

MANUFACTURING EXTENSION PARTNERSHIP

Hollings Manufacturing Extension Partnership

National Institute of Standards and Technology

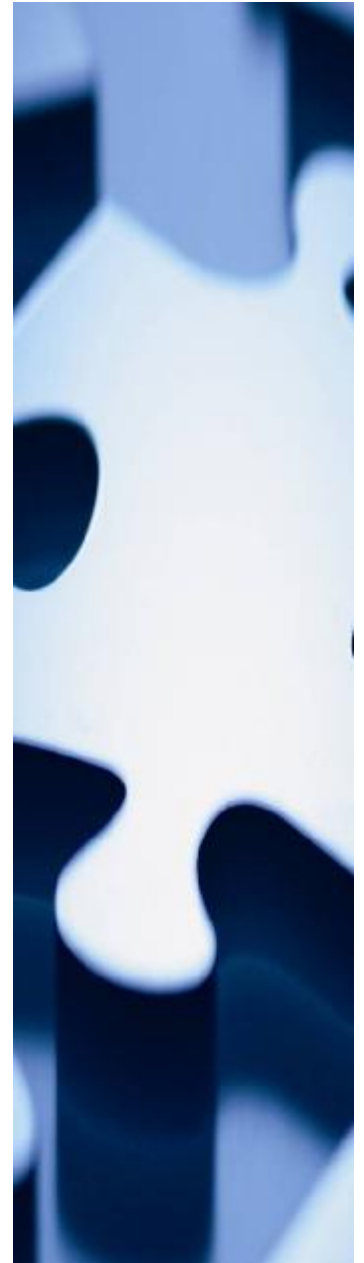
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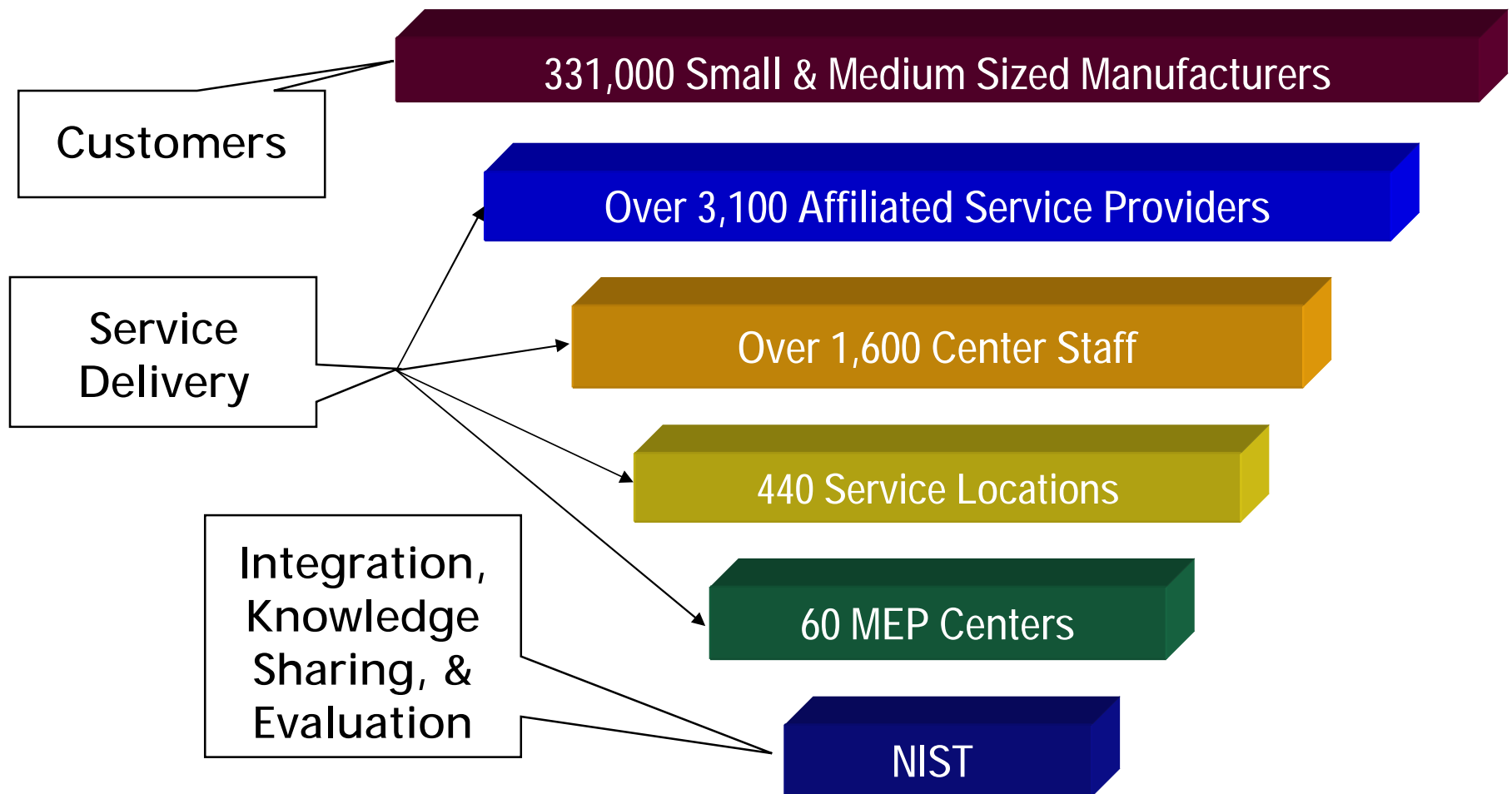
301-975-5020

