

The Effect of AI Chatbot Perceived Usefulness and Service Convenience on Customer Loyalty with Mediating Role of Customer Experience in Travel Agency Services

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Abstract

This study aims to analyse the effect of perceived utility and service convenience on customer loyalty through customer experience as a mediating variable in the AI chatbot-based online travel agency services. The study employs quantitative research methods with an explanatory design. The data collection was carried out by distributing online questionnaires to 200 users of online travel agencies in DKI Jakarta who have interacted with AI chatbots in the last 6 months. Data analysis was performed using Partial Least Squares Structural Equation Modelling using SmartPLS 3. The study results provide that perceived utility and service convenience have a positive and significant effect on customer experience and customer loyalty. Customer experience also had a positive influence on customer loyalty and mediates the relationship between perceived utility and service convenience on customer loyalty. This finding confirms that customer loyalty is shaped not just by the functional benefits of chatbots but also by efficient, personal and accessible digital experiences. This study expands the use of the Stimulus-Organism-Response framework in the context of digital AI-based travel services in Indonesia.



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INTRODUCTION

The development of information technology in the 4.0 Industry Era is driving the digitisation of tourism services with AI-based chatbots to make travel agencies' services more efficient and personalised (Khan et al., 2023). Indonesia travel industry has been growing exponentially throughout 2010 to 2018, more than 71,4% of Indonesian people have used OTA to plan their travel (Setiawan & Widanta, 2021). The growth is backed by the increase of internet users and the broad accessibility of mobile internet (Winarko & Husna, 2020). The travel sector contributed an economic value of US\$ 25 billion, making it the second largest contributor to online business in Indonesia after e-commerce (Batam et al., 2023). The industry is booming, but facing a big challenge from customer loyalty. Unlike traditional agents that possess a static customer base, the digital ecosystem is characterised by a high degree of switching behaviour as customers are prone to compare offers from numerous platforms before completing a transaction (Saputra et al., 2022; Setiawan & Widanta, 2021). Many failures in creating a personal customer experience cause them to leave the platform (Setiawan & Widanta, 2021). Loyalty in the tourism industry is not just a result of transactional satisfaction but also of the emotional bonds developed via consistent and quality digital experiences (Ali et al., 2026). The inclusion of AI in digital marketing has become a vital strategy for travel agencies to enhance customer engagement, satisfaction, and loyalty through automated services that respond to customer needs and provide information, particularly in the context of global competition (Khan et al., 2023; Zhu et al., 2023). This phenomenon is driven by the need for 24 hour service, where the chatbot can answer complex queries, make

recommendations, and support real-time booking through messaging platforms (Ali et al., 2026). Chatbot has become a strategic solution to fill the need for efficiency and personalisation of services, where intuitive interaction would strengthen brand image and satisfaction and indirectly lead to long-term loyalty (Darmadji & Dewi, 2025). AI Chatbot is an automatic agent that can provide 24/7 assistance, quick response with multi-language services and reduce non-moneter customer sacrifice (Astuti et al., 2024; Khana et al., 2023; Rosyada & Hartono, 2025).

Perceived usefulness is one of the determinants of the effectiveness of this technology which refers to the degree to which customers believe that the use of chatbots will improve their effectiveness in planning and managing their trips. In the case of online travel agencies, perceived usefulness is the result of the interaction quality and the quality of information provided by the system (Zhu et al., 2023). As for AI services, if users have the feeling that the AI chatbot provides relevant information and helps them perform their tasks, it is a functional element or experience factor. This is a positive environmental stimulus (Rizomyliotis et al., 2022). Therefore, studies have proven that when customers feel that the chatbot provides clear added value, such as convenience in finding tickets or hotels, their trust and intention to buy will increase significantly (Zhu et al., 2023). It is also evidenced by the fact that the use of chatbots simplifies communication and organisation of travel, leading to an increased perception of usefulness and ease of use in the eyes of the customer (Rosman et al., 2023; Vujko et al., 2025). Therefore, perceived usefulness is the main predictor of chatbot adoption in the hospitality and tourism sector because the technology must be able to support customers' cognitive needs in making travel decisions along with ease of use and system intelligence (Pillai & Sivathanu, 2020).

