THE EFFECT OF GREEN SUPPLY CHAIN MANAGEMENT PRACTICES ON SUSTAINABILITY PERFORMANCE:

MODERATING ROLE OF DIGITAL TECHNOLOGY ADOPTION IN SUPPLY CHAIN

by

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ABSTRACT

Today, most of manufacturing companies focus on green supply chain management practices for the organization's sustainable development. Digital technology plays a major role in the modern supply chains enabling firms to focus on manufacturing with increased the efficiency while reducing the waste.

Apart from that, in the modern world "green and eco" friendly concept is a trend and people prefer buying eco-friendly products without considering the other factors. Hence, manufacturers tend to follow green supply chain practices to satisfy their customers while taking part of the social responsibility. However, how these green supply chain practices affect sustainable performance of manufacturing organizations while using digital technology adoption is still not sufficiently investigated.

The primary objective of this study is to examine the direct impact of GSCM practices on sustainability performance in the manufacturing industry and assess the level of digital technology adoption in the supply chain. Data have been collected by means of a survey in which a final sample of 94 representatives from manufacturing organizations participated. To analyze the data, partial least square structural equation modeling was applied using SmartPLS software. The study revealed that Green Supply Chain Management Practices lead to improving all dimensions of Sustainability Performance (Economic, Environmental, and Social). However, digital technology adoption has no significant moderating effect on the above effect.

Accordingly, all GSCM practices and digital technology adoption are significantly associated with sustainability performance while the use of digital technology adoption does not moderate the direct effect of GSCM practices. Utilizing data collected only from manufacturing firms in Sri Lanka is a limitation of this study. This research provides guidelines for manufacturers who have implemented and are willing to implement GSCM practices. The study has made a significant contribution to the literature by showing that aspects of GSCM practice have an impact on four dimensions.

Keywords: Green Supply Chain Management Practices, Sustainability Performance, Digital Technology adoption.

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