

The Lean Manufacturing Practices in an Automotive Company Using Value Stream Mapping Technique

Authors : Seher Arslankaya, Merve Simge Usuk

Abstract : Lean manufacturing, which is based on the Toyota Production System, has focused on increasing the performance in various fields by eliminating the waste. By waste elimination, the lead time is reduced significantly and lean manufacturing provides companies with an important privilege under today's competitive conditions. The initial point of lean thinking is the value. This notion create of a specific product with specific properties for which the customer is ready to pay and which satisfies his needs within a specific time frame and at a specific price. Considering this, the final customer determines the value but the manufacturer creates this value of the product. The value stream is the whole set of activities required for each product. These activities may or may not be essential for the value. Through value stream mapping, all employees can see the sources of waste and develop future cases to eliminate it. This study focused on manufacturing to eliminate the waste which created a cost but did not create any value. The study was carried out at the Department of Assembly/Logistics at Toyota Motor Manufacturing Turkey from the automotive industry with a high product mix and variable demands. As a result of the value stream analysis, improvements are planned for the future cases. The process was improved by applying these suggestions.

Keywords : lead time, lean manufacturing, performance improvement, value stream papping

Conference Title : ICIEMS 2016 : International Conference on Industrial Engineering and Management Sciences

Conference Location : Rome, Italy

Conference Dates : May 02-03, 2016