CAVS Extension ... Impacting Mississippi

Reshoring Panel
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CAVS – Extension - At a Glance

Making a Difference
- Economic Impact: $5.4 Billion
- 2,300 jobs created or retained
  Through …
  On site Projects and Professional Development Workshops (e.g., Lean Six Sigma, Problem Solving, Kaizen Events, Simulation Modeling, Solid Modeling, Finite Element Analysis …)

Recent Successes
Simulation Modeling: Plant Start-Ups
Prototype to Full Scale production (9 mo.)
80% Improvement in Plant Quality
400% Increase in Plant Throughput (3 mo.)
Bad Boy Buggies

Background: Bad Boy Enterprises (BBE) was a small 4 wheel drive electric vehicle manufacturer located in Natchez, MS. BBE employed less than 50 people, but established a national brand name, Bad Boy Buggies, in the "hunting" vehicle industry.

Company was purchasing 80% of vehicle content from China, prepaying 3-month prior to delivery, and reworking quality problems instead of returning to vendor. Considering sending more key components offshore.

Project Objective: CAVS Extension, an MEP.ms Affiliate Center, assisted the company in re-engineering their production system.

Work involved process documentation, 5S, line balance, assembly line layout and implementation and supplier development.

Project Results: Production increased from 3-5 buggies/day to 20 buggies/day in a 3 month time frame.

Vehicle quality improved 80%.

BBE lead effort to increase US product content from 20% to 80%.

Product lead times decreased from 3 months to less than a month.

Purchased by E-Z-Go and moved to Augusta, GA

BBE “Reshoring” Experience

✓ Reshoring Work & Jobs – Bringing work & jobs back to US from other countries
✓ Retaining Work & Jobs – Analyzing costs and/or developing processes and facilities to justify keeping work & jobs in the U.S.
✓ Growing Work & Jobs – Becoming more efficient & competitive in cost/quality/etc. to facilitate growth & keep products from being offshored to other countries.

‘Mechanisms Utilized’:

Comparative Analysis:
✓ Formal Cost Analysis
✓ Strategic Reasons (Lead time, Quality).

‘Best Practices’:
✓ Plant Master Planning (Layout, Flow, Facilitation, etc.)
✓ Process Modeling & Simulation
✓ Lean Implementation/Training (Flow, Waste Elimination, )
✓ Quality Improvements (Standard Work, Check sheets)
✓ Supplier Development (Moving Work & Jobs to U.S. Suppliers)
Start-up Support: GreenTech Automotive

Company Background:
• “Start-up” electric car manufacturer located in Horn Lake, MS.
• Targeting initial creation of 150+ jobs

Project Results
• CAVS Extension team – responsible for in assisting the design of the assembly line and other support processes.

Plant Master Planning – ESCO Plant Expansion

Project Results
• Specified new material handling system which reduced costs (labor, forklifts) and improved throughput.
• Successfully designed new plant layout for multi million dollar investment (plant expansion & capital equipment).
• Simulation Model guided Plant Expansion decisions.
• Produce more product in US and MS