ABSTRACT

CV XYZ is one of the MSMEs operating in the textile and fashion industry. One of the products produced by CV XYZ is instant hijab. In actual conditions, companies often neglect delivering goods on time to customers. This causes customer complaints to the company. Therefore, identification is carried out regarding the causes of problems on the production floor. Identification of this problem is done by finding out the root cause of the problem in the production process using a fishbone diagram. Apart from that, Process Activity Mapping and Value Stream Mapping are used to determine the types and causes of waste. By carrying out calculations using Process Activity Mapping and Value Stream Mapping, the results are obtained from the total lead time, Value Added (VA) activities, Non-Value Added (NVA) activities, Necessary Non-Value Added (NNVA) activities, and the type of waste or wastage involved. appear. From the calculation results, it was found that the types of waste that emerged were motion waste and waiting waste. The aim of this final project is to reduce Non-Value Added (NVA) activities caused by waste motion with a percentage of 72%. The cause of waste motion is caused by man and method factors. To improve waste movements that arise, a proposal is made to implement 5S activities (seiri, seiton, seiso, seiketsu, and shitsuke) which are aimed at minimizing movements that do not add value to the operator. Seiri or concise design in the form of designing red tags and log registers, seiton or neat design in the form of goods storage and labeling, seiso or clean design in the form of cleaning equipment storage and monitoring checklists, seiketsu or maintenance design in the form of operator picket schedules and 5S work rules, and The last one is shitsuke or being diligent in the form of making 5S posters, audit checksheets and getting used to 5S activities. With the proposed 5S activities, operators can carry out the production process smoothly and more productively. Based on simulation results using the FlexSim application, non-value added activities can be reduced by 440.12 seconds. In the simulation using FlexSim, the output of instant hijab production after the proposed implementation of 5S could produce 72 pieces a day, whereas before the implementation of 5S activities it could only produce instant hijab production of 68 pieces. This simulation assumption is only carried out to determine production increases without direct application to the company. This

production increased by 4 units a day after simulating the implementation of 5S activities at CV XYZ.

Keywords: Lean Manufacturing, 5S, Value Stream Mapping, Process Activity Mapping, Waste Motion