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Intention to use determinants of AI chatbots to improve customer relationship management efficiency

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Intention to use determinants of AI chatbots to improve customer relationship management efficiency

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ABSTRACT

Al chatbots are the key technology that embraces the technology in service. Nevertheless, the use of Al chatbots intention is not visible in most companies; as a result, they are unable to maintain customer relationships with Generation Z. This study aims to examine how user experience and satisfaction (UES), perceived utility and ease of use (PUEU), communication effectiveness (CE), and user acceptance and trust (UAT) relate to the development of effective customer relationship management (CRM), and how these factors affect users' intentions to use chatbots (IUAC). This study collected data from medium-sized businesses and larger corporations in Asia, Europe, and Africa. A quantitative survey method was also used, followed by self-administered questionnaires. This study used a cross-sectional research design to investigate the impact of multiple factors on enhancing customer relationship management using structural equation modelling partial least squares (SEM-PLS). These findings indicate a strong correlation between variables. The study shows strong correlations between communication effectiveness and intention to use Al chatbots; the intention to employ Al chatbots and their perceived utility and ease of use; the intention to use an Al chatbot and acceptance and trust; and experience, satisfaction, and intention to use Al chatbots. The results of this study extend beyond customer relations to include other areas such as business operations, suppliers, distributors, and emerging economies. Therefore, this study provides a solid basis for understanding the relationships between innate traits and propensity to use AI chatbots for future advice.

ARTICLE HISTORY

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KEYWORDS

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SUBJECTS

Customer Relationship Management (CRM): Production, Operations & Information Management; Operational Research / Management Science; Operations Management; Events Management; Service Operations Management

1. Introduction

In the ever-expanding field of customer relationship management (CRM), the use of artificial intelligence (AI) chatbots has become a disruptive solution. By utilising AI chatbots, businesses can improve customer interactions, expedite communication protocols, and provide efficient support. As more businesses implement Al-driven technologies, it becomes imperative to understand the factors influencing the propensity to use AI chatbots for efficient integration and improved customer relationship outcomes. This study investigated various factors that impact people's propensity to use AI chatbots for customer relationship management. Businesses may learn a great deal about the nuances of customer engagement, modify their strategies, and make it easier for AI chatbots to integrate into CRM operations by looking at these traits.

A potentially revolutionary opportunity to redefine customer relationship management is the rise of artificial intelligence chatbots. However, several variables affect how these technologies are received and used. Despite the obvious benefits, little is known about the variables influencing users' intent to utilize

Al chatbots to improve customer service (Çalli & Çalli, 2022). By addressing these problems, our study aims to provide important insights into the intricate factors influencing people's intention to use Al chatbots for customer relationship management.

According to Ma and Huo's study, there is a need to examine user tolerance and confidence levels regarding artificial intelligence chatbots. Likewise, customers' inclination to incorporate these technologies in customer relationship management (CRM) interactions must be determined in reference to their influence over security, dependability, and transparency. Therefore, improving customer relationship management using Al chatbots is ineffective.

Customer relationship management (CRM) is significantly affected by the lack of user evaluations of the usability, functionality, and practicality of various technologies. Because Al chatbots can improve smooth communication in the context of customer relationship management, it is imperative to determine how to monitor their efficacy.

In addition, it is critical to determine which of these technologies effectively meets customer expectations, offers prompt support, and enhances overall communication efficacy. Similarly, negative user experiences and high levels of dissatisfaction with AI chatbot interactions have a significant impact on customer relationship management (CRM). The objective of this study is to examine how users' inclination to stick with or abandon AI chatbots for customer relationship management (CRM) is influenced by both positive and negative experiences.

1.1. Research gap

Although the fast-expanding field of artificial intelligence-enabled chatbots (IUACs) helps to simplify corporate procedures, several research gaps still need to be filled (Nimmagadda et al., 2024). These gaps comprise the integration of comprehensive constructions, context-specific effects, longitudinal studies, advanced AI capabilities, ethical and privacy considerations, demographic effects, accurate measurement of communication effectiveness, user experience and satisfaction dynamics, comparative analysis with human interaction, and technology integration difficulties, a multidisciplinary strategy (Bahroun et al., 2023).

Many studies, singly or in pairwise combinations of user acceptance and trust (UAT), perceptions of utility and ease of use (PUEU), communication effectiveness (CE), and user experience and satisfaction (UES), lack knowledge of their combined and relative impacts on intention to utilize AI chatbots (IUAC) (AI-Shafei, 2024). Research needs to take into account complicated models and capture these relationships completely. Furthermore, context-specific impacts are lacking since the effects of UAT, PUEU, CE, and UES could differ depending on the company environment, size, and business sector. Tracking changes across time and knowing how attitudes and perceptions evolve with the ongoing use of AI-powered chatbots depend on longitudinal studies (Meyer-Waarden et al., 2020).

In the context of understanding cutting-edge technology—it often does not set apart basic from advanced AI capabilities. Promoting a trustworthy AI environment depends critically on ethical and privacy issues (Habbal et al., 2024). Views of AI-based chatbots may be influenced by demographic variables, including age, gender, education level, and technological skills; however, there is inadequate knowledge of how these elements affect the link between UAT, PUEU, CE, and IUAC (Li et al., 2023).

While numerous research investigates intelligent chatbots in various consumer settings, such as e-commerce and customer care, there is a dearth of analysis on optimising commercial processes (Goncalves et al., 2024; Khalifa et al., 2021). In favour of consumer use cases, research disregards corporate processes, encompassing internal operations and customer management. The impact of intelligent chatbots on back-office tasks such as HR, accounting, and supply chain management, as opposed to customer occupations, has received limited research attention (Tavares et al., 2023; Tripathi et al., 2024). Most intelligent chatbot research focuses on standalone systems, but companies utilise many channels such as email, phone, social media, and face-to-face interactions (Sachdev & Sauber, 2023). A comprehensive understanding of how chatbots enhance operational efficiency across many channels is insufficient (Alshibly et al., 2024). The measurement and quantification of Communication Effectiveness (CE) for intelligent chatbots lack clearly defined parameters (Tavares et al., 2023). Evaluating chatbot

communication in the workplace is more challenging than assessing user satisfaction and response precision (Rukadikar & Khandelwal, 2024).

