on emotional intelligence in the context of naturalness of the language, emotional warmth in the conversation, and thoughtful emotional intelligence that imparts a sense of social presence where customers share their preferences and product suggestions (Juquelier, Poncin and Hazée, 2024; Cai, Gao and Yan, 2024). This anthropomorphism in AI communication creates brand loyalty and buying trust (Kelly, Kaye and Oviedo-Trespalacios, 2022; Koswara, 2025).

The other constructs that were identified to equally influence the behaviours of adoption are the perceived ease of use construct, which is the degree to which consumers are convinced that the process of interacting with the chatbots involves minimal effort (Mehta et al., 2022; Lo Presti, Maggiore and Marino, 2020). The users are more confident in chatbots, and they are more willing to use them again it as observed in other retail industries, and the interface and the flow of discussion are designed in a manner that will not overload the user with cognitive load (Busalim, Hollebeek and Lynn, 2023; Nyagadza et al., 2022). It was determined that ease of use is a major predictor of behavioural intention to use AI chatbots and that the issue of trust

and privacy are also predictive factors in an experiment that used 360 respondents as the subject of the study, who were dealing with online shopping and banking sectors (Rana et al., 2024; Can and Nguyen, 2025).

Chatbots and Consumer Behaviour

Customer Experience and Engagement

The present application of chatbots to the retail and e-commerce environment has entailed significantly transforming the encounters of the customers as it has developed intelligent, responsive and personal support mechanisms that are ever-present in the online environment. The consciousness and general perception of the interaction between the customers of the brand during the process of buying the products is an influential variable of competitive advantage in the new reality of online shopping (Al-Oraini, 2025). It is revealed that the experiences mediated due to chatbots are relevant in customer satisfaction, the degree of engagement and future behavioural intentions following diverse mechanisms that involve the provision of real-time assistance, customised recommendations and hassle-free resolving of issues (Ali and Sheikh, 2025).

The personalisation features are likely to be the most radical feature of chatbots that can be applied to enhance customer experience. Greater chatbot expansions entail the machine learning, natural language processing, and artificial intelligence technologies to interpolate details of customers like their browsing history, purchasing patterns, demographic characteristics, and live behavioural indicators to offer specific product suggestions and custom chat messages (Juquelier, Poncin and Hazée, 2024). As empirically demonstrated, hyper-personalisation through the assistance of AI and edge computing can reduce the time of interaction with customers by approximately 70% and raise the rates of conversion by approximately 30% (Ash and Widarmanti, 2025). This fact refers to the gigantic contribution of real-time customisation in the development of responsive and meaningful customer experience, as attractive to individual tastes and preferences. The chatbots which have been utilised in the retail industry are software robots and could be offered 24/7 and answer an extremely high number of questions simultaneously without becoming fatigued or time-limited. Similar to this nature, as it is highlighted by Alagarsamy and Mehroliya (2023), the scope of this nature causes the other attributes of service quality to become more responsive, which are best experienced. The chatbots reduce the amount of friction during the purchasing experience of consumers in Bangladesh, in which e-commerce has been developing at an

exceptionally rapid pace, but is restrained by the ineffectiveness of the infrastructure (Araújo and Casais, 2019). The resulting impact is the augmentation of interactivity and closeness to the brand, even in a cool digital space. Besides, no transactional and interaction that is relational interaction anymore. Chatbots can develop active and conversational marketing and retain the interest even after the first purchase. It is proven that the proportion of customers engaging with chatbots is more likely to give a certain image that the respective brands can be regarded as innovative, friendly, and customer-centred (Lo Presti, Maggiore and Marino, 2020). Thus, the engagement process would not only be an emotional one but also a functional reaction, and frequent and situation-based communication would strengthen the customer-brand relationships and build loyalty (Qiao and Wei, 2021).