Besides the usefulness, the service convenience as a factor of access easiness and efficiency influences the AI-based customer experience (Rosyada & Hartono, 2025), which emerges as a very influential dimension in determining customer experience in this high mobility era. Digital service convenience is about the time-saving and ease of access, meaning that customers can get help without geographical barriers or office hours (Trawnih et al., 2022). AI chatbot helps customers avoid the queue to get human service, saves time, and increases comfort, thus encouraging customers to engage with the brand during the service process (Trawnih et al., 2022). Kenyamanan, sebagai contoh, fitur desain teknologi atau implikasi teknis, merupakan input eksternal yang berada di bawah kendali penyedia layanan (Salem & Alanadoly, 2023). Therefore, service convenience directly affects the customer experience supported by AI, which ultimately affects customer loyalty and trust in the platform, without the element of convenience, any technology as advanced as it is will be difficult to be accepted by the market which greatly appreciates the efficiency of procedures and speed of response (Rosyada & Hartono, 2025).

Eventually, the importance of the usefulness and comfort of this service will mediate the development of a positive customer experience. The experience of the customer with the chatbot is multidimensional, since it includes sensory, intellectual, affective, behavioural and social aspects that are generated from the evaluation of competence, autonomy and connectivity during the interaction (Jiménez-Barreto et al., 2021). This is also seen through the personalisation provided by the chatbot as the most influential factor influencing users' positive attitudes, eventually improving the overall customer experience (Filrando et al., 2026). Therefore, customer experience is a cognitive and affective reaction that comes from interacting with an AI chatbot that shows that the attributes of the chatbot impact satisfaction and user experience, which acts as an important mediator before the emergence of engagement or loyalty (Cheng & Jiang, 2020; Magano et al., 2025). This experience is an internal evaluation of the extent to which the stimulus (utility and comfort) meets the user's needs (Saewanee et al., 2024). Customer experience is the bridge that transforms technical value such as, utility and convenience into emotional value which drives long-term loyalty (Khan et al., 2023).

This research applies the Stimulus-Organism-Response model to understand how external stimuli (AI Chatbot characteristics, including perceived usefulness and service convenience) affect the internal state or organism of a person (customer experience) and then trigger particular behavioural responses (customer loyalty). Features of a chatbot like usefulness and convenience serve as stimuli affecting customers' internal states (experience), which then elicits behavioural responses in the form of loyalty (Zhu et al., 2023). Comfort is also an important stimulus in the formation of customer experience so that non-disruptive services will create feelings of satisfaction and enjoyable experiences for users (Trawnih et al., 2022). One important thing is that satisfaction from customer experience becomes a mediating

variable between service convenience and loyalty, which acts as a bridge that turns technical efficiency into an emotional bond between the customer and the travel agent (Rosyada & Hartono, 2025). This experience is also the inner state of the customer, which is the primary factor of whether they will show loyalty as the ultimate response to the service (Khan et al., 2023). So, the management of travel agents needs to focus not only on the features of the chatbot but to build impressions as customers have good cognitive and affective experiences, they tend to make repurchases and show resistance to switch to competitors (Ali et al., 2026; Khan et al., 2023).

Although the adoption of AI chatbots in the online travel agency services is increasing, and the technology has proven to improve efficiency, responsiveness, personalisation, and ease of customer communication, previous research has still tended to conceptualise the chatbot as a service supporting technology, mainly focusing on operation-related aspects such as response speed, 24/7 support, real-time recommendations, and simplification of the booking process (Khan et al., 2023; Zhu et al., 2023; Ali et al., 2026). However, there are still few studies explaining how perceived usefulness and service convenience work together as the main stimulus in shaping customer experience and driving customer loyalty in the context of online travel agency. Most of the previous studies talked about the benefits of chatbot separately, for example, usefulness, convenience, satisfaction, or technology adoption, which have not fully explained the psychological mechanisms of customers in transforming the functional value of technology into meaningful digital experiences and long-term loyalty. Meanwhile, the Indonesian OTA industry is having high switching behaviour because customers are easy to compare prices, services, and cross-platform experience before transactions (Saputra et al., 2022; Setiawan & Widanta, 2021). Therefore, this research contributes to filling this gap by applying the Stimulus-Organism-Response framework to investigate the role of perceived usefulness and service convenience as a stimulus, customer experience as an internal customer condition, and customer loyalty as a behavioural response in AI chatbot service in online travel agencies.