Research on user acceptability and trust (UAT) and perceptions of utility and ease of use (PUEU) concentrate on customers rather than internal employees (Chuong et al., 2024). The existing research on the impact of intelligent chatbots on corporate collaboration, employee productivity, and job satisfaction is inadequate in intricate work environments (Al-Otaibi & Albaroudi, 2023). Existing research on the impact of intelligent chatbots on employee experience and workflow, particularly in collaborative or decision-making positions, is limited—the influence of exposure on confidence in Al systems (Chowdhury et al., 2024). Although most research examines trust and user acceptance at a single point, there is a dearth of longitudinal studies on the development or decline of trust in chatbots (Sharma & Sharma, 2024). In order to understand how businesses establish and sustain trust in intelligent chatbot systems and how task complexity and context impact trust, extensive long-term study is required (Mokhtar & Salimon, 2022; Rukadikar & Khandelwal, 2024). Implementing AI chatbots to enhance efficiency in the healthcare, finance, and education sectors may encounter obstacles (Al-Otaibi & Albaroudi, 2023). Research fails to consider industry-specific characteristics, leading to over-generalisation (Acharya & Berry, 2023). Clarifying these constraints could enhance the theory and commercial research of AI chatbots.

1.2. Future research

Furthermore, under evaluation should be the efficiency of communication to grasp better its influence on IUAC (S. C. Silva et al., 2023). User experience and satisfaction (UES) dynamics should be investigated since they vary depending on continuous encounters with chatbots run by artificial intelligence (Pereira et al., 2022). Furthermore, a comparative study, including human interactions, is required to grasp Al-based chatbots' relative capabilities and shortcomings instead of human agents (Jyothsna et al., 2024).

Technology integration issues should be investigated since effective integration with current corporate systems and procedures might provide major difficulties (Sawasdee et al., 2023). Combining knowledge from psychology, human-computer interaction, information systems, and business management in an interdisciplinary manner can help one to have a better awareness of the elements affecting IUAC and present more complete solutions (Behera et al., 2024).

User acceptance and trust are typically assessed in most research at a single point. A continual longitudinal study of confidence in Al-powered chatbots is necessary (Singh & Singh, 2024). Such analysis would reveal whether prolonged usage leads to an increase, decrease, or alteration in trust. How do user trust and adoption of Al-powered chatbots evolve, particularly when they are integrated into company operations? To what extent does the industry influence user impressions of the usefulness and usability of Al-powered chatbots, and how do healthcare, finance, and education segments employ them in distinct ways? How does incorporating Al-powered chatbots impact enterprise communication efficiency and customer satisfaction? How do Al-powered chatbots' customisation and adaptive learning impact long-term user satisfaction, experience, and economic performance? How do Al-powered chatbots impact employee productivity, collaboration, and satisfaction within internal company processes and decision-making? How may conversational fluency and empathy be used to evaluate the effectiveness of corporate Al-powered chatbot communication? To what extent do data privacy, transparency, and neutrality impact the adoption of corporate Al-powered chatbots and user trust? How do cultural and geographical factors impact corporate Al-powered chatbots' adoption, trust, and happiness in different regions? How may integrate Al-driven chatbots with blockchain, IoT, and RPA impact corporate operations, customer happiness, and communication? What strategies may enterprise Al-driven chatbot implementation use to overcome its main challenges? A comparative analysis of Al-powered chatbots versus human operators regarding communication, customer satisfaction, and business productivity. To what extent do user-centric design and customisation in Al-powered chatbots impact user satisfaction and corporate adoption? How might emotional AI chatbots enhance trust, communication, and workforce satisfaction? By studying these subjects, future research can enhance the adoption of Al-powered chatbots, optimise corporate processes, and increase user trust and pleasure.

2. Literature review

Studies show that artificial intelligence chatbots allow businesses to enhance customer connections, speed up communication protocols, and provide effective support. It is becoming increasingly important to understand the elements influencing the tendency to utilise AI chatbots to achieve efficient integration and improved customer relationship outcomes. This is because more firms are implementing technologies driven by artificial intelligence. Researchers explored characteristics influencing people's willingness to employ artificial intelligence chatbots for customer relationship management. Examining these characteristics can provide businesses with a wealth of information regarding the complexities of customer engagement, allow them to adapt their tactics, and make it simpler for AI chatbots to integrate into customer relationship management operations.

According to Chaturvedi and Verma, the proliferation of chatbots powered by artificial intelligence brings a revolutionary chance to rethink customer relationship management. Likewise, few researchers mention that accepted and utilised technologies are influenced by several factors. Despite the evident advantages, there is a need for knowledge regarding the factors that influence the intention of users to employ artificial intelligence chatbots to enhance customer service (Çalli & Çalli, 2022). Another research discloses that the influence people's intention to use artificial intelligence chatbots for customer relationship management. This addresses the challenges that the earlier researcher has identified.

The research conducted by Ma and Huo indicates a gap in investigating the levels of user tolerance and confidence in relation to chatbots powered by artificial intelligence. According to Lasrado, Thaichon, and Nyadzayo, it is necessary to identify the extent to which customers are inclined to incorporate these technologies into their customer relationship management (CRM) interactions. These technologies impact the security, dependability, and transparency levels they provide. User experience, degree of comfort, and particular business objectives are some elements that affect the deployment of AI chatbots for commercial purposes (Durach & Gutierrez, 2024). This variety makes AI chatbot design and implementation more difficult and requires specialised solutions that, depending on their financial limitations, could not be practical for many companies (Kanbach et al., 2024). Confidence is damaged when AI chatbots continually struggle to grasp complicated subjects, which impedes communication (Kurban & Şahin, 2024). User satisfaction and desire to utilise chatbots generally may decline after negative experiences (Shin et al., 2023). Integrating AI chatbots might be difficult in current business processes, particularly if they include intricate procedures or outdated technology (Lin et al., 2023). A less successful adoption may result from process reengineering and compatibility problems (Javidroozi et al., 2020).

Al chatbots handling personal data raises privacy and security issues (Malaka, 2024). Though difficult, one must abide by data privacy laws (Saeed et al., 2024). Companies are cautious about utilising Al chatbot solutions since data breaches or abuse of information could result in legal consequences and a loss of client confidence (Eng & Liu, 2024). Finding Al chatbots' return on investment (ROI) could be difficult because one has to balance any advantages against the initial and continuing maintenance. The general success of the implementation could also be impacted by employee resistance to adopting Al chatbots (Tung et al., 2024). Companies who want to effectively deploy Al chatbots and streamline processes—which will increase output and user pleasure—must address these issues (Manoharan et al., 2024).

The chatbot's language model is modified to understand better the changing user language and jargon specific to the industry (Kushwaha & Kar, 2024). Context-aware chatbots can recall past conversations and offer more pertinent responses (Al-Hasan et al., 2024). Regular user testing shows where work has to be done to reduce disturbance (Rahmadiannisa et al., 2024). The chatbot is supposed to be installed gradually and work with a range of devices and platforms. Continual vulnerability evaluations and security audits are conducted (Madhav & Tyagi, 2022). Employee participation is required to solve issues and get insightful criticism (Chong, 2009). These steps would increase the willingness to use Al chatbots to improve corporate processes and help with PUEU, CE, and UES problems (Babarinde, 2024). Therefore, the study aims to align the factors that affect customer relationship management deep down by driving the theoretical ground in the subsection.

