Chapter 9
Chatbots for Business and Customer Support

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ABSTRACT

Artificial intelligence (AI)-driven chatbots have established themselves as standard front-line solutions for companies looking to update consumer experiences while maximizing client engagement. Chatbots have become a crucial component of a company's customer-centric operations because of their fast replies, round-the-clock assistance, and ability to comprehend user inquiries. This chapter will describe the function of chatbots as customer service representatives and some of the benefits they offer to organizations. There will also be a discussion of the present difficulties facing the industry in integrating these conversational bots.

INTRODUCTION

Artificial intelligence (AI) is becoming a part of our daily lives by creating intelligent applications, such as conversational agents. Conversational agents, called chatbots, can perform a wide range of jobs, from simple tasks to complex procedures, and can be personality imbued (Kuhail et al, 2022). Chatbots are the classic example of an AI system and are one of the simplest and most common forms of intelligent human-computer interaction (HCI) (Bansal, 2018). The advances in natural language processing (NLP) have enabled them to understand multiple human languages and converse intelligently with users through auditory or textual methods. Per one of the definitions, a chatbot is "a computer program that simulates human conversation through voice commands or text chats or both" (Frankenfield, 2022). Indeed, there

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are several fields where virtual assistants are already in use. Users may access it using SMS text messages, cellphones, PCs, or other connected devices, and it just needs internet connectivity to function. The chatbot and user may converse in human language in what seems to be a standard conversation window. Users either type their query straight into the designated field or select certain buttons. It has been demonstrated that chatbots are a valuable and efficient way to inform customers.

Companies must be clear about the problems they encounter, how they plan to tackle them, and their goals while striving for gradual improvements considering current trends toward improving client touch points. For this purpose, several businesses are beginning to provide "chatbots" as a service to automate conversations with humans using computers for consumer interaction (Okuda & Shoda, 2018). In business, chatbots are widely used to speed up numerous processes, especially those involving personalization and customer support (Przegalinska, Ciechanowski, Stroz, Gloor, & Mazurek, 2019). Chatbots have developed into lucrative solutions for organizations due to their capacity for intelligent human interaction and simplicity of development and integration into current digital platforms. Chatbots are widely used nowadays for a range of online interactions between businesses and their clients in marketing and customer support. By giving clients high value, chatbots can enhance customer service, for instance, when searching for real-time information on the dependability and accessibility of goods and services. Customers' experience is flawless because of automatic responses to repetitive queries on frequent problems (Behera, Bala, & Ray, 2021).

CHATBOTS FOR BUSINESS

One of the main issues CEOs of contemporary businesses presently must cope with is digitalization. The word "digitalization" refers to the proliferation of digital technology across society as well as changes in individual communication styles and interpersonal interactions (Gimpel & Röglinger, 2015). The emergence of new digital technologies (such as social networks and cloud computing) has increased market transparency while reducing the knowledge asymmetry between sellers and consumers (Patil et al, 2017). As a result, building long-term client loyalty is crucial for businesses. The emergence of new technologies also had an impact on how individuals interact with businesses, and an increasing number of customers prefer to contact businesses through digital channels (such as online forms, social media, etc.) to express service requests or complete transactions, among other things. Businesses are now connecting with clients on digital platforms instead of conventional ones because of recent advancements in AI applications. The primary driver of this transformation is, among other things, the ease that technology offers