ABSTRACT

The objectives of the study were to find out the appropriate warehouse management method to overcome 1) the problems of pick face location and warehouse full, 2) higher-than-expected stock cover day due to continuous growth of stores nationwide. The growing of stores level each year lead an increasing number of new products and assortments to meet the customer satisfaction. The warehouse or distribution center also has an impact of higher stock level and available space to serve the new products. As the limited facility of existing warehouse, the management has investigated various warehouse management methods of peers and other related industries in order to find out the suitable methods to enhance efficiency and productivity. From the study and algorithm testing, the findings indicated that the existing warehouse is probably managed by combining the method of "Post Distribution cross dock" and DC stock item method. The data was analyzed using three indications; productivity, travel distance and cost per case to compare the efficiency of both methods. The sample was selected from the actual data of DC stock item method and simulated sample for Post Distribution cross dock for algorithm testing. All data are collected and analyzed by using spreadsheet in MS Excel. The results of this study were 1) higher productivity of Post Distribution cross dock by 14% 2) the shorten time distance of Post Distribution cross dock by 62%, and 3) lower cost per case of Post Distribution cross dock by 14% when compared to DC stock item method. Additionally, the aforementioned combination methods can reduce the pick face location and reserve location. As the Post Distribution cross dock method has not required the storage location, therefore this method will not impact the existing warehouse facility.