

The Effect of Management Information System (MIS) on Warehouse Operation Efficiency in Small and Medium Enterprises (SMEs)

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Abstract. Due to the globalization, warehousing activities are now becoming significantly crucial to ensure its effectiveness and efficiency of receiving, storing and handling of goods and materials in the manufacturing firms. Thus it creates the pivotal roles of logistics support in exporting the goods to other destination and also as an excellent hub with accurate information of timely delivery, receiving of materials and goods through efficient MIS networking. The objectives of this paper are to see whether there is any relationship between the warehousing operation (WO) and warehouse efficiency (WE), to examine the mediating effect of warehousing MIS (WM) in the relationship between warehousing operations and warehouse efficiency and to determine whether there is any relationship between the warehousing operations and warehousing MIS. This paper would focus only on Small and Medium Enterprise (SMEs) Manufacturing sector in Peninsular Malaysia, registered under the Small and Medium Industries Development Corporation (SMIDEC). Overall 187 SMEs were involved in this study. Questionnaires (42 questions) were given to owners, factory managers or warehouse managers or warehouse section heads. All the SMEs involved came from various sectors such as food & beverages, metal & metal products, wood & wood products, paper and printing publication, machinery & engineering, plastics products, electrical & electronics, non-metallic mineral product, petro chemical and chemical, transport equipment, rubber & rubber products, and leather. Findings showed that, there is a strong relationship between WO and WE with its correlation coefficient 0.772. Based on p-value 0.00, the study found that it is very significance. Based on the Sobel, Aroian and Goodman tests showed that the results are significant, $p < 0.05$. It had confirmed that the Warehousing MIS mediates the relationship between the Warehousing Operations and Warehouse Efficiency. Finally there is a strong relationship between WO and WM with the significance correlation 0.375 and correlation coefficient based on p-value 0.00. The results indicate the important of warehouse efficiency in the manufacturing firms. The warehouse operations and MIS are the main basic variables for process management improvement in making the warehouse to be efficient and firm performance achievable. It is through the warehousing MIS mediation to the warehousing operations that mediate positively to its relationship over the warehouse efficiency.

Keywords: Warehouse efficiency, warehouse operations, warehouse MIS, mediating effect. SMEs