

Chatbots in customer service: Analyzing their impact on consumer Satisfaction and brand loyalty

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Abstract:

This study proposes to examine the influence of chatbots in increasing brand loyalty and client satisfaction. Customer service chatbots can help in automating tasks that would be executed through customer service agents. Chatbots properly affect customer satisfaction and brand loyalty by offering reliable, immediate, and accessible support. The researcher has concentrated on conducting primary quantitative and secondary qualitative data analysis methods. In this research, a survey session was conducted by taking 251 participants from the retail, hospitality, and fashion industries. The analysis section highlights that the availability of chatbots 24*7 helps in solving conflicts of clients and provides fast service which enhances customer satisfaction. Moreover, the discussion section showcases that chatbots are considered an effective tool for providing better customer service. In the thematic analysis, three themes have been created to provide better knowledge about the influence of chatbots on brand loyalty and customer satisfaction. The usage of chatbots is emerging in the e-commerce and retail industry and customers have better faith in those brands which utilise chatbots.

Keywords: Chatbots, Brand Loyalty, Customer Satisfaction, Customer Service, Consumer.

1. Introduction

Customer service chatbots can support automating tasks that would otherwise be executed by consumer service agents. In addition, this frees up skilled workers for more value-added activities. A few instances of these tasks comprise consumer service inquiries, booking hotel reservations, and appointment setting. A customer service chatbot is a software application that utilises artificial intelligence (AI) to answer customer questions and automate routine tasks. By improving consumer satisfaction through streamlined procedures, personalised experiences along suitable support, chatbots can effectively impact main business metrics such as order value, conversion rates along consumer retention (Misischia, Poecze, & Strauss, 2022). Chatbots are effective for bringing customer satisfaction as this software application is 24*7 available and can offer quick responses to consumer queries.

There are several best practices support groups can utilise, however, one of the most effective options is to apply a customer service chatbot. In addition, chatbots diminish operating prices and boost support team efficiency and this can lead to improvements in consumer satisfaction. Chatbots can lessen wait times for consumers, permitting human agents to concentrate on more difficult tasks (Stoilova, 2021). Chatbots improve brand loyalty by offering personalised, instant support, addressing consumer queries rapidly, and creating a more seamless experience. Chatbots offer tailored recommendations, involve consumers with interactive content, and remember preferences. This study proposes to analyse the effect of chatbots on brand loyalty and customer satisfaction.

2. Literature Review

2.1 Utilisation of chatbots for client service

Chatbots are transforming client service by offering fast and better assistance, streamlining conflict resolution, and managing common queries. Chatbots can quickly access consumer data to offer customised support, making

connections more efficient. Chatbots, also known as “conversational AI applications”, are used to mimic human interactions for client service, appointment, and support purposes. The integration of Chatbots improves consumer satisfaction and brand loyalty by offering immediate information and help via a variety of channels, including voice assistants, messaging apps, and websites (Jenneboer, Herrando, and Constantinides, 2022). This software is powered by Artificial Intelligence as well as NLP or natural language processing which allows different sectors like retail, and hospitality to reduce the wait time and increase consumer evidence. According to Kyrylenko (2024), the retail of the hospitality sector integrated the chatbots by considering effective factors like speed and efficacy which allows them to provide consumer assistance without any delays.

With natural dialect processing, this software application can respond and understand conversationally, improving user experience (Zhang, Følstad, & Bjørkli, 2023). Moreover, through delivering constant, quick service, this software application can enhance consumer satisfaction and flexibly strengthen brand loyalty. The below statistics highlight the scope of the worldwide chatbot market in 2017 and provide a prediction of the anticipated market magnitude in the year 2024. In the year 2017, revenues of the chatbot market touched nearly 370 million US dollars and anticipates that this estimation will constantly cultivate quickly in upcoming years (Thormundsson, 2022) [Figure 1].

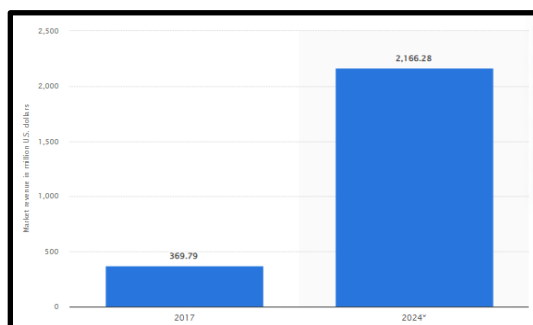


Figure 1: Extent of the chatbot market globally, Source: (Thormundsson, 2022)

Figure 1 represents the utilisation of the chatbot that is used globally in the business to support their operations resulting in fulfilling the Business KPI.

