

Reshoring Advanced Manufacturing Jobs in Mississippi: Enhancing Skills and Building Competitiveness

"Make it in Mississippi" Clay Walden, Ph.D. Director of CAVS Extension





























"Make it in Mississippi" ... Program Motivation

The Boston Consulting Group predicts that rising costs will soon drop China's cost advantage to single digits - suggesting growth opportunities for states such as Texas, Alabama, Georgia, and Mississippi. ("Reshoring U.S. Manufacturing: A Wave of the Present", businessclimate.com)

"I am optimistic we will be a leader in reshoring," said Brent Christensen, head of the Mississippi Development Authority, the state's economic recruiting agency. (as quoted in Business Week August 21, 2012)

MISSISSIPPI STATE



The 'Shoring' Decision





Geo-Political Changes

Re-work

Lead-Time

Tariffs

Obsolescence (Parts, Final)

Intermodal & Containerization

Warranty

Risk

Flexibility

Responsiveness

Quality

Intellectual Property

Coordination

Accountability

Product Development

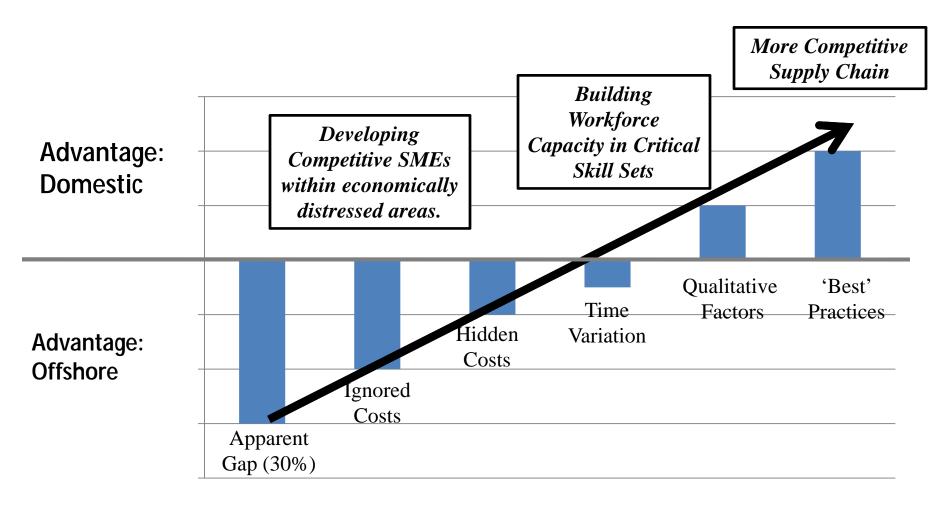
"When <u>all costs are taken into account</u>, certain U.S. states ... "will turn out to be among the least expensive production sites in the industrialized world. .. The early evidence of such a shift is mounting."

Made in America, Again; Boston Consulting Group, August 2011





Illustration ... Closing the Gap





Broad Coalition of Partnerships

Associations















State Agencies





Workforce Investment Boards





Non Profits







Federal Agencies







Private Industry





ULTICRAFT









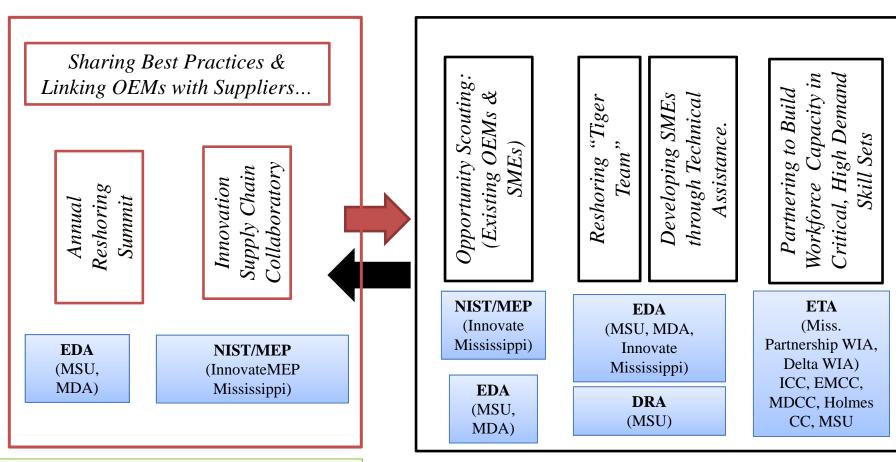








Program ... "Make it in Mississippi"



Impacts: \$40 million in Private Investment and economic impact, 750 jobs created or saved. (MEP Survey)

Longitudinal Tracking of Career Advancement: 276 "Advancement Maintenance Internships" with 85% placement, 50% advancement of incumbent workers trained. (nSPARC)



Grant Highlights ...