METHODS

This research uses a quantitative approach that aims to explain the causal relationship between variables by testing hypotheses (Siratan et al., 2026). The object of research is focused on the perception of users about the usefulness of the technology (perceived usefulness), comfort of the service (service convenience), quality of the perceived experience (customer experience) and its level of loyalty (customer loyalty) to the service provider. The present study employs a purposive sampling technique to ensure that the sample taken is truly representative of the phenomenon being studied. The research population is users of the travel agency or online travel agency service who have used an AI chatbot in the process of searching for information, booking, schedule change, complaint, refund, or travel assistance services. This context is appropriate as the tourism industry extensively employs travel service chatbots for hotel bookings, travel suggestions, customer service, and real-time services (Wüst & Bremser, 2025). The criteria for the sample are divided into four, namely: the respondents must fall into the adult category (minimum 18 years) to ensure legal capacity and independence in making travel transactions, respondents are customers who have used travel agency platforms that provide AI chatbot features, respondents have interacted with AI chatbots as many as one time within the last six months, and there is a purpose of use of respondents when interacting with chatbots for example looking for information. While for the DKI Jakarta region is chosen to have the characteristics of the population with high mobility which fosters a large demand for internet technology so that the use of technology is no longer just a work facility, but it has become a lifestyle and needs the ease of mobility (Noviyarto, 2017). Furthermore, DKI Jakarta is the business and government hub and the highest urban population concentration in Indonesia so the majority of the head or branch office of big travel agencies are located in Jakarta so the access to the population of users of this service is much greater than other areas.

Sample size calculation is the criteria of Hair et al (2021) that suggests that the minimum ratio is 5 to 10 observations for each indicator of the variable used in the research model. This research uses 16 indicators so 160 respondents were identified and to increase the accuracy and reduce the risk of invalid data, researchers are targeting data collection of up to 200 respondents. Data were gathered via an online questionnaire sent out to respondents. The instrument of this research was measured by using 5 points Likert scale from strongly agree to strongly disagree (Anto & Siratan, 2026). In this study, variables

are also defined operationally to facilitate measurement in accordance with the predetermined research path, namely perceived usefulness, which describes the level of customer belief that the use of chatbots will increase the effectiveness of ordering (Zhu et al., 2023). Then service convenience that describes the customers' perception in minimising the time and effort in accessing the service (Trawnih et al., 2022). Customer experience as mediation as internal and subjective response of customers to multidimensional interaction with AI (Jiménez-Barreto et al., 2021). Then customer loyalty which describes customer commitment to reuse and recommend travel agency (Khan et al., 2023). Data analysis was performed using Partial Least Square Structural Equation Modelling method with SmartPLS 3 software because capable to test complex structural models with mediation variables without requiring strict assumptions of normal distribution (Hair et al., 2021), with analysis stages were outer model analysis and inner model analysis (Siratan et al., 2024).

