

Lean Six Sigma Green Belt Training

Project Management Process Improvements for the RF-7800V Radio Firmware Development Team Harris Corporation, Rochester, NY

Background



Time and cost are critical metrics in the development of new products. Established product development procedures at Harris Corporation for the RF-7800V radio firmware development team were recognized as suboptimal. These procedures governed responsibilities, reporting, risk management, scheduling and, ultimately, project performance. Cost estimates were found to be inflated to maintain project schedule. Eliminating sources of waste is expected to lower the cost of firmware releases.

The DMAIC process was used to guide the analysis of existing procedures to develop new project status reporting methods and employee training.

Project Goal

Reduce the cost and effort associated with project planning, tracking, and oversight by 10% for the radio firmware development team.

Method

The DMAIC Process

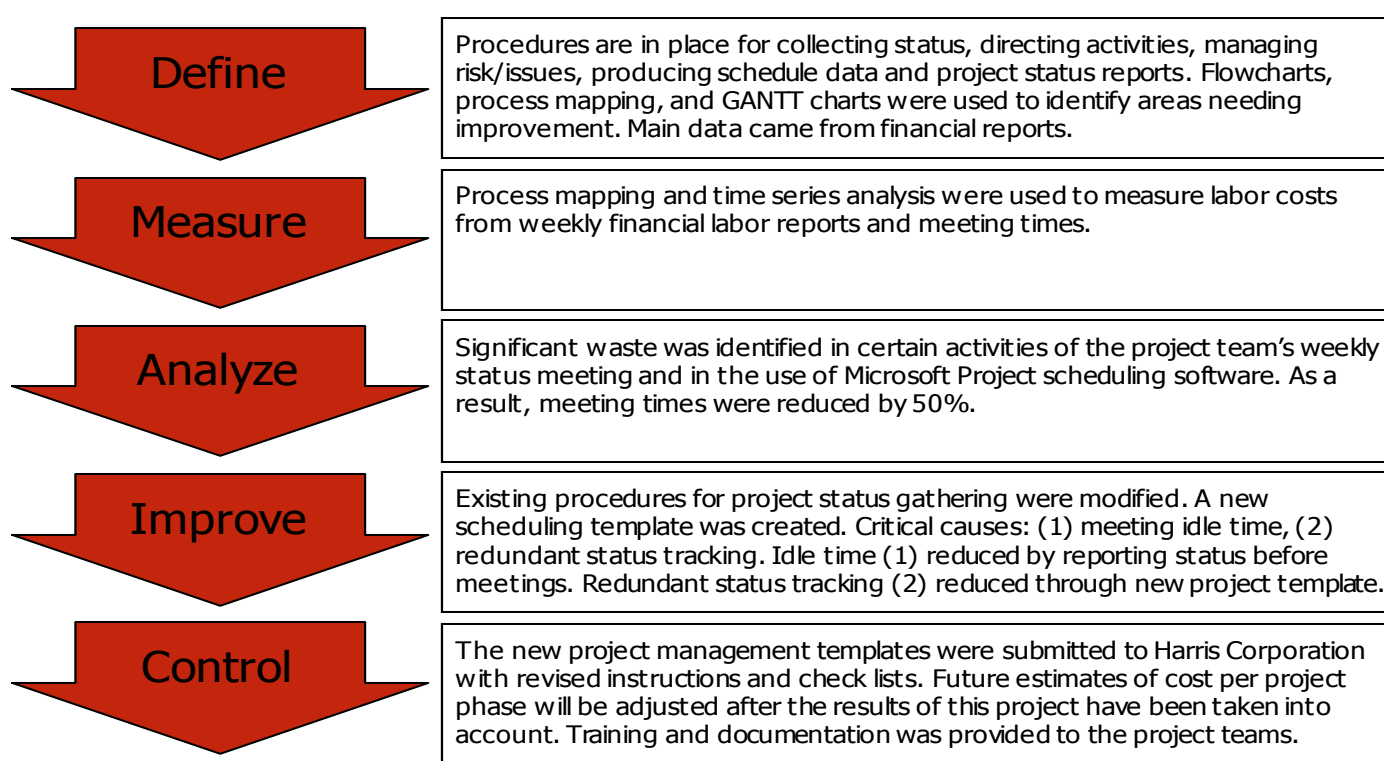


Figure 1. Implementation of the DMAIC process.

