Chapter 15
Revolutionizing Customer Service and Experience:
The Impact of Artificial Intelligence

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ABSTRACT

This chapter delves into the crucial role played by artificial intelligence (AI) in redefining customer service and augmenting the overall experience for customers. In the current era, which is characterised by continually shifting and ever-demanding customer expectations, enterprises are increasingly adopting artificial intelligence (AI) as a powerful tool to effectively fulfil and surpass these demands. This study goes into detail about the various applications of artificial intelligence (AI) in the field of customer service, encompassing the utilisation of chatbots, virtual assistants, and personalised recommendation systems. Overall, this study offers a detailed overview of how artificial intelligence is transforming customer experience and service, as well as recommendations, best practices, and case studies for businesses seeking to leverage AI in order to provide exceptional customer support.

1. INTRODUCTION

In this age of artificial intelligence and machine learning, businesses are rapidly embracing technology to enhance consumer engagement and experience. AI is playing an important role in modern business environment(Bhardwaj et al., 2023a; Bhardwaj et al., 2023b).Advancements in Artificial Intelligence have transformed how companies engage with their customers, as they increasingly use this powerful technology to strengthen their customer experience strategies so as to ensure unparalleled customer sat-

isfaction and maintain a competitive edge. It is clear that Artificial intelligence (AI) is revolutionizing customer service and become a boon for all types of businesses by providing strategic and invaluable consumer insights. Companies have realised that leveraging AI technologies for growth and success as it helps improve the overall customer experience. Undeniably, AI-driven customer insights along with its 24/7 customer care helps businesses gain customer's trust as well as boosts brand awareness. More companies are keen to adopt AI-powered tools andtechnologies to elevate their customer experience solutions, thereby achieving increased loyalty and customer retention. Integrating AI technologies with their business objectives have made it easier for businesses to personalise their offerings, provide targeted solutions, and upgrade their customer experience strategy that caters to today's experience-driven economy.

2. THE RISE OF ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) is the process of simulation of human intelligence in machines that are programmed to reason and think in a manner akin to human beings. The term "artificial intelligence" was introduced in 1956 through a proposal put forth by a distinguished cohort of computer scientists and mathematicians who convened a summer workshop called the "Dartmouth Conference" (Hildebrand, 2019). The field of artificial intelligence incorporates a range of technologies, including natural language processing, machine learning, and computer vision, that allow machines to comprehend, evaluate, and react to interactions with human beings. With its ability to respond to client inquiries instantly and accurately, AI- powered chatbots have emerged as a game-changer in customer service. By leveraging natural language processing and machine learning algorithms, chatbots can understand customer intent and deliver personalised assistance, reducing response times and improving customer satisfaction.The nature of customer service has changed as a result of technological advancements and increased customer expectations. Traditionally, customer service was largely delivered in- person or via a call centre. With the advent of digital technology, customer service also transitioned into the digital realm.

The emergence of e-commerce and online shopping has significantly transformed the landscape of the customer service industry. Consumers have the ability to engage in the purchase of goods and services from the comfort of their own homes, thereby eliminating the need to physically visit retail establishments. The volume of customer inquiries and requests for assistance has increased during this period of transition, thereby requiring expedited response times. The impact of email on customer service was groundbreaking. Customers found it convenient to establish communication with companies in order to seek assistance. Due to email lag, responses took longer and more questions arose. As technology progressed, businesses looked for alternative methods of interacting with customers. Real-time conversation was facilitated using online chat. The support staff was able to provide a prompt response time.

The ability to provide support to clients through social media platforms grew. Twitter and Facebook were utilised by customers to air grievances, compare experiences, and seek resolutions. It became necessary for businesses to keep an eye on and interact with their customers on social media as these sites increasingly served as a focal point for public discourse and brand reputation management.The proliferation of smartphones and mobile apps opened a whole new avenue for customer service. Users of mobile devices exhibit a preference for interactions that are efficient and simplified in nature. Websites, mobile apps, social media, email, phone, and even live chat are now all integral components of the modern customer service. Customers want a consistent journey across all channels. They seek individualised care, prompt responses, and convenient answers. Customer service has been moulded by technological

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