RESULTS AND DISCUSSION

The demographic characteristics profile of the 200 respondents in this study shows that all respondents met the research criteria, namely being at least 18 years old and having used a travel agency platform equipped with an AI chatbot within the last six months for use in the DKI Jakarta area. Based on gender, the composition of respondents was relatively balanced. Male respondents numbered 99 people, or 49.5%, while female respondents numbered 101 people, or 50.5%. This composition indicates that the use of AI chatbots on travel agency platforms was not strongly dominated by either gender group. In terms of the highest level of education completed, the majority of respondents had a D4/S1 educational background, totaling 106 people, or 53%. Furthermore, respondents with a D3 education numbered 40 people, or 20%, those with an S2 education numbered 28 people, or 14%, those with a senior high school/vocational high school education numbered 20 people, or 10%, and those with an S3 education numbered 6 people, or 3%. This finding indicates that most respondents came from highly educated groups, suggesting that they tended to have adequate ability to access, understand, and evaluate AI chatbot-based digital services. Based on age, most respondents were in the 34 to 41-year age group, totaling 82 people, or 41%. The 26 to 33-year age group numbered 51 people, or 25.5%, followed by the 42 to 49-year age group with 45 people, or 22.5%. Meanwhile, respondents aged 18 to 25 years numbered 16 people, or 8%, and those aged over 50 years numbered 6 people, or 3%. This pattern indicates that the majority of AI chatbot users in the travel agency context came from productive age groups with relatively high mobility, work, and travel activity needs. The frequency of AI chatbot use also shows that respondents were fairly active users. A total of 89 people, or 44.5%, used the AI chatbot 2 to 3 times, 47 people, or 23.5%, used it 4 to 5 times, 39 people, or 19.5%, used it once, and 25 people, or 12.5%, used it more than 5 times. In terms of monthly income or expenditure, the majority of respondents were in the Rp9,000,000 to Rp9,999,999 category, totaling 82 people, or 41%, followed by the category above Rp10,000,000 with 69 people, or 34.5%. The main purposes of using travel agency platforms with AI chatbots were booking tickets or hotels, totaling 62 people, or 31%, searching for tour package information, totaling 45 people, or 22.5%, and seeking travel recommendations, totaling 36 people, or 18%. These data indicate that AI chatbots were more frequently used for transactional needs and travel information searches.

Tabel 1. Construct Reliability And Validity Results

Variable	Cronbach's alpha	Composite reliability (rho a)	Composite reliability (rho c)	Average variance extracted (AVE)
Customer Experience (CE)	0,905	0,911	0,933	0,778
Customer Loyalty (CL)	0,904	0,907	0,933	0,777
Perceived Usefulness (PU)	0,869	0,871	0,910	0,717
Service Convenience (SC)	0,891	0,898	0,924	0,752

Source: Data processed by the author (2026)

Table 1 indicates that all research variables have a high level of reliability and construct validity. The Cronbach’s alpha values were 0,905 for Customer Experience (CE), 0,904 for Customer Loyalty (CL), 0,869 for Perceived Usefulness (PU) and 0,891 for Service Convenience (SC), which showed good internal consistency. Composite reliability (rho_a and rho_c) are above 0.87 and 0.91 respectively, showing strong composite reliability (Hair et al., 2021). Additionally, the Average Variance Extracted (AVE) values were between 0.717 and 0.778, which were above the minimum threshold of 0.50. This indicates that each variable sufficiently explained the variance of its indicators, confirming the convergent validity of the research instrument (Hair et al., 2021). These results support the conclusion that the instrument can be used for further analysis.

Tabel 2. R-square Results

Variable	R-square	R-square adjusted
Customer Experience (CE)	0,462	0,456
Customer Loyalty (CL)	0,553	0,546

Source: Data processed by the author (2026)

Table 2 indicates the result of R-square analysis results, the variable Customer Experience (CE) has an R-square value of 0.462 and an adjusted R-square of 0.456, which means that customer experience can explain about 45-46% of the variation in Customer Loyalty (CL). Meanwhile, the Customer Loyalty (CL) has R-square 0.553 and adjusted 0.546. It means the ability of the model explains about 55% of total data variation. This value indicates that the model has moderate predictive power and that most of the variability is affected by other factors than the variables analysed (Hair et al., 2021).

Tabel 3. Heterotrait-monotrait ratio (HTMT) Results

Variable	Customer Experience (CE)	Customer Loyalty (CL)	Perceived Usefulness (PU)	Service Convenience (SC)
Customer Experience (CE)	0,882			
Customer Loyalty (CL)	0,706	0,881		
Perceived Usefulness (PU)	0,544	0,529	0,847	
Service Convenience (SC)	0,559	0,529	0,317	0,867

Source: Data processed by the author (2026)

Table 3, indicate the results of Heterotrait Monotrait Ratio (HTMT) testing show that all HTMT values between constructs are below the threshold of 0.90 ranging from 0.317 to 0.706. This result shows that every construct (Customer Experience, Customer Loyalty, Perceived Usefulness, and Service Convenience) has good discriminant validity. Therefore, each variable could empirically represent distinct concepts and was free from construct overlap (Hair et al., 2021).

