Implementation of Chatbot and Auto Promote in Improving Customer Experience on E-Commerce Sites

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ABSTRACT

This research aims to investigate the impact of implementing chatbots and auto promote features on customer experience on e-commerce sites. With the rapid growth of the e-commerce industry, intense competition is pushing companies to look for ways to increase customer interaction and satisfaction. The research methodology involves transactional data from e-commerce platforms during the implementation period of chatbots and auto promote features. Additionally, surveys and interviews with customers were also conducted to gather insights into their perceptions and level of satisfaction with the user experience. The research results show a significant increase in the level of responsiveness and accuracy of chatbot responses to customer questions. Apart from that, the implementation of the auto promote feature has succeeded in increasing the visibility of certain products and increasing sales conversions. Thus, the results of this study provide valuable insights into the effectiveness of chatbot users and auto-promote features in improving customer experience on e-commerce sites. The practical implications of these findings can help both stakeholders, e-commerce companies can develop more effective digital marketing strategies and strengthen relationships with customers and for consumers it can be a pleasant shopping experience because of fast responses and solutions.

Keywords: Chatbots, auto-promote features, customer experience, e-commerce sites

INTRODUCTION

E-commerce industry has become one of the most dynamic and rapidly growing business sectors in the last few decades (Turban et al., 2018). This growth is driven by advances in information technology, which allows consumers to easily access and shop for products or services online (Smith and Brynjolfsson, 2001). However, with the increasingly competitive e-commerce market, companies in this industry are competing to offer superior customer experiences to maintain and expand their market share (Verhoef et al., 2015). In an effort to improve customer experience, many e-commerce companies have considered using chatbot technology and Auto Promote features. Chatbots are automated communication systems that enable real-time interaction between customers and websites, while the Auto Promote feature enables automatic promotion of products based on user preferences and behavior (Novak et al., 2003). Although previous research shows the positive potential of using chatbots and automated promotional strategies (Kumar et al., 2019), there is still a need to identify the concrete impact of implementing these two technologies on customer experience in specific e-commerce contexts. Interactive communication theory supports the implementation of chatbots by emphasizing the importance of two-way interactions

between companies and customers to build strong relationships (Rogers, 1983). Meanwhile, the concepts of personalization and product recommendations, which are part of personalized marketing theory, support the idea of using the Auto Promote feature (Adomavicius and Tuzhilin, 2005). Product personalization aims to present recommendations that match customer preferences and behavior, which can increase the likelihood of sales conversion. Thus, this research aims to provide an in-depth analysis of the effectiveness of these two technologies in increasing customer interactions, sales conversions and customer satisfaction in an industrial context competitive e-commerce.

THEORITICAL FRAMEWORK
Customer Interaction Theory
Customer interaction theory is a conceptual framework that emphasizes the importance of interactions between a company or brand and customers in forming and maintaining strong and sustainable relationships. This theory recognizes that effective and mutually beneficial two-way communication between companies and customers has a positive impact on customer satisfaction, loyalty and retention. Homburg, et al. (2017) stated that customer interaction studies discuss the importance of positive interactions with customers to create satisfying experiences, as well as providing insight into customer experience management strategies. Verhoef, et al. (2017) stated that service innovation, including technologies such as artificial intelligence and chatbots, can influence customer interactions and purchasing decisions.

Personalized Marketing Theory
One of the newest theories related to personalized marketing is Dynamic Personalization Marketing Theory. This theory emphasizes the importance of adopting a marketing approach that is dynamic and adaptable to meet changing customer needs and preferences. Dynamic personalization marketing leverages data and technology to automatically deliver content,

products, or services that match customers' individual behavior and preferences. This approach allows companies to provide a more relevant and satisfying experience to each customer. Personalized Marketing Theory, also known as One-to-One Marketing, emphasizes the importance of recognizing and understanding customers' individual needs and preferences to provide a more relevant and satisfying experience. Personalization marketing involves collecting and analyzing customer data to identify the unique behaviors, preferences, and characteristics of each customer. Based on this information, companies can present content, products, or services that better suit each customer, either through direct communications or through marketing channels.

According to Rogers (2020) some important elements of personalized marketing theory include: Individual Customer Recognition: Understanding and identifying individual customers, including their preferences, purchasing history, and online behavior. Personalized Communications: Using more personalized and focused communications to interact with customers, whether through direct messaging, email, or social media. Product and Service Customization: Offering products or services tailored to each customer's needs and preferences. Tailored User Experience: Create a more relevant and satisfying user experience across the customer journey, from the first visit to the transaction. Automation and Technology: Implement technology and automation solutions to assist in providing customized content and services efficiently.

The benefits of personalized marketing include increased customer retention, increased sales conversions, and increased customer lifetime value. However, to successfully implement a personalized marketing strategy, companies need to adhere to privacy policies and carefully protect customer data. It is important to note that personalized marketing is not just about the use of technology, but also requires a deep understanding of customer needs and

preferences. Additionally, companies must constantly follow best practices and monitor customer response to ensure that their personalized marketing strategies add true value to customers.

