

Artificial Intelligence Transformations in Marketing:
the Nexus Between Chatbots' Perceived Usefulness, Perceived Credibility,
and Brand Loyalty In E-Commerce

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Abstract

The fashion industry employs AI-driven marketing techniques such as Chatbot technology to increase its brand presence in the digital space for 27 hours a day, seven days a week, and has a fair chance to gain an edge over competitors. Chatbots are gaining momentum, serving as a promotional tool that assists and maintains customer experiences. Thus, the current study aims to identify the impact of Chatbots' Perceived Usefulness (CPU) and Chatbots' Perceived Credibility (CPC) on Brand Loyalty (BL) in the fashion retail industry of KP, Pakistan. Data were analyzed using descriptive statistics, correlation analysis, and regression analysis to identify a structural relationship between the study's variables. The findings revealed a significant and positive relationship between CPU, CPC, and BL. AI-driven chatbot fosters trust, confidence, and provides consistency by empowering customers and increasing conversion rates. Therefore, chatbot marketing is vital in stimulating customer engagement and credibility in brand loyalty. The practical implications are manifold, especially in consumer goods and digital platforms, which should prioritize enhancing product usefulness through user-centric design and features that deliver tangible benefits, while bolstering credibility through transparent communication and reliable performance. It also focuses on building functionally effective chatbots that respond accurately, promptly, and intuitively to user needs—this yields stronger brand loyalty. Augmenting these with design elements that enhance trust (empathetic tone, transparency) will add incremental value.

Keywords: Chatbot Perceived Usefulness, Chatbots Perceived Credibility, Fashion Industry, Brand Loyalty.

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INTRODUCTION

Businesses around the globe have been transformed by technological breakthroughs that have reshaped the firm's marketing practices (Younus, 2021). Ventures are moving from conventional marketing tactics to the most revolutionary techniques to reach their audience (Thrassou, Vrontis, Efthymiou, & Uzunboylu, 2022). Artificial intelligence chatbots show a potential shift in how consumers collaborate with technology for the acquisition of goods and services (Krishnan, Gupta, Gupta, & Singh, 2022). According to Cheng and Jiang (2022) AI chatbots are rapidly becoming the front-line interface between businesses and customers, automating customer services across industries, banks and financial institutions, retail and wholesale trade, the private and public sectors, and insurance companies (S. B. Lee, 2020). AI chatbots are known for their around-the-clock responses, which give quick issue resolutions, decrease service expenses, and provide personalized interactions (Kaczorowska-Spychalska, 2019). In response to digital transformations, AI chatbots have evolved into an emerging technology that enables brands to deliver instant responses to customized communications. Thus, enabling customer empowerment and satisfaction (Andrade & Tumelero, 2022). By leveraging state-of-the-art chatbot technology, which streamlines queries and responses, it helps shape customer perception regarding brand identity and credibility (Aslam, 2023). Moreover, post-COVID-19 pandemic, consumers expect companies to be at their doorsteps whenever and wherever they need them. As discussed by Laksamana, Saripudin, Suharyanto, and Cahaya (2024) Artificial intelligence tools have boosted consumers' cognitive intentions and expectations about the firm's products and services. Furthermore, Artificial intelligence has exerted a considerable impact on organizational infrastructure with the employability of cutting-edge technology applications and intelligent agents that can perform multiple tasks simultaneously (Aslam, 2023).

