

Lean Production and Quality Performance in Malaysian Manufacturing Industries

Rosman Iteng, Mohd Akhir Haji Ahmad, Kamarul Irwan Abdul Rahim

School of Technology Management and Logistics, College of Business,
Universiti Utara Malaysia,
Sintok, Kedah 06100, Malaysia.

rosman@uum.edu.my, makhir@uum.edu.my, mk.irwan@uum.edu.my.

Abstract

The purpose of the paper is to examine the significance of incorporating lean production (LEAN) in the Malaysian manufacturing industry. Lean production investigated in this paper consists of eight practices namely supplier focus, employee focus, continual improvement, customer focus, quality at source, just-in time, flow system and technology & innovation. This study utilizes two hundred and five manufacturing companies, selected randomly from the Federation of Malaysian Manufacturers Directory. The study measures senior production or lean managers' perception of the lean production practices and the level of quality performances in their companies. Grounded by the Program Theory, this paper specifically investigates whether the implementation of lean production practices will affect the quality performance in the organization. Pearson's correlations exhibit significant correlations between the eight lean practices and quality performance measures (measured by product conformance, product performance and product reliability). The findings of the study provide a striking demonstration of the importance of lean practices in enhancing the quality performances of the Malaysian manufacturing companies. The result indicates that manufacturing companies will enjoy the benefit of improving quality performance from the utilization of lean practices.

Keywords

Lean production practices, quality performance, Program Theory, Malaysian manufacturing companies

Acknowledgements

This research is funded by Universiti Utara Malaysia under RAG grant (Project Code: 13268).

Biography

Rosman Iteng is a Senior Lecturer of School of Technology Management, College of Business, Universiti Utara Malaysia. He earned Bachelor of Science in Metallurgical Engineering from New Mexico Institute of Mining and Technology, USA, Masters in Environmental Management and Doctor of Philosophy (PhD) from Universiti Kebangsaan Malaysia (UKM). He has published journal and conference papers. He bears more than 25 years of experience in Quality Management field working as Quality Consultant. He had consulted numerous companies on product quality improvement, line balancing and optimization, quality system development, value stream mapping, lean practices and KAIZEN project. He is member of Malaysian Institute of Management (MIM) and certified lead auditor for Quality Management System (QMS).