

ABSTRACT

This research aims to study DMAIC methodology for the improvement on the yield of Object Controller Cabinet start-up test for Railway Signaling project in Rail Control Solution Company. The failure of Object Controller Cabinet star-up test causes many losses for the company. The concept is to systematically identify, analyze, and find the measurement to solve the problem.

DMAIC methodology is useful for solving the current problem and reducing the failure on Object Controller Cabinet start-up test. The objectives for this research are defining of the problem, measuring the current standard, analyzing the root cause of the problem, improving the significant areas of concerns, and controlling or sustaining the improvement of the problem.

The study indicated that DMAIC methodology can solve the problem and improve the overall operation. The methodology consists five phases which are define phase, measurement phase, analyze phase, improve phase and control phase. The concept can be applied in all areas of interests. The five phases also stimulate the improvement on the work process, the project's deliverable performance, and the quality assurance. The deliverable improvement leads to the project efficiency and the cost effectiveness which fulfill customers' requirements as the same as the concept of Supply Chain Management.