A chatbot is a computer-generated artificial intelligence tool and human-computer interaction model that stimulates dialogue between humans and computers over the internet (Pham, Nabizadeh, & Selek, 2022). The chatbots employ Natural Language Processing (NLP), text analysis, and computational linguistics to assess and extract the affective states and prejudiced opinions (Suta, Lan, Wu, Mongkolnam, & Chan, 2020). Moreover, AI digital conversational entities, interactional agents, neural networks, smart bots, and predictive chatbots cover digital transformational technologies (Maher, Kayte, & Nimbhore, 2020). According to Lane and Dyshel (2025) human bots' communications are key in education, business, e-commerce, health, and entertainment. In addition, its emergence has reduced the personnel costs involved in customer service operations as it has the unique capability of handling multiple issues concomitantly. Digital mechanization has revolutionized customer interactions with brand experiences and the level of loyalty they attach to their preferred brands (N. Akbar, Ahmad, & Yousafzai, 2022; Patel & Trivedi, 2020). Furthermore, AI-generated mechanisms have been trending that can transform customer-venture connections across every sector, which is the program's ability to accurately comprehend data, acquire knowledge from this information, and use the collected information to attain goals and objectives through adaptable modification processes (Krishnan et al., 2022). Additionally, a key tenet of AI is that businesses assess data and interact with customers by employing hardware and software, which elevates robotic discussions to more human and customer-centric levels (Abbas, Yousafzai, & Khattak, 2015; Bose, Chopra, Singh, & Patel, 2020; Yousafzai, Khan, & Khan, 2017). In light of the foregoing arguments, it is clear that AI tools equipped customers with user-friendly

attributes and efficient assistance by engaging them with speedy responses (C. T. Lee, Pan, & Hsieh, 2022).

Brands direly need sustainability in upgrading their technology to maintain their brand image (S. Akbar, Akbar, & Yosuf, 2023; Qurtuba, Tariq, & Akbar, 2023). In the branding context, considerable work has assessed the role of chatbots in winning the hearts of their customers in advanced countries (Zeb, Akbar, & Ahmad, 2016). However, the connection between chatbot perceived usefulness, perceived credibility, and brand loyalty in emerging Asian economies remains unexplored. AI-robotic chatbots have transformed the branding landscape, including machine intelligence, AI-powered conversational chat-rooms, and chatbot web-based services (Krishnan et al., 2022). The algorithmic nature of AI technology leads firms to transition from conventional customer care units to digital chatbot solutions on a wider scale (Anagnoste, Biclesanu, D'Ascenzo, & Savastano, 2021). Similarly, computerized human interactions reveal new avenues for brands to nurture a deep connection with customers through tailored dialogue, replacing mass marketing practices (Jelonek, Kumar, & Pawelozsek, 2024). In branding, prior research has been done in industrialized economies that have examined the nexus between brand management practices and AI-generated human-computer interaction tools (N. Akbar, Yousafzai, & Akbar, 2023; N. Akbar, Zeb, & Ahmad, 2017; Begum, 2024; Cheng & Jiang, 2022). Brandtzaeg and Følstad (2017) investigated the underlying motivations behind chatbot technology in the US market. Furthermore, the results of the preceding study revealed that chatbots are highly efficient and productive indicators of marketing communication plans. In a similar nature study, Chung, Ko, Joung, and Kim (2020) assessed the luxury brands' adherence to e-services mainly through chatbots, which is rising as an emerging technology tied with ease and convenience, personalization, and idiosyncratic customer support. Chatbots have been thoroughly examined in business and marketing literature. However, AI chatbots have been ignored in developing countries like Pakistan. The current research aims to investigate the impact of the AI-chatbot's perceived usefulness and perceived credibility on the brand loyalty of social media users who shop through online apps and platforms.

The AI chatbot has evolved into a significant touchpoint for customer service, generating quick responses and cultivating corporate brand identity. The current study assesses the impact of chatbots' perceived usefulness and perceived credibility on brand loyalty in online shopping. Perceived usefulness refers to the degree to which customers perceive that chatbot assistance enhances their ability to complete a purchase efficiently and effectively, strengthens communication, and fosters a favorable response toward it, which increases their affiliation and patronage (Dr. Neelam Akbar, 2023). Azman, Keat, Sufian, Abdul Aziz, and Azman (2025) examined the impact of machine learning chatbots on customer purchase intentions with perceived usefulness and ease of use roles in assessing consumer purchase behavior. Therefore, the findings revealed a significant and positive association between these variables in the fashion industry. The study found that enhancing chatbot functions can improve a firm's performance by streamlining the customer decision-making process. Furthermore. Chatbot perceived usefulness stimulates customer empowerment and involvement by decluttering the purchase process and easing informational bombardment in the online shopping context. Perceived credibility refers to trustworthiness, authenticity, and validity of the chatbot, which harnesses consumer purchase action, invigorates their confidence, and mitigates confusing queries. Therefore, perceived credibility strengthens the consumer's emotional and psychological bond with

the brand. In light of preceding discussions, it is assessed that the chatbot's perceived usefulness and credibility improve brand loyalty. The current study aims to examine the relationship between perceived usefulness and perceived credibility, and brand loyalty in the e-commerce fashion industry.

