The Impact of Employee Involvement and Empowerment in Lean Manufacturing System Implementation towards Organizational Performances

Eida Nadirah Roslin[#], Shamsuddin Ahmed^{*}, Mohamad Asmidzam Ahamat[#], Mohd Zaki Bahrom[#], Norazlin Ibrahim[#]

[#]Universiti Kuala Lumpur Malaysia France Institute, 43650 Bandar Baru Bangi, Selangor Darul Ehsan, Malaysia Email: eidanadirah@unikl.edu.my

*Department of Mechanical and Chemical Engineering, Islamic University of Technology (IUT), Dhaka, Bangladesh

Abstract—Lean Manufacturing System (LMS) implementations in Malaysia's automotive industry has not been extensive in its expected reach, as extensive inquiries revealed it being adopted as a "pick-and-choose" system for certain processes or only upon determined levels within the industry. Current implementation strategy does not permit the industry to gain total benefits from the system itself. Undeniably, a few significant factors are being given less significance in multiple stages of LMS' execution. Employee involvement and employee empowerment have been identified as part of these contributing factors in a successful implementation of LMS in an organization. However, important criterion with its contributing aspects of these factors is not given the necessary attention, translating into a lamer impact upon companies embarking on a LMS deployment. This paper examines the impact of these two factors in the implementation of a lean manufacturing system towards achieving the organizational performances in the automotive industry. A questionnaire-survey was administered to gauge the impact of these two factors in an implementation process of a lean manufacturing system and later analyzing the effect towards their organizational performances. Data from 204 automotive parts manufacturers were gathered and analyzed. The correlation between the influencing factors, 5 lean activities and 6 organizational performances were measured. The results gained suggest that the integration between employee involvement and employee empowerment will be a valuable critical organizational capability impacting organizational performances towards the successful implementation of LMS in the Malaysian automotive industry.

Keywords- employee involvement; employee empowerment; lean manufacturing system; organizational performances.

I. INTRODUCTION

Within the Malaysian economic development context, the automotive industry is regarded as one of the most important sectors for productivity and growth. The government has strategically undertaken efforts in strengthening this industry. This has made the Lean manufacturing system a familiar concept in the domestic automotive community [1], [2]. However, until now, its implementation has still not encompassed the whole automotive sector [3]-[7]. Multiple factors are known as being contributable in making this system fulfilling an important role in an implementation process; at the same time, the ultimate goal of achieving total adoption among manufacturers. The factors of employee involvement and employee empowerment have been identified as part of these contributing factors [4], [8], [9]. These two factors are often taken lightly from the

organizations, despite the desire of establishing a lean system in their operations [10].

Total involvement of employees is crucial; in fact, the implementation process will not grow without a workforce that works hand-in-hand. The implementation of LMS can only be successful when the total involvement from all level of employees in an organization was gained [9]. Crucially, there is a need for a complete understanding and a wide spread of LMS knowledge, to have total involvement and buy-in of employees towards a successful agenda. Invariably the management should experience a more fluid execution process of the intended implementation plans.

Job enrichment policies, worker's greater motivation, and responsibility were identified as factors that could lead to a complete failure of any LMS implementation initiatives if they are not understood or considered carefully. These issues are ironically the ones ignored by organizations, despite attempting to adopt and implement improvement initiatives