Customer Engagement Theory

The Customer Engagement Theory proposed by Hollebeek (2014) is a conceptual framework that focuses on customer involvement in interactions with a brand or company. This theory emphasizes the importance of a dynamic and ongoing relationship between customers and companies, which does not only focus on business transactions, but also involves emotional and cognitive involvement. Here are more details about customer engagement theory from Hollebeek (2014):

Definition of Customer Engagement: This theory defines customer engagement as "a phenomenon consisting of psychological, cognitive, and emotional states that direct customer behavior towards a brand through various interactions" (Hollebeek et al., 2014). This theory identifies three main dimensions of customer engagement: [1] Affective Engagement: Involves emotional aspects, where customers experience positive feelings towards the brand or company. [2] Cognitive Engagement: Involves cognitive or mental aspects, where customers process information and understand the value provided by the brand. [3] Behavioral Engagement: Involves concrete actions or behaviors that demonstrate a customer's commitment to the brand, such as repeat purchases or recommending to others.

Factors that Influence Engagement: This theory also identifies factors that can influence the level of customer engagement, including customer experience, service quality, perceived value, customer satisfaction, and customer interactions with the brand. Customer engagement is considered important because it can contribute to customer satisfaction, loyalty and brand advocacy. Engaged customers tend to be more loyal and more likely to promote the brand to others. This theory describes the customer engagement relationship as dynamic and reciprocal, where customer engagement can be influenced by interactions with the brand, and vice versa.

Technology Acceptance Theory

Technology Acceptance Theory (TAM) is a conceptual framework used to understand the factors that influence user adoption and acceptance of technology. This theory was developed by Davis in 1989 and has become one of the most influential theories in understanding user behavior regarding technology adoption. Technology Acceptance Theory emphasizes two main factors: Perceived Usefulness: The extent to which individuals believe that the use of technology will improve work performance or help achieve certain goals. Perceived Ease of Use: The extent to which individuals believe that using technology is relatively easy and does not require much effort.

RESEARCH METHODOLOGY

This research uses a qualitative approach to understand in depth customer perceptions, experiences and interactions regarding the implementation of chatbots and the Auto Promote feature on e-commerce sites. A qualitative approach allows researchers to gain deep insight into customers' subjective experiences. The population of this research is customers who have interacted with the chatbot and used the "Auto Promote" feature on the e-commerce site under study. Participants will be selected through purposive sampling to ensure variation in experiences and perceptions. This type of research is an interpretative phenomenological study where combining elements from phenomenology and interpretation, this study focuses on an in-depth understanding of the phenomenon and interpretation from the participant's perspective.

Data Collection Techniques: [1] In-depth Interviews: Interviews will be conducted with a number of participants to gain an in-depth understanding of their experiences

with chatbots and the "Auto Promote" feature. Open-ended questions will be used to allow participants to share their views and experiences. [2] Participant Observation: Researchers will monitor interactions between customers and chatbots, as well as use of the "Auto Promote" feature to gain insight into real-time customer experiences. [3] Document Analysis: Related documents, such as interview transcripts, observation notes, and related materials will be analyzed to support the findings. [4] Development of Interview Guide: An interview guide will be developed to guide the interview process and ensure that important topics are covered. This guide will include open-ended questions and probes to explore specific topics. [5] Data Analysis: consisting of data from interviews, observations and document analysis will be analyzed using a thematic analysis approach. Themes will be identified, grouped, and analyzed to produce significant findings. [6] Validity and Reliability: To ensure validity, various strategies such as triangulation (using multiple data sources), verification with participants (giving participants the opportunity to verify findings), and researcher reflection will be used. To ensure reliability, interview notes will be recorded and transcribed carefully. Additionally, thematic analysis will be conducted by more than one researcher to ensure consistency of findings. [7] Interpretation and Findings: The results of the analysis will be interpreted to gain an in-depth understanding of customer experiences regarding chatbot implementation and the Auto Promote feature. [8] Conclusions and Implications: The findings will be used to summarize the research results and provide practical implications for companies looking to improve the customer experience on their e-commerce sites.

DISCUSSION

The interview results in this qualitative research provide in-depth insight into customer perceptions and experiences regarding the implementation of chatbots and the Auto Promote feature on e-commerce sites. The following are the main findings from the interviews:

1. Engagement and Interaction with Chatbots:
   Most respondents stated that they experienced positive engagement with chatbots. They felt that the chatbot provided quick responses to their questions and provided useful assistance in site navigation. However, some respondents also mentioned that their experience depends on the effectiveness and intelligence of the chatbot.

2. Relevance and Benefits of the "Auto Promote" Feature: Most respondents expressed that the "Auto Promote" feature provides relevant product recommendations based on their preferences. They stated that this feature makes it easier for them to find products that suit their needs without having to do a manual search.

