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Postgraduate Dissertation

Bridging Technologies and Trends: A Systematic Literature Review
of AI & ML applications in the Eurozone Supply Chains

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Patras, Greece, June 2024

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Abstract

Our research has indicated that there are not enough studies written about the key points related to Artificial Intelligence (AI) and Machine Learning (ML) applications in the Eurozone supply chains and there are not enough studies in this topic inspired by the systematic literature review method. The present study reviews the existing literature on AI and ML applications in the Eurozone supply chains published from 2019 to 2023 and addresses three research questions. We analyzed 37 journal articles using a systematic literature review methodology. We found that there has been an increase in research from 2021 onwards, while the research on 2019 and 2020 was extremely limited. The vast majority of the examined papers were multi country and have received contributions from multiple authors. Most of the papers that specified the country their data was sourced from, concern developed Eurozone countries and there has been limited research on emerging, standalone and frontier countries. The 37 examined papers span across several subject areas and mostly explore applications related to Neural Networks (NNs), Deep Learning (DL) and Decision Tree Learning (DTL) techniques.

Keywords

Eurozone Supply Chains; AI and ML applications; Systematic Literature Review; Technology adoption; Supply Chain Resilience; Supply Chain Optimization

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