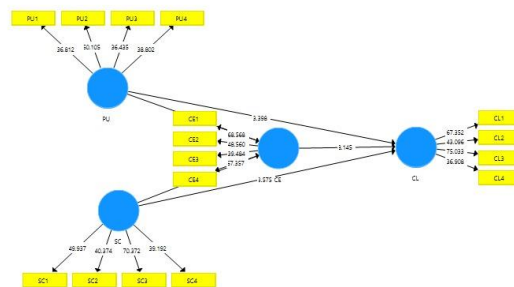
Tabel 4. Path Coefficients (Direct And Indirect Effect) Results

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
CE -> CL	0,488	0,488	0,060	8,145	0,000
PU -> CE	0,408	0,414	0,051	7,993	0,000

PU -> CL	0,202	0,205	0,059	3,398	0,001
SC -> CE	0,430	0,425	0,055	7,787	0,000
SC -> CL	0,192	0,194	0,054	3,575	0,000
PU -> CE -> CL	0,199	0,202	0,036	5,505	0,000
SC -> CE -> CL	0,210	0,207	0,037	5,665	0,000

Source: Data processed by the author (2026)

Table 4 indicate the result of path coefficient testing shows that all direct and indirect relationships in the model have a positive and significant effect. Customer experience has the greatest impact on customer loyalty ($O = 0.488$; $t = 8145$; $p = 0.000$), so improving customer experience is the main thing to improve loyalty. Perceived usefulness also significantly impacts customer experience ($O = 0.408$; $t = 7,993$; $p = 0,000$) and customer loyalty ($O = 0,202$; $t = 3,398$; $p = 0,001$). The results show that the benefits perceived by customers are not just positive experiences, but they have a direct impact on loyalty. Social commerce has a significant effect on customer experience ($O = 0,430$; $t = 7,787$; $p = 0,000$) and customer loyalty ($O = 0,192$; $t = 3,575$; $p = 0,000$). The indirect effect of PU and SC on CL through CE is also significant so that customer experience acts as an important mediator in the research model (Hair et al., 2021).



Source: Data processed by the author (2026)

Figure 1. PLS-SEM Model Results

The results of structural model analysis show that Perceived Usefulness (PU) and Social Context (SC) have positive and significant effect on Customer Experience (CE) with path coefficient of 3.396 and 3.575 respectively. In addition, Customer Experience (CE) exerts a positive impact on Customer Loyalty (CL) with a coefficient value of 3.145. The loading values for all indicators on each construct are high, indicating adequate convergent validity (Hair et al., 2021). This finding confirmed that the improvement of the perception of benefits and social support can strengthen the customer experience which will significantly improve customer loyalty.

The results of the hypothesis test (H1) show that perceived usefulness has a positive and significant effect on customer loyalty, this implies that relevant and accurate AI Chatbots can increase the cognitive satisfaction and loyalty of customers so that the quality of information and chatbot interactions affect the trust and purchase intentions of customers (Zhu et al., 2023). When customers experience tangible benefits of easy access to information and accuracy of travel options provided by AI systems, the customer’s trust in travel agents is enhanced, which in turn leads to long-term loyalty (Pereira et al., 2022). Thus, interaction with the chatbot not only helps to increase satisfaction but also directly becomes a key driver of repurchase intention and customer loyalty (Orden-Mejía et al., 2023). Furthermore, the efficiency in providing relevant information by the chatbot was shown to have a considerable impact on positive emotions and satisfaction that in turn affected future customers’ behavioural intention (Choi & Park, 2026). Other studies also found usefulness to be the most important predictor of adoption intention, where high utility in travel planning has been proven to be crucial for

customer retention (Pillai & Sivathanu, 2020). Hence, perceived usefulness serves as an important mediating mechanism in the relationship between information quality and purchase intention in the online travel agency ecosystem (Zhu et al., 2023).

