

Improved Performance Drives Savings

The client, a global provider of products, services, and solutions for the military defense and civil security industry, was looking to create financial capacity in order to upgrade their technical talent and scale its growth through systems and processes, rather than relying on a limited number of subject matter experts. DB&A implemented a proactive management culture that better equipped front-line leaders to measure cost and schedule performance on a weekly basis. As a result, the engagement generated \$4.8M of financial headroom that is being used to reinvest in talent.

DB&A Analysis

DB&A Consultants performed an in-depth analysis that observed every level of the operational organization to understand three primary questions:

- What do employees do?
- > Why do they do it?
- What processes and systems are in place to manage what a good day looks like?

The primary focus was to analyze the manufacturing organization in order to uncover unique ways to increase capacity. During this time, it became apparent that many of the opportunities for operational improvements were rooted in the upstream process flow.

- Program management sometimes gave conflicting direction and drove turmoil as they competed for the finite resources within the organization.
- Supply chain struggled to get critical parts to the shop floor within the required lead times.
- Vendors were not being consistently managed to ensure performance and control costs.
- Multiple engineering change orders interrupted work on the shop floor causing delays.

The DB&A Difference

Analysis Financial Proposal

- ▶ Project Cost: \$1,092,000
- > Annualized Savings: \$2,730,000
- ► ROI: 2.5:1

Actual Financial Results

- Actual Project Cost: \$1,092,000
- ► Total Project Savings: \$4,854,175
- Net Annualized Savings Rate: \$3,471,535
- > Actual ROI: 3.2:1

Project Results

- ► \$4.8M savings in personnel costs
- \$588,000 savings in production flow improvement
- \$250,000 savings in manufacturing efficiency
- \$88,000 savings in work planning efficiencies
- \$700,000 in negotiated savings from existing suppliers

- There was a lack of communication and coordination between scheduling, planning, and manufacturing that drove even more inefficiency.
- There was no measurement or controls around rework.
- "Work to Time" estimates, that allowed management to schedule a full day's work and effectively follow-up on performance issues, were nonexistent.
- A lack in process allowing management to resolve issues when floor-level metrics failed.
- Existing metrics for engineering work were not being utilized.

Implementation Actions

DB&A Consultants worked closely with the Technical Operations teams and local management to break down the blocks of work into smaller, more manageable pieces. These efforts allowed the functional managers to plan and load individual contributors and project teams with a week of work at a time using AGILE concepts.

Managers created weekly and bi-weekly plans for each engineer and began measuring their individual performance. This gave the organization floor-level metrics to measure performance on a weekly basis.

Managers also received coaching on how to give each engineer feedback in daily Scrum meetings. Managers were also coached on how to seek out barriers ahead of time so they could be proactive in seeking solutions and not reacting to even larger issues further down the road.

In addition, site-level improvements included:

- Solidifying the resource requirements to accurately determine the work-to-resource relationship
- Establishing daily/weekly accountability meetings in all areas
- Tech Ops implemented a revised work planning process with a standardized process across programs
- Revitalizing individual development process
- Establishing Manufacturing Review Meeting to drive clarity & alignment between manufacturing and support areas
- Establishing a monthly Business Review Meeting to drive adherence and communication of



project-wide progress and improvements

- Developing a weekly Manufacturing Plan which included Program Management buy-in for all assemblies
- Upgrading centralized Procurement Function by establishing 3 distinct procurement disciplines (SCA, SPM, SCM)
- Updating supplier scorecards and how they are utilized to manage Suppliers
- Metrics were created and implemented:
 - Manufacturing implemented Productivity, Utilization, Efficiency and Schedule Adherence to measure performance at the floor level on a daily and weekly cadence
 - Engineering (Systems, Electrical, Mechanical, Software and Test) implemented Agile methodology to break work from the Integrated Master Schedule into Sprints. This allowed the Scrum Masters to utilize the existing JIRA system to measure performance on a daily and weekly basis. Issues were raised on a daily basis so that leadership was able to proactively address problems vs. being reactive in monthly Program reviews
 - Supply Chain, Strategic Sourcing, and Procurement developed a suite of metrics to measure individual and department performance, including: schedule attainment,

schedule adherence, unplanned work and lost time

- Updated Standard Operating Procedures and Work Instructions
- Updated floor layout to improve lean concepts and flow, implemented production cells, created carts for materials and tools for production cells, and updated layout of stockroom to create a better picking process flow

Project Results

Through improvement in performance management and effective scheduling of labor, this project generated a savings of \$4,854,175 in personnel costs. These savings paid for the project and allowed the client to hire 8 additional employees to fill critical business needs. The company plans to reinvest even more into key human resources. The net savings in personnel costs on this project was \$3,471,535.

Efficiencies in planning work on the manufacturing floor have yielded significant savings. Time to plan previously took the support team 20 hours per week. Based on the current process, less than 10 hours per week are required. Estimated savings of 520 hours per year x \$170 per hour = \$88k in savings per year. This is for one of their existing programs and it will be repeated once other programs reach full rate production.

Efficiency and productivity have continued to improve month over month since the inception of metrics tracking. All assemblies have implemented a challenge to reach a 20% savings in labor expenses, and the assembly team is meeting the objective. By becoming more efficient, the Manufacturing Team has already been able to reduce labor expenses by 15% while continuing to meet the programs schedule targets yielding over \$250K of labor savings per year.

Significant savings have been achieved with the first Production Cell implemented on the factory floor. Previously, this assembly averaged 250 hours to complete. The first assembly through the Production Cell is now completed in under 180 hours. Plans to build 70 Production assemblies are expected for the duration of the program. At this rate, 70 hours x 70 assemblies = 4,900 hours x \$120 = \$588,000 in savings. This will also be applied to future programs as they come up to full rate production.



Since 1987 DB&A has provided cross-industry management consulting delivering 15-20% in operational and financial improvements to our clients with a financial guarantee. We deliver customized solutions that maximize existing resources to increase efficiency, capacity, and productivity. Our approach is to work with all levels of management to transform management culture in order to drive accountability where it matters most: the front-lines. For more information visit www.dbaresults.com or email contact@dbaresults.com