

Sonam Devadiga: Continuous Improvement Project Details

1. Standard templates for Prototype Drawing (NX/Unigraphics)

Problem Statement: Quality issues with local vendors to get Prototype Parts as 'first-time-right'. Low volume and high variety scenario at the vendor end.

Solution:

- Identified top-three issues through root-cause analysis and stakeholder interviews viz. being unaware about 'critical dimensions', communication-gap while communicating changes in WIP prints and ambiguity on QC steps to be followed before shipping.
- Designed a drawing template in NX/Unigraphics with new standard symbols to indicate critical dimensions. Drafted a pre-shipping QC process

Result:

- 97% improvement in 'first time right' parts in before and after process implementation. Significant cost and time saving due to elimination of re-work

2. Risk Management Automation Tool in Excel

Problem Statement: Excel used for Risk Management. No metrics generated for day-to-day reference of engineers or high-level-picture of the health of the project and the program to managers.

Solution:

- Updated risk filing and updating process through Excel automation/VBA programming.
- Created metrics by linking projects to programs to define health of project.

Results:

- Reduction in weekly time for completion of risk assessment reduced from ~30 mins to ~10 mins
- High Level metrics generated of Risk Burndown Chart, High Risk Tasks and Risk Forecast through Excel automation facilitating better and quicker decision making

3. Inventory Control for R&D Test Laboratory through supply chain management

Problem Statement: Inventory ordered by project engineers got stuck at customs causing unanticipated delays in project timeline.

Solution:

- Root cause analysis identified clubbing of shipments ordered by different project engineers major cause of delay.
- Identified key supply chain KPI's to determine the critical parts required for the build of scroll compressor. Streamlined the process by dividing the parts to be ordered amongst the engineers and lab personnel.

Results:

- After process streamlining the Project Engineer was responsible for ordering only 8 critical parts instead of ~40 odd parts. Significant time saving for Project Engineers.
- 20% cost saving and reduction of lab space requirement by 10% due to streamlined process
- Spinoff project of re-circulation of unused inventory (for eg. Protectors) by releasing to an open pool for use of any engineer helped in creating cost and effort saving

4. Streamline the Customer Bulletin Performance Reports & Rating Generation in Excel

Problem Statement: No proper documentation for the in-house software 'CPID' that was used for rating generation of the compressors after testing. As rating generation was an iterative process the engineers spent ~1hr in this task per compressor due to sub-optimal use of the software

Actions:

- Took the initiative and contacted the CPID team to understand all the functionalities of the software.
- Created documentation to define the best-practices in effective use of CPID software
- Created excel automation to aid the iterative process of ratings generation
- Conducted knowledge-sharing session within the team for formal release and implementation of new process.

Results:

- Rating generation time reduced from ~1 hour/compressor to ~15 mins/compressor generating significant time savings for the project engineers