2.2 Influence of chatbots on client satisfaction and brand loyalty

Chatbots effectively affect brand loyalty and customer satisfaction by offering accessible, reliable, and immediate support (Jenneboer, Herrando, & Constantinides, 2022). This software application can personalise communications by remembering previous queries, which encourages a more tailored experience. 24*7 availability of chatbots makes sure consumers get timely assistance, diminishing frustration from lengthy wait times. As opined by Naqvi et al. (2024), by continuously meeting consumer expectations and improving convenience, chatbots support building trust within the brand [Figure 2]. Moreover, this reliability motivates consumers to return, fostering brand loyalty and optimistically influencing lengthy-term consumer satisfaction and relationships.

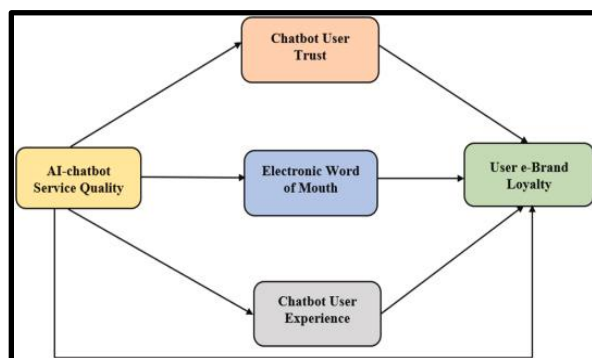


Figure 2: Influence of chatbots on client satisfaction and brand loyalty, Source: (Naqvi et al., 2024)

From Figure 2, customers are more likely to feel appreciated and content if chatbots offer prompt, pertinent support. On the other hand, sluggish, imprecise, or robotic reactions irritate people and make them unhappy. Customer happiness serves as the intermediary between brand loyalty and chatbots.

Relationship between factors like chatbots, consumer satisfaction, and brand loyalty

Chatbots are the first point of contact with customers, forming their initial perception of the business. Customer satisfaction levels are determined by how well they answer in a timely, accurate, and engaging manner (Shahzad et al., 2024). According to Rane, Choudhary, and Rane (2024), a well-performing chatbot improves customer happiness by providing a smooth user experience, individualized replies, and effective problem-solving. Positive feelings and trust are the outcomes of high satisfaction, which motivates customers to interact with the company more. Conversely, customer confidence in the company is weakened when chatbots fail to grasp inquiries, provide repeating responses, or provide a human handoff.

One of the factors integrated by the chatbot in the sectors that impact overall consumer satisfaction and brand loyalty is the feedback loop. In the industry, well-established chatbots include a positive feedback loop and the sequence is as follows:

Effective chatbots → Increased investment in chatbot upgrades → Greater customer happiness → Increased brand loyalty.

On the contrary Haugeland et al. (2022), connote that poor chatbot integration in the sectors creates issues in interacting with consumer satisfaction and leads to the chatbot's improvements. In order to effectively respond to consumer queries, NatWest implemented Cora, a virtual banking assistant (NatWest Group, 2024). Cora offers round-the-clock customer service, addressing frequently asked banking questions, assisting customers with transactions, and resolving problems without the need for human assistance.

2.3 Research objectives

- To highlight the efficiency of using chatbots for better client service.
- To inspect the role of chatbots in bringing better client satisfaction in business.
- To discuss the role of chatbots in bringing higher brand loyalty.
- To recommend a few ways which brands can adopt to utilise chatbots more effectively to improve their users' experience.

2.4 Research gap

After conducting the research, it has been understood that the past researchers have discussed the usage of chatbots however, they have not discussed how chatbots can be effective in increasing brand loyalty along with customer satisfaction. Thus, the researcher has focused on elaborating the effect of using chatbots on consumer satisfaction along with brand loyalty. Moreover, the research has focused on elaborating on the way chatbots can effectively be utilised to offer better consumer service.

3. Research Methodology

3.1 Study design

In order to execute this study, the researcher has focused on using the "descriptive study design". This study design is effective for this research as the researcher has focused on conducting a mixed method. This study design helps enable the researcher to gather actual information, identify patterns, get knowledge about relationships, and offer a robust foundation for generating future hypotheses, creating decisions, and further exploration based on real-world information (Siedlecki, 2020) [Figure 3].