2.1. Underpinning theory

The elements impacting the intention to use AI chatbots for customer relationship management were analyzed using a variety of theoretical frameworks. The researchers used the most relevant theories. There are three theories: the Unified Theory of Acceptance and Use of Technology (UTAUT), the Technology Acceptance Model (TAM), and the trust theory. Though these theories are commonly used for technology adoption, the trust theory and technology adoption model are the first alignments in the research of Al chatbots, which makes the research theory unique. Also, this theory gives the most logical integration of variables and their impact on AI chatbots. Therefore, those theories have a significant effect on the overall research arena.

Taherdoost stated that the technology adoption model (TAM) is a frequently used paradigm in technology research intended to understand and predict user adoption of developing technologies. The main idea emphasizes the importance of perceived utility and simplicity of use in determining how widely adopted technology is. Customers' opinions on AI chatbots' usability and ease of use in terms of improving customer relationships can be assessed using the Technology Acceptance Model (TAM) as a framework.

Addition to the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT) adds performance expectancy, effort expectancy, social influence, and facilitating factors. The Unified Theory of Acceptance and Use of Technology (UTAUT) provides a thorough framework for examining the effects of numerous factors on people's intentions to use AI chatbots, including social influence and organisational support.

Trust is an important factor in technology uptake. Trust theory is a theoretical construct that revolves around the human tendency to place trust and rely on a particular technology or system (Morgan & Hunt, 1994). The application of trust theory can facilitate the analysis of how consumers' confidence in Al chatbots for customer relationship management is influenced by factors such as transparency, reliability, and security. Using these theoretical frameworks, researchers have gained a thorough understanding of the factors influencing people's propensity to use AI chatbots for customer relationship management. This method makes it easier to closely examine user viewpoints, organizational support, and contextual nuances. To build the research framework, the research transforms the problem into facts and fits the ideas. The conceptual framework of this study is shown in Figure 1. The intention to utilize AI chatbots (IUAC) to streamline business operations is the dependent variable, and user acceptance and trust (UAT), perceptions of utility and ease of use (PUEU), communication effectiveness (CE), and user experience and satisfaction (UES) all have an impact.

2.2. Hypothesis development

People who believe in the chatbot's accuracy and dependability in providing information are more likely to view their exchanges as significant and productive. User satisfaction and interactions with AI chatbots are improved when User Acceptance and Trust are combined. Customer relationship management (CRM) goals are more likely to be achieved when users have a positive experience with Al chatbots. Meyer-Waarden et al. (2020) found a substantial correlation between consumer acceptance levels and their assessments of the usefulness of Al chatbots in customer relationship management (CRM). People's willingness to adopt and use AI chatbots is predicted to rise if they view these technologies as practical tools for handling customer relationships.

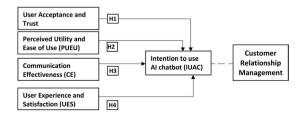


Figure 1. Conceptual framework. Source: Author's own creation.

People's intention to use an AI chatbot is influenced by their perceptions of trust. The perceived use-fulness and effectiveness of these technologies influence the combined effects of User Acceptance and Trust on consumers' inclination to employ AI chatbots for CRM augmentation (Mostafa & Kasamani, 2022). The process by which people assess and approve a system or piece of software's overall functionality, usability, and performance is known as user acceptance (UA) (Shih, 2004). People that exhibit an acceptance of AI chatbots should be more likely to believe that there is less risk associated with deploying and using this technology. Acceptance is characterised by a decreased sense of fear in relation to unusual situations and a greater willingness to learn about and apply new technical developments. In the case of AI chatbots, building trust is crucial since it plays a major role in mitigating and addressing perceived dangers. People who have faith in the AI chatbot are less likely to be anxious about mistakes, data leaks, or misunderstandings, which lowers their awareness of the risks involved.

It is clear that user intention to include AI chatbots into customer relationship management (CRM) procedures is positively impacted by user acceptance and trust levels. The Technology Acceptance Model (TAM) and Trust Theory serve as theoretical cornerstones. Meyer-Waarden et al. (2020) developed frameworks that emphasize the importance of consumers' beliefs regarding simplicity of use, utility, and trust-worthiness in shaping their intent to use AI chatbots for customer relationship management (CRM). This hypothesis aims to verify that people who demonstrate a higher degree of acceptance and trust in AI chatbots are also more likely to express a positive desire to use AI chatbots for customer relationship management.

Hypothesis 1: The findings of this research will further our understanding of the factors influencing user intentions to deploy AI chatbots in the context of customer relationship management (CRM).

First, the intention to employ AI chatbots (IUAC) to improve customer relationship management is positively impacted by user acceptance and trust engagement. Users who find AI chatbots valuable resources for CRM tend to be user-friendly and prefer simple interactions. The usability and accessibility of a chatbot's features by users are closely linked to its effectiveness. The degree of usability provided by AI chatbots is directly correlated with their user-friendliness.

Users' entire experience and accessibility are positively impacted when they perceive the technology to be easy to use and intuitive in terms of navigation and interaction. Al-Abdullatif stated that incorporating perceived utility and ease of use ensures that people interact with Al chatbots in a user-friendly manner, making them more accessible. The positive interaction noted here supports users' desire to use Al chatbots to improve customer relationship management (CRM). People who consider Al chatbots to be valuable resources in the field of customer relationship management should anticipate increased productivity when performing duties. The chatbot's ability to streamline customer relationship management (CRM) processes is correlated with its effectiveness.

Ease of use has an impact on job execution efficiency. The Customer Relationship Management (CRM) industry benefits from the efficient execution of activities by users who find AI chatbots easy to use. According to Sohail et al., customers' perceptions of AI chatbots as effective tools for completing CRM activities are largely influenced by the combination of perceived utility and ease of use. People that intend to use AI chatbots for customer relationship management (CRM) goals will gain from the aforementioned idea. People who perceive AI chatbots as beneficial tools expect a positive user experience.

The chatbot's effectiveness is dependent on users' expectations of favorable outcomes and benefits. The overall user experience is significantly improved by usability. Users' general satisfaction with technology is positively impacted by Al chatbots' simplicity of use. Combining perceived utility and ease of use ensures that consumers have a positive and satisfying experience when interacting with Al chatbots. Their propensity to utilise Al chatbots to improve customer relationship management (CRM) is strongly influenced by a positive user experience (Shaik et al., 2023). The justification shows that the incorporation of Perceived Utility and Ease of Use positively impacts the Intention to Use Al Chatbots to supplement CRM (Li et al., 2023).

Customers' perceptions of AI chatbots' usefulness, ease of use, effectiveness, and general positive experiences are influenced by the interplay of these attributes, and this in turn influences their intention to use these technologies for customer relationship management (CRM) purposes.

