

Over 70% of continuous improvement project savings gained by leveraging projects from other plants

Upland's PowerSteering empowers best practice deployment at Johnson Controls, Inc.

Business Needs

Johnson Controls, Inc. (JCI) embarked on a massive Six Sigma initiative in early 2000. At first, JCI leveraged a Lotus Notes-based project tracking tool, but eventually outgrew its limited capabilities. JCI began a thorough search of various project portfolio management software applications to identify a tool that would support a cross-divisional Six Sigma initiative spanning its automotive, building and battery divisions worldwide across 300+ plants and locations.

The Solution



JCI selected Upland's PowerSteering for the expansion of its Six Sigma initiative in 2010. PowerSteering's Six Sigma software capabilities were well-suited to the needs of the Six Sigma/Continuous Improvement program at JCI.

Benefits

- PowerSteering supports 600+ full-time Continuous Improvement (CI) professionals, 1,000+ Green Belts and associated support staff. With PowerSteering, approximately 10,000 projects are completed each year.
- In one Financial Business Center application, nearly two-thirds of its CI savings resulted from benchmarking other transactional centers.
- By using internal benchmarking, many plants achieved significant increased CI project savings. For example, in one JCI plant, over 70% of its savings (nearly \$1 million) came from projects which were "leveraged" from other plants.



Johnson Controls is a global diversified technology and industrial leader serving customers in more than 150 countries. Johnson Controls creates quality products, services and solutions to optimize energy and operational efficiencies of buildings; lead-acid automotive batteries and advanced batteries for hybrid and electric vehicles; and interior systems for automobiles.

INDUSTRY:	Mechanical Engineering
HEADQUARTERS:	Milwaukee, WI
EMPLOYEES:	130,000+
WEBSITE:	johnsoncontrols.com

"The CI teams were able to deploy proven best practices across the globe to our manufacturing facilities that resulted not only in significant cost savings for our organization, but also a reduction in energy usage and GHG emissions."

— **Kevin Filcik, Continuous Improvement Controller**
Johnson Controls

Best Practice Deployment

Using PowerSteering, JCI built two best practice deployment initiatives. The first, called workstream internally, uses tags to identify best practice categories within the various business units. The workstream teams hold regular meetings to manage the deployment and track the initiatives using PowerSteering. Both the status and the benefits are seen on a regular basis. The second, internally known as “push” methodology, is a “bulk deployment” of best practices across the enterprise through PowerSteering’s work generation functionality.

Description of Best Practice

Problem Statement: Generally 30% to 50% of the energy consumed generating compressed is wasted due to leaks, artificial demand, and inappropriate uses.

Validated Cause of Problem: Lack of a complete compressed air maintenance program that includes: employee education, awareness, and involvement, with leak maintenance being a scheduled activity.

BP Description - How better than other practices?: Generally industrial compressed air systems are poorly maintained and maintenance individuals have not been properly trained on best practices and efficient operation. It is not uncommon to see leak rates consuming 30% to over 50% of the total compressed air produced. Properly maintained systems should be operating at 100PSI or less with a baseload (leak rate) of less than 10% of the normal capacity required for production.

Key: Energy Savings measured in KWH.

Performance Metric / Process Variable: Improved: Every air leak you can hear and feel cost at least \$700 USD per year based on \$0.05 per KWH

Images

Increased Demand Due To Excessive System Pressure
Leaks
Inappropriate Uses
Abnormal Production

Title: Illustration of Best Practice
Description: -

Detailed instructions and documentation for the execution of each best practice were provided so that plant CI teams could implement them in their facilities.

Each CI initiative has a specific workstream approach with key content elements ensuring state-of-the-art solutions move forward. Within each workstream there are projects that are tracked and deployed throughout JCI. The key success factor for workstreams is the rigorous tracking and transparency provided by the efforts. Regularly reviewed charts enable the team to easily see when projects are ahead or behind plan.

Best Practice Sharing Process Flow

JCI prides itself on continuously documenting best practices across its enterprise with PowerSteering. Subject matter experts comprise a best practice review board that monitors best practice ideas submitted from anyone across the

organization. The submissions must include proven results, enablers, implementation guidance, cost/benefit details and the submitter’s contact info. The source of these ideas includes CI initiatives from various plants or simply best practice ideas developed by various successful teams. All ideas are either rejected or approved. The best practice team evaluates all ideas and buckets them in certain categories: rejected, pull or push. The “pull” ideas are approved for teams around the world to review and deploy by using PowerSteering’s CI search engine (product / process / keyword). The “push” category represents the critical few ideas selected for roll out by JCI’s leadership team.

One notable example of the use of the deployment is related to “sustainability” best practices. Six best practices were identified in specific plants to improve energy efficiency and reduce greenhouse gas emissions. These key best practices were “deployed” using PowerSteering to over 250 plant locations worldwide. A corporate “best practice champion” tracked

and reported on the execution of the best practices to ensure that all plants completed them and to measure savings and results achieved.

Best Practice Lessons Learned

With the help of PowerSteering’s Six Sigma software, JCI continues to rely on its proven best practice workstream approach. This approach has been very effective not only because of PowerSteering but also because of the business team ownership. The “push” deployment has been effective as well thanks to a high-level executive sponsor and regular status tracking. PowerSteering is a key means to deploy JCI’s best practices.

About PowerSteering

Upland’s PowerSteering enables powerful, scalable and uniquely flexible top-down program and portfolio management without requiring granular task and resource tracking. It is a cloud-based software application that combines the robust program and portfolio functionality demanded by global organizations, and provides class-leading analytic and financial tracking capabilities.

The Upland Product Family



Upland’s family of cloud-based enterprise work management software helps every team in your organization do their best work. See what you can do with Upland. Contact us at 855-944-7526 or info@uplandsoftware.com.