

Quantum Associates, Inc
 459 Lambert Tree Ave
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 Certified Minority Business Enterprise
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The Value We Bring to Our Clients

Case Studies

Company: Active Pharmaceutical Ingredient Manufacturing Division of a Fortune 500 Pharmaceutical Firm

Business Challenge

Client had overbooked the manufacturing facility for oncoming year. The manufacturing plan including changeovers requires 399 days of capacity. In order to meet this aggressive plan a minimum of 34 days must be freed up. The primary focus was to reduce the changeover time for the largest volume active pharmaceutical ingredient, from an average of 11 days to 3 days.

Solutions:

- One week rapid improvement (Kaizen) event
- One-on-one assistance for members of the changeover team to meet the goals and timetables identified during the kaizen event.
- Group facilitation where needed of kaizen team meetings
- Value stream/process mapping of the manufacturing process
- Went to the "gemba" with the team and observed the changeover process. Recording value-added and non-value-added times as well as internal and external activities
- Based on group observation and feedback, developed recommendations on how to improve the process.

Results

- Identified and separated external and internal changeover activities and worked with Kaizen team to convert many of the internal activities to external activities.
- Kaizen team reduced changeover 50% on first pass to 5 days and identified other opportunities that would achieve the 3 day changeover goal.
- Identified other wasteful activities and developed a lean future state roadmap for the process

Company: \$6 Billion Consumer Products Chemical Manufacturer

Business Challenge:

Increase capacity on one their chemical production lines

Solutions:

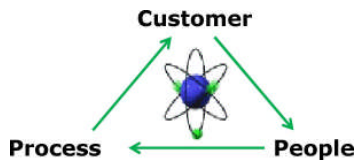
- Full Lean manufacturing assessment to identify capacity constraints
- Value stream mapping
- OEE

Results:

- Identified line constraints impeding increased capacity
- We developed lean metrics and recommendations for continuous improvement projects to achieve the performance metrics.
- Created future state map that provided an improvement roadmap with a list of kaizen events to achieve the future state
- Client used the results of our analysis and recommendations to self-implement the improvements within two weeks following the assessment.

We help organizations focus on creating customer value by eliminating waste to achieve gains, ranging from 40% to 80%, in quality, productivity, cost reduction and customer response time.

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Company: \$2.5 Billion Consumer Products Chemicals Company

Business Challenge:

Spend \$400 million capital to build new production line or increase capacity from existing production assets

Solutions:

- Conducted Reliability Analytics that quantified 30% hidden capacity across existing (8) production lines
- Utilized Reliability Analytics & CTQ Flow-down that identified multiple Six Sigma improvement projects on (1) of these production lines
- Allowed business team to defer growth capital spend and focus attention on driving capacity increase via Six Sigma and Lean initiatives

Results:

- Identified and completed (3) Six Sigma improvement projects that are currently delivering >\$10 million recurring annual revenues via capacity thru-put, energy savings and product quality control. Minor capital expenditures were < \$100 thousand to reap these gains
- Along with the production board operators, we implemented a mini Kaizen to define the key process parameters to aimed to improve process productivity and process reliability performance
- We executed Six Sigma "DOE" on these key process parameters that allowed implementation of process control upgrades to consistently achieve final product properties
- The 30% hidden capacity has allowed this business to defer major growth capacity spending for over 10 years and running
- These upgrades were easily transferred to other production lines across the company

Company: Automotive Supplier Division of a Fortune 500 Automotive and Controls Company

Business Challenge

A Joint Venture Client had quality issues delivering automotive seating to Japanese Customer to meet a pilot build program. The quality and craftsmanship of the materials (fabric, leather), plastics, and metals did not meeting the standards of the build. The timing of the program delivery was at risk of not delivering the product or meeting the milestone events which impacted testing and vehicle approval.

Solutions:

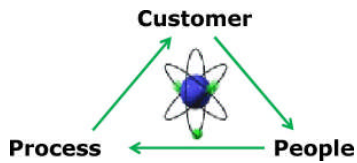
- Created a cross-functional team with Core Quality Team, Joint Venture Team, and Customer Team (Japanese) and developed a war room for team reviews and visual project status display.
- Deployed SME's to evaluate root causes of quality issues in plants in United States, Mexico, Canada, Japan, and Europe.
- Led "gemba" events at high risk Tier 3 suppliers with the customer to evaluate capability and product quality.
- Led Supplier Development including quality roadmaps, organization, tooling, equipment, facilities, process, product verification, and sub-supplier compliance for program.
- Ensured optimal JIT performance for Quality and Delivery through problem solving and Lean Six Sigma
- Audited and approved Craftsmanship, Product OK to ship, APQP, PPAP, Control Plan, MSA, and 8D.

Results

- Executed turn-around for 33 late vendors responsible for over 250 parts by managing high-risk suppliers.
- Improved APQP deliverables by 40% by developing a database, tracking weekly status.
- Improved team dynamics through Change Management and moved 3 "Resistors" to "Advocates".
- Enabled Cost-Avoidance of late product delivery needed to complete seasonal vehicle testing.

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Company: Large Global Product Safety Testing Organization

Business Challenge:

Lean Implementation—Improve customer responsiveness by reducing transaction center and engineering turnaround time at least 50%

Solutions:

- Worked with client teams to map current and future states of a number of document generation processes.
- Value stream mapping of engineering sections and identified waste
- Helped teams redesign transaction center processes in the U.S., Europe and Asia for preparing customer certification documents
- Facilitated client teams from various engineering sections in root cause analysis to eliminate barriers to reducing certification process cycle time.
- Implemented Lean System for Management (LSFM) in multiple engineering sections in the U.S. and China
- Facilitated development of responsibility charts for the management team and staff of a \$6 million division using the RACI (Responsibility, Accountability, Consult, and Inform) process. Created responsibility matrices that helped define management and staff roles and identify competencies/weaknesses. This exercise helped the management team develop a succession planning model.

Results:

- Reduced lead time in the European transaction center from a high of 65 days to 15 days
- Reduced backlog of projects in 5 engineering sections by two-thirds. One section's backlog was completely eliminated and the engineers were responding to customer projects as soon as they were received from customer service.

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