



Research Article

A Research Study on The Role of Chatbots and Conversational AI In Customer Engagement

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Abstract

This study examines the role of chatbots and conversational AI in enhancing customer engagement across digital commerce platforms. Using descriptive research methodology with a sample of 100 respondents, both primary data (structured questionnaires) and secondary data (journals, articles, research papers) were collected and analysed using percentage techniques, bar graphs, and pie charts. The findings reveal that customers highly value 24/7 availability (40%), instant responses (30%), and personalised recommendations (20%) as the key benefits of conversational AI. While chatbots significantly improve customer satisfaction and engagement through reduced response times and consistent communication, a hybrid model — combining AI automation with human interaction — remains essential for handling complex or sensitive customer queries. The study concludes that although conversational AI offers scalable, efficient, and personalised customer service, businesses must balance automation with human touchpoints, invest in advanced NLP capabilities, and prioritise data privacy to build lasting customer trust.

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KEYWORDS: Chatbots, Conversational AI, Customer Engagement, Natural Language Processing (NLP), Customer Satisfaction, Artificial Intelligence (AI), Digital Commerce, Personalisation, 24/7 Support, Human-AI Interaction, Machine Learning (ML), Customer Retention, Conversational Commerce, Virtual Assistants, Customer Experience.

1. INTRODUCTION

Customer engagement is increasingly being viewed as an important factor for businesses to succeed in today's world of digital commerce. With the rapid advancement of AI technology, more and more businesses are adopting chatbots and conversational AI tools to replace human-to-human conversational interactions via chat messages or voice recordings.

Generic chatbots can be used for many purposes across almost every industry, including e-commerce, banking, healthcare, and education. They can be utilized at any time of the day or night to provide support for customer inquiries, and help customers complete their transactions. However, the term "conversational AI" describes chatbots specifically designed for use with natural language processing (NLP), machine learning (ML), data analytics, and other forms of telemetry that allow providers to identify which customer interactions may have occurred in the past, in real time, and how to respond appropriately.

The framework of customer engagement theory is based on a customer's level of involvement with a product or service provided by a company. Chatbots provide a way for companies to have a two-way dialogue with their customers, connect to help customers conduct their own searches for information, and create relationships between companies and their customers.

2. LITERATURE REVIEW

1. Alan Turing (1950)

An article in which Alan Turing established several theories about machine-based intelligence based on his creation of the "Turing Test," and which ultimately paved the way for today's conversational robots (Chatbots), which are used as platforms for communicating with customers.

2. Joseph Weizenbaum (1966)

The first interactive behavioral robot (Chatbot) to interact in a true human-like manner — i.e., ELIZA — was created by Joseph Weizenbaum. He demonstrated that computers could present themselves as having human-like intelligence or "natural language" abilities to create dynamic interaction using natural human speech (words). ELIZA's continuing use for financial services customer service interactions is due to this demonstration of intelligent interaction between computers.

3. Philip Kotler (2017)

Philip Kotler states that organizations can engage their customers with the help of artificial intelligence (AI) chatbots by providing personalized communication, reducing response times, and providing improved customer interactions through the use of artificial intelligence (AI) chatbots and other digital marketing channels.

4. According to David Cancel's research, conversational AI allows businesses to maintain a continuous and instantaneous connection between themselves and their customers, which helps build solid relationships. Studies show that the implementation of chatbots increases customer retention rates and ultimately leads to higher customer satisfaction levels at those businesses.

5. Chris Messina coined the term "Conversational Commerce" to define how businesses can use messaging platforms such as AI assistants and bots to establish direct contact with their customers and create a more meaningful and effective interaction with those customers through the use of conversational AI.

6. Research published by Gartner indicates that when businesses utilize AI-enabled chatbots, they reduce their overall cost of providing customer service while also improving the quality of their customers' engagement experience. Customers appreciate having access to instant support via conversational AI.

3. OBJECTIVES / AIMS

- Chatbots - the impact of chatbots in improving customer engagement
- The impact of chatbots on improving customer satisfaction levels
- Customer sentiment towards AI-assisted interactions
- The effectiveness of AI-assisted tools to build relationships.

4. RESEARCH METHOD / METHODOLOGY

The objective of the research is to analyse customer feedback and perception through a form of Descriptive Research. The primary objective that is created is completed through a combination of Primary Source Data and Secondary Source Data. The source from the customer is collected through the process of an organised questionnaire, and the source of secondary data was from various journals, articles, research papers, and websites.