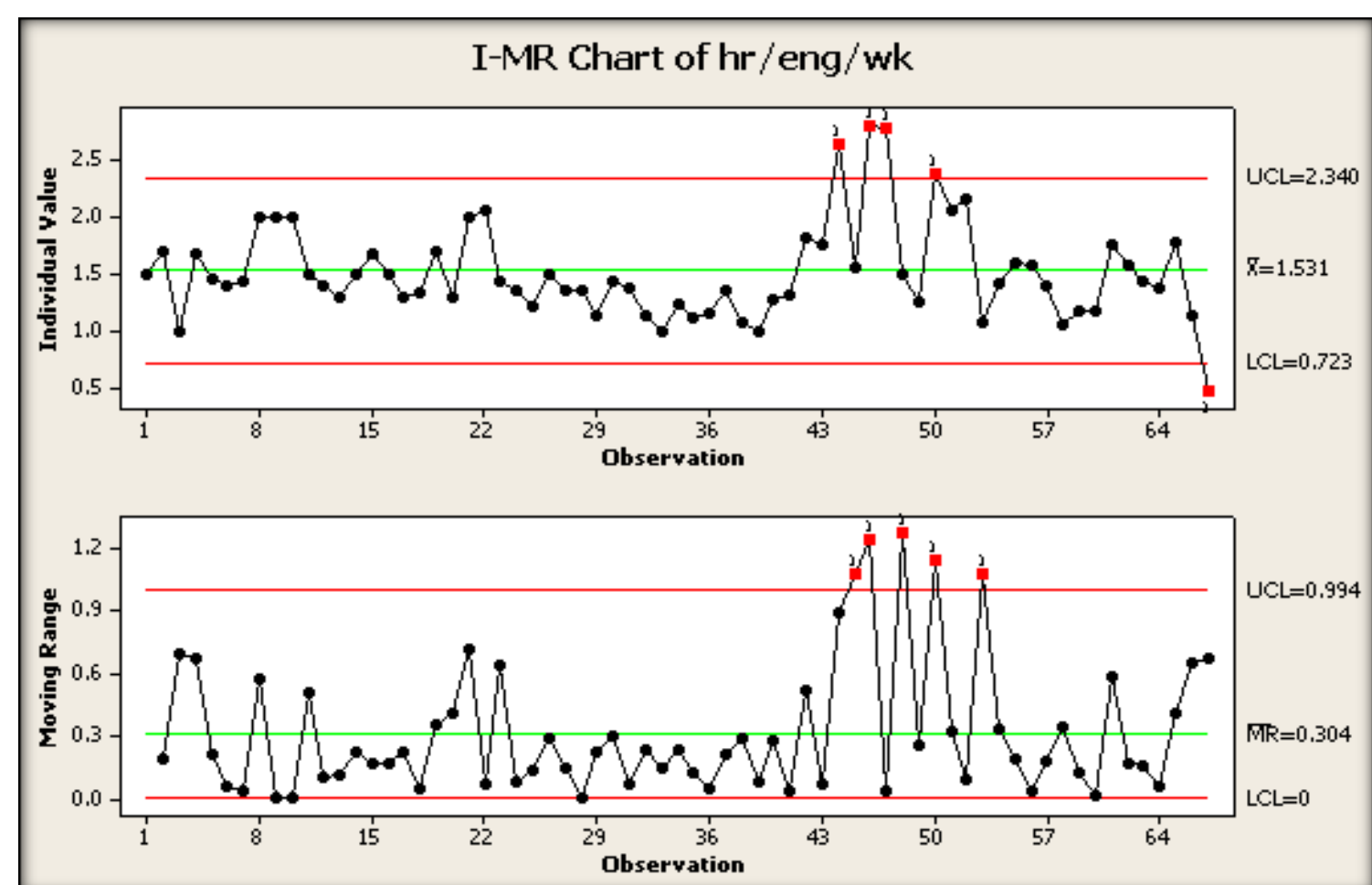


Figure 2. Time series analysis of weekly hours per engineer needed for status reporting. The last two observations were measured after implementing the project changes.