There is a lack of empirical evidence related to the issue of chatbot-mediated customer experience in the context of retail in Bangladesh, but it was chosen to cover the territory where the rapidly developing e-commerce market is located (Marikyan and Papagiannidis, 2025). The recent research conducted on the area of chatbot implementation into the banking sector in Bangladesh was guided to reach the conclusion. Nonetheless, the prevalence of chatbots in the retail store can also provoke some doubts about the safety of privacy because the gathering and processing of personal data, including browsing history and shopping preferences, can trigger the appearance of unauthorised access to data as well as abuse of it. Moreover, excessive dependency on automation could also pose a threat of losing human touch in an organisation that favours human customer services especially in complicated cases where chatbots may fail to perform. These are the risks that should be carefully taken into consideration during the designing and implementation of the chatbot systems. that the application of chatbot-based services could be implemented to establish efficient customer service due to the following advantages: the personal response to natural language processing, the 24/7 responsiveness, and the customisation of the offer delivery (Mubdir et al., 2025).

This is a structurally differentiating level of customer experience complementation chatbot efficiency amid customer division and set-ups (Musa et al., 2024). As the research indicates, the attitude towards the chatbot responsiveness differs between genders, and it can be inferred that the links between the chatbot features and the experience effects are moderated by demographics. Additionally, the influences of the ability to understand on the desire to switch the service are mediated by the active control strength that the customers can have on the communication between them and chatbots (Singhal, 2025). This observation supports the fact that the creation of the chatbot interface is essential because it is less controlling and more

accommodating to allow customers to control the flow of the conversation based on their interests.

There is a lack of empirical evidence related to the issue of chatbot-mediated customer experience in the context of retail in Bangladesh, but it was chosen to cover the territory where the rapidly developing e-commerce market is located (Terblanche and Kidd, 2022). The recent research conducted on the area of chatbot implementation into the banking sector in Bangladesh was guided to reach the conclusion that the application of chatbot-based services could be implemented to establish efficient customer service due to the following advantages: the personal response to the natural language processing, the 24/7 responsiveness, and the customisation of the offer delivery (Yun and Park, 2022). However, the elaboration of the topic of the chatbot personalisation/official assistance employment and its usage with a view to the consideration of the influence on the customer experience in a specific case, i.e. the retail one in Bangladesh, is conspicuously missing.

Trust and Purchase Intentions

The issue of trust is one of the factors that play a crucial role in the consumption intention of the consumer in the chatbot-led marketing environment. The implication of the fact that AI-based communication will substitute human interaction will mean that the consumer will have to develop trust in the reliability, accuracy, and security of the chatbot to invest in the buying decisions (Ash and Widarmanti, 2025). It is a collection of trust that implies that it is multidimensional, i.e. it is competence trust (the beliefs that one has that the chatbot under consideration can provide the relevant and useful information) and benevolence trust (beliefs that the system in question is doing the consumer a favour). Busalim, Ghabban and Hussin (2021) indicate that the potential of providing similar answers, truthful and pertinent answers, is connected with the perception of credibility of chatbots. A greater association between trust and intention will be established when the customers believe that a chatbot is capable of being discriminative towards their preferences (Jia, Liu and Lowry, 2024). This mental process is similar to the Commitment-Trust Theory of Morgan and Hunt (1994) that transforms trust as an alternative to commitment and long-term loyalty. This reintegration can be further applied to Bangladesh, where the retail industry is still struggling with the problems of digital mistrust and security issues. Chatbots can be helpful to overcome consumer apprehension, and, obviously, they will have to take into account the way the data is utilised, deliver high-quality services, and be sensitive to the culture of the language (Can and Nguyen, 2025).

It is established that trust is a considerable psychological phenomenon that mediates relationships among the properties of chatbots, customer experience, and the intentions to purchase in the context of the online retail environment (Juquelier, Poncin and Hazée, 2024). In a hypothetical state, since the disposition to be vulnerable during the presence of positive expectation of the intents and actions of a second party, trust becomes more salient in the dialogue between AI mediators on the information asymmetry, invisibility of technology, and any other interaction form between humans, which is not the case with the digital form of interaction, as indicated by Lo Presti, Maggiore and Marino (2020). Once again, consumer trust in AI-based chatbots is demonstrated to make a potent forecast of intention to adopt, intention to use, and purchase decision, and, as such, trust can be deemed as one of the most potent predictors of chatbot success in business. The subject of trust is important as an intervening factor in the correlation of chatbot features (competence, benevolence, and reliability) and customer purchasing behaviour. The interaction between the consumer and AI-driven chatbots will result in impact on the consumers who will exhibit both cognitive and emotional processes based on a level of trust, thus affecting purchase intentions. Such mediation effect is observed when an ability of a chatbot to convey competent information (competence) or show concern towards the needs of the consumer (benevolence) eventually improves the perceived trustworthiness and usefulness of the service, and consequently, the intentions to purchase strengthen.

