

Procurement 4.0: Benefits And Challenges of Digital Transformation In The Procurement Process

Mia DELIĆ

PhD, associate professor, University of Zagreb, Faculty of Economics and Business, Croatia

Mate DAMIĆ

PhD, assistant professor, University of Zagreb, Faculty of Economics and Business, Croatia

Marta RIMAC

student, University of Zagreb, Faculty of Economics and Business, Croatia

Correspondence should be addressed to Mia DELIĆ; mdelic@efzg.hr

* Presented at the 41st IBIMA International Conference, 26-27 June 2023, Granada, Spain

Copyright © 2023. Mia DELIĆ, Mate DAMIĆ and Marta RIMAC

Abstract

Modern supply chains, characterized by geographic differences, high complexity, dynamism, and uncertainty, are forcing companies to consider how they can benefit from new technologies. The transition from a traditional procurement model to a Procurement 4.0 ecosystem enabled by the combination of industry 4.0 technologies is revolutionizing the way companies operate the procurement process. In particular, rapid advances in digitization have contributed to many benefits within the procurement function and along the supply chain, such as cost reduction, integration, and process flexibility. However, there is limited research on the use of digital technologies such as Internet of Things, Big Data and analytics, AI, etc. in the context of procurement. Therefore, this paper aims to explore the current adoption of Industry 4.0 digital technologies in the procurement context in Croatian companies. The assessment provides insights into the current status, the potentials of these emerging technologies for procurement-related activities, the benefits of digital transformation of procurement processes, and the challenges of adoption. A quantitative analysis with an online survey was used to collect primary data from 62 Croatian companies. The results help to understand the importance of implementing Industry 4.0 technologies in the procurement process and show the current situation of digital transformation in the procurement sector in Croatian companies, which is still under-researched. In this way, the paper facilitates practicing managers' access to concepts of digital technologies, their importance for the digital transformation of the procurement process, and the challenges associated with their adoption in order to remain competitive in the global context.

Keywords: procurement 4.0; industry 4.0 technologies; digital technologies; digital transformation; challenges