ABSTRACT

PT XYZ *is a company that manufactures all the poultry equipment such as chicken meal equipment, box chicks, and others. The products are divided into two types namely plastic and metal products. The problem faced by* PT XYZ *is in the warehouse did not have arrangements regarding the layout of the warehouse, particularly in finished good warehouse plastic with a high level of demand. In addition, the type of finished good sales of plastic products can be either a complete set, which consists of multiple* SKUs *into one product function, causing the majority of consumers of ordering more than one type of product with varying amounts. Due to the nothing of clear storage arrangement, finally done randomly by surrounding the warehouse to find the empty place. As a result, the storage and picking time of goods becomes longer. Therefore, it is necessary to design the layout of the warehouse.*

Similarity coefficient approach is one method of the correlated storage policies that are used to measure the correlation among products based on similarities in the list of orders. This is done to bring a product that is often out together. Furthermore, these products are formed into several clusters or groups using a hierarchical algorithm in order to facilitate the operator in product picking. Arranging of intra-group and inter-group products made using CRAFT *algorithm in order to minimize the movement of material handling. Slotting and zonation also conducted to determine the capacity of floor and rack along the area based on clustering product.*

Keywords : warehouse layout, similarity coefficient, clustering algorithm