

Impact of Supply Chain Capabilities on Operational Performance with the Mediation Effect of Technological Innovation in the Manufacturing Industry of Sri Lanka

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Supply chain capabilities are essential to Sri Lanka's manufacturing sector as they optimize operational efficiency, minimize costs and ensure on-time delivery of goods, contributing to competitive advantage and customer satisfaction. Effective supply chain management enhances resilience, responsiveness and adaptability, enabling manufacturers to navigate uncertainties, mitigate risks and capitalize on opportunities in Sri Lanka's dynamic market. The purpose of this study is to identify the impact of Supply Chain Capabilities on Operational Performance with The Mediation Effect of Technological Innovation in The Manufacturing Industry of Sri Lanka. This study underpins the resource-based view and the core competency theory. A quantitative cross-sectional survey was conducted using a structured questionnaire. The study sample included 79 manufacturing organizations in Sri Lanka. These organizations adopted supply chain capabilities such as information exchange, activity integration, coordination, and responsiveness. Structural Equation Modeling (SEM) with the help of SmartPLS was used for data analysis. The study's findings emphasize a strong positive correlation between the implementation of supply chain capabilities and operational performance, further the findings highlighted the significant mediating effect of technological innovation in enhancing this relationship. The primary objective of the study is to address operational performance improvement within the manufacturing industry through targeted improvements in both supply chain capabilities and technological innovation, thereby creating greater efficiency, resilience and competitiveness in the marketplace. The study aims to improve the operational performance of the manufacturing sector by improving technological innovation and understanding supply chain capabilities. Its insights are valuable to academics and provide practical guidance to middle and lower-level management, fostering informed decision-making and strategic improvements in industry practices.

Keywords: Supply Chain Capabilities, Operational Performance, Technological Innovations, Manufacturing Industry