

Impact of Chatbot on Customer Loyalty in Nepalese Organization

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Abstract

This study examines the impact of chatbot on customer loyalty in Nepalese organization. Customer loyalty is the dependent variable. The selected independent variables are use of chatbot, chatbot responsiveness, chatbot personalization, customer service quality, brand reputation, and customer experience. The primary sources of data is used to assess the opinions of respondents regarding use of chatbot, chatbot responsiveness, chatbot personalization, customer service quality, brand reputation, and customer experience. The study is based on primary data of 124 respondents. To achieve the purpose of the study, structured questionnaire is prepared. The correlation and multiple regression models are estimated to test the significance and importance of impact of chatbot on customer loyalty in Nepalese organization.

The study showed that a positive impact of use of chatbot on customer loyalty. It indicates that using chatbot leads to change in customer loyalty. Similarly, chatbot responsiveness is positively correlated to customer loyalty. It indicates that better responsiveness stimulates the customer loyalty. Likewise, chatbot personalization is positively correlated to customer loyalty. It indicates that better personalization can stimulates the customer loyalty. Further, customer service quality is also positively related to the customer loyalty. It indicates that service quality leads to change in customer loyalty. Likewise, brand reputation is positively correlated to customer loyalty. It implies that good brand image leads to change in customer loyalty. In addition, customer experience is also positively correlated to the customer loyalty. It means that best experience of customer leads to change in customer loyalty.

Keywords: use of chatbot, chatbot responsiveness, chatbot personalization, customer service quality, brand reputation, customer experience, customer loyalty

1. Introduction

Chatbots use natural language processing and artificial intelligence technologies to understand and respond to user requests or questions. Chatbots can improve customer experience by providing personalized and instant responses to queries, which can lead to increased customer satisfaction and loyalty (Suresh *et al.*, 2020). A study found that customers are more likely to remain loyal to companies that provide personalized and proactive customer service, which can be achieved through the use of chatbots (Kim, 2018). Chatbots can help businesses save time and money on customer support, which can be reinvested into improving customer loyalty programs

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(Schumacher, 2021). Chatbots can improve the overall customer experience by providing real-time support and personalized recommendations, leading to increased loyalty and advocacy (Kietzmann *et al.*, 2018). Chatbots can be used to provide proactive customer service by anticipating customer needs and addressing them before they become issues, leading to improved loyalty and satisfaction (Kim, 2020). Chatbots can be an effective tool for service recovery, and that the perceived justice of the service recovery process positively influenced customer loyalty (Chitturi, 2019). According to Kim (2020), the inability of chatbots to effectively handle cultural nuances may lead to a decrease in customer satisfaction and loyalty in multicultural settings.

Wan (2018) examined the impact of chatbots disclosure on customer purchase intention. The study revealed that disclosure of chatbots usage increased customer trust, which in turn increased purchase intention. Similarly, Lee (2017) observed that the use of chatbots in education and their impact on student engagement and learning outcomes. The study found that chatbots can provide personalized learning experiences and increase student engagement. According to Wang (2021), the impersonal nature of chatbots may lead to a decrease in customer satisfaction and loyalty. According to Sood (2021), chatbots may not be able to effectively handle complex customer complaints, leading to a decrease in customer satisfaction and loyalty. Chatbots may not be able to provide accurate and relevant information to customers, leading to a decrease in customer satisfaction and loyalty (Yang, 2021). According to Chatterjee (2017), the use of chatbots may lead to a decrease in trust and loyalty among customers, particularly in industries where sensitive information is exchanged. The inability of chatbots to express empathy and understanding may lead to a decrease in customer loyalty in industries that require emotional support, such as mental health (Lee, 2021). Lee (2019) investigated the impact of chatbot empathy on customer loyalty in the hospitality industry. The study found that chatbots can offer immediate responses to customer queries, the lack of human touch may lead to a decrease in customer loyalty.

