

Does Supply Chain Analytics Impact Supply Chain Agility and Competitive Advantage? The Mediating Role of Robustness Capability

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Abstract

This study aimed to investigate the Impact of Supply chain analytics on Supply Chain Agility and Competitive Advantage the Mediating Role of Robustness Capability. An online survey was used to collect data from employees of Pharmaceutical manufacturing companies, and 192 valuable questionnaires were collected. Afterwards, the data collected was analyzed using the Partial Least Squares (PLS)/Structured Equation Modelling (SEM) to determine the effect between the variables.

The results showed SCA's positive impact on supply chain agility, displaying a positive and statistically significant relationship between SCA and competitive advantage. On the other hand, the results display a positive impact of robustness capability as a mediating variable between SCA and supply chain agility. The results display a positive impact of robustness capability as a mediating variable between SCA and competitive advantage. This study adds to the relevant literature by displaying the role of the mediator of robustness capability in the relationship between SCA and competitive advantage and the role of the mediator of robustness capability in the relationship between SCA and Supply chain agility. The study recommends that Organizations should prioritize strategic investments in enhancing SCA while concurrently developing robustness capabilities; given the dynamic nature of the pharmaceutical manufacturing industry, companies are advised to establish mechanisms for continuous monitoring and adaptation, Invest in employee training programs to enhance skills related to technology adoption, data analytics, and adaptive problem-solving, fostering a workforce capable of driving organizational resilience.

KEYWORDS: Supply Chain Analytics, Supply Chain Agility, Competitive Advantage, Robustness Capability.