

IMPROVING PRODUCTIVITY THROUGH VALUE STREAM MAPPING (VSM): A CASE STUDY AT ELECTRICAL & ELECTRONIC COMPANY

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Abstract:

The presence of non-value added (NVA) activities in a production line will affect the productivity performance. This will lead to a high production cost due to non-value added activities are not in the customer specification. As a result more resources are required to fulfil the NVA activities. Identification and recognition of NVA activities are considered difficult task to do as they need to visualize the whole production flow. This paper is aim to increase productivity of a case study's company by eliminating of all possible non value added activities. The study is carried out at a speaker unit of ABC's company, Malaysia. The current value stream map of production line was developed based on interviews, observations and other data of the company. Then, the future VSM was mapped based on the lean manufacturing principles. The current VSM was identified 12 NVA activities and the improved VSM managed to eliminate all 10 NVA activities. The elimination of NVAs was successfully achieved by applying selected lean tools and techniques. All hidden and cause of wastes were identified and eliminated. As a result the application of VSM has improved company performance by increasing the productivity by 35% and production lead time up to 400%.

Keywords : Value Stream Mapping; Productivity; Value Added; Non Value Added; Lean; Kanban.

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