Big Data Capabilities and their Effect on Firm's Performance: The

Mediating Role of Firm's Agility

By

Miran Ahmad Qutami

Supervisor

Prof. Khaled Saleh Al-Omoosh

Al-Zaytoonah University of Jordan, 2023

Abstract

This study aims to investigate the relationship between Big Data capabilities and the firm's performance by mediating the role of firm agility. An online survey was used to collect data from IT managerial positions in Jordan's telecommunication companies, and 157 useful questionnaires were collected. Afterward, 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 a statistically significant and positive impact of Big Data capabilities on firm agility. On the other hand, the results also showed a statistically significant and positive impact of firm agility on firm performance. Where the significant and positive impact of Big Data capabilities on firm performance. Finally, results showed the full mediating role of firm's agility in the impact of Big Data capabilities on firm performance. This study adds to the relevant literature by displaying the role of the mediator of firm agility in the relationship between Big Data capabilities and firm performance. The study recommends to get value for business from Big Data investments as an essential component. These investments include employing individuals with a practical managerial and technical understanding of Big Data, integrating Big Data decision-making into the organization's structure, and building a culture of organizational learning.

Keywords: Big Data, Big Data capabilities, firm performance, firm agility.