Hypothesis 2: The intention to employ Al chatbots (IUAC) to improve customer relationship management is positively impacted by perceived utility and ease of use (PUEU) involvement.

People that utilise AI chatbots place a high importance on timely and relevant responses to user inquiries or requests. The ability of a chatbot to understand user needs and respond appropriately is closely linked to the effectiveness of its communication.

Users are more inclined to use AI chatbots for Customer Relationship Management (CRM) when they obtain prompt and pertinent responses. The efficacy of communication influences the perception of chatbots as useful tools for managing customer relationships. Users will perceive AI chatbots as responsive and capable of providing important information quickly, owing to the combined influence of communication effectiveness. People's willingness to use Al chatbots to improve customer relationship management (CRM) is positively impacted by their positive perception of them (Shaik et al., 2023).

The effectiveness of communication can be greatly increased by integrating artificial intelligence (AI) chatbots that can tailor conversations and provide customized responses based on user preferences. According to Lal, Dwivedi, and Haag, users attach great value to interactions that are customized to meet their specific needs and relevant to their particular situation. When users receive personalized interactions tailored to their needs, they are more likely to use AI chatbots for customer relationship management (CRM). The efficacy of communication has a beneficial impact on users' perceptions of the chatbot's capacity to satisfy their specific demands. Customers will see Al chatbots as competent in offering individualized and personalized interactions within the context of Customer Relationship Management (CRM) because of the combined influence of Communication Effectiveness. This positive view has a positive impact on their decision to use AI chatbots to handle consumer relationships (Rafiq et al., 2022).

Customers typically find a positive association between positive user experiences and AI chatbots that effectively provide information. The entire communication experience affects users' satisfaction with technology. When users have positive communication experiences, they are more likely to indicate a propensity to adopt AI chatbots for customer relationship management (CRM). The extent to which users' overall satisfaction and confidence in the chatbot are shaped by good communication. In the context of customer relationship management (CRM), the combined effect of communication effectiveness ensures that users have positive communication encounters with AI chatbots.

Their likelihood of adopting AI chatbots to improve customer relationship management increases as a result of this positive user experience. This justification shows that the intention to use AI chatbots to improve customer relationship management is positively impacted by the addition of communication effectiveness (Nicolescu & Tudorache, 2022). Users' opinions on AI chatbots as useful tools for customer relationship management are influenced by the effectiveness of communication, which is characterized by clear interactions, quick responses, personalization, and positive user experiences. This, in turn, affects their desire to employ these technologies to improve their CRM.

Hypothesis 3: The ambition to employ AI chatbots (IUAC) to improve customer relationship management is positively impacted by Communication Effectiveness (CE) engagement.

Users' desire to integrate Al chatbots into their customer relationship management processes is indicative of their perception of these technologies as useful and efficient tools for task completion. Users' positive perceptions of AI chatbots as enablers of effective and successful task performance in Customer Relationship Management (CRM) are significantly shaped by the intersection of User Experience and Satisfaction. People's propensity to use AI chatbots to improve customer relationship management (CRM) is positively impacted by their positive perceptions of them (Ponte, 2023). Al chatbots that demonstrate flexibility and customization in their interactions are highly valued by users.

Happiness is influenced by a chatbot's ability to adapt to user preferences and provide customized experiences (Zhang & Kamel Boulos, 2023). Users' inclination to employ AI chatbots for customer relationship management is positively impacted by their perception of the adaptability and customization of these technologies. User experience and satisfaction have a significant influence on how customers view Al chatbots, especially with regard to customer relationship management (CRM). The apparent adaptability and personalization capabilities of chatbots define this view. People's willingness to use AI chatbots

to improve customer relationship management (CRM) is positively affected by their positive perceptions of these tools.

(Shaik et al., 2023). User satisfaction components include dependability and trustworthiness. When it comes to Al chatbots, users place great importance on their impression of dependability and trustworthiness because they want support and correct information (Yen & Chiang, 2021). Users' inclination to adopt Al chatbots for customer relationship management is positively impacted by their perception of these technologies as dependable and trustworthy.

Users' impressions of AI chatbots as dependable and trustworthy in Customer Relationship Management (CRM) are greatly influenced by the interaction of User Experience and Satisfaction (Zhang & Kamel Boulos, 2023). People's propensity to use AI chatbots to improve customer relationship management is positively impacted by their positive perceptions.

This rationale supports the notion that including User Experience and Satisfaction benefits the Intention to Use AI Chatbots to enhance Customer Relationship Management (Nicolescu & Tudorache, 2022). The satisfaction of users with AI chatbots in the context of CRM is influenced by several factors, including positive interaction experiences, task performance efficiency and effectiveness, adaptability and personalization, and trust and reliability (Alnofeli et al., 2023). These factors collectively contribute to users' overall satisfaction and subsequently influence their intention to use AI chatbots to enhance CRM.

Hypothesis 4: User Experience and Satisfaction (UES) involvement positively impacts the intention to use an Al chatbot (IUAC) to enhance customer relationship management.

3. Methodology

3.1. Approach

This research used quantitative and inductive reasoning based on customer relationship management.

3.2. Research design

This study used a cross-sectional research design to investigate the impact of multiple factors on enhancing customer relationship management.

3.3. Measurements

To evaluate the elements of the framework, this study used a 5-point Likert scale (1="Strongly Agree" to 5="Strongly Disagree"). This study included three constructs: User Acceptance and Trust, Perceived Utility and Ease of Use (PUEU), Communication Effectiveness (CE), User Experience and Satisfaction (UES) and the intention to use AI chatbots. The scale used to measure these constructs has been adapted from previous studies and aligned theories.

3.4. Sample

The researchers were advised to use G*Power (3.1.9.4) software to calculate the initial sample size estimate. This study used a significance level of 5% and a medium effect size estimate of 0.15. To conduct this examination, it was important to have a minimum sample size of 180 cases. Upon careful consideration of numerous variables, researchers determined that 230 people were expected to participate in this investigation.

3.5. Data collection

In this study, users of an AI chatbot (IUAC) used by medium-sized and large organizations in Asia, Europe, and Africa engaged with researchers. Emails were distributed to 860 participants who self-identified as reputable organizations in Asia, Europe, and Africa using a random sampling methodology. Furthermore, 230 individuals who used AI chatbots for various corporate communication goals were included in the

sample. Additionally, a self-administered questionnaire (SAQ) was created for this research. Google Docs was used to conduct the surveys. To collect data, the questionnaire was distributed to the respondents via email, Facebook, Twitter, WhatsApp, and other channels. A hyperlink to the questionnaire was distributed to the participants, which was created using Google Docs.