LITERATURE REVIEW

With the revolutionary transformations in AI, chatbot technology has changed the avenues for business transactions and customer service interfaces in e-commerce (Misischia, Poetze, & Strauss, 2022). By leveraging AI tools, these chatbots can personalize suggestions and speed up consumer purchases (Nicolescu & Tudorache, 2022). The current literature scrutinizes theories, paradigm shifts in technology adoption, and variables used for this study. The adoption of AI chatbots in marketing has been comprehensively studied through the prism of the Technology Acceptance Model developed by Davis (1989), which provides a theoretical explanation of how consumers embrace and accept innovative technology. The model explains perceived usefulness (PU) as the extent to which specific automation and digitalization can improve their proficiencies (De Cicco, Iacobucci, Aquino, Romana Alparone, & Palumbo, 2021). Chatbot (PU) refers to the customer's perception of chatbots' efficiency in optimizing their purchase actions, offering customized suggestions, and facilitating cognizant decisions (Humairoh & Wihelmus Hary, 2023). According to Soni and Dubey (2024) AI chatbots transformed from a novel tool to a basic touchpoint in customer service, shaping after-sales services and personalization discovery. The TAM model is grounded in consumer behavior, which explains the consumer behavioral loyalty to the brand on a digital platform (Auer, Schlögl, & Glowka, 2024). In the fashion industry, chatbot-enabled online service quality (promptness, readiness, and agility) improves the brand image and identity of a prestigious designer brand (Xia & Shannon, 2024). Prior research reveals that customer perception of the chatbot's usefulness enhances customer shopping experience, trustworthiness, and brand loyalty through positive word of mouth (Aslam, 2023; Shahzad, Xu, An, & Javed, 2024).

Pakistan's fashion industry is intensely competitive, working on both brick-and-click operational efficiencies, and brand loyalty is sensitive as technological innovation has become a vital factor in customer interactions. Chatbot technology has been exclusively adopted by fashion retail outlets with an attractive website, Facebook page, and Instagram presence, which has transformed the perceived usefulness and credibility of the customer (Rajaobelina, Prom Tep, Arcand, & Ricard, 2021). Perceived credibility (PC) stems from the Source Credibility Theory (SCT) developed by Ohanian (1990) which defines the PC as a trustworthy indicator of message acceptance when consumers attach competency and reliability to conversational agents, they perceive higher reliability in their advocacy, magnifying satisfaction and brand loyalty. Alagarsamy and Mehrolia (2023) examined the trust determinants of chatbots as a critical factor in designing marketing campaigns that improve customer interaction with their preferred brands, defining chatbot trust as how accurately, reliably, and transparently the chatbot automation operates in terms of its functional efficiencies. Furthermore, previous researchers have extensively studied the chatbots' PU and trustworthiness efficacy in light of the TAM and SCT, such as Malik and Asim (2025) Conducted a quantitative study by employing probability sampling to examine the mediating role of communication quality and customer brand relationship in enhancing customer responses with chatbots, generating quick purchase actions. Additionally, these connections stimulate loyal customers and improve customer buying experiences (Asim, Raees, Qamar, Manzoor, & Nisar, 2024). Therefore, it is reviewed that

chatbots provide automated customer support, transactional assistance, and generate customized communication, which serves as a means to gain a customer base.