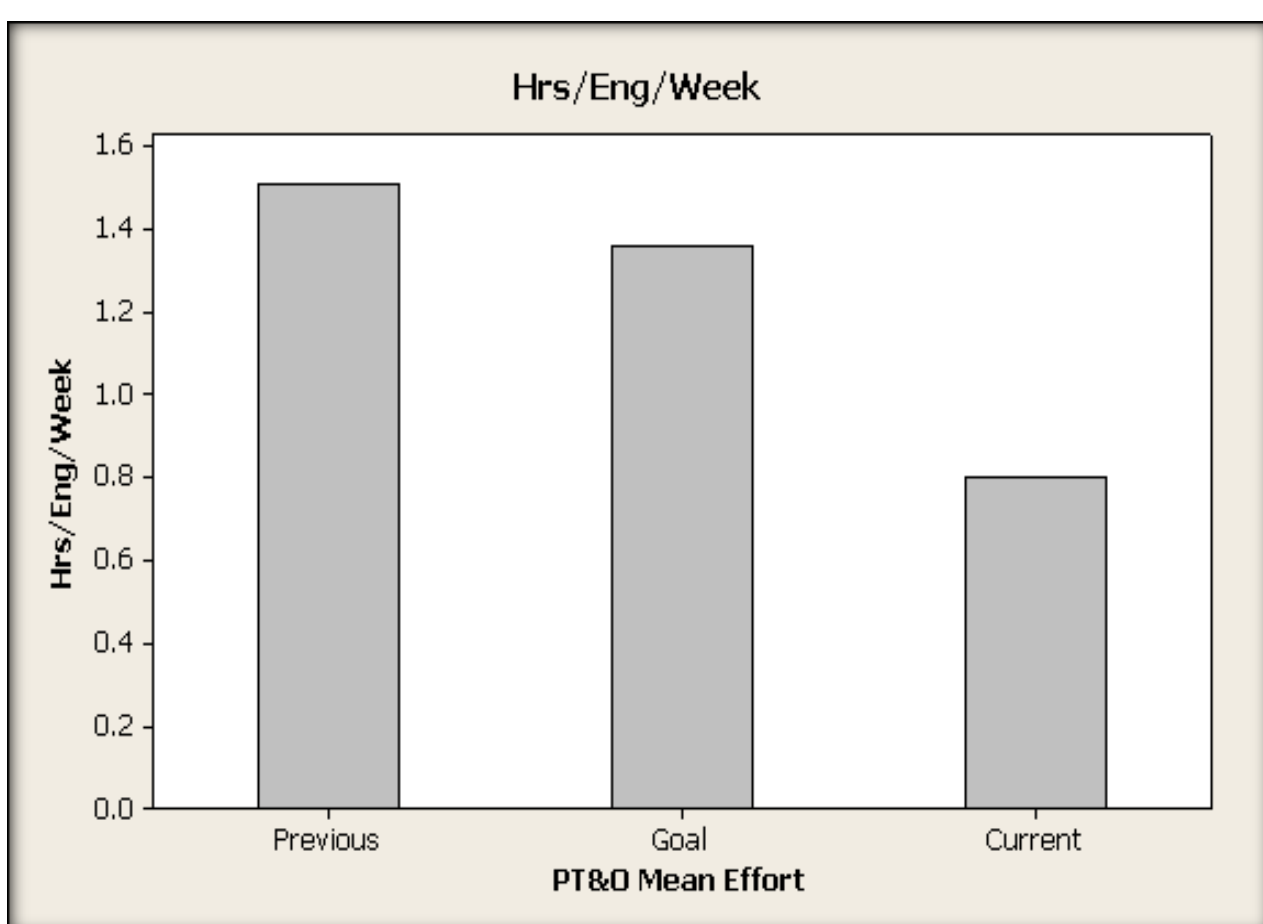


Figure 3. Baseline, target, and end weekly hours per engineer needed for status reporting.

