FACTORS AFFECTING THE EFFECTIVENESS OF THE WAREHOUSES: WITH SPECIAL REFERENCE TO THE TELECOMMUNICATION INFRASTRUCTURE CONSTRUCTION FIELD, SRI LANKA

J.A. Rathnayake and E.A.C.P. Karunarathne

Department of Industrial Management, Faculty of Applied Sciences, Wayamba University of Sri Lanka, Kuliyapitiya, Sri Lanka

Corresponding author: im.chami@gmail.com

Warehouse plays a major role in logistic operations especially in the telecommunication infrastructure construction industry. Inefficient warehouse management makes huge cost to the company. Thus, it is important to manage warehouses especially in this industry as they are using very specific materials, machineries, equipment and tools. On the other hand, firms need to keep larger as well as costly inventories for the successful completion of the construction projects. This implies differences compared to other type of warehouses and also generates some specific requirements in warehousing for this industry. Thus, this study focused to identify and examine the factors affecting effectiveness of warehouses in telecommunication infrastructure construction industry. The study was carried out by performing a comprehensive survey, and a questionnaire was used to get the feedback from the selected sample which comprises both executive and nonexecutive employees in warehouses. Throughout the study, for the purpose of analysis, descriptive statistics, correlation analysis and logistic regression were used to examine the factors. Scraps management, environmental impacts, waste management, space utilization, emergency unloading, safety and continuous maintenance were identified as factors affecting to warehouse effectiveness and these variables' effect on warehouse effectiveness was examined. Employee perception on environmental impacts and continuous maintenance were identified as significant factors which affect the overall effectiveness of the warehouses. Further analysis were carried out and identified these factors' significant behaviours based on different firm related demographic categories such as employee age, gender, education, service duration and employee category. According to the findings, by enhancing continuous maintenance procedures and minimizing environmental impacts by improving layout designs and controlling chemical usage levels, telecommunication infrastructure construction, firms can effectively manage their warehouses.

Keywords: Construction industry, Effectiveness, Telecommunication infrastructure, Sri Lanka, Warehouse