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Enhancing Competitive Advantage in Logistics through Infrastructure as Code and Cloud Technologies*

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Abstract

The increasing reliance on digital technologies in logistics has intensified the need for agile and efficient IT infrastructures. This study explores the role of Infrastructure as Code (IaC) and cloud computing in enhancing competitive advantage within logistics operations. While numerous studies have examined these technologies individually, limited research addresses their combined effects on logistics performance. Employing a mixed-methods approach, this research integrates interviews with IT logistics professionals and a quantitative analysis of key performance metrics before and after IaC adoption. The findings reveal significant improvements in deployment speed, configuration accuracy, and operational cost efficiency. These outcomes underscore the strategic importance of automation-driven infrastructure for achieving scalability and responsiveness in contemporary logistics settings.

Keywords: Infrastructure as Code, Cloud Computing, Logistics, Business Agility, Competitive Advantage

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