<http://www.nist.gov/mep/>



MANUFACTURING EXTENSION PARTNERSHIP

Partnering to Drive a National Program



MANUFACTURING EXTENSION PARTNERSHIP

MEP Office Locations

www.mep.nist.gov – or – 800-MEP-4MFG

60 “Centers”
1600 Field Staff
440 Service Locations



MANUFACTURING EXTENSION PARTNERSHIP

What MEP Does

§ Focus on meeting manufacturer's short term needs but in context of overall company strategy

§ MEP Center projects

- Business Growth Services – new market opportunities
- Technology Services for products and processes
- Lean Enterprise – continuous improvement philosophy
- Quality Systems and other standards
- Energy, Environment, and Sustainable Services
- Talent Development to meet future manufacturing needs

§ Reach 32,000 manufacturing firms and complete 8,000 projects per year*

*Based on FY2008 MEP Center reported performance data.

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Client Impacts Resulting from MEP Services *FY2008*

§ New Sales	\$3.6 Billion
§ Retained Sales	\$5.5 Billion
§ Capital Investment	\$1.7 Billion
§ Cost Savings	\$1.4 Billion
§ Jobs Created and Retained	52,948



March 9, 2010

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Arkansas Client Impacts Resulting from AMS Services *FY2008*

§ New and Retained Sales	\$592 Million
§ Capital Investment	\$25.0 Million
§ Cost Savings	\$12.7 Million
§ Jobs Created and Retained	3,335



March 9, 2010

What we all know...

Manufacturing has and continues to change!

- § Globalization is here to stay and U.S. manufacturing firms are adapting to increasing competition.
- § Supply Chains are becoming more global, more exclusive, and more competitive.
- § Innovation (product, process, service & business model) is critical for survival.
- § Technology advances will be incremental and disruptive. Unfortunately, technology adoption rates at smaller firms still lag those of larger ones.
- § Sustainability is an increasingly powerful business driver for industry. The triple bottom-line approach to economic, environmental, and societal balance is defining many corporate strategies.



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MEP Program Evolution – The Next Generation



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MEP's strategy to address this changing world

Reduce Costs

Take 20% off bottom line expenses through lean, quality, & other programs targeting plant efficiencies

Increase Profitability

Add 20% to top line sales through business growth services resulting in new sales, new markets, and new products.



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GROWTH SERVICES

Providing a reliable scientific system that guides companies through the creation of new ideas, discovery of market opportunities, and the tools to drive the ideas into development



NEXT GENERATION MEP

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Eureka! Winning Ways

Helping Companies Find, Filter & Fast Track Ideas for More Profitable Customers, Products and Markets

Eureka! Winning Ways is a “hands on” facilitated process that gives manufacturers the tools to generate ideas for new sales, markets or products. The program quickly identifies and validates new ideas to increase top-line revenues, using proven idea-creation and deployment methodology.