4. Results

4.1. Respondents' demographics profile

The poll posed 20 guestions regarding sustainable ways to enhance AI chatbot performance in customer relationship management. This study's demographic profile covered a wide range of variables, including age, gender, marital status, and educational attainment. Table 1 provides a summary of the participants and includes their demographic data.

Of the 230 individuals who took part in the poll, a smaller percentage were female (36%) than male (63%). The majority of the participants (40%) were in the 26-35 age bracket. The corresponding percentages for the remaining age groups (18-25 and 36-45 years) were 8% and 15%, respectively. Regarding respondents' marital status, 81.5% were classified as married, and the remaining participants (17.5%) were classified as single. In terms of the participants' educational background, 2% had a diploma, 40% had a bachelor's degree, 25.5% had a master's degree, 23% had a PhD, and 9.5% had other degrees.

4.2. Measurement model

This study employed the methods described in the discriminant validity approach. The convergent validity of the suggested method was evaluated by computing the Cronbach's alpha and composite reliability values.

4.2.1. Exceptions, multicollinearity, common method bias

By considering the distance from the Mahalanobis values that were less than the 0.001 threshold, this investigation was conducted to identify outliers. One outcome was removed from consideration because it was found to be an outlier in the current analysis. After the investigation was completed, 230 patients were included in the additional study.

A variation unrelated to a construct was associated with a common method bias test. This variation includes both the variance resulting from the assessment method itself and that arising from the measured constructs. The common method variance was shown to be the cause of a cumulative variance of 36.801%, which was less than the 50% criterion. Therefore, it can be said that the data obtained are unaffected by the variance in the common technique.

Using SPSS, regression analysis was performed on each independent variable to obtain this result. For the variable, a threshold of 5.0 or higher is deemed appropriate, while a maximum tolerance level of 0.20 is deemed good. This suggests the presence of multicollinearity. The multicollinearity company results are outlined in detail in Table 2, which offers a thorough summary of the findings.

Because all the independent variables in the sample had Variance Inflation Factor (VIF) values less than 5, Table 2 demonstrates that none of the independent variables showed any significant multicollinearity. As the tolerance values were greater than 0.20, the conclusion that multicollinearity was absent was strengthened. Therefore, multicollinearity was not an issue in the analysis.

4.2.2. Discriminant validity, average variance extracted, and reliability

The outer loadings of an indicator can be used to quantify its reliability as they indicate the proportion of the observed variance in the hand that can be accounted for by the underlying component. The composite reliability values of the study were deemed satisfactory as they exceeded the 0.7 cutoff point in Table 3 and Figure 2. The current analysis indicates that the latent variable's average variance extracted (AVE) values, as displayed in Table 3, are greater than the predefined limit of 0.50.

Fornell-Larcker is a remedy for detecting discriminative validity. The Fornell-Larcker value resulted in the absence of discrimination, as shown in Table 4.

Table 1. Demographic Characteristics of the respondents (n=230).

		Frequency	Percent
Gender	Male	145	63
	Female	82	36
	Not to say	3	1
Age	18–25	92	40
	26–35	58	25
	36–45	44	19
	46 and above	36	16
Academic Degree	Diploma	5	2
	Bachelor	92	40
	Masters	59	25.5
	PhD	53	23
	Others study	21	9.5
Married	Married	187	81.5
	Unmarried	40	17.5
	Not to say	3	1

Source: Author's own creation.

Table 2. Collinearity Statistics.

Dependent variable	Independent variable	Tolerance	VIF
Intention to use AI chatbot	Communication Effectiveness	.798	1.121
	Perceived Utility and Ease of Use	.877	1.222
	User Acceptance and Trust	.812	1.131
	User Experience and Satisfaction	0.779	1.321

Source: Author's own creation.

Table 5 displays the correlations between the variables. Hypothesis 1 was confirmed because of the strong correlation between Communication Effectiveness and Intention to use AI chatbots. Hypothesis 2 was supported by the significant link between the intention to employ AI chatbots and their perceived utility and ease of use. Similarly, there was a strong association between the intention to use an AI chatbot and Acceptance and Trust, thus supporting Hypothesis 3. Likewise, Hypothesis 4—the substantial relationship between Experience, Satisfaction, and Intention to Use AI Chatbot—was verified.

4.3. Structural model

Significant results were found for t-values greater than 1.96, whereas *p*-value of 0.05 or below was regarded as appropriate or supported. Figure 3 depicts the study's conceptual model, which includes the hidden external mechanisms of the independent variables (perceived utility and ease of use, PUEU; User Acceptance and Trust; CE; and User Experience and Satisfaction; UES) that influence the dependent variable (intention to use AI chatbots to streamline business processes).

Table 5 presents a structural model illustrating the proposed interactions. based on the information presented in Table 5 and Figure 3. This study examines the association between the intention to use Al chatbots (IUAC) to improve customer relationship management and the following variables: perception of utility and ease of use (PUEU), communication effectiveness (CE), user experience and satisfaction (UES), and user acceptance and trust (Piabuo et al.).

5. Discussion

The findings show a strong positive correlation between the intention to use an AI chatbot (IUAC) to enhance customer relationship management, and the degree of User Acceptance and Trust participation (Hypothesis 1). The results of this investigation are consistent with those of previous studies by Behera et al., Ma and Huo, and Meyer-Waarden et al. (2020). The reduction in users' perceived risks associated with the usage of AI chatbots in customer relationship management (CRM) is significantly impacted by the convergence of user acceptance and trust. Consequently, this increases the users' propensity to embrace these technologies. People who embrace AI chatbots can positively impact their friends, coworkers, and other acquaintances by endorsing technological advancement (Mostafa & Kasamani, 2022).

A favorable environment for the general adoption and application of AI chatbots in the context of customer relationship management (CRM) may be fostered by positive social impacts. Building

Table 3. Construct's reliability and details.

Constructs	Items	Loadings	Composite reliability	AVE
Communication effectiveness	CE1	0.953	0.974	0.902
	CE2	0.951		
	CE3	0.948		
	CE4	0.947		
Intention to use AI chatbot	IUAC1	0.948	0.977	0.915
	IUAC2	0.964		
	IUAC3	0.962		
	IUAC4	0.952		
Perceived utility and ease of use	PUEU1	0.963	0.977	0.913
•	PUEU2	0.946		
	PUEU3	0.962		
	PUEU4	0.952		
User acceptance and trust	UAT1	0.950	0.975	0.906
·	UAT2	0.947		
	UAT3	0.957		
	UAT4	0.953		
User experience and satisfaction	UES1	0.937	0.969	0.888
•	UES2	0.952		
	UES3	0.932		
	UES4	0.947		

Source: Author's own creation.