The determinants of the level of trust in AI-based chatbots are chatbot determinants, user determinants, contextual determinants, and transparency determinants, and the determinants have an interactive effect on the perception of trustworthiness (Nyagadza et al., 2022). The following variables are linked with chatbots: expertise (perception of knowledge and competence of the chatbot), anthropomorphism (anthropomorphic characteristics of the behaviour in the forms of conversational style and user interface design), responsiveness (promptness and timeliness of the response), and reliability (focus on consistency and truthfulness of the information it delivers) (Qiao and Wei, 2021). Structural equation modelling was carried out, and the conclusion was made that chatbot expertise, anthropomorphism and responsiveness have a positive impact on consumer trust in chatbots. Such effects lead to the reduction of uncertainty, the enhancement of credibility impression and psychological comfort that culminate in the acquaintance and human-similarity patterns of the relationship (Rana et al., 2024).

A lot of empirical studies have been conducted on e-commerce chatbots in interactive, perceived humanness, and trust studies. A study conducted by Singhal (2025) (343 respondents) has established that there is an influence of interactivity, perceived humanness on trust in chatbots of AI that mediates the relationships between such predictors and intention to use chatbots in e-commerce. The advantage of interactivity is that it helps to increase the feeling of trust in the user as it provides them with the feeling of perceived mastery and control, which leads to the feeling of participation satisfaction (Terblanche and Kidd, 2022). Making the perception of humanity via empathic expressions, conversational plausibility, and emotional responsiveness creates trust, which creates the perception of credibility and reduces the psychological gaps between people and technology (Yun and Park, 2022).

Trust is an intermediate between the dimension of service quality of chatbots and purchase intentions of the cognitive and affective processes. Mediation studies indicate that trust mediates the correlation that exists between perceived usefulness and ease of use and purchase intention in chatbot-mediated commerce, either in totality or partially (Al-Oraini, 2025). Based on such mediation, the assumption is that the functional chatbot properties mediate the purchase decisions in the case when they develop trust, which, in its turn, develops the behavioural intentions. The clients who will rely on the chatbot's advice and information will repurchase and visit in the future, and recommend the services (Alagarsamy and Mehroliya, 2023).

Personalisation and Conversion

The main advantage of AI-based chatbots is their customisation, i.e. messages, suggestions, and propositions will be tailored to a specific user depending on the available behavioural information at a given time. Personalised interactions can be used to conduct online shopping to enhance the perceived value and relevance, and enhance the conversion rate. The article by Ali and Sheikh (2025) has found that the purchase intention is able to be enhanced in the behaviourally determined ones because the marketing communication can conform to the preferences of the consumers through the recommendations. The chatbots are capable of maximising the realisation of e-commerce in Bangladesh since it involves both the aspect of personalisation and the automated success of service delivery. Facebook or WhatsApp chatbots will be one of them, where the user will find the culture of Bengali and English attractive, and the reply must be culturally correlated with the local consumer behaviour (Ash and Widarmanti, 2025). These bots are also a guided selling tool which can be utilised in consideration set reduction, whereby the bots are used to suggest the products which have the

highest likelihood to appeal to the user. In this way, they are going to save time in the decision-making process, which would enhance the likelihood of making a successful purchase (Jia, Liu and Lowry, 2024).

Behavioural targeting, dynamism and delivery of contextual product offers through real-time modification, and optimum content dynamism are the mediating processes of personalisation of chatbots in terms of influencing the conversion rates (Joshi, 2025). Behavioural targeting analysis will consider the customer behaviour in the clicks and page views, search, addition of items in the cart and dwell times so as to develop the purchase intent and tailor the subsequent communication. Based on the research, the brands with the adaptive content model will be capable of increasing the conversion rate by 23% in case the offering, the headlines, and the page designs are optimised with the assistance of artificial intelligence and real user information in real-time, according to Mehta et al. (2022). Besides that, AI chatbots that have customised suggestions and that follow up on the needs of consumers can raise the conversion rate by 20%, as reported by Kelly, Kaye and Oviedo-Trespacios (2022).

