Chapter 15
Artificial Intelligence:
Next Level Customer Service

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ABSTRACT

Artificial intelligence's (AI) importance in customer service has significantly expanded in our daily lives. Businesses and customers are already swiftly adjusting to the new reality thanks to AI's simplicity of use. Artificial intelligence is useful in many areas and corrects common mistakes in conventional customer service. The three most prevalent problems customers have with customer service involve delays in responses, a lack of contact control, and the difficulty to receive help outside of typical business hours. The good news is that AI can handle these problems with ease, especially when it comes to customer service. Since AI is ultimately dependent on the data provided, and today data is available in abundance and an effective analysis of that data is required in order to gain competitive advantage over rivals and only with the help of AI can this be achieved, it may be essential for businesses to employ AI-enabled customer experience solutions that capture and model data in order to improve both customer satisfaction and the overall health of the company.

1. INTRODUCTION

In the era of digital world, customer service (CS), whether business-to-business or business-to-consumer, must offer procedures and modifications that should result in improved customer service. Covid- 19 era has changed the thinking pattern and behaviour of individual (Sharma et al, 2022). The IT department initially has the only organizational responsibility for steering customer service through the technology process; this is a business issue that has an impact on all levels of management and personnel (Nobles, 2018).

According to McLean and Osei-Frimpong (2019), artificial intelligence (AI) has power to primarily alter the marketplace and how businesses interact with their clients. By providing businesses with a greater understanding of customers' preferences and purchase patterns, AI advances can improve the

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purchaser experience in particular (Evans, 2019). As a result, strategically integrating enhancing artificial intelligence technology at various pivotal consumer interaction points holds significant potential for organizations, potentially leading to improved customer satisfaction, employee engagement(Bhardwaj and Kalia, 2021) and overall organizational benefits (Ameen et al., 2021).Artificial intelligence technologies are omnipresent in our daily lives and improve our quality of life. Artificial intelligence's inevitable advancement has already begun to show up in marketing tactics, brand management, and long-term client relationship management. In a world where 4 billion people use the internet, artificial intelligence is practically impossible to ignore.

The term "artificial intelligence," originating from the Turing machines of the 1940s, was coined by Minsky and McCarthy during a 1956 conference on machine intelligence held in the United States. Since then, it has found extensive applications in various domains, including computer hardware and software, computer vision, image and speech recognition in robotics, machine learning, cognitive modeling, information retrieval, search technologies, and game theory. These applications have been widely explored in numerous academic publications, research initiatives, and practical implementations (Gere 2019).

2. ARTIFICIAL INTELLIGENCE AND BIG DATA

Artificial intelligence, which can be termed as both a robot and a phone, automate mundane human tasks, recall things that are elapsed, intelligently summarize complex information, learn from you, and even make suggestions (Gilbert, 1997). Since AI ultimately depends on the data that is provided, it may be crucial for organizations to increase both customer satisfaction and the general health of the company, AI-enabled customer experience solutions that record and model data should be implemented.Big data, machine learning, and potent solutions form the foundation of artificial intelligence's strength. This is where the idea of "big data" comes into play. By making it easier for businesses to gather and organise huge, complicated volumes of data, big data gives organisations the chance to employ more assimilated data. Based on this client self-data, it makes sure that consumers receive the products that correspond to their demands and needs at the appropriate time and location via the appropriate distribution methods.

The 3V model explains big data (Laney, 2001). The *volume* that describes the size, the *variety* of unstructured and semi-structured data unfolding, complicated data, the amount of time it takes to analyse big data and today's most significant aspect is speed or *velocity*.

Machine learning (deep learning) it is a very important aspect which lets the marketers to obtain an advantage over rivals in the market by understanding the logical conclusions from their big data collections and having the authority toentice customers to buy their products. Most crucially, because of this idea of artificial intelligence, firms who use it in their marketing strategies can forecast customer inclinations, track and analyse consumer purchasing behaviour, and forecast the consumer's subsequent purchase behaviour.

Strong solution is the third basic states that in the twenty-first century, when machines and people both understand the world similarly, computers can easily interpret emotions and human communication, find concepts and themes utilizing a multitude of data, and reply to clients in the best way possible.. They can also predict customers' behaviour and decisions and use this information to solve future issues (Dimitrieska, Stankovska, and Efremova, 2018).