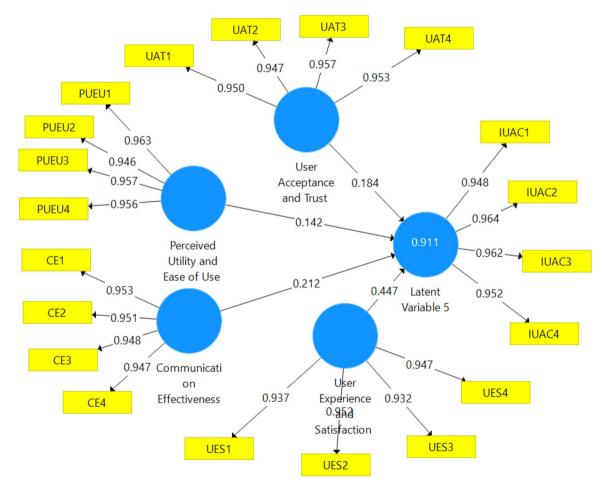


Figure 2. Measurement model. Source: Author's own creation.

trustworthy relationships with an AI chatbot is crucial to encouraging positive word-of-mouth referrals and influencing social media. People with a high degree of faith in technology are more likely to encourage the use of AI chatbots.

People who use artificial intelligence (AI) chatbots are more likely to have positive and easy interaction experiences. User experience is greatly improved when AI chatbots are incorporated into customer

Table 4. Fornell-Larcker ratio of discriminant validity.

	1	2	3	4	5
1. Communication effectiveness	0.950				
2. Intention to use AI chatbot	0.927	0.957			
3. Perceived utility and ease of use	0.897	0.898	0.955		
4. User acceptance and trust	0.919	0.916	0.933	0.952	
5. User experience and satisfaction	0.938	0.937	0.883	0.907	0.942

Source: Author's own creation.

Table 5. Assessment of path model.

Hypothesis	Relationships	Beta values	SD	T values	P values	Findings
H1	Communication Effectiveness -> Intention to use AI chatbot	0.212	0.090	2.352	0.019	Supported
H2	Perceived Utility and Ease of Use -> Intention to use Al chatbot	0.142	0.072	1.969	0.050	Supported
H3	Acceptance and Trust -> Intention to use AI chatbot	0.184	0.086	2.128	0.034	Supported
H4	Experience and Satisfaction -> Intention to use Al chatbot	0.447	0.094	4.734	0.000	Supported

Source: Author's own creation.

relationship management (CRM) strategies (Mostafa & Kasamani, 2022). Building user confidence in an Al chatbot's abilities helps enhance a positive user experience. When User Acceptance and Trust come together, the result is definite social influence. Users can express their desire to adopt AI chatbots to improve Customer Relationship Management (CRM). According to Mozafari et al., the reasoning behind the inclusion of User Acceptance and Trust has a positive impact on the Intention to Use AI chatbots to improve customer Relationship Management.

The interplay between these attributes contributes to a pleasant user experience, perceived utility, reduced perceived risk, and beneficial social impact. Together, these factors impact users' intentions to employ AI chatbots for customer relationship management (CRM) purposes.

Hypothesis 2 states that the intention to use Al chatbots (IUAC) to improve customer relationship management is influenced by perceived utility and ease of use (PUEU). A few studies agree with this hypothesis. They revealed that people who see AI chatbots as useful tools that offer extra advantages for customer relationship management are more likely to consider the technology relevant to their needs. Even with our findings, consumers' understanding of how AI chatbots can enhance their customer relationship management (CRM) processes is significantly influenced by their perception of the usefulness. The usability of a technology directly correlates with its practicality. Users are more likely to see Al chatbots as useful tools for their daily tasks if they find them simple to navigate and incorporate into their CRM routines.

Similarly, customers' positive perceptions of AI chatbots as useful and practical tools for enhancing customer relationship management are greatly influenced by their perceptions of their perceived utility and simplicity of use. The way people perceive AI chatbots greatly influences their willingness to use them in the context of customer relationship management (CRM), which is consistent with the findings of the current study.

The hypothesis also addresses a related result that has been mentioned, suggesting that customers' intention to incorporate AI chatbots into their customer relationship management (CRM) strategies is significantly influenced by their perception of the technology's utility and convenience. The Technology Acceptance Model (TAM) theoretical framework, which emphasizes the importance of perceived usefulness and simplicity of use as critical variables influencing technology adoption, is incorporated into the argument. The hypothesis's expected outcome is to support the idea that people who view AI chatbots as beneficial and easy to use are more likely to show a favorable propensity to employ these technologies to enhance customer relationship management. The results of this study are consistent with another study that examined the factors that affect users' desire to use AI chatbots in customer relationship management (CRM) settings. This study focuses on perceived utility and ease of use (Nicolescu & Tudorache, 2022).

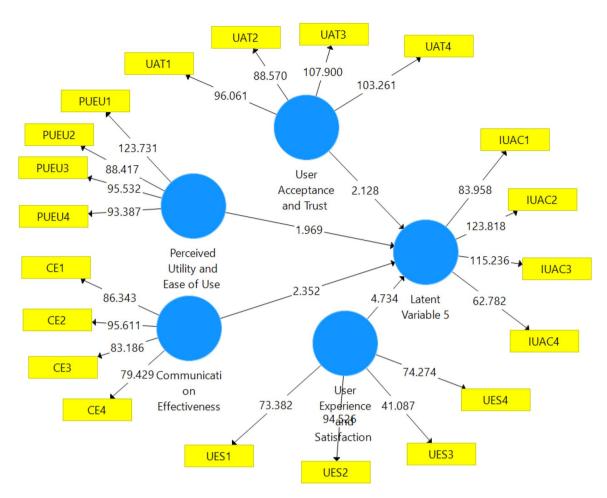


Figure 3. Structural model. Source: Author's own creation.

Users judge AI chatbots to be efficient in enhancing customer relationship management when their conversations are clear, succinct, and easy-to-understand (Hypothesis 3). Consistent with our prediction, Zhou et al. found that users' faith in the chatbot's ability to communicate information accurately and effectively is largely shaped by the efficacy of communication. People are more likely to express willingness to use AI chatbots for customer relationship management (CRM) goals when they have a clear understanding of their experience, which provides the basis for our current study. Excellent communication has a positive effect on people's trust in technology for customer relationship management.

Customers' positive perceptions of AI chatbots' ability to interact successfully within the context of customer relationship management (CRM) are significantly shaped by the combined influence of communication effectiveness. Similar to our findings, people's willingness to use AI chatbots to handle client relationships is greatly impacted by their positive perceptions of them.

According to current theory, customers' perceptions of the effectiveness of AI chatbot communication significantly influence their propensity to use these technologies in customer relationship management (CRM) strategies.