Huanj (2020) examined the impact of chatbot language proficiency on customer loyalty in multilingual settings. The study found that chatbots may not be able to fully understand the nuances of different languages and dialects, leading to communication barriers and a decrease in customer loyalty. The over-reliance on chatbots for customer service may lead to a decrease in human touch and personalized attention, which could result in a decrease in customer loyalty (Chunj, 2021). Likewise, Kim (2021) analyzed the impact of chatbot-human interaction preferences on customer loyalty in the banking industry. The study found that over-reliance on chatbots for customer service

may lead to a decrease in customer loyalty, as customers may prefer human interactions for more complex issues. Due to the lack of emotional intelligence in chatbots it may result in a decrease in customer satisfaction and loyalty (Huang, 2021). Sood (2021) investigated the impact of chatbot contextual understanding on customer loyalty in the education industry. The study found that the inability of chatbots to understand the context of customer queries may lead to a decrease in customer satisfaction and loyalty. Likewise, Huang (2021) examined the impact of chatbot transparency on customer loyalty in the automotive industry. The study found that the lack of transparency in chatbot decision-making processes may lead to a decrease in customer trust and loyalty. Moreover, Liu (2015) investigated the impact of chatbot legal knowledge on customer loyalty. The study found that the inability of chatbots to handle complex customer queries related to legal issues may lead to a decrease in customer loyalty in the legal industry.

Ahuja and Medury (2015) examined the impact of chatbots as a customer service channel on customer behavior, specifically focusing on the effects of chatbot personality and user experience. The study found that both chatbot personality and user experience have significant impact on customer behavior and loyalty when chatbots are used as a customer service channel. Similarly, Kim and Lee (2009) assessed the effects of trust in chatbot technology on user adoption of e-commerce service. The study found that trust in chatbot technology has a significant positive impact on users' adoption of e-commerce services. Likewise, Wu and Li (2015) analyzed the impact of chatbots on customer satisfaction in the insurance industry. The study found that the use of chatbots has a positive impact on customer satisfaction in the insurance industry. Likewise, Liu (2015) examined how chatbot disclosures affect customer purchase decisions. The study found that when chatbots disclose the identity of customers, customers are more likely to purchase products from the chatbot, whereas when chatbots do not disclose their identity, customers are less likely to make a purchase. Similarly, Hwang (2017) assessed the impact of chatbots on customer loyalty with the moderating role of gender as the topic. The study found that chatbot usage has a positive effect on customer loyalty and that this relationship is stronger for female customers. Likewise, Yan and Cho (2014) examined the impact of chatbots on customer perceptions of online service quality, focusing on conversational control and conversational symmetry. The study found that conversational control and conversational symmetry both have significant positive effects on customer perceptions of online service quality. In addition, Yang and Park (2016) assessed the impact of chatbots on customer loyalty among mobile instant messaging application

users. The study found that chatbot usage has a positive impact on customer loyalty and perceived usefulness and ease of use positively affected chatbot usage. Similarly, Zhou and Lu (2011) examined mobile instant messaging user loyalty, specifically from the perspectives of network externalities and flow experience. The study found that both network externalities and flow experience have significant positive impact on user loyalty towards mobile instant messaging.

Wang (2021) examined the impact of chatbots on customer loyalty. The study found that chatbots have positive influence customer loyalty through perceived usefulness, perceived ease of use, trust, and satisfaction, with perceived usefulness being the most influential factor. Similarly, Hwang (2019) analyzed the acceptance of chatbots on social media. The study found that personality, interaction, and social presence had significant effects on chatbot acceptance. Likewise, Almansour (2020) analyzed the impact of chatbot-human interaction on customer loyalty in the banking sector. The study found that chatbot-human interaction has a positive impact on customer satisfaction, trust, and perceived ease of use. Further, Chew (2019) assessed the impact chatbots and customer service. The study found that chatbots can enhance customer satisfaction and loyalty, as well as increase customer retention. Likewise, Zhang (2019) determined the impact of chatbots on customer experiences. The study found that use of chatbots positively affects customers' perceptions of service quality, trust, satisfaction, and loyalty, indicating that chatbots can improve customer experiences in hotel booking services. Chen (2018) examined the impact of chatbots on customer engagement and customer experience in the banking sector. The study found that chatbots have a positive impact on customer engagement and customer experience. Moreover, Boughzala (2017) examined the roles of social presence and chatbot quality in enhancing users' satisfaction and loyalty in the context of chatbot interactions. The study found that social presence and chatbot quality have positive effects on user satisfaction and loyalty. Further, Kim (2020) examined the impact of chatbot usage on hotel guests' perceived value, satisfaction and loyalty. The study found that chatbot usage has a positive impact on perceived value, satisfaction, and loyalty of hotel guests. Likewise, Arora (2021) examined the impact of chatbots on customer loyalty. The study found that chatbots have significant and positive impact on customer loyalty which is mediated by customer satisfaction and trust in chatbots. Further, Mishra (2018) assessed the impact of chatbots on customer loyalty. The study found that chatbots have positive impact on customer satisfaction and perceived service quality which in turn leads to

increased loyalty.

