Production Flow Analysis through Value Stream Mapping Switchgear Manufacturing Industry

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Abstract

A significant element of lean production is the assessment and elimination of inefficiency. Manufacturers use LM to maintain the pinnacle of competition by increasing the efficiency of their industrial technologies and increasing product reliability. The aim of this research is to improve the operational process of the company that manufactures various features for MV Switchgear manufacturing lines by minimizing waste and non-value added process variations using Value Stream Mapping (VSM), one of the most important lean production methods. First, a current value stream map of the assembly line was created using structured interviews, surveys, and supporting information from the company. Thereafter, the potential Future Stream map application of lean production concepts was suggested to highlight the total production lead time and additional value time. Impact on the previous decision, VSM is a valuable and adaptable technique that ultimately helps in conceptualizing different types of waste and defects. It also proposed a Future Stream Map(FSM) to increase overall process performance and illustrated using value stream mapping by reducing rotation time, total lead time and waiting time by suggesting a new de-burring arrangement.