Data-driven technologies applied to logistics: Systemic and Bibliometric Review

Smili Safae[0009-0009-3281-3931], Bensfia Chafik[0000-0001-8991-7023], Lahrach Rahhal [0000-0003-3995-3282] and Tamouh Nadia[0000-0003-4421-0600]

[1] Laboratory of Management and Development of Businesses and Organizations, Higher School of Technology, Mohammed First University of Oujda, Morocco, safae.smili@ump.ac.ma

[2] The Entrepreneurship, Strategy, and Audit Control Research Team, National School of Commerce and Management, Mohammed First University, Oujda, Morocco, c.bensfia@ump.ac.ma

[3] Laboratory of Management and Development of Businesses and Organizations, Higher School of Technology, Mohammed First University of Oujda, Morocco, r.lahrach@ump.ac.ma

[4] Laboratory of Management and Development of Businesses and Organizations, Higher School of Technology, Mohammed First University of Oujda, Morocco, n.tamouh@ump.ac.ma

Abstract. In a context of accelerated transformation of supply chains, data-driven technologies such as artificial intelligence, the Internet of Things, big data, and blockchain are emerging as fundamental levers for optimizing logistics processes. This article presents a bibliometric and systematic analysis of scientific publications indexed in the Web of Science database between 2020 and 2025, with the aim of assessing the role played by these technologies in improving logistics performance. The analysis highlights that these technologies promote real-time decision-making, service personalization, production flow optimization, and proactive resource management. However, their integration also raises cybersecurity and data quality issues, requiring the strengthening of digital protection mechanisms.

Keywords: Data-driven technologies, Logistics, Logistics optimization;