ABSTRACT

PT. Kerja Bersama Sentosa is a company engaged in manufacturing, namely the garment industry that produces shirts and children's clothing. In recent years, there has been an increase in demand for Kemeja Tunik Wanita (DS 0276,124) where PT. Kerja Bersama Sentosa has not been able to meet this demand with the current condition of the production line. Therefore, there is a need for a Lean Manufacturing approach to increase productivity by reducing waste. The approaches used are *Value Stream Mapping* (VSM), *Value Stream Analysis Tools* (VALSAT), and *Root Cause Analysis* (RCA). The flow of current state values is generally shown through *Current State Mapping* (CSM). Based on data processing, three selected VALSAT tools were obtained, namely *Process Activity Mapping* (PAM), *Supply Chain Response Matrix* (SCRM), and *Demand Amplification Mapping* (DAM). In identifying the types of waste, the results obtained are *Over Production*, *Inappropriate Inventory*, *Defect*, *Excessive Motion*, *Transportation*, *Excessive Process*, and *Excessive Waiting*. Next, identify the root cause of waste using *Root Cause Analysis* (RCA) and determine the proposed corrective solution. After that, apply the proposed improvement solution into *Process Activity Mapping* (PAM) and *Future State Mapping* (FSM) so that 75.5% *Value Added Activity* is obtained, 24.5% *Necessary Non Value Added Activity*, and *Waiting Time* decreased from 4.410 s to 2.190 s.

Keywords: *Lean Manufacturing*, *VSM*, *VALSAT*, *RCA*

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