Hypothesis testing result (H2) shows that perceived usefulness has positive and significant effect on customer experience. It means that in the context of travel agent services, the usefulness of the chatbot system is an important base for customer experience because of its capability to offer functional solutions to the users (Shawal et al., 2023). This is also evidenced by the fact that when chatbots are able to provide faster, accurate and personal assistance, this directly contributes to improving the overall quality of the customer experience (Kamal et al., 2025) making the success of technology in meeting the functional needs of customers, known as functional acceptance, proved to be a central domain that determines positive user experiences (Rizomyliotis et al., 2022). Along with the benefits felt through the efficiency of information access and pleasant interaction, not only facilitate the task of planning a trip but also directly shape the perception of a valuable and pleasant experience for customers when interacting with the travel agent service (Pereira et al., 2022).

The results of hypothesis testing (H3) indicate that service convenience has a positive and significant effect on customer loyalty, confirming that operational efficiency and ease of access offered by chatbots become a major driver for customers to maintain long-term relationships with service providers (Rosyada & Hartono, 2025). Moreover, the technology features offered by chatbots, including accessibility and interactivity, have been found to be positively correlated with increased customer loyalty in the tourism industry (Orden-Mejía et al., 2023). The dimensions of convenience and efficiency as the characteristics of chatbot service quality significantly influence customer loyalty by the mediating role of perceived value and cognitive and affective trust (Chen et al., 2023). The chatbot's ability to provide personalised and timely support as a main dimension of service convenience is, therefore, able to effectively promote customer loyalty (Khan et al., 2023).

The results of hypothesis test (H4) indicate that service convenience has a positive and significant effect on customer experience. It shows the ease and comfort provided by AI chatbot significantly enhances the quality of customer interaction (Wahbi et al., 2023). The comfort dimension of usability is instrumental in forming the cognitive experience of customers interacting with AI agents (Baabdullah et al., 2022). The responsiveness and efficiency of conversations available outside working hours as a clear manifestation of the 24/7 comfort of chatbots significantly improve the customer experience (Astuti et al., 2024; Khana et al., 2023; Ranieri et al., 2024; Rosyada & Hartono, 2025). The inherent features of comfort, ubiquity and interactivity associated with chatbot technology systematically enhance customer experience by providing optimal efficiency (Peruchini et al., 2024). Thus, the time efficiency aspect of service convenience allows customers to get the responses they need instantly, which in turn eliminates barriers on the customer journey and improves the quality of the experience overall (Trawnih et al., 2022).

The results of hypothesis test (H5) show that customer experience has a positive and significant effect on customer loyalty. This means that AI chatbot-based online travel agents confirm that the quality of perceived interactions by customers is a major determinant in forming emotional and cognitive bonds that support long-term loyalty (Claudius et al., 2025). The experience provided by AI chatbot in the service industry is not merely operational, but also a strategic asset that influences customer retention (Claudius et al., 2025; Darmadji & Dewi, 2025). When chatbots in providing personalised interaction makes customers feel more appropriate, which directly increases their loyalty level (Khana et al., 2023). Empirically, it has been shown that the perceived quality of AI services enhances cognitive and affective trust, leading to brand loyalty (Chen et al., 2023), and customers are prompted to engage in repeated interactions when presented with seamless and efficient experiences through AI technology (Singh, 2025). Therefore, it has been shown that a frictionless customer experience via chatbots can immediately

enhance customer satisfaction, a crucial factor for customers to stay loyal to the travel agency's services (Khan et al., 2023).