Case Study: Precision Analysis LLC

Riverton, Wyoming

Home water testing kits

Results:

- § Re-vamped their marketing message to attract new markets*
- § Created a new home water testing kit to keep in check with EPA regulations*
- § Developed & released the new product within 5 months*
- § Doubled their sales within 5 months*
- § Created 3 new jobs, retained 8 jobs*



Eureka! Winning Ways is a collaborative effort between Commerce's NIST MEP and the Eureka! Ranch

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ExporTech

Helping Companies Enter and Expand into Global Markets

ExporTech is a “how to” service to help companies expand into global markets by developing a proactive international growth plan customized for their business, moving the company into actual, profitable export sales.

Case Study: Wilco Machine & Fabrication Marlow, Oklahoma

Manufacturer of fabricated and machined equipment, products, and tools for the energy industry.

Results:

- § Visited the Middle East to establish relationships
- § Negotiations for a joint venture in Brazil
- § 2008, exports accounted for less than 8% of total revenue
- § Halfway through 2009, exports jumped to 51%
- § Predicting that exports will be 60% of total revenue by end of 2009

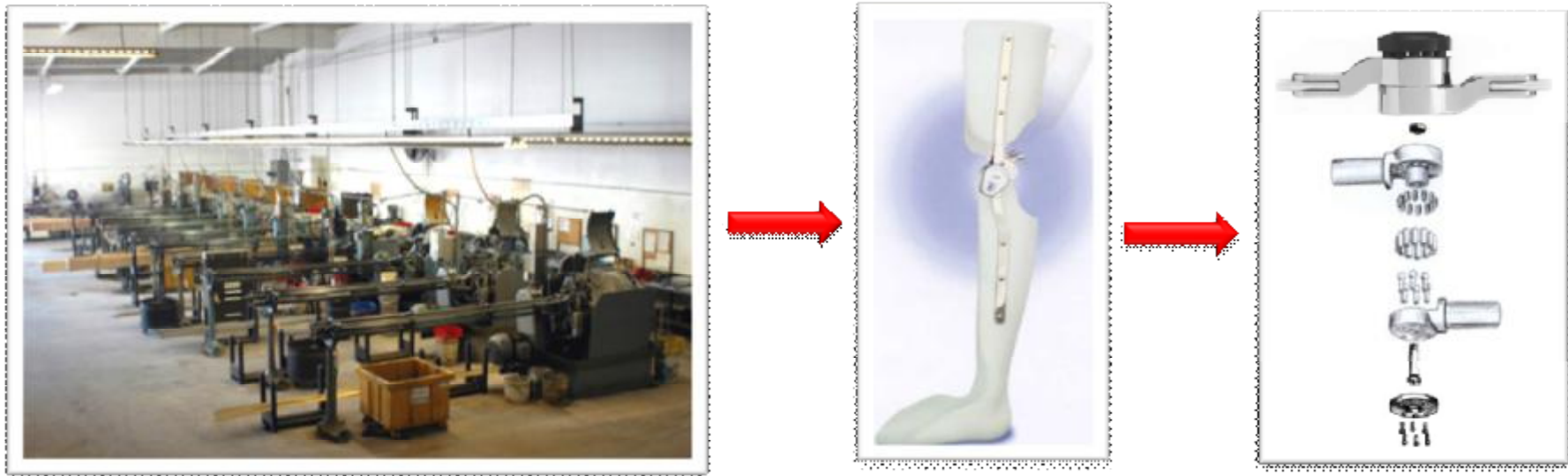


ExporTech is a collaborative effort between Commerce’s NIST MEP, the U.S. Export Assistance Centers, and District Export Councils, the SBA’s Small Business Development Centers, and State-based international trade programs.

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Diversification: New Customers/Markets

With an assessment, MEP matched market trends and data with the specific process capabilities of J.C. Gibbons Manufacturing, Livonia, Michigan.



Medical Prosthetics

Through this effort, MEP helped the company move from automotive to medical appliances while using the same equipment and the same manufacturing processes, and retaining 25 jobs.