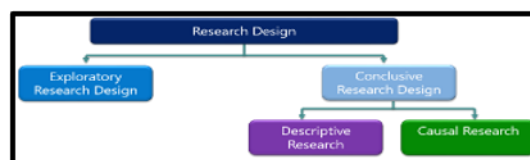


Figure 3: Research design, Source: (Siedlecki, 2020)

Based on Figure 3, this study design is effective for this research as it provides an in-depth, right portrayal of phenomena, characteristics, and behaviors rather than manipulating any variables.

3.2 Sample and instrument

In terms of conducting the primary quantitative study, it is necessary to assemble information from diverse participants to offer in-depth and extensiveness of information. In order to gather information from various members, a purposive sampling technique has been used. In addition, this sampling technique has been utilised as it permits researchers to select members based on specific traits or expertise appropriate to the study (Campbell et al. 2020) [Figure 4]. Utilising this sampling technique, the investigator has selected 251 individuals among 500 individuals. The other 249 members have been excluded from this research as they do not know about chatbots. The selected 251 members are taken from the retail, fashion, and hospitality industry. Moreover, the researcher has utilised a survey as a research instrument as this instrument provides quantitative data that might be properly analysed.



Figure 4: Purposive sampling, Source: (Campbell et al. 2020)

As per [Figure 4], on the contrary, the purposive sampling technique has been utilised for conducting secondary qualitative research. Moreover, this technique allows the research to effectively review several data sources which are documents and case studies, which are pertinent to the research questions. With the support of this sampling technique, six secondary research sources have been chosen and these selected sources are taken focusing on the research topic. The main instrument that is utilized for the secondary qualitative study is document analysis guides and these can support the investigator in examining articles, reports, and journals.

3.3 Method for data collection

The investigator has concentrated on both secondary qualitative and primary quantitative data collection methods. Secondary qualitative methods for data collection are effective as they leverage remaining information, saving resources and time. They permit investigators to analyse historical, rich data across several contexts and recognise trends without straightforward data collection (Hughes, Hughes, & Tarrant, 2020). The investigator has collected all the data from a few secondary sources mainly journals, websites, and newspaper articles, including articles. On the other hand, the researcher has selected a primary quantitative data collection method as it is suitable for capturing in-depth, authentic insights straightforwardly from diverse participants. In order to collect primary data from participants, the researcher has assembled 251 participants from the retail, fashion, and hospitality industries and these participants know about chatbots.

3.4 Method for Data Analysis

The investigator has decided to choose both quantitative and qualitative data analysis methods [Figure 5]. The investigator has been attentive to conducting primary quantitative analysis methods as this method is effective in recognising patterns, testing hypotheses along making generalisations from any numeric data. Furthermore, methods such as descriptive statistics and statistical analysis offer objective, precise insights, showcasing correlations and trends (Kimmons, 2022). The investigator has focused on executing a survey session by taking 251 participants from the retail, fashion, and hospitality industries. In order to conduct the survey, 14 questions have been formulated and among these questions 3 are demographic-based and 11 are variable-based questions.

The participants have given their responses to these questions based on a 5 Likert scale. In order to analyse data, a statistical analysis has been conducted with the support of SPSS software, and descriptive statistics, correlation,

ANOVA, and regression have been created based on the dataset. On the other hand, the investigator has also been attentive to conducting a secondary qualitative analysis method as this method is suitable to uncover new insights from all the existing information, enabling investigators to analyse contextual and historical viewpoints without extra data collection (Braun & Clarke, 2023).

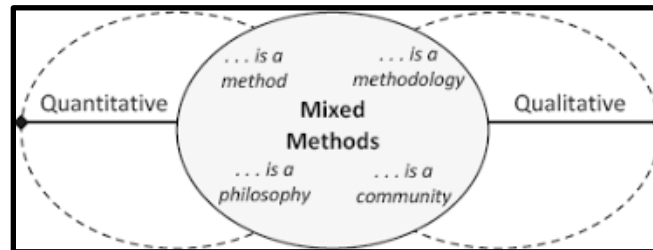


Figure 5: Mixed methods, Source: (Kimmons, 2022)

As per Figure 5, in order to analyse secondary qualitative data, the researcher has been attentive to conducting a thematic analysis creating a few themes based on the research topic.

