PRODUCTION PROCESS IMPROVEMENT ANALYSIS OF ACoustic guitar with lean Six Sigma approach using FMEA (Failure, Mode and Effects Analysis) method at UKM. Sentana Art, Solo

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Abstract

Sentana Art is home industry (instrument) that produces a product with the make to order system. Instrument manufactured according to customers' wants and wishes and in an accordance with customer orders. In the meantime, the product of Sentana Art can be said a handicraft. Therefore the reduce of the accuracy and a level of human error must be needed. Currently, the production process existing have some processes that are not efficient and effective.

Based above the facts, research conducted by DFMA phases (Define, Measure, Analyze, and Improve). Define phase is done by collecting data to determine what waste is happen, use Lean six sigma approach. The Measure phase weighting calculations of the most influential waste of production process. Analyze phase continued to be known where the root of the problem using Root cause analysis (RCA), and can be found in the system of continuous improvement to improve the production process, using the FMEA method.

Keywords: Product Quality, Waste, Lean Six Sigma, Root cause analysis