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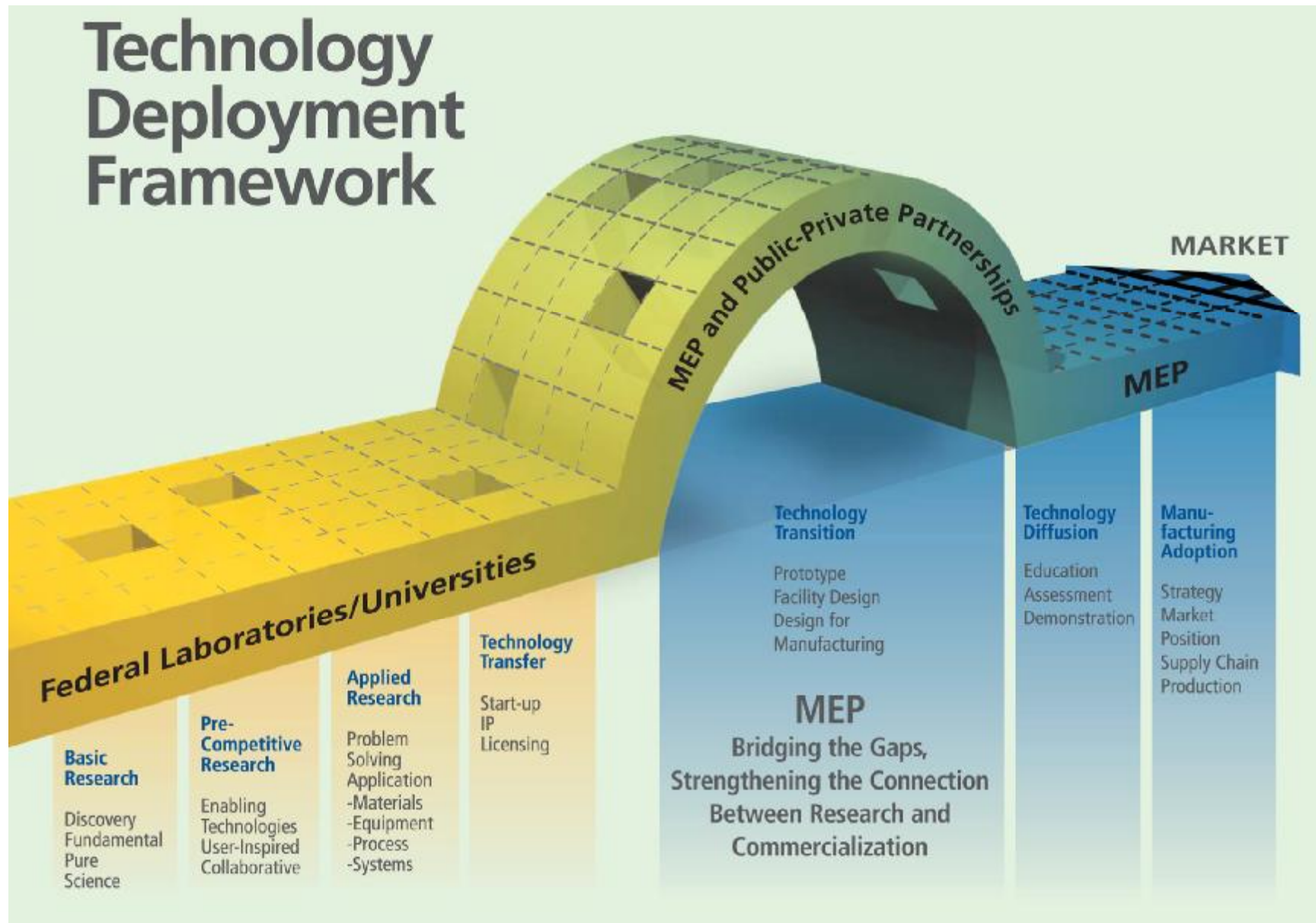
TECHNOLOGY ACCELERATION

Systematically identifying, and capitalizing on, opportunities to leverage technology into the processes, products, and services of manufacturers

