

ABSTRACT

PT. XYZ is a condensor company with the main activity of manufacture and condensors selling. PT. XYZ has three main warehouses which are large raw materials warehouse, small raw material warehouse, and finished good warehouse. Raw material warehouse is the place to store large dimension spare part. Due to goods damaging in large raw material warehouse and the product searching time is relatively long in picking process is affected the goods delivery time caused production service tardiness.

The first step to solve this problem is to map the whole information and material flow process in the PT XYZ's large raw material warehouse using Value Stream Mapping (VSM). After that, detail activity classification is made using Process Activity Mapping (PAM). The next step is to identify the warehouse waste using tool checklist. The result of the waste analysis is generating the waste of motion, transportation, and waiting. The cause of the waste is discovered using fishbone diagram.

The idea of solving the problem is including the product classification based on the product characteristic using FSN analysis, product allocation based on the result of product classification, warehouse product codification, visual control and Warehouse Management System (WMS). From the future state map idea design result, it can be concluded that the waste level is decreased to the value of 23% from the total process which is 3058.14 seconds or 50.96 minutes, whereas the value added in future state condition become 77%.

Keywords: Manufacture, Value Stream Mapping, Process Activity Mapping, FSN Analysis, Checklist, Fishbone diagram, Warehouse Management System