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Adoption of JMM practices - A key to performance improvement of a local automotive industry (Conference Paper)

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Abstract

It is imperative for a manufacturing company all over the world to constantly look for ways to increase productivity and at the same time to lower cost to secure a competitive position. It is recognized that practices associated with Japanese Manufacturing Management (JMM) can yield a superior competitive advantage in terms of productivity, quality and provide overall successful business performance. This paper discusses the transfer of the best practices of the JMM locally and analyses the impact of adoption and adaptation of the management system as an in-depth case study conducted in a Malaysian automotive company. This study is to identify what are the changes in terms of the philosophy and practices undertaken by the company and ascertain the impact of the JMM on its manufacturing and financial performances. The elements of business performance from the viewpoint of manufacturing are based on safety, Parts Per Million (PPM), in-line Defect per Unit (DPU), First Time Quality (FTQ), cycle time, productivity, efficiency and stock level. The results show a positive impact to the automotive plant manufacturing performance. For example, safety index has reduced to 0 major accident occurrences. The PPM and In-line DPU have improved by 98% and 91% respectively whereas the FTQ has improved by 167%. Cycle time has reduced from 20 to 6 minutes and productivity increased up to 43% whilst the efficiency reached at 99.9%. The stock level was reduced from half month to 3 days after the adoption of the JMM. The revenue has increased up to 92%, the percentage of expenses has reduced from 11.04% to 3.06% giving an improvement of 72% whilst the net profit has increased from 5.33% to 8.15%. The Return of Asset (RoA) and Return of Equity (RoE) also showed slight improvement despite the effects from the restructuring exercise, Tsunami calamity and fluctuation in Japanese exchange rate. © Published under licence by IOP Publishing Ltd.

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