

Client Reference

Manufacturing | Automotive

Asset Care Plan Development Strategy Implementation



Client Background

Our client initiated a project to improve its asset care development plan process. The strategy is based on an enhanced maintenance tactic mix of its high-criticality assets in the body shop. The project focused on seven maintenance areas to improve asset uptime and recovery strategies from breakdowns.

The implementation followed a DMAIC (define, measure, analyse, improve, control) problem-solving approach. A completeness satisfactory level (CSL) audit was done to identify gaps and determine data accuracy in each of the seven technology groups.

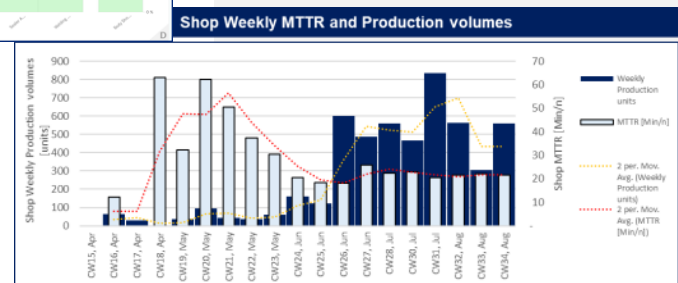
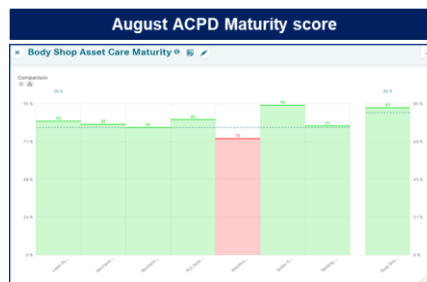
The maturity levels were defined as follows: 0-40% fire fighting, 41-60% stabilising, 61-70% preventing, 71-90% optimising, and 91-100% as excellence. The desired minimum maturity level of 71% was achieved by SOP and it is anticipated that a maturity level of 100% will be reached through series production following a DMAIC approach.

Key Challenges

- Inaccurate measurement of ACPD maturity.
- Measuring tools were unprotected with no access control measures in place.
- No maintenance plans in EAMS.
- No clear FMEA (failure modes and effects analysis) and preventive maintenance upload process.
- Incomplete criticality analysis.
- Inconsistent ACP review meeting forums and lack of agenda structure.
- Low and below-optimal asset care development plan strategies (ie readiness maturity level) before SOP (standard operating procedure).

Value Add

- An improved and streamlined asset care development plan process implemented successfully.
- Error-proofed maturity measuring tools.
- Optimal maturity level of the process (>71%).
- Asset risk reduction: Improved MTTR (mean time to repair) over the implementation period from an initial average of 62min in May, down to an average of 21min from the beginning of June.
- An additional 68 units per week were produced after breakdown recovery.
- Since implementation, the overall savings from February to August were R2,271,929, with a potential for projected savings of R20,466,560 for the 2022-2023 year.
- Effective quick recovery strategies.



The process was successfully implemented and achieved a maturity level of >71% by SOP. Since implementation, the overall savings from February to August were R2,271,929, with a potential for projected savings of R20,466,560 for the 2022-2023 year.

Pragma Intervention

The team, in collaboration with client technology specialists and maintenance engineers, utilised the DMAIC problem-solving technique. The process was successfully implemented and achieved a maturity level of >71% by SOP. Based on the analysis, the following findings were made:

- The MTTR for the shop dropped from a maximum of 62 min in May down to an average of 21 min from the beginning of June (refer to graph).
- A 66% risk reduction to production and critical assets, signifying the effects of the asset care plan's quick recovery strategies and maintenance plans.
- An additional 68 units per week are produced from every recovery after a breakdown.

Tools and Technology

- EAMS
- iPortal
- SFMDigital
- Microsoft Excel
- CSL Audit
- DMAIC