One-to-one messaging - individual messages to the customer depending on their purchase history and customer desire, among other contextual trigger variables, has gigantic ramifications on the conversion rates and customer loyalty because it will make the message more relatable, can be more attractive to the emotions and less invasive. It turns out that advertising materials are positively received by customers based on their individual needs and pain points, and there is a high probability of purchasing their products. Firms that have implemented AI-sensitive customer analytics to aid the channelling of the creative energy to man affirmed that they are 47% engaged with the customers and 31% makeover than their traditional approaches (Mubdir et al., 2025).

Personal recommendations of the products on the chatbot websites are among the most helpful conversion strategies, which reduce the cost of search, remove a search overload, and provide customers with feasible options which they would not have discovered otherwise (Qiao and Wei, 2021). The AI-based recommendation system, which relies on the history of purchases a browsing history and collaborative filtering tendencies, could provide an indication of the most probable products which could be near to the personal preferences. The companies that have taken up the recommendations of AI have claimed that their sales have increased by up to 300% and tailored recommendations that have raised the conversion rates by nearly half, according to the research by Rana et al. (2024). The conversion is enhanced by the use of the gamification aspects on the Personalisation rules by chat-bots because it allows the actualisation of both

streams of motivations, utilitarian and hedonistic ones. According to the articles, the application of gamer chatbots using the utilitarian-inspired approach has a positive impact on the dimension of cognitive and behavioural engagement, but not the emotional engagement dimension (Singhal, 2025). These aspects of participation, in turn, affect the purchase behaviour it creating an opportunity within which gamification can be applied to enhance the efficiency of the personalisation.

The demographic factors that have moderate effects on the above-mentioned personalisation effectiveness and conversion outcome are age, education, and technological literacy. According to Terblanche and Kidd (2022), the propensities of the effects of personalisation do not fully depend on the clusters of consumers, and more technologically conscious consumers of a younger age will be more susceptible to AI-based propositions. Certain distinctions between the genders are set, which presupposes that the personalisation approaches can be optimised through the demographic equalisation of the processes in order to gain maximum relevance and conversion opportunities (Yun and Park, 2022).

Consumer Loyalty and Post-Purchase Behaviour

The customer loyalty and the after-sales behaviour are particularly significant elements of the retail performance, and the chatbots are considered the potential tools which ensure changing the transactional customer into the brand ambassadors, who would provide them with long-term relationships, repeat purchases, and transformation of the brand ambassadors (Clark, 2025). Customer satisfaction, customer retention, customer lifetime value, customer tracking, after-sales care, delivery and product support, customer returns and post-sales feedback are strongly influenced by customer satisfaction, retention and customer lifetime value, and the majority of them are not invested in as much as the expenses incurred in pre-purchase marketing. The study revealed 77% of the clients will recommend the brands delivering a positive post-sale experience, and customers who use chatbots will be three times more inclined to buy the brand again due to the offered and friendly experience (Jia, Liu and Lowry, 2024).

The mechanisms that help chatbots build loyalty of customer loyalty are proposed in a variety of channels, which include the development of improving the quality of relationships, satisfaction and the development of continuance intention and emotional attachments (Joshi, 2021). The system quality, quality of service, and quality of information, as evidenced by a systematic literature review on the effects of chatbots on customer loyalty, are the dimensions that the chatbots must meet to drive positive experiences that result in customer loyalty.

Customer trust, customer satisfaction and commitment are the primary antecedents to development of long-term commitment and repurchase behavior as a direct result of the high-quality service offered by chatbots such as technical efficiency, empathy, and accuracy of the information offered. Technical reliability is the system quality, ease-of-use of the interface, and the responsiveness is the ease-of-use, speed of the interface (Koswara, 2025). Empathy is the service quality, responsiveness, and problem solution efficiency is the information quality, accuracy, relevance and timeliness of the available information. The continuously high scores in these dimensions will result in the customers developing the psychological states of trust, satisfaction, and commitment that will be transferred to the intentions of repetitive buying behaviour and positive word-of-mouth marketing (Lo Presti, Maggiore and Marino, 2020).

