Productivity Improvement of Cutting, Sewing and Finishing Sections through Value Stream Mapping - A Case Study

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Abstract

On time delivery with quality and quantity is important for any manufacturing industry. At present, lead time is decreasing day by day and customer requirements also continuously changing. To fulfill customer demand whole production system should be more capable and efficient. For this reason productivity is important for manufacturing industries. Productivity can be defined as a ratio between output and input. Productivity improvement is a critical success factor and the foundation of profitability. Productivity measurement is a long-term measurement. Any changes in dynamic potential show a growth or reduction of figures over a long period. A value stream is all the actions (both value added and non-value added) currently required to produce a product and analyze the current material and information flow necessary through the input to output. It is also a technique for creating "one page picture" of all the processes that occurs in a company. In a lean improvement initiative, most of the improvement comes from squeezing out a large number of non-value-added steps. In the process, the value-added time can also be reduced.

The present study focuses on improving the overall productivity of cutting, sewing and finishing sections through value stream mapping (VSM). Different techniques like process integration, job sharing, multitasking etc. will be implemented to improve the current state situation. Three different product lines (Jacket, Polo shirt, and tee shirt) will be considered to implement this study, and the productivity as well as line efficiency will be compared before and after implementing the technique.

Keywords

Productivity, VSM (Value Stream Mapping), Value adding, Non Value adding, Efficiency, Multitasking, Job sharing etc.