The chatbots' marketing efforts are significantly associated with brand loyalty in a study conducted by Asim et al. (2024) which further investigated the mediating role of communication quality and credibility. The findings revealed significant mediation effects on the relationship between predictor and criterion variables. In a similar nature study, carried out in the apparel industry by Jansom, Srisangkajorn, and Limarunothai (2022) the chatbots' e-service marketing efforts were regressed as a significant predictor of customer satisfaction, revealing that chatbots' endorsement in the businesses motivates communication credibility and customer satisfaction. Moreover, the fashion industry requires chatbots for 24hours/7-day availability in response to intense competition, and the fear of brand switching drives them as a basic marketing strategy. Furthermore, chatbots' quick issue-resolution capabilities and trending nature enhance brand credibility, which leads to a satisfied customer base (Vebrianti, Aras, Putri, & Swandewi, 2025). Prior research in the fashion and retail sector found that the usability and responsiveness of chatbots are mediated by customer satisfaction, and intrinsic and extrinsic values that reinforce brand loyalty (Shabbir, Adnan, Butt, Khan, & Aslam, 2025). Similarly, the customer's previously established brand loyalty amplifies their opinion of the potential limitations of chatbots, which enhances credibility and reliability. Moreover, brand loyalty was found to be a significant and positive indicator of perceived usefulness, perceived ease of use, and perceived trustworthiness, where AI chatbots' characteristics imparted a positive impact on customer satisfaction (Yoon & Nguyen, 2025). Thus, in light of the foregoing arguments, it is assessed that chatbots PU and PC play a critical role in enhancing the brand loyalty to fashion brands in e-commerce.

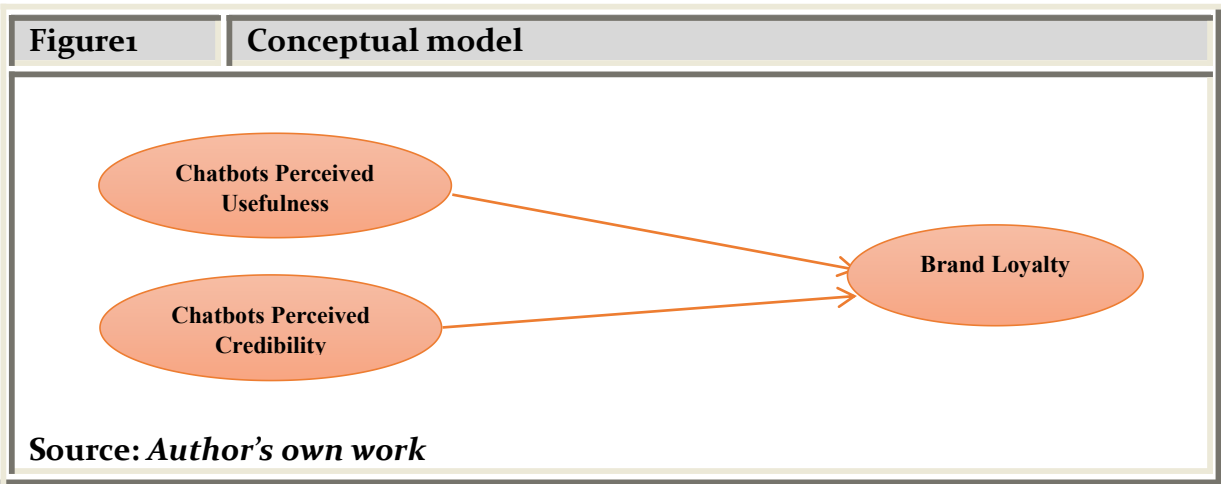
Very little research has been conducted in the context of the fashion industry in Khyber Pakhtunkhwa, Pakistan, regarding AI-driven chatbots' perceived usefulness and the perceived credibility impact on brand loyalty. However, other districts have been considered by researchers in AI-driven chatbots in connection with brand management, such as Wahid and Awad (2025) investigated the impact of AI-enabled chatbots on customer satisfaction and loyalty in Lahore, Pakistan. The findings revealed that AI-driven chatbots' usability and responsiveness shape the overall consumer shopping patterns in online buying and selling, which increases consumer attitudinal brand loyalty and satisfaction. In addition, the usability factor describes the perceived usefulness, while responsiveness drives the perceived credibility of chatbots. The AI-generated chatbots on social media are known as bots that provide automatic responses, create and disseminate content, and engage customers on social media platforms (Ng & Carley, 2025). Furthermore, bots on social media facilitate an information ecosystem by eliminating human operators, delivering substantive content, connecting consumers with affinity groups, and supporting digitalization in marketing efforts (Madahali, 2024). According to Selwyn, Hillman, Bergviken-Rensfeldt, and Perrotta (2023) Digital automation enhances consumer involvement and facilitates publicity, which has detrimental effects on digital awareness that amplify propagation. In the fashion industry, the chatbot's perceived usefulness encompasses real-time customization, such as virtual reality and trend-based suggestions, influencing customer satisfaction (Shabbir et al., 2025). The perceived credibility of chatbots explains their consistent delivery of accurate information, which addresses consumer confidentiality and privacy, with conversational empathy that reduces cognitive dissonance in complex buying behavior (Naqvi, Hongyu, Naqvi, & Kun, 2024). In