In the context of Nepal, the lack of Nepali language support in chatbots may lead to a decrease in customer satisfaction and loyalty among Nepali-speaking customers (Khatiwada, 2021). According to Adhikari (2021), the lack of trust in chatbots among Nepali customers may lead to a decrease in customer loyalty in Nepalese organizations. Similarly, Sharma (2020) examined the impact of chatbot cultural intelligence on customer loyalty in the Nepalese tourism industry. The study found that the inability of chatbots to handle customer queries related to local Nepalese culture and customs may lead to a decrease in customer satisfaction and loyalty in Nepalese organizations. According to Shakya (2021), the lack of personalized recommendations and interactions in chatbots may lead to a decrease in customer loyalty among Nepali customers. Likewise, Gautam (2021) concluded that the lack of responsiveness and timeliness in chatbot interactions may lead to a decrease in customer satisfaction and loyalty among Nepali customers. Chatbot is becoming biggest challenges for Nepalese organizations.

Parajuli (2022) examined the scope of AI-embedded chatbot for customer interaction in the banking industry of Nepal. The study found that AI-embedded chatbots have the potential to provide convenient and personalized services to customers, improve customer satisfaction and retention which help banks to gain a competitive edge in the market. Similarly, Shrestha (2019) examined the impact of chatbots on Nepali account holders' banking experiences. The study found that chatbots have a positive impact on customer satisfaction and adoption of banking services among Nepali account holders. Likewise, Shrestha (2020) examined the impact of chatbots in Nepali industries. The study found that chatbots were found to be effective in improving customer service and reducing operational costs. Pudasaini (2021) examined the impact of chatbots in the banking industry. The study found that chatbots have a significant positive impact on customer satisfaction and their effectiveness depends on their features and meeting customer expectations. Similarly, Gautam (2021) examined the impact of chatbots in the banking industry. The study found that implementation of chatbots improved customer satisfaction and reduced response time. Shrestha (2019) examined the impact of chatbots in the Nepalese banking industry. The study found that chatbots are a potential solution for banks to improve customer service and reduce response time. Likewise, Shrestha (2020) examined the impact of chatbots in the Nepalese financial services industry. The study found that chatbots can improve customer experience in the financial services industry. Furthermore, Suvedi (2021) examined the impact and usage of chatbots in the Nepalese

banking industry. The study found that chatbots are increasingly being used in the Nepalese banking industry to provide quick and efficient customer service.

The above discussion shows that empirical evidences vary greatly across the studies on impact of chatbot on customer loyalty in organization. Though there are above mentioned empirical evidences in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The major objective of the study is to examine the impact of chatbot on customer loyalty in Nepalese organization. Specifically, it examines the relationship of use of chatbot, chatbot responsiveness, chatbot personalization, customer service quality, brand reputation, and customer experience with customer loyalty in Nepalese organizations.

The remainder of this study is organized as follows: section two describes the sample, data, and methodology. Section three presents the empirical results and final section draws the conclusion.

2. Methodological aspects

The study is based on the primary data which were collected from 124 respondents through questionnaire. The study employed convenience sampling method. The respondents' views were collected on use of chatbot, chatbot responsiveness, chatbot personalization, customer service quality, brand reputation and customer experience within Nepalese organization. This study is based on descriptive as well as causal comparative research designs.

The model

The model used in this study assumes that customer loyalty depends upon impact of chatbot. The dependent variable selected for the study is customer loyalty. Similarly, the selected independent variables are use of chatbot, chatbot responsiveness, chatbot personalization, customer service quality, brand reputation and customer experience. Therefore, the model takes the following form:

$$CL = \beta_0 + \beta_1 UC + \beta_2 CR + \beta_3 CP + \beta_4 CSQ + \beta_5 BR + \beta_6 CE + e$$

Where,

CL = Customer loyalty

UC = Use of chatbot

CR = Chatbot responsiveness

CP = Chatbot personalization

CSQ = Customer service quality

BR = Brand reputation

CE = Customer experience

Use of chatbot was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “I frequently interact with company’s chatbots”, “Chatbot are important for the customer service needs” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.772$).

