

ABSTRACT

Adorable Projects. Adorable Projects is one of the MSMEs (Micro, Small and Medium Enterprises) in the field of Fashion originating from Cimahi, West Java, which sells predominantly women's fashion needs for footwear. In this study, the footwear category was chosen because it has a dominant product category sold by Adorable Projects, which is 66% and also in sales activities in 2023 has the highest sales compared to the other 3 categories. The problem that occurs in this study is that the picking activity has the largest gap compared to other activities, which is 32% of the standard time. This is caused by 2 aspects, namely the people aspect and the method aspect. In the people aspect, there is a lack of communication between putaway staff and inventory staff which results in differences in product positions in the system and actual. In the Method aspect, namely the absence of classification, picking is still manual, the high pile at level 5. In an effort to overcome these problems, a proposed design of goods storage is carried out and will use the help of simulation tools. The first step taken is classification using fsn analysis to determine the classification of products with the highest movement value, then calculating the throughput / spacerequierment ratio for ranking in each classification. Next is the calculation of distance and time calculation to find out the location with the closest distance and fastest time to the MHE parking location and to find out the location of the goods after classification. The next step is to create a simulation model with anylogic tools to determine the average comparison of time with actual storage conditions and proposed storage conditions with, then a comparison between the two can be seen, at the proposed storage location has decreased by 16%, namely for the proposed storage to get a time of 12.96 minutes and for the time with actual storage which is 15.32 minutes. The results for demand fulfilled in actual conditions are 669 units and the proposed storage gets the results of demand fulfilled as much as 773, this is in the proposed condition has increased by 16%.

Keywords : Actual Time, Picking, Class-based Storage, Simulation