developing Muslim-majority countries like Pakistan, culturally accustomed chatbot conversations improve credibility perceptions. In addition, sharia compliance moderated the relationship between AI-personalization and consumer purchase intentions, indicating that AI-driven technologies affect consumers' trust and credibility if they are in congruence with the Islamic code of conduct (Hussain, 2025). According to Khan, Hamid, Saad, Hussain, and Arif (2023) AI-enabled chatbots as a mediator improve customer engagement in marketing analytics and automatically handle queries, which fosters loyalty when integrated with perceived usefulness and credibility. Based on the prior research, the following hypothesis has been developed.

H1: Chatbot perceived usefulness has a significant positive impact on brand loyalty

H2: Chatbot perceived credibility has a significant positive impact on brand loyalty

CONCEPTUAL FRAMEWORK



METHODOLOGY

The current research employs a quantitative, deductive, positivist stance, a cross-sectional survey design to objectively measure the structural connection between chatbots' perceived usefulness, perceived credibility, and brand loyalty on multiple social media platforms used by the fashion industry in Khyber Pakhtunkhwa (KP), Pakistan. This research offers valuable insights into the consumer behavior literature by presenting AI-driven chatbots in the context of consumer psychology and their impact on brand loyalty in a culturally sensitive domain. The target population consists of fashion industry customers in KP who adopt social media platforms (Facebook, Instagram, Daraz.pk, Laam.pk, Telemart.pk, and Ali Express) for shopping for different fashion items (Apparel, clothing, footwear, accessories, jewelry, cosmetics, beauty, textile and fabrics, and luxury and designer items). The sampling frame of the KP's major districts is where fashion consumption and AI-driven chatbot conversations are common. The current research employed Cochran (1977) A formula to determine an adequate sample when the population is large or unknown. It predicts the minimum number of participants required to achieve a 95% confidence level and 5% margin of error. The formula provided a sample of 384 participants. A multistage sampling strategy was employed through a step-wise technique. In the first stage, purposive sampling was implemented in districts with the highest fashion retail shops/expanded consumption of social media content. After that, the cluster selection of fashion retail outlets and shop sites. The respondents were selected based on convenience and had prior experience employing chatbots in online platforms. Measures of perceived usefulness and brand loyalty were taken from a study conducted by Yoon and



Nguyen (2025), while the measures of perceived credibility were adopted from Flanagin and Metzger (2007). Responses were collected through a Likert scale. The data were analyzed using descriptive statistics, multiple regression analysis, and correlation in SPSS to examine trends and test hypotheses, ensuring efficient data analysis and comprehensive interpretation of the findings.