Chatbot responsiveness was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “Chatbots respond to our inquiries very quickly”, “Chatbot responsiveness influence my decision to remain a loyal customer” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.708$).

Chatbot personalization was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “Chatbots understand our needs and preferences”, “Chatbot personalization influence my decision to remain a loyal customer” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.760$).

Customer service quality was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “The inquiries are resolved by the chatbots very quickly”, “The responses provided by Chabot are very helpful to me” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.822$).

Brand reputation was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “Customer perceive brand to be more trustworthy when organization use a chatbot for customer service”, “Chatbots positively impact customers overall experience with brand” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.810$).

Customer experience was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly

disagree and 5 for strongly agree. There are 5 items and sample items include “Customer’s experience with chatbots impact loyalty to brand”, “Customer prefer to use chatbot for customer service compared to other channels (eg. Phone, email etc.)” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.740$).

Customer loyalty was measured using a 5-point Likert scale where the respondents were asked to indicate the responses using 1 for strongly disagree and 5 for strongly agree. There are 5 items and sample items include “Use of chatbots positively impact customers loyalty to a brand”, “Intelligence of chatbot impact customer’s loyalty to company” and so on. The reliability of the items was measured by computing the Cronbach’s alpha ($\alpha = 0.838$).

The following section describes the independent variables used in this study along with the hypothesis formulation.

Use of chatbot

The use of chat bots in customer service interactions leads to increased customer satisfaction and reduced response time compared to traditional methods of customer support (Li, 2018). Shariff (2017) examined the impact of educational chat bots on student engagement and learning outcomes. The study found that use of chat bots in educational settings improves student engagement and learning outcomes. Similarly, Wang (2022) found that chat bot interactions positively impact customer perceptions of brand personality and brand loyalty in the fashion industry. Likewise, Abdullah (2020) found that use of NLP to enhance chat bot performance and improve customer experiences in various domains. Further, Pimmer (2018) found that use of chat bots in financial institutions improves customer trust and confidence in handling. Based on it, this study develops the following hypothesis:

H₁: There is a positive relationship between use of chat bot and customer loyalty in Nepalese organization.

Chat bot responsiveness

Improved chat bot responsiveness results in higher customer engagement on social media platforms (Song, 2020). Liu (2018) examined the impact of chat bot responsiveness on customer satisfaction in online shopping. The study found that chat bot responsiveness positively affects customer satisfaction in online shopping. Similarly, Kowal (2018) founds that chat bot responsiveness influences customer trust in online financial services. Likewise, Wang (2020) found that chat bot responsiveness influences customer perception of convenience. Further, Benton (2017) found that chat bot responsiveness

influences customer satisfaction with chat-based customer support. Based on it, this study develops the following hypothesis:

H₂: There is a positive relationship between chat bot responsiveness and customer loyalty in Nepalese organization.

Chat bot personalization

Chat bot personalization is the process of customizing the conversation, content, and recommendations provided by a chat bot to meet the unique needs, preferences, and characteristics of individual users (Alavi, 2018). Kadam (2017) investigated the influence of chat bot personalization on customer satisfaction in the context of online shopping. The study found that when chat bots provide personalized interactions and tailored recommendations to online shoppers, it leads to higher levels of customer satisfaction. Similarly, Kowal (2018) examined the impact of chat bot personalization on customer loyalty. The study found that when chat bots offer personalized experiences to customers in the e-commerce setting, it leads to higher levels of customer loyalty. Likewise, Chung (2019) found that when chat bots provide personalized experiences in online financial services, it influences customer trust. Based on it, this study develops the following hypothesis:

H₃: There is a positive relationship between chat bot personalization and customer loyalty in Nepalese organization.

Customer service quality

Customer service quality refers to the level of excellence in the interactions, support, and assistance provided by a company or its representatives to meet customer needs and expectations (Chen, 2018). Yang (2021) examined the relationship between customer service quality, customer satisfaction, and customer loyalty. The study found that higher customer service quality leads to increased customer satisfaction. Similarly, Chew. (2019) found that enhancing the quality of customer service has a positive impact on customer loyalty. According to Kim (2021), quality of customer service leads to higher customer retention rates. Similarly, Wang (2022) found that improving customer service quality fosters higher levels of customer trust. Likewise, Sood (2021) found that enhancing the quality of customer service contributes to higher customer lifetime value, which refers to the total value a customer brings to a company over their entire relationship. Based on it, this study develops the following hypothesis:

H₄: There is a positive relationship between customer service quality and customer loyalty in Nepalese organization.

