Vol. 7 No. 2

July - December 2013

ISSN: 1985 - 3157

**JOURNAL OF** 

## Advanced Manufacturing Technology



## STUDY ON STREAMLINED PROCESS IMPROVEMENT BY USING VALUE STREAM MAPPING IN AUTOMOTIVE SEATING COMPANY: A CASE STUDY

Puvanasvaran, A.P., Stephanie, T.S.N. and Norazlin, N.

Faculty of Manufacturing Engineering, Universiti Teknikal Malaysia Melaka, Durian Tunggal, 76100 Melaka, Malaysia

Email: punesh@utem.edu.my

**ABSTRACT:** Streamlined process improvement is often one of the tools applied during the performance improvement plan at which it is an effective way of bringing about positives improvement to the processes. Value Stream Mapping is a qualitative tool by which described the process in detail about how it operates in order to create flow. Through the value stream is regarded as an important tool in the implementation of lean manufacturing at where it identifies the waste in system which paving the way for a successful lean implementation. The paper discussed the findings from the development of the Current State Value Stream Mapping (CSVSM) and the reduction in non value added time that can be obtained after the development of Future State Value Stream Mapping (FSVSM). The result of this paper indicates that development of the Value Stream Mapping from CSVSM to FSVSM has led to reduction in non-value added time from 11.76 days to 3.00 days. The suggestions of potential improvements opportunities are proposed for the Future State Value Stream Mapping after analyzing the problem statements.

**KEYWORDS:** Time Study, Value Stream Mapping (VSM), Current State Value Stream Mapping (CSVSM), Future State Value Stream Mapping (FSVSM).

## 1.0 INTRODUCTION

Streamlined process improvement is often one of the tools applied during the performance improvement plan at which it is an effective way of bringing about positives improvement to the processes. At the present time, manufacturing industries need to fully redefine their management in production systems in order to tackle the competitiveness demanded by the challenges from the current markets. Value Stream Mapping (VSM) can serve as a good starting

## JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY

Contents

Volume 7

Number 2

July - December 2013

- 1. Analysis of the Travelling Forklift in Material Transport Activities in a Manufacturing Plant Awang, N., Bani Hashim, A.Y. and Jamaludin, Z.
- 2. Optimization of Turning Parameters for Titanium Alloy Ti-6Al-4V ELI Using the Response Surface Method (RSM)
  Sulaiman, M.A., Che Haron, C.H., Ghani, J.A. and Kasim, M.S.
- 3. Effect of Substrate Chemical Surface Treatment on Surface Energy and the Influence towards Coating Adhesion
  Nizam, A.R., Izani, M.Z., Fairuz, D. and Mazliah, M.
- 4. An Analysis of Quality Criteria to Determine the Improvement Priority
  Attributes
  Sihombing, H., Yuhazri, M.Y., Yahaya, S.H., Sivarao and Masni-Azian.
- 5. Study on Streamlined Process Improvement by Using Value Stream Mapping in Automotive Seating Company: A Case Study Puvanasvaran, A.P., Stephanie, T.S.N. and Norazlin, N.
- 6. Laptop Casing Aesthetic Improvement Wan Malek, W.N. and Maidin, S.
- 7. A Review on Optimistic Impact of Cleaner Production on Manufacturing Sustainability
  Yusup, M.Z., Wan Mahmood, W.H., Salleh, M.R., and Tukimin, R.





MUVANYOU MANUACLUTING TECHNOLOGY !

)i. 7 No. 같 July - December 2013