The instant conversion effect is an attribute of chatbots, besides the long-term loyalty and post-purchase behaviour (Mehta et al., 2022). Chatbots do not end with the value-generation by the inexorable communication at the attempt to monitor the delivery of a purchase with the aim of evoking a response, and even after-sales services. Continuity is the one that enhances the quality of interaction and repetition of the interaction. The introduction of chatbots in the post-purchase contact, as recommended by Mubdir et al. (2025), makes the customers happier and increases rates of word-of-mouth advocacy, especially in the lower-cost economies where the digital support systems are already in place. After sale services in e-commerce or the Bangladesh context is critical in creation of customer loyalty in the rapidly competitive shopping market. Resolving the customer care by using chatbots can guarantee a positive after-sales, lower anxiety, and word-of-mouth promotion that are critical in maintaining the growth of the digital economy. To this definition, the process of loyalty is facilitated by three processes that are mutually dependent, i.e. convenience, consistency, and connection (Musa et al., 2024). The support of the post-purchase service will be supported by chatbots who will provide 24/7 service; the continuity of the same experience in the sphere of communication; contact through the expression of empathy and memory, recollection of the past experience with the customer and preferences (Ali and Sheikh, 2025). The mentioned relations find the reflection in the service-dominant logic conceptualisation of value as a co-created object during the interaction, as compared to the firms being the creators of value. The transformational potential of the chatbot-based loyalty is within the retailing environment of the country of Bangladesh, where customers are gradually becoming accustomed to the electronic standards of the services (Ash and Widarmanti, 2025). The chatting bots provide a trust-based relationship, which extends the transactional region, such as the long response time or language barrier. It has been found that

retail brands that operate on AI-based communication have a higher retention of consumers, as well as a higher repurchase intention, than any other digital communication medium (human or non-human) (Cai, Gao and Yan, 2024).

The level of satisfaction and retention is high in chatbots' posts sales services, such as receiving orders, delivering orders, helping customers use products, warranty support, troubleshooting and returns support (Clark, 2025). The AI-based chatbots that will deliver real-time feedback on the service requests, send automated messages on the status of the order, and send proactive messages on the potential issues will be able to enhance the level of transparency and reduce the anxiety of the customers during the after-sales stages (Juquelier, Poncin and Hazée, 2024). It has been discovered that 24/7 access to after-sales services in chatbots has eliminated time constraints, which has been a constraint to the availability of customer service in the past has created an opportunity to make a query at any time, regardless of time zones and working hours.

In the frame of the retail industry in Bangladesh, it is possible to note the lack of empirical studies, which would cover the chatbot and its impact on customer loyalty and after-sales behaviour, since more people are turning to e-commerce (Kelly, Kaye and Oviedo-Trespalacios, 2022). Though, studies have found out that the consumer in Bangladesh is also getting more sensitive to the tailored online customer experience and responsive to customer care implicates connotatively, studies of the effects of chatbot mediated after sales service to the retention and the repurchase rate, and brand loyalty to the Bangladesh retail situation are pivotal gaps that needs to be addressed with research by the researchers.

Summary

The literature suggests that chatbots have revolutionised digital marketing because they combined automation and personalised engagement. Their intent as AI-based systems that simplify and speed up the process of communication is shown in the conceptual basis, and the perceived usefulness, trust, and social presence affect the adoption process according to the theoretical viewpoints of TAM, UTAUT, and relationship marketing. The chatbots have been reported to have a positive impact on customer experience, trust building, and conversion and loyalty due to the custom and responsive communication (consumer behaviour literature). However, it has certain gaps as far as empirical validation is concerned within the developing nations like Bangladesh, where the infrastructural and cultural setting is not adopted uniformly. The literature, in its turn, enables the holistic approach to integrating the features of chatbots

with consumer engagement, trust, and purchase behaviour, and their strategic significance in ensuring the digital transformation is customer-oriented.

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