Hypotheses

Positive Hypothesis: There is no impact of the application of Chatbots on consumer satisfaction and brand loyalty

Negative Hypothesis: There is a positive influence of the Chatbots integration on consumer satisfaction and brand loyalty

4. Results and Discussion

4.1 Primary Quantitative Analysis

4.1.1 Results

The descriptive data analysis is as follows:

Demographic questions

1. What is your age?

Table 1 represents the age group of participants involved in the survey session,

Table 1:Age, source: Self-made

1. What is your age?

	Frequency	Per cent	Valid Percent	Cumulative Percent
Valid 24-34	42	16.7	16.7	16.7
35-46	102	40.6	40.6	57.4
47-57	83	33.1	33.1	90.4
58-66	23	9.2	9.2	99.6
67 and above	1	.4	.4	100.0
Total	251	100.0	100.0	

As per Table 1, In the survey, most of the participants are in the age group of 35 to 46 and only 0.4% of the survey respondents are in the age group above 67.

2. What is your gender?

Table 2 represents the gender of the participants,

Table 2: Gender, source: Self-made

2. What is your gender?

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Male	110	43.8	43.8	43.8
	Female	141	56.2	56.2	100.0
	Total	251	100.0	100.0	

In the survey session, 56% of the respondents are female while 4.8% of respondents are male. It reflects that the gender-friendly perspective has been followed.

3. What is your job role?

Table 3 represents the job role of the participants,

Table 3:Job role, source: self-made

3. What is your job role?

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Manager	12	4.8	4.8	4.8
	Hospital staff	73	29.1	29.1	33.9
	Sales manager	107	42.6	42.6	76.5
	Customer relationship manager	52	20.7	20.7	97.2
	Doctor	7	2.8	2.8	100.0
	Total	251	100.0	100.0	

Table 3 showcased that 42.6% of the respondents are working as sales managers while the remaining respondents are engaged in different professions that are managers, hospitals, consumer relationships managers, and doctors.

Variable-based questions

- 1. Chatbots are transforming client service by offering fast and better assistance, streamlining conflict resolution, and managing common queries. Do you agree?**

Table 4 represents the viability of the transformation of the client service,

Table 4:Transforming client service, source: Self-made

- 1. Chatbots are transforming client service by offering fast and better assistance, streamlining conflict resolution, and managing common queries. Do you agree?**

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly agree	30	12.0	12.0	12.0
	Agree	129	51.4	51.4	63.3
	Neutral	63	25.1	25.1	88.4
	Disagree	25	10.0	10.0	98.4

Strongly disagree	4	1.6	1.6	100.0
Total	251	100.0	100.0	

According to Table 4, most respondents (63.4%) concur that chatbots are revolutionizing customer service, whilst 25.1% are ambivalent and 11.6% disagree. This suggests that, despite some scepticism, chatbots are largely seen favourably.

2. Chatbots can easily handle clients' queries. Do you agree?

Table 5 represents the ways that chatbots have handled the clients' queries,

Table 5: Easily handle clients' queries, Source: Self-made

2. Chatbots can easily handle clients' queries. Do you agree?

	Frequency	Per cent	Valid Percent	Cumulative Percent
Valid Strongly agree	34	13.5	13.5	13.5
Agree	94	37.5	37.5	51.0
Neutral	65	25.9	25.9	76.9
Disagree	48	19.1	19.1	96.0
Strongly disagree	10	4.0	4.0	100.0
Total	251	100.0	100.0	

As per Table 5, there is mixed trust in the efficacy of chatbots, with the majority (51%) believing they manage customer inquiries successfully, 25.9% remaining indifferent, and 23.1% disagreeing.

3. Chatbots can diminish wait times for consumers, permitting human agents to concentrate on more difficult tasks. Do you agree?

Table 6 represents the proficiency of the chatbot which is mentioned below,

Table 6: Diminish wait times, Source: Self-made

3. Chatbots can diminish wait times for consumers, permitting human agents to concentrate on more difficult tasks. Do you agree?

	Frequency	Per cent	Valid Percent	Cumulative Percent
Valid Strongly agree	25	10.0	10.0	10.0
Agree	82	32.7	32.7	42.6
Neutral	53	21.1	21.1	63.7
Disagree	54	21.5	21.5	85.3
Strongly disagree	37	14.7	14.7	100.0
Total	251	100.0	100.0	

As per Table 6, the majority (32.7%) of the respondents agreed that the chatbots play an effective role in reducing the wait times for the consumers, and permit the agents to percentage on difficult tasks.