RESULTS

DESCRIPTIVE STATISTICS

Data were gathered from 384 Pakistani consumers who reported shopping on online platforms, comprising 183 male participants (47.7%) and 201 female participants (52.3%), revealing a balanced gender distribution. The age distribution shows that the youth were the majority of online buyers, representing 116 participants, with 30.3% who were under the age of 21. 135 participants (35.2%) fell within the age bracket of 21-29. 115 subjects (29.9%) were between 30-39 years of age. While only 18 participants (4.7%). The findings recommend that the young generation under 39 is more inclined towards online shopping as compared to other age groups. Based on the educational classification of 384 respondents, 89 participants (23.2%) had less than a bachelor's degree, and 87 participants (22.7%) had completed a bachelor's degree. The majority of participants were master 's-level students, who presented 105 responses, with 27.3%. 80 participants (20.8%) with MS-level studies, and 23 respondents had PhD degrees. The findings show that the majority of online purchases were educated consumers who are taking advantage of online shopping conveniences. Interpretation based on an online platform preference was distributed among 384 respondents. The widely preferred online platform was Daraz.pk, reported 110 participants (28.6%), followed by Facebook, with 84 participants (21.9%). Moreover, AliExpress accounted for 67 participants (17.4%). Instagram reported 45 respondents (11.7%), and 78 participants (20.3%) reported using other online platforms. The findings indicate that Daraz.pk and Facebook are the most dominant online shopping platforms. The income distribution revealed that 123 respondents (32%) fell in the 40,000-50,000 range; the second largest group was those earning 50,000-70,000, reported by 84 respondents (21.9%). While 45 respondents (11.7%) were earning between \$ 70,000 and \$ 100,000, and 77 respondents (20.1%) were in the income range of \$ 100,000 to \$ 150,000. Fifty-five respondents (14.3%) belonged to the highest income group, which ranged from \$ 150,000 and above.

CORRELATION ANALYSIS

Chatbots' perceived usefulness (CPU) and Chatbots' Perceived Credibility (CPC) were assessed as independent variables, and their association with the dependent variable Brand Loyalty (BL) was examined using Pearson Correlation. The findings, as shown in Table 1 of the study, indicated a strong positive correlation between CPU and BL of 0.81, $p < .001$, demonstrating that higher CPU is associated with greater brand loyalty. Likewise, CPC was positively correlated with BL 0.72, $p < .001$, suggesting that CPC plays a significant role in enhancing brand loyalty for fashion brands. Additionally, CPU and CPC were highly correlated at 0.72, $p < .001$, indicating that customers who perceive chatbots' usefulness also rely on chatbots' credibility.

TABLE 1: CORRELATION ANALYSIS

		Chatbots PU	Chatbots PC	Brand Loyalty
Chatbots PU	Pearson	1		
	Correlation			
Chatbots PC	Pearson	0.724**	1	

	Correlation			
Brand Loyalty	Pearson	0.810**	0.721**	1
	Correlation			

** Correlation is significant at the 0.01 level (2-tailed).

Notes: CPU: Chatbots Perceived Usefulness, Chatbots PC: Chatbots Perceived Credibility.
BL Brand Loyalty

MULTIPLE REGRESSION ANALYSIS

The current study employs multiple regression analysis to identify the impact of Chatbots' perceived usefulness and Chatbots' perceived credibility as predictors of the dependent variable (BL), which were found to be statistically significant and positive. The model yielded a strong correlation ($R = 0.833$) between the independent variables and the dependent variables. In addition, the R^2 value of 0.694 signifies that 69.4% of the variance in brand loyalty is explained by the integrated effects of Chatbots' perceived usefulness and Chatbots' credibility. The Adjusted R^2 value of 0.692 reveals the robustness of the model.

