

AI in Defence Logistics: Optimizing Supply Chains and Resource Management

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Alongside the growing instability within Europe's security landscape, militaries begin to seek innovative ways to counter newly emerging threats. This study analysed how AI may enable military forces to develop, conduct, and grow their logistics capabilities in ways that help them achieve operational objectives. This study was based on a literature analysis, and focused on three relevant theories of growth explaining organizational expansion. The study analysed the relationships between logistics, AI, growth theories, and industry growth practices in supporting the military logistics growth development where support from both the established growth theories and the long-standing industrial practices are needed. The study positions AI as a crucial enhancer in developing an optimal strategic-fit growth concept. The study identified nine propositions that underscore the relationship between theoretical variables of growth enhanced by AI, providing a framework to guide future research on military logistics growth. A comprehensive literature review synthesizing existing theories of organizational growth with practical industrial practices and exploring their intersection with AI-enhanced logistics in military contexts was conducted. This findings propose AI-driven strategies for military leaders to enhance logistics growth, contributing to military innovation and expansion. It further bridges the gap in the literature on an area relatively unexplored in relation to AI-enabled logistic growth in the military. The results further provide a strategic pathway for innovation and expansion in military logistics.

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