This claim is supported by the idea that efficient, timely, and customized communication improves users' general satisfaction and trust in Al chatbots used to support customer relationship management (CRM) goals and advance our goals (Rafiq et al., 2022). The hypothesis's expected outcome is to corroborate the idea that people who view AI chatbots as adept communicators that provide clear, fast, and customized interactions are more likely to show a positive propensity to use these technologies to enhance customer relationship management. Related researchers have revealed factors that affect users' intention to utilize AI chatbots in customer relationship management (CRM) environments, with a particular emphasis on the efficacy of communication (Nicolescu & Tudorache, 2022).

The intention to use Al chatbots (IUAC) to improve customer relationship management is positively impacted by User Experience and Satisfaction (UES) involvement (Hypothesis 4). The present findings are consistent with those of other researchers who have observed that user experience and satisfaction (UES) engagement has a beneficial impact on the intention to use Al chatbots (IUAC) to enhance ageing. Validating the idea that people who perceive positive interactions, efficiency and effectiveness in task performance, adaptability and personalisation, as well as trust and reliability with Al chatbots, are more likely to show a positive intention to use these technologies to improve customer relationship management is the expected outcome of this hypothesis (Shaik et al., 2023; Yen & Chiang, 2021; Zhang & Kamel Boulos, 2023).

Alnofeli et al. (2023) found a comparable outcome that influences users' desire to use Al chatbots in customer relationship management (CRM) settings, with a focus on user experience and satisfaction.

In line with our study findings, users place high value on exceptional AI chatbot engagement experiences, where the technology facilitates smooth and engaging conversations. A favorable user experience has a major impact on the overall degree of satisfaction. Customers' intention to use AI chatbots for customer relationship management is influenced by positive interaction experiences. When users have a favorable overall experience with the chatbot, there is a greater likelihood that they will display good intentions.

According to Alnofeli et al. (2023), Jiang et al., and Rane, our findings strongly suggest that the intersection of User Experience and Satisfaction plays a pivotal role in shaping consumers' perception of Al chatbots as effective facilitators of positive engagement experiences within the context of Customer Relationship Management (CRM). People's willingness to use Al chatbots to enhance customer relationship management is positively impacted by their positive view of them (Shaik et al., 2023). According to Dwivedi et al., users place high value on Al chatbots because of their ability to improve the efficiency and efficacy of task execution. A small number of academics hold the opposite opinion, claiming that using technology to help people accomplish activities and reach their goals has been shown to greatly increases their overall level of pleasure.

6. Study Implications

The results of this study emphasize the importance of placing people first when creating Al chatbots for customer relationship management. By prioritizing user satisfaction and fostering a positive user experience, businesses can optimize the advantages of artificial intelligence chatbots for customer relationship management.

6.1. Practical Implications

Businesses developing AI chatbots may use these findings to enhance the architecture and functionality of their systems. We can create more effective AI chatbots for customer relationship management if we can understand what makes people happy. This makes sense for businesses to incorporate user-centric strategies into their customer relationship management processes. Tailoring AI chatbot interactions based on user expectations and preferences can lead to increased user satisfaction. One practical ramification is the need for continuous improvement. Businesses should regularly upgrade their AI chatbots and incorporate feedback systems to keep up with client demands and technological advancements

6.2. Social implications

This study emphasizes the human element of customer relationship management (CRM), contending that positive encounters with AI chatbots can strengthen relationships with customers. Businesses can leverage this data to create positive customer connections by using creative and user-friendly software. Reliability and credibility must be prioritized when developing AI with a social conscience. Businesses should consider how AI chatbots impact customer trust and dependability to guarantee ethical data use

and truthful communication. Socially responsible AI design considers the inclusivity to make AI chatbots accessible and suitable for a wide range of users. By expanding access to new technology, this inclusion has a positive impact on society.

6.3. Educational implications

These findings can be incorporated into curriculum development in fields such as customer relationship management, user experience design, and artificial intelligence in educational institutions. A realistic understanding of AI chatbots is beneficial for preparing students to meet industrial demands. This study highlights the importance of considering ethics when using Al. Programmes for business and technology education might include ethics-related discussions to emphasize the significance of developing and utilizing AI in an ethical manner. It would be beneficial to incorporate this study's theoretical and practical conclusions into training curricula for CRM and AI development specialists. Continuous training in user-centric design principles may be beneficial to industry. The conclusions have implications for education, theory, society, and real-world applications, among other fields. Stakeholders can responsibly and effectively integrate AI chatbots into CRM by considering these factors.

6.4. Managerial imprecation

This study also included the strategic alignment of Al Chatbots for business strategies and customer service. Most organizations are getting the learning point for advancing AI and machine learning to understand customer response capabilities better. Also, this study enlightens the staff on adequate training and development to manage and monitor the optimization and interaction with the customer and make critical viewpoints for managers. Additionally, this study's most effective use of AI chatbots provides a complete guideline for existing CRM systems that need more consistent communication with the manager. By expressing managerial implications, companies can enhance AI chatbots for effective CRM, foster robust connections, and achieve a viable benefit in the market.

6.5. Originality/value

The study considers user experience and overall pleasure in an effort to provide light on the subject beyond its component pieces. Using this approach, a more thorough comprehension of user behavior in an AI chatbot and CRM interaction can be achieved. This combination increases the distinctiveness of the study and widens its application to different fields. This study is unique in that it considered ethical factors. Developing trust and dependability in AI chatbot engagements contributes to the open dialogue currently occurring in the field of responsible AI development. This study offers knowledge that can be incorporated into UX and CRM classes, which is helpful for educators. Professionals and students who are curious about the challenges associated with adopting AI technology can also gain intellectual insights. By illuminating the processes at work when people interact with AI chatbots and customer relationship management systems, this study adds to the corpus of knowledge. It is a great addition to ongoing scholarly discussions owing to its value in advancing knowledge in this sector.

7. Conclusion

This study aimed to investigate the different factors that affect people's propensity to use AI chatbots to increase the effectiveness of customer relationship management. This analysis produced important results with implications for scholars, technologists, and enterprises. One notable conclusion emphasized the importance of user experience in influencing people's propensity to use AI chatbots. The success of customer interaction with chatbots depends on a positive, easy-to-use, and enjoyable user experience. People interacting with artificial intelligence-powered interfaces make it clear that a smooth and enjoyable experience is crucial. Users' willingness to accept AI chatbots for customer relationship management (CRM) has been found to be significantly influenced by the development of trust.

The perception of dependability plays a major role in building confidence in chatbot interactions, emphasizing the significance of ethical data usage practices, accurate responses, and transparent communication. Organizations that give top importance to these characteristics foster trust, which in turn positively influences user intentions.

The study's conclusions offer useful guidance for businesses that integrate Al chatbots into their customer relationship management plans. The end-user experience is prioritized, as seen by the focus on ethical considerations, user-centric design principles, and building trust inside businesses. This study has illuminated the moral issues that arise when people interact with Al chatbots.