TABLE 2: MODEL SUMMARY

Model	R	R ²	Adjusted R ²	S.e
1	0.833	0.694	0.692	0.37086

EMPIRICAL RESULTS

The findings of multiple regressions show a positive and significant connection between chatbots' perceived usefulness, Chatbots' perceived credibility, and brand loyalty. The model was statistically significant, and both independent variables influenced brand loyalty. As shown in Table 3 of the study, the perceived usefulness was found to be a strong and significant predictor of brand loyalty ($B = 0.578$, $SE = 0.039$, $\beta = .604$, $t = 14.72$, $p < .001$), demonstrating that greater perceptions of usefulness were associated with higher levels of loyalty. Perceived credibility also showed a significant positive effect on brand loyalty ($B = 0.263$, $SE = 0.038$, $\beta = .284$, $t = 6.91$, $p < .001$), advocating that consumers who viewed chatbots as credible tended to report stronger loyalty toward brands. Among the predictors, perceived usefulness exerted the stronger standardized effect ($\beta = 0.604$) compared to perceived credibility ($\beta = 0.284$), indicating that functional usefulness plays a more substantial role than credibility in shaping consumer brand loyalty in the online platforms.

TABLE 3: COEFFICIENTS SUMMARY

Model		Unstandardized beta		Stand. beta	t	Sig
		Beta	S.e	Beta		
1 (Constant)		0.617	0.117		5.290	0.000
Chatbots' Perceived Usefulness		0.578	0.039	0.604	14.719	0.000
Chatbots Perceived Credibility		0.263	0.038	0.284	6.906	0.000

a. Dependent variable: Brand Loyalty

DISCUSSIONS AND CONCLUSIONS

The findings elucidate the driver of BL, identifying a significantly positive impact from CPU and CPC. With unstandardized coefficients of 0.578 and 0.263, respectively, and both predictors achieving high statistical significance ($p < 0.001$), the model underscores that usefulness exerts a stronger influence ($Beta = 0.604$) than credibility ($Beta = 0.284$). These

outcomes support theoretical frameworks such as the Technology Acceptance Model (TAM) and Trust-Based Models in consumer behavior, where perceived utility and trustworthiness are pivotal in fostering long-term loyalty. The baseline constant (0.617) is an inherent level of loyalty even in the absence of these perceptions, possibly attributed to habitual or cultural factors. These results align with recent research, demonstrating that chatbot service quality which encompasses functional utility substantially contributes to e-brand loyalty, mediated by factors like trust, user experience, and e-word of mouth (Shahzad et al., 2024). Similarly, the central role of information quality and emotional experience in chatbot interactions has been shown to enhance customer-brand relationships, supporting our finding that usefulness (a utilitarian dimension) strongly drives loyalty (Magno & Dossena, 2022). The practical implications are manifold: Businesses, especially consumer goods or digital platforms, should prioritize enhancing product usefulness through user-centric design and features that deliver tangible benefits, while bolstering credibility through transparent communication and reliable performance. For businesses: Focus on building functionally effective chatbots that respond accurately, promptly, and intuitively to user needs—this yields stronger brand loyalty. Augmenting these with design elements that enhance trust (empathetic tone, transparency) will add incremental value.

For platform developers: Prioritize information quality and usability over flashy technical features. Emotional engagement and credibility remain important, but functional reliability drives core loyalty outcomes. Policy implications extend to economic development, where governments and regulators might encourage initiatives that promote accessible, credible branding in essential sectors (e.g., healthcare or finance) to support vulnerable populations, potentially through subsidies or standards for consumer protection that align with perceived usefulness. However, the study has certain limitations. The sample size of 384, while adequate for regression analysis, may not fully represent broader populations, particularly given the income skew and potential geographic or cultural biases not detailed here. Reliance on self-reported data introduces risks of social desirability bias, and the cross-sectional design precludes causal inferences over time. Additionally, unexamined variables such as age, education, or cultural factors could mediate the observed relationships. Future research directions should include longitudinal studies to track loyalty over time, comparative analyses across diverse income strata or cultural contexts, and the incorporation of additional predictors like emotional attachment or social influence. Expanding the sample to include more high-income respondents or employing mixed-methods approaches could enhance generalizability and depth, ultimately refining strategies for sustainable brand loyalty in an increasingly polarized economic landscape. In summary, this study confirms that chatbot perceived usefulness is the principal driver of brand loyalty, with credibility offering additional but smaller support. As consumer reliance on digital platforms grows, firms that prioritize functional utility in their chatbot implementations while also nurturing trust stand to gain stronger loyalty and deeper brand engagement.

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