Chapter 7
Employing AI in the Sustainability of Smart Commerce and Supply Chain

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ABSTRACT

Artificial intelligence and machine learning are overcoming more businesses and distinctive angles of our lives daily. Of course, the coordination industry isn't absolved from this. Manufactured insights and machine learning within the coordination industry can play a vast and successful part in the field of the supply chain. By utilizing this innovation, forms can be optimized, botches made by people can be maintained a strategic distance from, and future openings and challenges can be anticipated. In this manner, business productivity and success will be given. In this chapter, subtle elements are mentioned about the benefits of utilizing and executing manufactured intelligence technology within the supply chain, and by perusing these things, you may get the significance of how counterfeit intelligence and machine learning calculations can offer assistance in creating your commerce.

INTRODUCTION

Artificial intelligence (AI) can potentially convert numerous perspectives of trade operations. This innovation can be utilized in different areas such as information examination and request determining, progressing coordinations and transportation courses, and identifying wasteful focuses within the supply chain. This eventually led to strides in responsiveness to request changes, decreased conveyance times, and lower costs.

Supply chain management is critical as one of the main success factors in businesses that produce goods and services. According to the ever-increasing developments in technology and information, using artificial intelligence as one of the supply chain management solutions is required (Fallah et al., 2021). Artificial intelligence is a concept in which computers and systems are able to perform tasks that are. They usually seem complicated for humans. In the supply chain provision field, using artificial intelligence improves the performance and efficiency of existing processes (Gallo et al., 2023).

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The use of artificial intelligence in supply chain management can help reduce costs related to returns and after-sales services. By using intelligent algorithms in producing goods and products, it is possible to obtain detailed information about the quality and characteristics of the products and to take measures to increase the quality and reduce the failure rate of the products. Also, by using artificial intelligence, it is possible to analyze customers' buying patterns and demand better and identify the problems that may cause the return of goods (Kazancoglu et al., 2023). By improving quality control and inspection processes, shipments that have caused product returns can be avoided. Also, by improving the methods of after-sales service and communication with customers, it is possible to manage customer needs better and avoid sending inappropriate goods. Therefore, using artificial intelligence in supply chain management can help reduce the costs related to the payment of returns and after-sales services, improve the quality of goods and products, increase customer satisfaction, and improve their shopping experience (Liu, 2023).

Using customer data makes it possible to achieve a more accurate prediction of customer needs and improve sales accordingly. For example, by analyzing customer purchase data, it is possible to achieve a more accurate prediction of their needs and individual tastes and offer them related products. Also, by using purchase data, it

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