In conclusion, our research successfully closed the information gap that currently exists regarding user attitudes and actions related to Al chatbots for customer relationship management (CRM). This study adds to the body of knowledge by shedding light on the variables that influence people's propensity to use Al chatbots; in advance of other research, the variables that were found to be significant in determining user intentions offer avenues for additional academic investigation. Prospective directions for future research include delving deeper into the complex relationships between emotional intelligence and Al chatbots, how user expectations are affected by technological advancements, and the importance of personalization in customer relationship management.

The study's multidisciplinary methodology, which draws from fields including behavioral intentions theory, ethics, and human-computer interaction, emphasizes the value of teamwork in understanding and advancing the field of artificial intelligence in customer relationship management. Future cooperative initiatives can improve knowledge sharing and produce all-encompassing viewpoints. Technological innovations and educational initiatives will make it possible for individuals to interact with Al chatbots with ease. Cooperation between businesses and academic institutions can be used to increase user literacy in the artificial intelligence (Al) space, which will help consumers feel more confident and in charge of their interactions with Al systems.

In summary, the factors that influence the propensity to employ AI chatbots for customer relationship management (CRM) are complex and comprise trust, ethical considerations, and user experience. Organizations must recognize the significance of these factors in the ever-changing business environment today to encourage positive user intent. Thus, in the age of artificial intelligence, customer relationship management will be enhanced.

7.1. Boundaries and future research

A sample that is not representative of the general population in terms of age, culture, and occupation may constrain the study. To ensure that the findings are applicable to different user groups, future research should aim to obtain a more representative sample. The results might not apply to other industries because the study was conducted in a particular setting or industry. Future studies should examine the specifics of Al chatbot adoption to identify the unique traits of certain industries. The short-term views of the users were the primary focus of this study. Longitudinal research may help us to better understand how Al chatbot users' attitudes, objectives, and experiences are changing.

When self-reported metrics are utilized, response bias and social desirability effects may manifest themselves. If observational data or objective measurements were employed in subsequent research, the outcomes might be more reliable. Rapid technological breakthroughs may cause some findings to become obsolete as AI chatbot capabilities increase. Adapting and reevaluating research methodologies are necessary to stay up-to-date with a rapidly evolving technology landscape. The primary goal of the investigation was to find correlations between variables. Future research should examine causal relationships to determine which interventions or variables lead users' intentions to change.

Further investigation into the nuanced concept of trust with regard to AI chatbots should be undertaken. Examining the functions of other trust-building elements, such as explainability, accountability, and transparency, would provide a more complicated picture. Conducting cross-cultural investigations would be beneficial for gaining a better understanding of how cultural variables impact the intention to use AI chatbots. This could inform culturally adaptive AI interfaces. Examine how customization is necessary for AI chatbots. By understanding how user pleasure and intent to use are impacted by interactions



that are customized to individual preferences, more individualized AI systems may be created. Examine the potential for integrating the emotional intelligence skills of AI chatbots. Investigating the effects of emotionally intelligent chatbots on user satisfaction and desire to use may yield new opportunities to enhance human-machine interactions.

Comparative studies to learn how other sectors use AI chatbots. Longitudinal research should be conducted as well as comparative studies among companies with varying customer service requirements to gain important insights into how Al chatbots are being received. Long-term evaluations may provide a more comprehensive view of Al chatbot adoption by highlighting the trends, evolving attitudes, and evolving preferences. Intervention studies were conducted to evaluate the effectiveness of various approaches to user happiness and satisfaction. Controlled interventions are frequently used by researchers to assess causation and offer practical recommendations to businesses.

Authors' contributions

Authors have contributed equally. Additionally,

Dr Mahadi Hasan Miraz-Original draft and Editing

Dr. Abba Ya'u-Editing

Dr Samuel Adevinka-Oio-Editing

Dr. James Bakul Sarkar-Data collection

Dr Mohammad Tariq Hasan-Analysis and editing

Md. Kazimul Hogue- Data collection and extraction

Dr Hwang Ha Jin-Monitoring and supervision

Consent statement

We have received verbal consent for the manuscript because the questionnaire clearly stated that their identity should not be reviled and not disclosed in the manuscript to the reviewers. The response was anonymous, and no identification of the consent was obtained from the participants.

Disclosure statement

All authors have no conflict of interest regarding the manuscript.

Ethical statement

The study was approved by the ethics committee of (United International University & Curtin University School of **Business**)

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Data availability statement

Dr Mahadi Hasan Miraz, among all the authors, is responsible for providing the data for the data availability statement. Data and materials supporting this work can be accessed upon reasonable request.

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Appendix

Constructs and items sources

Constructs	Items No	Items	Sources
User Acceptance and Trust	UAT 1	To what extent do you find using the Al chatbot to be effortless?	(Morgan & Hunt, 1994; Silva, 2015)
	UAT 2	To what extent do you suppose using an Al chatbot would augment your interactions?	
	UAT 3	Please indicate your level of satisfaction with the Al chatbot's user interface.	
	UAT 4	To what extent do you see the Al chatbot upholding privacy considerations?	
Perceived Utility and Ease of Use	PUEU 1	To what extent does the acquisition of proficiency in operating the Al chatbot come naturally to you?	(Chakraborty et al., 2018)
	PUEU 2	To what extent do you feel at ease utilising the AI chatbot interface?	
	PUEU 3	To what extent do you possess confidence in engaging with the Al chatbot?	
	PUEU 4	What is the probability of your future utilisation of the AI chatbot?	
Communication Effectiveness	CE 1	To what extent does the Al chatbot comprehend the user's inquiries or solicitations?	(Chakraborty et al., 2018)
	CE 2	Assess the precision of the responses supplied by the Al conversational agent.	
	CE 3	The tone and style of communication employed by the Al chatbot might be characterised as formal and professional.	
	CE 4	To what extent can you modify the AI chatbot's answers in response to your comments and requests for clarification?	
User Experience and Satisfaction	UES 1	Give the Al chatbot a general rating based on your experience.	(Morgan & Hunt, 1994; Silva, 2015)
	UES 2	Is the AI chatbot's UI easy to use and understand?	
	UES 3	In your opinion, how well does the Al chatbot comprehend and respond to your questions and requests?	
	UES 4	What level of satisfaction do you feel from the Al chatbot's responses?	
Intention to use Al chatbots	IUAC 1	Have you had any prior experience utilising a chatbot?	(Silva, 2015)
	IUAC 2	What is the frequency of your interactions with chatbots?	
	IUAC 3	What is the probability that you will utilise the Al chatbot in subsequent instances?	
	IUAC 4	To what extent does the AI chatbot's reaction time factor into your decision to use it?	

Source: Author's own creation.