Convenience Sampling Techniques were used for 100 samples, which were analysed using the Percentage Technique and represented by Bar Graph and Pie Chart for a better understanding and visualisation of the results. Additionally, results were interpreted through the use of the Interpretation Technique to provide general conclusions and insights from the data.

5. FINDINGS / RESULTS

The trends observed show that most users prefer a quick response from chatbots; 24/7 availability optimizes customer service. Customers appreciate that chatbots offer a more tailored approach to their chatting; however, customers will usually need or require the assistance of a human representative when they have difficulty solving any problems or questions. Chatbots will help to increase customer satisfaction and customer engagement levels; but less than 1% of customers have found that an absence of human interaction or lack of accuracy is an issue with chatbots.

6. DISCUSSION / ANALYSIS

The evidence shows that chatbots/conversational AI have been shown to positively affect the connection between customers and brands by increasing customer engagement through immediate correspondence, shorter response times, and enhanced service efficiency. Personalization through the use of

artificial intelligence allows companies to create personalized communications that can improve the overall quality of the customer and company relationship.

However, while automating so much may remove an emotional component of connection, the majority of customers prefer human-to-human interactions, particularly when they have a

question or concern that is complicated or sensitive. For this reason, a combination of artificial intelligence tools with the ability to interact with humans provide the best results.

7. Data Analysis: Analysis & Interpretation

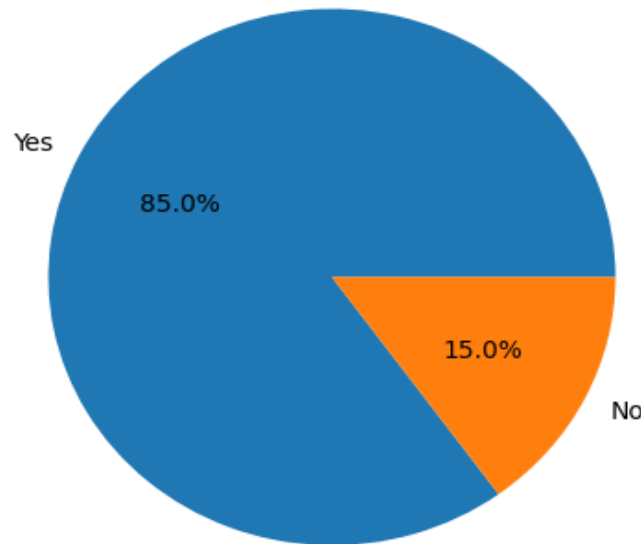


Figure: Q1: Interaction with Chatbots

Interpretation: Most respondents have interacted with chatbots while shopping or using online services.

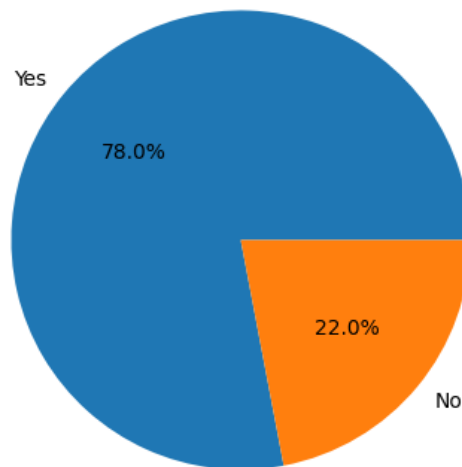


Figure: Q2: Quick Responses by Chatbots

Interpretation: A majority of respondents believe chatbots provide quick responses to customer queries.

