

Chapter 2

Chatbot for Online Customer Service: Customer Engagement in the Era of Artificial Intelligence

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ABSTRACT

Chatbot has become popular in recent years due to the advancements in artificial intelligence and other underlying technologies. Likewise, increased internet interactivity and smarter mobile devices have specifically attracted more consumers to pursue superior and personalized customer service. The aim of this chapter was therefore to better understand the use of chatbots by online businesses to shed light on its effect on customer service satisfaction. The commitment trust theory served as the underlying theoretical foundation for the conceptual framework of this study. It explored the relationships among trust, commitment, service quality, and technology towards the use of chatbots. Subsequently, customer engagement gained has influenced the knowledge sharing and the referral to other customers. This chapter presented an integrative framework for predicting the use of chatbots to enhance customer bonding with firms. The main contribution was the list of antecedents needed to improve customer engagement in the implementation of chatbots.

INTRODUCTION

Chatbots have become popular in recent years due to the advancements in artificial intelligence and other underlying technologies, i.e. natural language processing and machine learning (Hill, Ford, & Farreras, 2015; D. Lee, Oh, & Choi, 2017; Thomas, 2016). Chatbot is an artificial intelligence software that manages the conversation with customers in natural language. Similarly, higher Internet interactivity and smarter mobile devices have directly attract more consumers to seek better and personalized customer service prepared by chatbots. Chatbots are smarter and more responsive as they ensure that

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customers are getting the instant services they demand (Følstad, Nordheim, & Bjørkli, 2018). It is more convenient for online customers and possible to ask about customer support, payment details, and other inquiries without having to wait in a long queue as experienced in human and telephone support. In the past, waiting a day or longer to receive responses as they would have from the human customer support staff. Hence, it is replacing traditional voice service with more deployment of chatbot as a new interface between firms and customers. This study aimed to further understand the use of chatbot by online business in shedding light on its influence on customer service satisfaction.

The usage of chatbot is expected to grow, hence it is obvious that artificial intelligence backed chatbot would have become more powerful. Chatbots are deployed at customer touchpoints available on several platforms, such as websites, social media apps, and mobile apps connected to various digital devices.

The conversational agent served as the backbone of the customer dialogue system (Araujo, 2018). Chatbot is getting attention from consumer behavior studies (Luo, Tong, Fang, & Qu, 2019; Zarouali, Van den Broeck, Walrave, & Poels, 2018). It is powered by natural language processing and communicates with the use of human language (Thomas, 2016). The advanced technology makes it a conversational agent that improve the customer perception over the customer service quality. Subsequently, this leads to a higher likelihood to increase the profit of the firm. Customers who are satisfied with the services received could be converted into a loyal customer (Van den Broeck, Zarouali, & Poels, 2019). Prospective customers who use chat is more likely to be turned into actual customers.

BACKGROUND

Growth of Chatbot

Customer service and support are referred to as communication channel facilitated by customer support staff in connecting both consumers and sellers (Brown & Maxwell, 2002). With the increased popularity of social media, companies are using social media such as Facebook, and LiveStream to support the customers. Hence, chatbots are incorporated into these social media aimed to generate potential customer lead (Quan et al., 2018). The highly interactive nature of Chatbot is making closer contact with customers and improving customer engagement (Chung, Ko, Joung, & Kim, 2018). The improved interactivity in chatbot make it popular to support customers better and tailored to customers' need, particularly in electronic commerce (Go & Sundar, 2019). This is due to a higher level of human-computer interaction are engineered by artificial intelligence. Chatbots provide another avenue to enable sellers and customers to connect more effectively and build customer relationships more easily.

Likewise, the interaction between them that takes place in chatbot also promotes knowledge sharing by allowing everyone the opportunity to create and co-produce content (Barreda et al., 2015). Product learning is enjoyable when it was conducted with the aid of technologies. This is due to the faster and complex computational power of the artificial agent embedded into the chatbot. A research study by Fryer et al. (2019) showed that the implementation of an empathy chatbot cultivated a sense of belonging for the customers and subsequently led to stronger bond ties to the sellers. Chatbot has been regarded as a suitable tool to take care of customer empathy. A list of the research in chatbot indicates that customer engagement is further improved when the sellers are putting the effort into meeting customer needs (Chung et al., 2018; Fryer et al., 2019; Xu, Liu, Guo, Sinha, & Akkiraju, 2017).

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