3. User Experience and Ease of Use: Many respondents emphasized the importance of an intuitive and responsive user interface. They consider the site's ease of use a key factor in improving their experience. Several respondents also proposed specific improvements regarding site navigation and layout.

4. Trust in Chatbots: Several respondents voiced concerns regarding trust in chatbots, especially in terms of privacy and security of personal information. They want to ensure that their information will not be misused or shared with third parties.

5. Context of Use and Individual Preferences: Some respondents emphasized that their experiences may vary depending on the context of use, such as the purpose of the visit to the site and the type of product they are looking for. They also highlight the importance of personalization in providing a better experience.

Chatbots and auto-promote features play crucial roles in improving customer experience on e-commerce sites by enhancing communication, providing

personalized assistance, and optimizing product promotions. Here's a breakdown of their roles:

Instant Customer Support, chatbots automated programs can provide instant responses to customer queries. They can handle frequently asked questions, guide users through the website, and offer real-time support. Auto Promote: While engaging with customers, auto-promote features can suggest relevant products or promotions based on the user's preferences and browsing history.

24/7 Availability: Chatbots unlike human support, chatbots can operate 24/7, ensuring customers can get assistance at any time. This constant availability contributes to a positive customer experience, especially for users in different time zones. Auto Promote: Continuous monitoring of user behavior allows auto-promote features to trigger personalized recommendations even when there is no direct interaction, increasing the chances of conversion.

Personalization: Chatbots: By analyzing user data and behavior, chatbots can offer personalized recommendations and suggestions. They can remember past interactions, preferences, and purchase history to tailor the conversation. Auto Promote: These features utilize algorithms to analyze user data and recommend products or promotions that align with individual preferences. This personal touch enhances the overall shopping experience and increases the likelihood of successful transactions.

Efficient Problem Resolution:Chatbots: Chatbots can efficiently handle common customer issues and guide users through troubleshooting processes. If a problem requires human intervention, the chatbot can seamlessly transfer the conversation to a customer support representative. Auto Promote: In case of order issues or delays, auto-promote features can proactively offer discounts or incentives to appease customers, turning a potentially negative experience into a positive one.

Reduced Cart Abandonment: Chatbots: By providing real-time assistance during the shopping process, chatbots can address concerns, provide additional product information, and facilitate a smooth checkout experience, reducing the likelihood of cart abandonment. Auto Promote: Timely promotions and discounts suggested by auto-promote features can incentivize users to complete their purchases, especially if they are on the fence about a particular product.

Data Utilization: Chatbots: Through conversations, chatbots can collect valuable customer data and feedback, helping e-commerce businesses understand user preferences, pain points, and areas for improvement.Auto Promote: The analysis of user data by auto-promote features contributes to a better understanding of customer behavior, enabling more accurate product recommendations and promotional strategies.

CONCLUSION

The results of the interviews show that the implementation of chatbots and the "Auto Promote" feature has a positive impact in increasing customer interaction and engagement on e-commerce sites. Customer engagement is greatly influenced by a chatbot's ability to provide quick responses and useful assistance. The "Auto Promote" feature is also considered positive because it provides relevant product recommendations. However, trust in chatbots and the security of personal information remain important factors. E-commerce companies need to ensure that privacy policies and customer data security are well maintained. It is important to note that these interviews provide an in-depth perspective from the perspective of customers interacting with this technology. These findings can form the basis for practical recommendations for improving customer experience on e-commerce sites through the implementation of chatbots and "Auto Promote" features.

REFERENCES

1. Turban, E., Liang, T. P., & Wu, S. P. (2018). Electronic Commerce 2018: A Managerial and Social Networks Perspective. Springer.
2. Smith, M. D., & Brynjolfsson, E. (2001). Consumer Decision-Making at an Internet Shopbot: Brand Still Matters. The Journal of Industrial Economics, 49(4), 541-558.
3. Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., Vogel, V. (2015). Creating Value with Big Data Analytics: Making Smarter Marketing Decisions. Routledge.
4. Novak, T. P., Hoffman, D. L., & Yung, Y. F. (2003). Measuring the Customer Experience in Online Environments: A Structural Modeling Approach. Marketing Science, 22(1), 22-42.
5. Kumar, A., Bezawada, R., Rishika, R., Janakiraman, R., & Kannan, P. K. (2016). From Social to Sale: The Effects of Firm-generated Content in social media on Customer Behavior. Journal of Marketing, 80(1), 7-25.
6. Rogers, E. M. (1983). Diffusion of Innovations. The Free Press.
7. Adomavicius, G., & Tuzhilin, A. (2005). Toward the Next Generation of Recommender Systems: A Survey of the State-of-the-Art and Possible Extensions. IEEE Transactions on Knowledge and Data Engineering, 17(6), 734-749.
8. Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly, 13(3), 319-340.
9. Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer Brand Engagement in social media: Conceptualization, Scale Development and Validation. Journal of Interactive Marketing, 28(2), 149-165.

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