Abstract

PT. Tirta Palasari Sindanglaya is a company that specializes in bottled drinking

water (AMDK). Four years this company has been struggling with drinking water

industry. The main problems that exist in this company is the high number of

product defects that exist in the company. The value of this high defect has

existed since the newly established company, at the beginning of the enterprise

value of defective products in the range of 9% while the company set a target of

only 1% of product defects that be allowed produce by company.

To control-quality products, PT. Tirta Palasari Sindanglaya then conducted

research on quality control by using six sigma methods. where these methods

focus to improve the value of reject to achieve perfection (3.4 DPMO) and the

stability of the process in a company. Implementation step in six sigma only until

improvement. Starting from defects which determine the object of stage six sigma

and identify the CTQ. Then the measurement stability and capability in Measure

step process. After that analyze of the root causes of problems on analyze the

stages and in the last stage of improve performed proposed revisions to the root

cause of the problem.

From the results, key CTQ such as the suitability of packaging, impermeable

water, and suitability of water. Meanwhile, the stability of the company's process

is still not stable because there are many processes that Out of Control. Beside

that process capability is still about 3.739 σ and has a value of 12854 DPMO,

those value is still far from the value of 6σ . After analyzing the root causes of

problems, is found several root causes of problems, such as throwing error, a hard

incline, slipshod, hasty, less careful, and less examination. Based on those root

cause of the problem, then proposed which can be given is the designed the

inclined plane back, increase the frequency of inspection, give reward and

punishment for employee.

Key word: Six Sigma, CTQ (Critical to quality)

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