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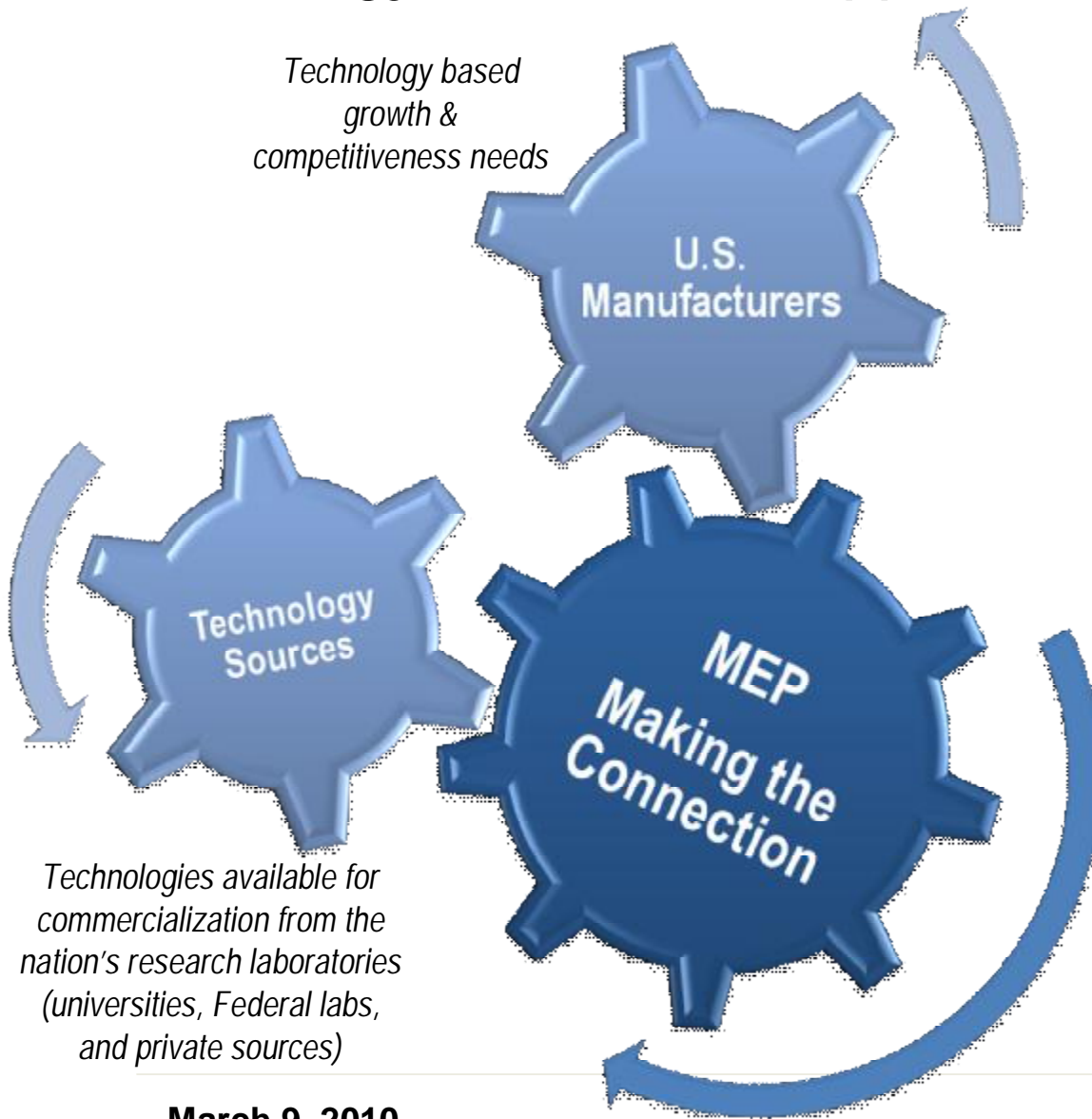
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Technology Acceleration Approach