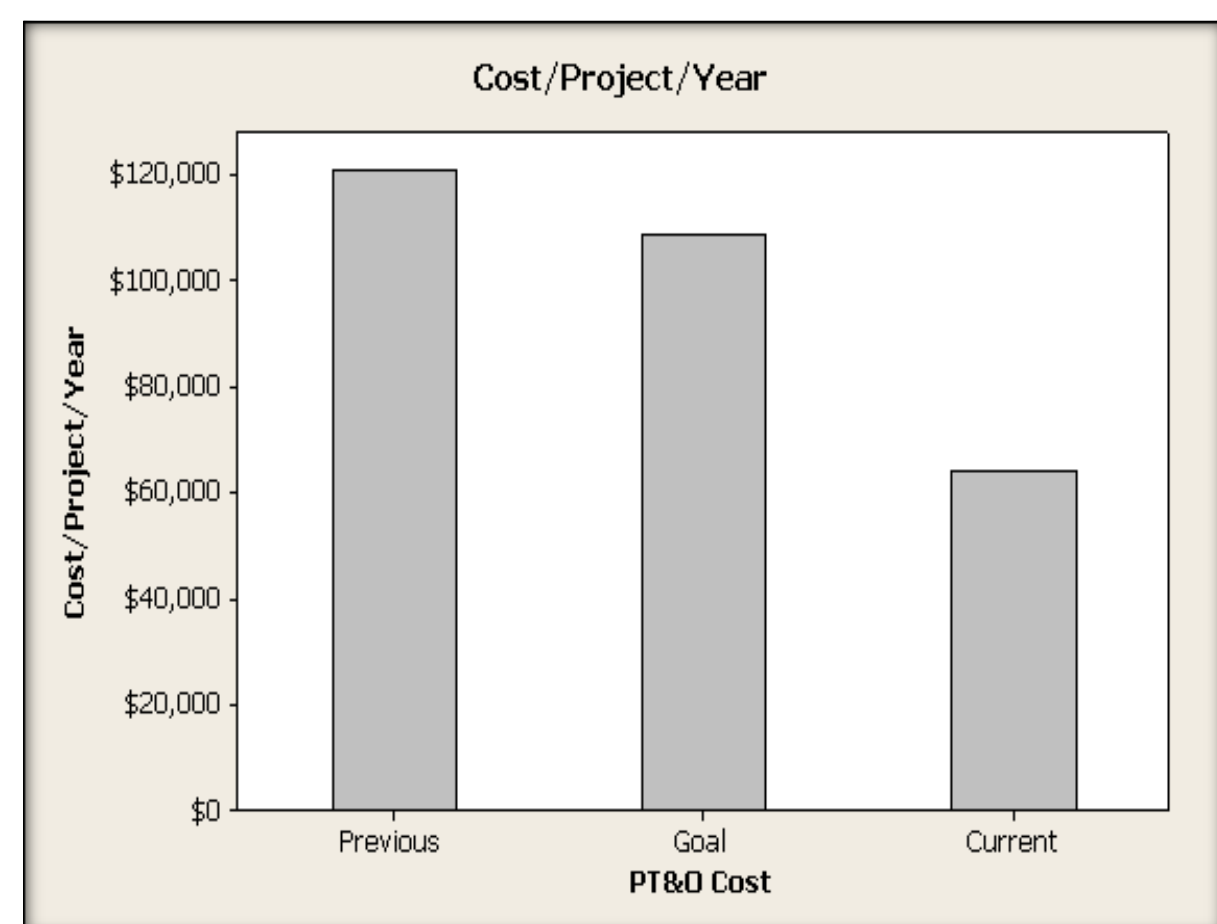


Figure 4. Baseline, target, and end cost per project per annum.

Results

The Lean Six Sigma Greenbelt project reduced the time needed to track project status (Figure 3). Meeting times were reduced by 50% by eliminating idle time. The annual cost of project planning, tracking, and management was reduced by nearly 50%, considerably more than the original goal of 10%.

Conclusions

Process improvements substantially reduced the time, effort, and cost associated with project management for the RF-7800V radio firmware development team. Further analysis is needed to confirm the sustainability of these improvements, but Harris is now equipped with new procedures and tools to ensure long term success.