Brand reputation

Brand reputation refers to the overall perception and evaluation of a brand's trustworthiness, credibility, and esteem among consumers and other stakeholders. Chen (2018) examined the impact of brand reputation and customer loyalty. The study concluded that positive brand reputation can enhance customer loyalty, attract new customers, and positively impact on business performance. Similarly, Chew (2019) found that consumers are more likely to engage with brands that have strong reputation through activities such as online interactions, word-of-mouth recommendations, and brand advocacy. Likewise, Liu (2015) found that when a brand with a positive reputation faces a negative event or crisis, consumers are more likely to forgive and maintain positive attitudes compared to brands with a weaker reputation. Based on it, this study develops the following hypothesis:

H₅: There is a positive relationship between brand reputation and customer loyalty in Nepalese organization.

Customer experience

Customer experience refers to the overall perception and impression that customers have during their interactions with a company or brand across various touch-points and throughout the entire customer journey (Mishra, 2018). Wang (2021) examined the customer effort and satisfaction. The study found that customers who have low effort experiences when resolving issues or making purchases reported higher levels of satisfaction. Similarly, Chung (2019) found that customers who reported a positive experience with a company's customer services are significantly more likely to repurchase from the company compared to those who had a negative experience. According to Wang (2022), customers who have a seamless experience across multiple channels, such as online, mobile, and physical stores, exhibited higher levels of loyalty towards the company. Similar, Kim *et.al.* (2009) examined the role of trust in customer relationships. The study found that customer experience has a positive impact on customer loyalty. Likewise, Arora (2021) found that customers who perceived a high level of trust in a company were more likely to have positive experiences, engage in repeat purchases, and maintain long-term relationships with the company. Based on it, this study develops the following hypothesis:

H₆: There is a positive relationship between customer experience and customer loyalty in Nepalese organization.

3. Results and discussion

Correlation analysis

On analysis of data, correlation analysis has been undertaken first and for this purpose, Kendall’s Tau correlation coefficients along with mean and standard deviation has been computed and the results are presented in Table 1.

Table 1

Kendall’s Tau correlation coefficients matrix

This table presents Kendall’s Tau coefficients between dependent and independent variables. The correlation coefficients are based on 124 observations. The dependent variable is CL (Customer loyalty). The independent variables are UC (Use of chatbot), CR (Chatbot responsiveness), CP (Chatbot personalization), CSQ (Customer service quality), BR (Brand reputation), and CE (Customer experience).

Variables	Mean	S.D.	CL	UC	CR	CP	CSQ	BR	CE
UC	4.032	0.727	1						
CR	4.071	0.737	0.517**	1					
CP	4.075	0.739	0.482**	0.531**	1				
CSQ	4.143	0.728	0.469**	0.494**	0.641**	1			
BR	4.061	0.707	0.507**	0.524**	0.564**	0.545**	1		
CE	4.087	0.729	0.667**	0.690**	0.737**	0.721**	0.706**	1	
CL	4.061	0.711	0.620**	0.484**	0.487**	0.517**	0.571**	0.627**	1

Note: The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent levels respectively.

Table 1 shows the Kendall’s correlation coefficients of dependent and independent variables for customer loyalty. The study shows that use of chatbot is positively correlated to customer loyalty indicating that using chatbot in organization leads to increase in customer loyalty. Likewise, chatbot responsiveness is positively correlated to customer loyalty. This implies that chatbot responsiveness leads to increase in customer loyalty. Similarly, chatbot personalization is positively correlated to customer loyalty. It indicates that personalization of chatbot leads to increase in customer loyalty. Further, customer service quality is also positively related to the customer loyalty indicating that customer service quality leads to increase in customer loyalty. Likewise, brand reputation is positively correlated to customer loyalty. It implies that higher level of trust towards the brand drives customer loyalty. Further, customer experience is also positively correlated to the customer loyalty. It shows that the proper and good customer experience stimulates customer loyalty.

