

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

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ABSTRACT

Due to the globalize business, the warehouse activities are now becoming the centre of important to ensure the effective receiving, storing and handling of goods and materials efficiently in the manufacturing firms. Thus it creates the pivotal roles of logistics support in exporting the goods to other destination as excellent hubs with accurate information of timely delivery, receiving of materials and goods through efficient MIS networking. This paper focus on the warehouse efficiencies in relation with the warehouse layout among SMEs manufacturing firms and its mediating effect with Management Information System (MIS). 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 shows that the Warehouse Efficiency (AWE) correlates significantly with the Warehousing Layout variables above 0.7 while Warehousing MIS (AMIS) above 0.5. As for multiple regression test, variables AL and AMIS, the effects were significance with the $R^2 = 0.758$ or 75.8 percent to explained in model AWE. In this test, it is found that there are significance value of variables AL (0.623) and AMIS (0.03). This reflects of the significance role of AL and AMIS in maintaining the warehouse efficiency. The results indicate the important of warehouse efficiency in the manufacturing firms. The warehouses Layout 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 Layout that mediates positively to its relationship over the Warehouse Efficiency.

Keywords: Warehouse efficiency, Layout, MIS, SMEs