5. Chatbots are effective for bringing customer satisfaction as this software application is 24*7 available. Do you agree?

Table 7 represents the contribution of chatbot in bringing customer satisfaction,

Table 7: Bringing customer satisfaction, Source: Self-made

4. Chatbots are effective for bringing customer satisfaction as this software application is 24*7 available. Do you agree?

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly agree	38	15.1	15.1	15.1
	Agree	80	31.9	31.9	47.0
	Neutral	44	17.5	17.5	64.5
	Disagree	64	25.5	25.5	90.0
	Strongly disagree	25	10.0	10.0	100.0
	Total	251	100.0	100.0	

Based on Table 7, although 31.7% of respondents concur that chatbots improve customer satisfaction by being available around the time, 25.5% disagree, and 17.5% are neutral, indicating a range of viewpoints.

6. Chatbots can manage higher volumes of repetitive inquiries concurrently, improving response capacity amidst peak times. Do you agree?

Table 8 represents the management of the queries by using the chatbot.

Table 8: Manage higher volumes of repetitive inquiries, source: Self-made

5. Chatbots can manage higher volumes of repetitive inquiries concurrently, improving response capacity amidst peak times. Do you agree?

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	Strongly agree	36	14.3	14.3	14.3
	Agree	84	33.5	33.5	47.8
	Neutral	42	16.7	16.7	64.5
	Disagree	42	16.7	16.7	81.3
	Strongly disagree	47	18.7	18.7	100.0
	Total	251	100.0	100.0	

Based on Table 8, although 33.5% of respondents concur that chatbots improve answer times during busy periods, 16.7% disagree and are undecided, suggesting that opinions on their effectiveness are divided.

7. Chatbots streamline the resolutions of easy problems. Do you agree?

Table 9 represents the efficiency of the chatbot in resolving the problems.

Table 9: Streamline the resolutions, source: Self-made

6. Chatbots streamline the resolutions of easy problems. Do you agree?

	Frequency	Per cent	Valid Percent	Cumulative Percent
Valid Strongly agree	41	16.3	16.3	16.3
Agree	78	31.1	31.1	47.4
Neutral	54	21.5	21.5	68.9
Disagree	43	17.1	17.1	86.1
Strongly disagree	35	13.9	13.9	100.0
Total	251	100.0	100.0	

Based on Table 9, 78 respondents among the 251 respondents in the survey agreed that the chatbots certainly streamline the resolution of easy problems and improve consumer satisfaction margin.

8. Business firms use chatbots to simplify their business procedures. Do you agree?

Table 10, represented the usage of chatbot that helps to simplify the business procedure.

Table 10: Use chatbots to simplify their business procedures, Source: Self-made

7. Business firms use chatbots to simplify their business procedures. Do you agree?

	Frequency	Per cent	Valid Percent	Cumulative Percent
Valid Strongly agree	36	14.3	14.3	14.3
Agree	84	33.5	33.5	47.8
Neutral	50	19.9	19.9	67.7
Disagree	57	22.7	22.7	90.4
Strongly disagree	24	9.6	9.6	100.0
Total	251	100.0	100.0	

Based on Table 10, the majority of the respondents almost 33.5% agreed that businesses have a tendency to integrate chatbots to simplify the business process.

9. Chatbots properly speed up response times, guiding consumers toward making a purchase. Do you agree?

Table 11 shows the efficiency of the chatbot.

Table 11: Speed up response times, Source: Self-made

8. Chatbots properly speed up response times, guiding consumers toward making a purchase. Do you agree?

	Frequency	Per cent	Valid Percent	Cumulative Percent
Valid Strongly agree	33	13.1	13.1	13.1
Agree	81	32.3	32.3	45.4
Neutral	50	19.9	19.9	65.3
Disagree	50	19.9	19.9	85.3
Strongly disagree	37	14.7	14.7	100.0

Total	251	100.0	100.0
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As per Table 11, in the survey, 81 respondents agreed that they have the experience that the chatbots speed up the response time and increase brand loyalty in the sectors.

10. Chatbots can diminish misinformation by offering reliable and credible sources of information. Do you agree?

Table 12 represents the data handling capability of the chatbot.

