ABSTRACT

PT XYZ *is one of furniture company which has main service in manufacturing*. PT XYZ *use their raw material warehouse to manage the supply for production needs*. *The existence of problem on warehouse raw material I activity especially in picking activity which cause the not optimum of order fulfillment*. *It caused by searching process which done manually on picking*. SKU (*Stock Keeping Unit*) *placement on rack which done randomly by operator may make it does not tidy arranged and well organized*.

The first step is making a map on entire activities which existed in raw material warehouse I of PT XYZ *by using Value Stream Mapping* (VSM*) and Process Activity Mapping* (PAM). *Therefore it can obtain process time and value for each activity. Then it should be discovered the longest non value added time from picking activity. In order to reduce the searching time mainly in picking, it may accomplish the material placement allocation by grading the materials based on material characteristics with* ABC *Analysis and* FSN *Analysis. After that, it should take slotting and zonification to determine the area of placement for each* SKU's *based on classification.*

After doing the process of classification, slotting, and zoning, the next step is designing future state to find the searching time which reduced by 486,49 seconds or 31,79% from 1.324,48 seconds or 22,08 minutes of the total process time while the percentage of value added is increased by 12%.

Keyword : Raw Material, Warehouse, Value Stream Mapping, Process Activity Mapping, ABC Analysis, FSN Analysis, Warehouse Slotting