Manufacturing Extension Partnership

National Institute of Standards and Technology

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The MEP Program in Short....

- Federal program created in 1988, with centers in all 50 states by 1996 selected competitively. Reauthorized in America Competes Act.
- Mission "To strengthen the global competitiveness of US-based manufacturing by providing information, decision support, and implementation of innovative approaches focused on leveraging technologies, techniques, and business best practices."
- 59 centers with ~ 440 field locations
 - System wide, Non-Federal staff is ~ 1,600
 - Contracting with over 3,000 third party service providers
- Partnership Model Federal/State/Industry
- MEP System budget ~ \$300M
 - 1/3 Federal, ~1/3 State and ~1/3 Industry (fees for services)
- Program started because of "market failures" in terms of access to information, technical expertise and cost – particularly for small manufacturers.
- Emphasis on performance program and center measured based upon impact of center services on client firms.

MEP Office Locations

www.mep.nist.gov - or - 800-MEP-4MFG

59 "Centers" 1600 Field Staff 440 Service Locations



What MEP Does

- Focus on meeting manufacturer's short term needs, but in context of overall company strategy
- MEP Center areas of common strength
 - Engineering Services for products and processes
 - Growth Services new or expanded market opportunities
 - Lean Manufacturing
 - Quality Systems
 - Environmental Services
 - Workforce Development
- Over 27,000 manufacturing client interactions (projects, workshops, etc.) annually*

*Based on FY2007 MEP Center reported performance data.



Client Impacts Resulting from MEP Services

New Sales \$3.11 Billion
Retained Sales \$3.65 Billion
Capital Investment \$1.65 Billion
Cost Savings \$1.115 Billion
Jobs Created and Retained 52,585

FY 2006 economic impact results are based on a survey of 4,959 MEP clients out of 5,384 attempted.



What we all know -Manufacturing is changing!

- Globalization is here to stay, and most U.S. manufacturing firms must adapt to increasing competition.
- Innovation (product, process, service and business model) will be critical for enterprise survival and must be managed at several levels.
- Supply chains are becoming more global, more exclusive, and more competitive.
- Technology advances will continue to be both incremental and disruptive. Unfortunately, adoption rates at smaller firms still lag those of larger ones.









Expanding Manufacturing's Growth Potential

Business Growth Opportunities

New Sales – Redefining yourself to the customer

New Markets – International Opportunities

New Products – Technology Deployment





Why Deploy Technology?

MEP 20/20+ Vision for Manufacturers

- Take 20% off bottom line expenses through Lean, Quality, other programs targeting plant efficiencies
- Add 20% to top line sales through Eureka! Winning Ways and other growth services

• Focus for Top Line Sales Increase:

- 1. New Sales
- 2. New Markets
- 3. New Products

TECHNOLOGY is critical to realizing these goals....

.... critical to

ACCELERATING MANUFACTURER GROWTH





expenses through Lean, Quality



into focus:



Technology Deployment Framework

MARKET



Technology Transition

And Public Private Partings III

Prototype Facility Design Design for Manufacturing

MEP Bridging the Gaps, Strengthening the Connection Between Research and Commercialization

Technology Diffusion

Education

Assessment

Demonstration

Manufacturing Adoption

MEP

Strategy Market Position Supply Chain Production

MANUFACTURING EXTENSION PARTNERSHIP MEP Technology Deployment Approach



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MANUFACTURING EXTENSION PARTNERSHIP **NIST – MEP Technology Collaboration Smart Machining Systems**

- TechSolve (MEP center in Cincinnati, OH) and NIST MEL initiated a CRADA in 2005 to co-develop & share information about in-situ measurement of cutting tool dynamics.
 - Collaborative design of two alternative technical approaches.
 - TechSolve did research on one approach and NIST MEL the alternative.
 - Shared results and data from both approaches.
 - Provided guidance for future commercial developments by TechSolve.
- NIST MEL continues collaboration as member of TechSolve's Smart Machine Technical Advisory Board, which oversees the National Smart Machine Platform Initiative (SMPI) activities.
 - SMPI is an industry, government, academic program to develop enabling technologies to allow manufacturing equipment to make decisions based upon acquired knowledge and in turn produce a "first part correct" without unscheduled delays.







Questions?