This research also proved that the role of customer experience mediates the relationship between perceived usefulness and customer loyalty, this indicates that the perception of customers to the usefulness of chatbots, such as its ability to solve problems or provide relevant information does not immediately create loyalty, but must go through the formation of positive customer experience first (Claudius et al., 2025). Secara teoritis, apabila pelanggan merasakan bahwa chatbot memiliki nilai guna yang tinggi maka hal tersebut akan memicu persepsi pengalaman yang baik yang pada akhirnya akan memperkuat loyalitas (Osman et al., 2025). In addition, this is also supported by the evidence that perceived efficiency as a part of AI chatbot usefulness becomes an important mediator in changing the functional perception into the loyalty outcome (Singh & Singh, 2024). The functional acceptance of users as a central domain in shaping positive customer experiences in technology-based interactions is confirmed when customers perceive the chatbot as a useful tool (Rizomyliotis et al., 2022).

This research also proves that customer experience plays a mediating role between service convenience and customer loyalty. It proves that when customers feel comfortable in digital services, the experience created tends to be more positive and efficient, thus strengthening customer loyalty intentions (Osman et al., 2025). The availability of chatbots to access customers when needed for acquiring information or help will improve the satisfaction which further will build loyalty through personalised service experience (Khana et al., 2023). Service Convenience has both direct and indirect effects on loyalty through the mediation of AI-enhanced service experiences (Rosyada & Hartono, 2025). In the end, the inclusion of service convenience that reduces the customer's effort offers a seamless experience that is consistently proven to increase the trust and long-term commitment of travel agency customers to the brand (Singh, 2025). Therefore, AI development Strategy must pay attention to humanistic and personalised aspects, not just technical aspects. The inclusion of elements of artificial empathy and a more natural language style can improve the quality of Customer Experience, which is the key to mediation towards long-term loyalty (Ali et al., 2026; Jiménez-Barreto et al., 2021).

CONCLUSION

The study concluded that AI chatbot plays a strategic role in building customer loyalty toward online travel agency services by shaping positive customer experience. Perceived usefulness and service convenience become important stimulus as customers evaluate the chatbot for practical benefits, ease of access, speed of response, relevance of information and system ability to assist the journey process. Customer experience is the inner engine that translates the functional value of technology into emotional and relational value. In the Stimulus-Organism-Response context, the usefulness and comfort of the chatbot services not only lead to positive evaluation towards the technology, but also reinforce the tendency of customers to continue using, recommend and maintain a relationship with the travel agency platform.

The managerial implications of the study suggest that managers of the online travel agency should consider AI chatbots as a part of customer service strategies but not as an automation tool. The management needs to ensure that the chatbot offers accurate, relevant, personal and simple to understand answers especially for ticket search, hotel booking, schedule change, refund, complaints and travel recommendations. Comfort in service must be improved too by simple interface design, fast response, a 24 hour service, multilingual support, and integration with human services when the chatbot cannot solve complex problems. Moreover, companies should continuously assess the quality of chatbot interactions based on customer feedback, complaint history, time to solve problems, and satisfaction levels after interaction. This strategy can help the platform to create a more seamless, trusted and competitive digital experience.

There are some limitations of this study. First, the study focuses on the scope of the users of online travel agency services in DKI Jakarta, so the generalisation to other regions in Indonesia must be done

with caution due to differences in digital literacy, travel behaviour, and access to online services. Second, the study adopted a quantitative approach based on survey data and thus could not deeply explore the emotional experiences, psychological reasons, and situational contexts of customers when they use AI chatbots. Third, the research model only looked at perceived usefulness, service convenience, customer experience and customer loyalty. The model does not include other factors such as trust, perceived risk, privacy concern, service recovery, price, platform reputation, and quality of human interaction.

Further research is suggested to expand the study to various big cities and tourist destinations in Indonesia to have a more comparative understanding of digital customer behaviour. Future research could also adopt a longitudinal approach to test whether customer loyalty remains stable after repeated chatbot usage. Mixed-methods approach is also relevant to explore customer experience in a more in-depth way, especially related to trust, service disappointment, switching behaviour and perception of AI personalisation. Moreover, future studies may extend the model by adding mediating or moderating variables such as trust, privacy concern, perceived risk, personalisation, emotional engagement and service recovery quality. The comparison of AI chatbot service and human-assisted service is also important to understand the preferences of Indonesian customers in the online travel agency ecosystem.

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