

Abstract

Nowadays, the continuous improvement of an operational efficiency is a key success for business competitiveness. In practice, the criteria of the Thailand Quality Award (TQA) can be employed as a good criteria to evaluate the organization for improvement effectively.

The objective of this research is to improve an efficiency of the production process of microwave product by using the criteria of the Thailand Quality Award (TQA). This research gathers related data in a case study company and then employs the gap analysis method to identify a critical problem for improvement.

In this study, the problems in production line are prioritized by the defect amounts. The result shows that a critical problem occurs at the screen printing process with the main factor as the set up parameter printing machine. An improvement technique, the Experiment Design method, is then applied. The result from the experiment shows that the parameters in a process of screen printing should be changed as follow; squeegee speed, squeegee pressure and separation speed in a process from 30 mm/s to 60 mm/s, from 6 kg to 8 kg and from 0.1 sec to 3 sec respectively. The result also shows that the improvement reduced the defective rate for 2.01% .This improvement does not only reduce defect, but also enhances customer satisfaction, employee development, and competitiveness.