

# Chapter 20

## Future of Customer Engagement Through Marketing Intelligence

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### ABSTRACT

*The industrial industry is increasingly recognising the significance of Industry 4.0 (I4) technological advances due to their ability to deliver several advantages, including improved efficiency, reduced expenses, and higher profit margins. The objective of the chapter was to examine existing literature on the influence of the fourth industrial revolution on customer experience. By utilising cloud-based instantaneous fashion evaluation and reporting tools, personnel at every level of an organisation may collect the necessary operational and experience data to evaluate and enhance the customer journey, focusing on crucial times. The key technologies of the Fourth Industrial Revolution that improve customer experience encompass cyber security, internet of things (IoTs), machine learning (ML), artificial intelligence, big data, and other technologies. This chapter asserts that the capabilities associated with the fourth industrial revolution, particularly the analysis of large amounts of data and its logical use, have the potential to bring about a fundamental change in marketing.*

## **INTRODUCTION**

Scientists universally agree that the world is undergoing a new industrial revolution known as Industry 4.0 in the early years of the twenty-first century. (Schwab, 2017; Vaidya et al., 2018). It is widely accepted that digitization is the primary catalyst for the fourth industrial revolution. The Industry 4.0 technological influence wave is still being propelled by interaction, digitization, and optimisation. The utilisation of new technologies in smart factories enables this change. However, the complete potential of Industry 4.0 and the Human Machine Interface (HMI) potential of Industry 5.0 can only be achieved when there is effective collaboration between both humans and technology (Liao et al. 2017). The industrialised the virtual world is a crucial facilitator for the seamless integration of various components.

Furthermore, Industry 4.0 plays a role in enhancing the digital supply chain and attaining sustainability, while also enabling organisations to overcome the obstacles associated with Industry 4.0 (German, Lucas, & Dalenogare, 2019). Industry 4.0 is a smart and sustainable approach to industrialization. It seeks to identify the optimal trajectory for technical advancement and structural modification in order to foster economic growth and facilitate a successful transition towards a circular economy (CE). China has implemented this approach to attain sustainable development by combining the circular economy with industry 4.0 (Leung, Wue, and Wen, 2019). Industry 4.0 is not a revolutionary advancement, but rather a combination of current or newly developed technologies that rely on the integration of cyber and physical systems. The importance of Industry 4.0 stems from various factors, like as the initiative was introduced by Germany and sparked a global discussion and decision-making process in the industrial sector. It combines elements from the ICT model and conventional mechanical engineering techniques, resulting in an intersection of various technological systems (Goecks, Santos, and Korzeniowski, 2010). Industry 4.0 is introducing a fresh set of technologies that manufacturers can utilise to enhance experiences for their customers and channel partners. Manufacturers have the ability to revamp their customer service systems using artificial intelligence (AI), which can lead to higher levels of satisfaction and client retention. Throughout every phase of the customer journey, sophisticated digital technologies are generating fresh possibilities for innovation and expansion, as well as devising unique methods to enhance and personalise the consumer experience. The literature pays less attention to the marketing impacts of the fourth industrial revolution. Having access to up-to-date consumer information enables sellers to personalise not just their products and services, but also other aspects of the marketing mix such as distribution, pricing, and communications (Rekettye & Rekettye Jr. 2019). Due to these advancements, the significance of client experience will progressively grow. The field of customer experience is a recent addition to modern marketing, and its use is constantly evolving and becoming more refined as a result of enhanced digitization. The objective of the chapter was to examine existing literature on the influence of the fourth industrial revolution on customer experience.

## **LITERATURE**

### **Industry 4.0**

The latest phase of the industrial revolution, known as Industry 4.0, is characterized by significant changes in manufacturing, consumption, and supply processes. Defined as the increase in digitization, automation, and the creation of digital value chains, Industry 4.0 aims to facilitate communication between

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