Table 12: Diminish misinformation, Source: Self-made

9. Chatbots can diminish misinformation by offering reliable and credible sources of information. Do you agree?

	Frequency	Per cent	Valid Percent	Cumulative Percent
Valid Strongly agree	35	13.9	13.9	13.9
Agree	72	28.7	28.7	42.6
Neutral	54	21.5	21.5	64.1
Disagree	53	21.1	21.1	85.3
Strongly disagree	37	14.7	14.7	100.0
Total	251	100.0	100.0	

Based on Table 12, almost 29% of the respondents agreed that chatbots help reduce the integration of misinformation and ensure that the business is getting accurate feedback from the consumers.

11. Chatbots can bring brand loyalty and consumer satisfaction. Do you agree?

Table 13 includes insights about maintaining brand loyalty and customer satisfaction.

Table 13: Bring brand loyalty and consumer satisfaction, Source: Self-made

10. Chatbots can bring brand loyalty and consumer satisfaction. Do you agree?

	Frequency	Per cent	Valid Percent	Cumulative Percent
Valid Strongly agree	34	13.5	13.5	13.5
Agree	76	30.3	30.3	43.8
Neutral	44	17.5	17.5	61.4
Disagree	51	20.3	20.3	81.7
Strongly disagree	46	18.3	18.3	100.0
Total	251	100.0	100.0	

From the descriptive outcome from Table 13, it has been found that chatbots certainly help to bring consumers satisfaction and brand loyalty.

12. Chatbots can bring scale and speed to customer service. Do you agree?

Table 14 represents the performance efficiency and scalability of the chatbot.

Table 14: Bring scale and speed, Source: Self-made

11. Chatbots can bring scale and speed to customer service. Do you agree?

	Frequency	Per cent	Valid Percent	Cumulative Percent
Valid Strongly agree	28	11.2	11.2	11.2
Agree	80	31.9	31.9	43.0
Neutral	58	23.1	23.1	66.1
Disagree	47	18.7	18.7	84.9
Strongly disagree	38	15.1	15.1	100.0
Total	251	100.0	100.0	

Table 14 showcased, that 31.9% of the respondents agreed that by integrating chatbots, the companies are able to bring speed and scale to consumer services.

Correlation analysis

The correlation analysis is the statistical method that helps to discover the relationship between the two variables (Janse et al., 2021). The correlation outcomes are mentioned in Table 15:

Table 15: Correlation analysis, Source: Self-made

Correlations

		2. Chatbots can easily handle clients' queries. Do you agree?	11. Chatbots can bring scale and speed to customer service. Do you agree?	8. Chatbots properly speed up response times, guiding consumers toward making a purchase. Do you agree?
2. Chatbots can easily handle clients' queries. Do you agree?	Pearson Correlation Sig. (2-tailed) N	1 251	.286** .000 251	.248** .000 251
11. Chatbots can bring scale and speed to customer service. Do you agree?	Pearson Correlation Sig. (2-tailed) N	.286** .000 251	1 251	.177** .005 251
8. Chatbots properly speed up response times, guiding consumers toward making a purchase. Do you agree?	Pearson Correlation Sig. (2-tailed) N	.248** .000 251	.177** .005 251	1 251

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

From the correlation statistical outcome (Table 15), it has been found that there is a significant relationship between chatbot integration to bring scale and speed to consumer service and chatbot integration to increase the speed of response time, the correlation value of these two statements is 0.005 which is lower than the ideal value 0.05. It reflects the relationship between chatbot integration and consumer satisfaction is significant and the alternative hypothesis is accepted.

Regression analysis

The regression analysis helps to derive the relationship between the dependent variables of the research (Hai et al., 2023). In this research, the dependent variables are consumer satisfaction and brand loyalty now, the relationship is presented in Table 16:

Table 16:Model Summary, Regression, source: Self-made

Model Summary								
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	
1	.406 ^a	.165	.151	.980	.165	12.138	4	

In Table 16, the R square value has been evaluated to derive the relationship between the two dependent variables which are consumer satisfaction and brand loyalty. From the outcome, it has been found that the R-square value is 0.165 which is higher than the ideal value of 0.05. It reflects that the integration of the improves the consumers satisfaction certainly by improving response times and reducing the wait time but only the integration of chatbots will not impact the business loyalty and improve the trust factors in the industry.

