ABSTRACT

This study is to examine whether the implementation of lean manufacturing principles has an impact on the production efficiency of the organization. This research's primary objective is to suggest suitable changes using lean manufacturing principles to the different areas of Visteon Thailand, so that the company's efficiency and overall performance can be improved thus giving them competitive advantage.

Other objectives are to create an illustrated example, that can be referred by other Thai organizations, and applied to their companies with the view of cost reduction, and overall improvement in production efficiency.

This research is also a extended study of an MIT graduate student and application of the principles to a real life example. This research uses primary data from interviews and secondary data from reference work, internet browsing and discussions. The Paired T Test is used to test whether the number of operators, cycle-time, space utilized, inventory and efficiency have had an impact before and after the treatment, which is implementing the suitable lean manufacturing principles to different area in an organization.

Results from the analysis have shown that the implementation of lean manufacturing principles has had an impact on the production efficiency of the organization and can be seen that there has been considerable savings of resources and creation of new opportunities.

The number of work-heads, inventory and space utilized, have considerably reduced thus creating more value and opportunities for growth and expansion. The cycle time and response time in different areas are now under control and can be made flexible to change with customer requirements. The overall efficiency is seen to have increased in all the areas, where lean principles has been carefully selected and implemented.