

ABSTRACT

XYZ Ltd. is a company that focus on Fast Moving Consumer Good (FMCG), that is a provider of products such as snacks and beverages. XYZ Ltd. has a warehouse which has function to store and distribute products under license of ABC Group to depots belonging to the ABC Group called Replenishment Distribution Center. The duplication of activities, goods storage allocation policy that is not based on the speed of movement, and lack of display pointer of storage location, causes a delay in the fulfillment of orders. Order delays resulted in accumulation of goods in the warehouse that inhibits the activity of inbound and outbound.

Initial step is mapping the entire flow of information and material that occurs in the process in the RDC XYZ Ltd. uses Value Stream Mapping. The next step is classifying the activity using Process Activity Mapping. Next, identifying the waste based on 8 criteria waste by using a checklist. Based on the checklist, derived types of waste that occurs, then look for the root cause of the problem using a fishbone diagram.

Proposed improvements using Lean Warehousing approach with the appropriate application of Lean tools, such as Warehouse Slotting, Visual Control, and Key Performance Indicator (KPI). From the results of design of the proposed future state map, it can be concluded that the level of waste that occurs has decreased by 59% from 486.45 seconds to 198.57 seconds. Total processing time was reduced by 21.29% over the existing process with a value of 2.302.84 seconds, value added time to be 51.07%.

Keywords: Lean Warehousing, Value Stream Mapping, Process Activity Mapping, Waste, Fishbone Diagram, Lean Tools.