Strengthening the Supply Chain

- Listening Sessions CAVS-E (Canton, MS); ICC Belden Center (Tupelo, MS) ... Completed (20 manufacturers)
- Upcoming October 30, 2014 ... Capps Center (Indianola, MS)
- "Tiger Team" Sourcing & Technical Assistance Projects ... Active Projects (30)

Developing the Workforce

- Professional Development ... Lean Certificate, Six Sigma Green Belt, Management & Supervisory Training
- Advanced Manufacturing Internships (ICC, Holmes CC, MDCC, EMCC) ... All programs are active.

Note: Above training opportunities are free for "qualified" participants (geography, ...).

DEVELOPING THE WORKFORCE



Building Workforce Capacity in Critical Skill Sets

Activity	Number of Times	Responsibility
ICC Advanced Maintenance Internships	93	ICC
EMCC Advanced Maintenance Internships	93	EMCC
MDCC Advanced Maintenance Internships	30	MDCC
Holmes CC Advanced Maintenance Internships	60	Holmes CC
Conduct Management & Supervisory training	3 Workshops	MSU Franklin Furniture Institute
Conduct workshops for enhancing engineering and tech professionals career paths. (e.g., Industry recognized certifications in Lean, 6 Sigma)	36 Workshops	MSU CAVS Extension
Longitudinal tracking on internship recipients and incumbent training (jobs, advancement).	3 (Annual)	nSPARC



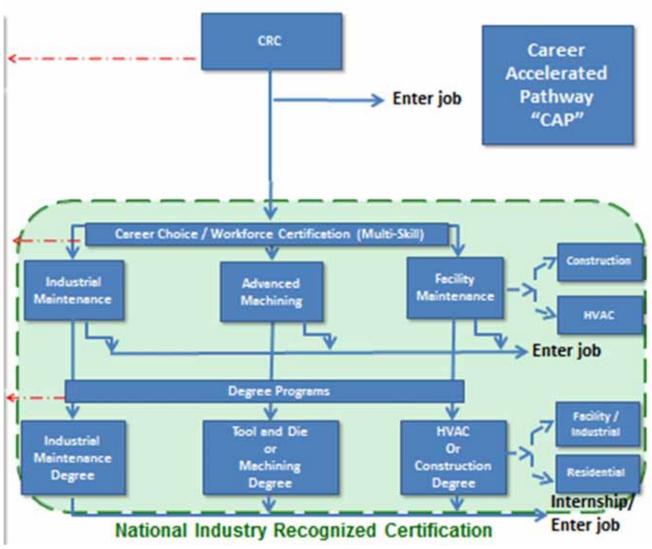
Career Accelerated Manufacturing Pathway















Advanced Manufacturing Pathways

Community College	Total Numbers of Internships
Itawamba Community College	93
East Mississippi Community College	93
Holmes Community College	60
Mississippi Delta Community College	30

276 Advanced Manufacturing Internships

STRENGTHENING THE SUPPLY CHAIN

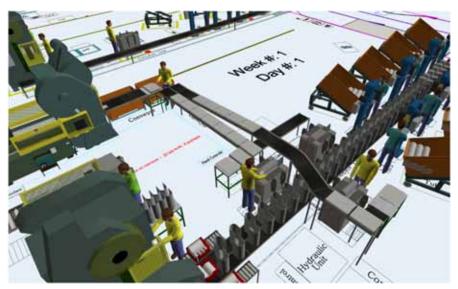
Manufacturers Engaged (Listening Session & "Tiger Teams")

- Solar Group
- Multi-Craft
- Syntron (FMC)
- K&S Custom Whse
- Miss. Prison Industries
- Varsity Pro
- Grenada Mfging
- Advantage Pharmacy Service
- Leggett & Platt
- Hyperion

- Laurel Machine & Foundry
- Rod Sox
- Electro National
- Affordable Furniture
- SCP Polymers
- Hickory Springs
- Hyperion
- Composite Building Systems.

Solar Group (Taylorsville, MS)





- Redesigned production line to increase productivity, reduce WIP, freeing up additional line.
- Increased Competitiveness => opportunity to bring work back from China and prevent offshoring.



Developing More Competitive SMEs

Activity	Number of Times	Responsibility
Basic Lean VSM, Supervisory, Export Technical Assistance Projects within the DRA area	1/yr * 2 years = 2	MSU FFI
General Technical Assistance Projects	1/year * 3 years = 3	MSU CAVS Extension
Conduct Innovation Jumpstarts within the Delta Region	1/year * 2 years = 2	MSU CAVS Extension
Management and Supervisory Training	2/year *2 years= 4	MSU FFI
Conduct Sustainability Program	1/year * 2 years = 2	MSU FFI
Conduct Innovation Events around the broader region.	1 / year * 3 years = 3	MSU CAVS Extension
Support Innovation Events through recruitment, and results tracking.	Ongoing	Innovate Mississippi
Track Project Results	Quarterly	Innovate Mississippi



Recent Success Stories ... (Lean & Six Sigma)

- North Mississippi manufacturer ... Roller Trough
- Impact: Reduced LT from 90 days to 10 days

. . .

- Inventory investment reduced by \$500,000
- Reduced transportation cost by \$50,000.
- Maintained high service levels
- Surpassed the "China" savings on a piece price basis.



