



INTERNATIONAL CONFERENCE
ON DIGITAL BUSINESS
MANAGEMENT
AND ECONOMICS

ARTIFICIAL INTELLIGENCE APPLICATIONS IN LOGISTICS & SUPPLY CHAIN
MANAGEMENT (SCM)

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ABSTRACT

Logistics & supply chain management (SCM) paradigms are redefined by a variety of IT tools and technologies integrating towards smartness, traceability and end-to-end visibility of the entire network. In this context, advances in artificial intelligence (AI) techniques are one of the breakthrough technologies. In this study, a literature review of AI applications is provided from logistics & SCM perspective. The study reveals that AI enables the development of predictive, dynamic and autonomous capabilities in almost all supply chain processes by providing increased productivity, on-line monitoring, predictive analytics, contextual intelligence and decision support. They aid procurement and supplier selection processes; help demand forecasting; integrate with warehouse management systems, find a variety of applications in transportation management; and redefine the customer support and human resources processes via chatbots. It is shown that by integrating with robotics, computer vision and autonomous vehicle technologies, a wide range of AI applications is observed with increasing assimilation. Thus, AI appears to be naturally serving for the main logistics and supply chain objectives, and strategically fitting with the domain.

Keywords: Artificial Intelligence, Logistics, Supply Chain Management

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