Hypothesis testing

This statistical method helps to check whether the hypothesis (Null or Alternative) is met through the analysis. The outcomes are mentioned in Table 17:

Table 17:Hypothesis testing, Source: Self-made

One-Sample Test						
	Test Value = 12					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	
1. Chatbots are transforming client service by offering fast and better assistance, streamlining conflict resolution, and managing common queries. Do you agree?	-173.469	250	.000	-9.622	-9.73	

From Table 17, it has been found that the sig value (2-tailed) on the impact of the chatbot on the client service by offering better assistance and streamlining the conflicts is 0.000 which is lower than 0.05. It reflects that the null hypothesis which states “There is no impact of the application of Chatbots in the consumer satisfaction and the brand loyalty” is rejected and the alternative hypothesis “There is a positive influence of the Chatbots integration on the consumer satisfaction and the brand loyalty” has been accepted.

4.2 Discussion

Based on the analysis it has been understood that chatbots are known as an effective tool that provides better customer service. The result is positive as half of the participants among 251 have given their positive responses about the fact that proper utilisation of chatbots in retail, hospitality, and fashion industries can help in increasing brand loyalty and customer satisfaction. It is required to discuss that the availability of chatbots 24*7 is another reason that it helps in solving the problems of clients easily (Haugeland et al. 2022). On the other hand, from the analysis, it has been

understood that fast service and quick conflict resolution by chatbots are the actual reasons that industries utilise chatbots and businesses are getting higher client satisfaction and brand loyalty.

4.3 Secondary Qualitative Analysis

4.3.1 Thematic analysis

4.3.1.1 The effect of chatbots on customer loyalty

Due to the growing competition and digital developments, business firms are continuously challenged to attract and retain consumers. The new consumer desires to devote less and less time and thus, imagines to be capable of grasping a firm anywhere and anytime, irrespective of location, channel, and time. A tool to respond to customer experience and digitisation is the usage of chatbots. With chatbots, customers' complaints and questions could be responded to in real time which makes firms less likely to lose sight of the consumer (Jenneboer, Herrando, & Constantinides, 2022). Chatbots offer a new coating of complaint handling and support for the measurement of service quality by making sure that mainly for digitalisation, personalised service is accessible to meet consumer needs anywhere and anytime.

4.3.1.2 Understanding the handler satisfaction including the loyalty of consumer Service chatbots

The AI chatbot is developing as an effective corporate consumer-facing application, effectively increasing consumer service competence while diminishing costs. Chatbots are mainly beneficial for eCommerce and retail industries. Through responding to and serving consumers properly, chatbots support increasing conversion rates and sales, improving the spending experience, and collecting consumer data among others. For instance, Lego declared its chatbot, Ralph, to support Christmas sales. In addition, this AI chatbot had its personality and was amusing to engage with. Furthermore, the business worth of chatbots lies in consumers' loyalty (Hsu & Lin, 2023). The essential AI chatbot service quality along with satisfaction effectively influenced the loyalty of chatbot service users.

4.3.1.3 The influence of chatbots in increasing brand loyalty

AI-chatbot service quality effectively affects consumer e-brand loyalty. Moreover, chatbot user experience, faith along microelectronic word of mouth effectively arbitrate the connection between consumer e-brand loyalty and AI-chatbot service quality. Chatbots help in building credibility and trust. For instance, in case a chatbot solves any critical issue for an individual in a few minutes, the person is bound to remember it for a lengthy time (Shahzad et al. 2024). This upsurges the customer's trust in the brand along builds higher credibility for the specific brand. Chatbots can support businesses to maintain a more consistent service level, which can enhance the consumer experience along with brand loyalty.

5. Conclusion

This research aims to highlight the effect of chatbots on client satisfaction and brand loyalty. Chatbots can help businesses maintain a consistent service level, which can improve brand loyalty and customer experience. In this research, both primary and secondary data collection methods have been undertaken. Therefore, survey and thematic analysis both have been conducted in this research. From the survey, it has been understood that most of the participants have agreed that chatbots can be considered as an operative tool for providing better client service. On the contrary, in thematic analysis, it has been showcased that previous studies have highlighted chatbots are mainly beneficial for e-commerce and retail industries.

6. Future work and limitations

6.1 Future work

In the future, the researcher can emphasize discussing the efficiency of using chatbots for retaining consumers, and the researcher can also focus on discussing the effect of AI service quality on consumer loyalty.

6.2 Limitations

This research has not focused on discussing the increasing rate of usage of chatbots in different business sectors. Therefore, the researcher can cover this limitation in the future by doing more detailed research on the research topic.

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