Regression analysis

Regression analysis is a statistical process for estimating the relationships among variables. The regression results were estimated where use of catboats, chatbot responsiveness, chatbot personalization, customer service quality, brand reputation and customer experience are used as independent variables and dependent variable is customer loyalty.

The regression result of use of catboats, chatbot responsiveness, chatbot personalization, customer service quality, brand reputation, customer experience and customer loyalty in Nepalese organization is shown in Table 2.

Table 2

Estimated regression result of use of chatbots, chatbot responsiveness, chatbot personalization, customer service quality, brand reputation, and customer experiences on customer loyalty

The results are based on 124 observations using linear regression model. The model is $CL = \beta_0 + \beta_1 UC + \beta_2 CR + \beta_3 CP + \beta_4 CSQ + \beta_5 BR + \beta_6 CE + e$ where the dependent variable is CL (Customer loyalty). The independent variables are UC (Use of chatbot), CR (Chatbot responsiveness), CP (Chatbot personalization), CSQ (Customer service quality), BR (Brand reputation), and CE (Customer experience).

Model	Intercept	Regression coefficients of						Adj. R_bar ²	SEE	F-value
		UC	CR	CP	CSQ	BR	CE			
1	1.214 (4.835)**	0.706 (11.527)**						0.517	0.494	132.869
2	1.271 (5.006)**		0.685 (11.163)**					0.501	0.502	124.616
3	1.428 (5.346)**			0.646 (10.022)**				0.447	0.529	100.441
4	1.129 (4.408)**				0.708 (11.624)**			0.522	0.492	135.119
5	0.183 (0.829)					0.951 (18.895)**		0.743	0.360	357.011
6	0.977 (3.906)**						0.779 (14.593)**	0.636	0.429	215.891
7	0.858 (3.439)**	0.421 (4.763)**	0.370 (4.247)**					0.577	0.462	84.729
8	0.741 (2.927)**	0.372 (4.113)**	0.261 (2.558)*	0.186 (2.003)*				0.587	0.457	59.230
9	0.580 (2.312)*	0.289 (3.147)**	0.155 (1.478)	0.285 (3.023)**	0.124 (1.346)			0.613	0.442	49.720
10	0.19 (0.121)	0.426 (4.950)**	0.002 (0.26)	0.112 (1.353)	0.391 (4.203)**	0.142 (1.645)		0.641	0.40321	44.625
11	0.53 (0.347)	0.372 (4.476)**	0.60 (0.675)	0.119 (1.520)	0.372 (4.197)**	0.52 (0.611)	0.197 (3.677)**	0.676	0.38322	43.421

Notes:

- Figures in parenthesis are t-values.
- The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
- Customer loyalty is dependent variable.

Table 2 shows that the beta coefficients for use of chatbot are positive with customer loyalty. It implies that use of chatbot has a positive impact on customer loyalty. This finding is consistent with the findings of Chen (2018). Likewise, the beta coefficients for chatbot responsiveness are positive with customer loyalty. It indicates that chatbot responsiveness has a positive impact on customer loyalty. This finding is consistent with the findings of Chunj (2021). In addition, the beta coefficients for chatbot personalization are positive with customer loyalty. It indicates that chatbot personalization has a positive impact on customer loyalty. This result is consistent with the findings of Yang *et.al.* (2016). Further, the beta coefficients for customer service quality are positively related with customer loyalty. It indicates that customer service quality has a positive impact on the customer loyalty. This finding is consistent with the findings of Li (2018). In addition, the beta coefficients for brand reputation are positive with customer loyalty. It indicates that brand reputation has a positive impact on customer loyalty. This finding is similar to the findings of Suresh *et al.* (2020). The beta coefficients for customer experience are positive with customer loyalty. It indicates that customer experience has a positive impact on customer loyalty. This finding is consistent with the findings of Lee (2021).

4. Summary and conclusion

Chatbots improves customer loyalty by providing quick and convenient customer service, leading to increased customer satisfaction and retention. Chatbot has revolutionized the way people interact and gather information about the company or organization.

This study attempts to examine the impact of chatbot on customer loyalty in Nepalese organization. The study is based on primary data of 124 respondents.

The major conclusion of the study is that use of catboats, chatbot responsiveness, chatbot personalization, customer service quality, brand reputation and customer experience have positive impact on the customer loyalty in Nepalese organization. The study also concludes that brand reputation followed by customer experience is the most influencing factors that affects the customer loyalty in Nepalese organization.

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