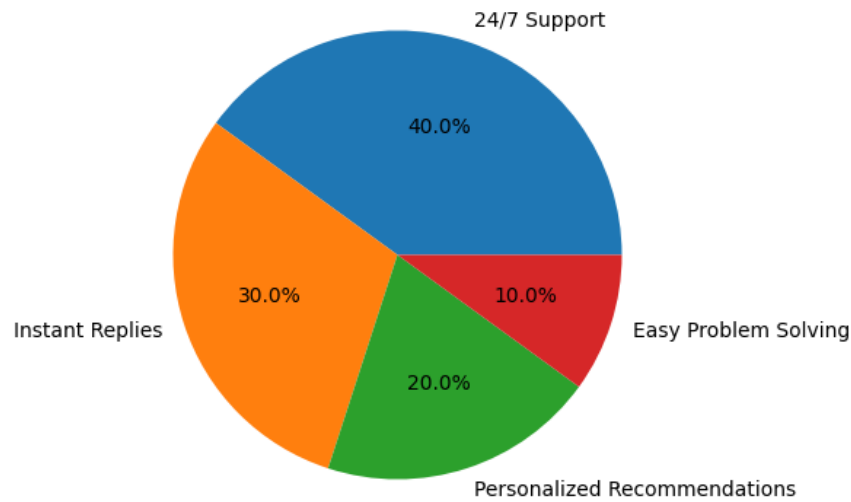


Figure: Q3: Most Useful Feature of Conversational AI

Respondents indicated that the top benefit of conversational AI is 24/7 Support (40%), meaning users appreciate the ability to access assistance anytime and get help quickly. Instant Replies (30%) show that convenient and timely communication is also an important element of customer engagement. Personalized

Recommendations (20%) indicate a moderate level of interest in developed user experience customizations. Easy Problem Solving (10%) is the lowest percentage of respondents being able to identify it as a major benefit of using conversational AI.

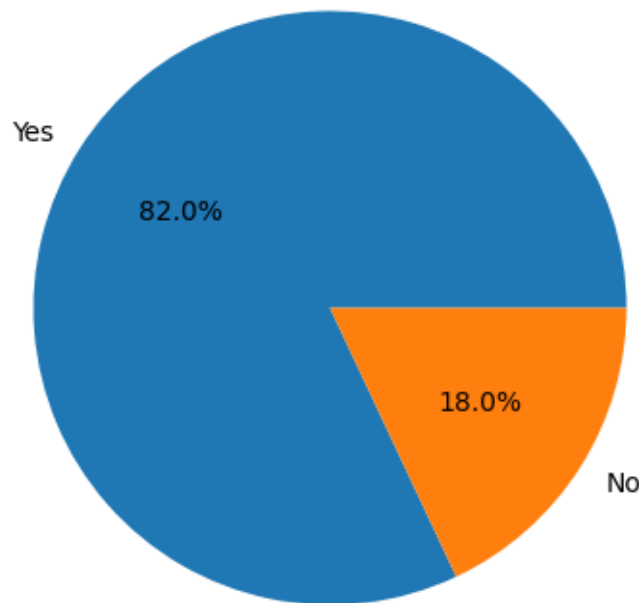


Figure: Q4: Chatbots Improve Customer Engagement

Most people think that chatbots are a thing because they make customers happy and they like talking to them. Chatbots really do improve how customers feel. They are more satisfied when they use chatbots. This is what most people say about chatbots and customer satisfaction, with chatbots.

8. CONCLUSION / SUMMARY

Due to chatbots and conversational AI, how businesses interact with their customers has changed; overall, the technology provides greater levels of efficient, consistent, personalised communication to customers through higher-quality

interactions with businesses. This technology creates more efficiencies and has the potential to scale to much greater degrees than traditional media sources (for example, radio and television); however, the challenge lies in integrating chatbots into the broader human-to-human communications framework in order to maintain an enjoyable and consistent experience for the customer.

9. LIMITATIONS

- Use of convenience sampling may affect generalisation

- Responses may be biased based on user experience with technology
- Lack of industry-specific analysis

10. RECOMMENDATIONS

A combination of AI and human interaction should be utilized in order to achieve optimal customer service levels. The use of advanced NLP features will enhance the ability of bots to interpret and respond accurately to customer queries. For companies to build trust and confidence with their customers, they must implement adequate security and data privacy systems. In order for users to have a better user experience, continually re-training artificial intelligence systems with customer feedback will increase AI system efficiency. In addition to automating processes, conversational AI is expected to support the personalisation and advancement of customer relations.

REFERENCES

1. Naqvi MHA, Hongyu Z, Naqvi MH, Kun L. Impact of service agents on customer satisfaction and loyalty: mediating role of Chatbots. *J Model Manag.* 2024;19(2):470-491.
2. Naqvi MHA, Hongyu Z, Naqvi MH, Kun L. Impact of service agents on customer satisfaction and loyalty: mediating role of Chatbots. *J Model Manag.* 2024;19(2):470-491.
3. Hollebeek LD, Menidjel C, Sarstedt M, Jansson J, Urbonavicius S. Engaging consumers through artificially intelligent technologies: Systematic review, conceptual model, and further research. *Psychol Mark.* 2024;41(4):880-898.
4. Hollebeek LD, Menidjel C, Sarstedt M, Jansson J, Urbonavicius S. Engaging consumers through artificially intelligent technologies: Systematic review, conceptual model, and further research. *Psychol Mark.* 2024;41(4):880-898.

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