Time Driven Activity Based Costing Capability to Improve Logistics Performance: Application in Manufacturing Context

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Abstract : In a highly competitive environment characterised by uncertainty and disruptions, such as the recent COVID-19 outbreak, supply chains (SC) face the challenge of maintaining their cost at minimum levels while continuing to provide customers with high-quality products and services. More importantly, businesses in such an economic context strive to maintain survival by keeping the cost of undertaken activities (such as logistics) low and in-house. To do so, managers need to understand the costs associated with different products and services in order to have a clear vision of the SC performance, maintain profitability levels, and make strategic decisions. In this context, SC literature explored different costing models that sought to determine the costs of undertaking supply chain-related activities. While some cost accounting techniques have been extensively explored in the SC context, more contributions are needed to explore the potential of time driven activity-based costing (TDABC). More specifically, more applications are needed in the manufacturing context of the SC, where the debate is ongoing. The aim of the study is to assess the capability of the technique to assess the operational performance of the logistics function. Through a case study methodology applied to a manufacturing company operating in the automotive industry, TDABC evaluates the efficiency of the current configuration and its logistics processes. The study shows that monitoring the process efficiency and cost efficiency leads to strategic decisions that contributed to improve the overall efficiency of the logistics processes.

Keywords: efficiency, operational performance, supply chain costing, time driven activity based costing

Conference Title: ICGSCLM 2021: International Conference on Global Supply Chain and Logistics Management

Conference Location: Istanbul, Türkiye Conference Dates: April 26-27, 2021