



DMAIC



Executive Summary - Production and Delivery stops OPEX_NS_RMRO_SE-4313_043

Problem statement and scope of the project 2015-02-01

None of ABB Robotics KPI's for Quality are on goal and show little to no statistical improvement. Product and process data is collected but not analyzed and used for improvement. Customer warranty rate is stagnated at unacceptable levels and the VOC is not being communicated within the organization.

Quality leadership throughout the organization is lacking and morale within the Quality Department is low.

The scope of the project is to identify quality issues and areas in need of improvement, contain issues using the Production and Delivery Stop process and thereafter initiate L6S and DMAIC projects to solve root-causes.

Critical tools/methods used

Throughout the project Lean- and 6 Sigma tools were used as necessary.

Critical to the project is application of the Production and Delivery Stop process which requires full support from Senior Management.

Quality culture has been addressed via the Global ABB "Make Quality Happen" initiative.

Major results / findings

The major finding was lack of ownership of quality issues. Most of the quality issues were cross functional in nature requiring cross functional teams but no one wanted to take the led to address issues. The standard answer was "It's not my departments responsibility" or "It's department XXX's fault, they should do something".

Actions taken:

1. Improved Quality Culture – Education, resources and management involvement
2. Improved Processes – FMEA, Control Plans, VOC, standardized quality checks
3. Production and Delivery Stops – Production stopped when quality issues occurred.
4. Multiple L6S and DMAIC projects aimed at specific quality issues

Conclusions & Recommendations 2018-09-02

Calculated accumulated savings are approximately 80 MSEK based on FPY improvements in Production. Secondary savings not calculated are productivity improvement, customer satisfaction, employee morale etc.

FFR Warranties	41 % improvement
FPY System Testing	56 % improvement
FPY Product Auditing	42 % improvement
FPY Arc Welding	56 % improvement
FPY Cabinet Testing	58 % improvement

Recommendations – continue as planned with improvement project!

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