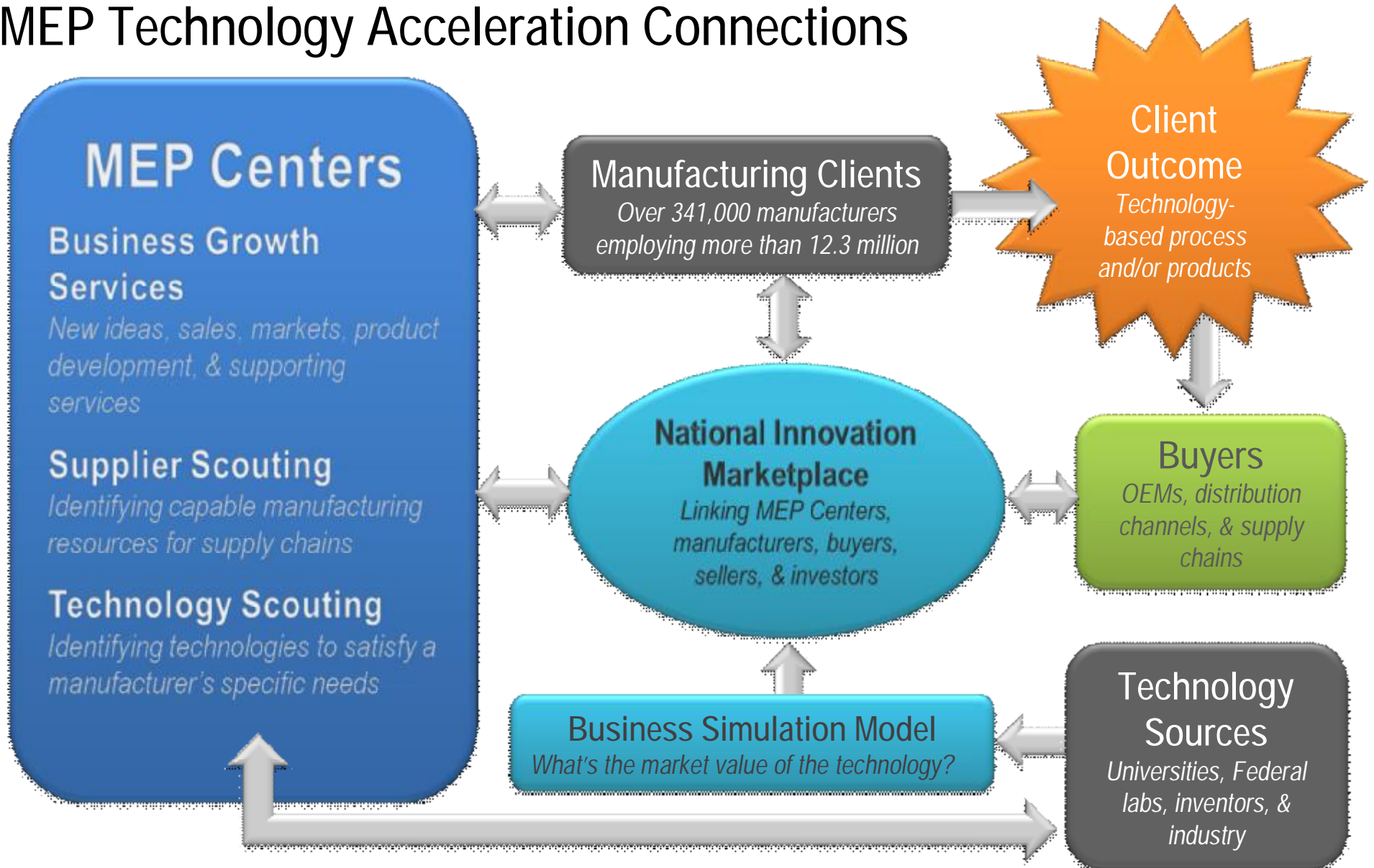


MEP is accelerating technology deployment and utilization by getting the needs of U.S. manufacturers to Technology Sources and getting new technologies translated into real-world product concepts by:

- § Connecting manufacturers with solutions and opportunities
- § Providing development & commercialization assistance
- § Leveraging 3rd party partners

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MEP Technology Acceleration Connections



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The National Innovation Marketplace – NIM

- § MEP is pilot testing the tools and resources to connect manufacturers to technology and business opportunities resulting in new markets and new products through an online marketplace – NIM.
- § The NIM involves the translation of emerging technologies first into business applications, second into market opportunities, and third into the adoption of new products.
- § Uses an open innovation strategy, which includes partnering, licensing, and co-developing innovation with partners outside of a company instead of the traditional, internal research and development. The NIM connects innovation sellers, buyers, investors and distributors in all industries.
- § Targets significant reduction of SME transaction costs associated with technology commercialization.



www.usainnovation.org

Arkansas Innovation Marketplace (AIM)

- § Arkansas Science and Technology Authority (ASTA) on behalf of Arkansas Manufacturing Solutions (AMS) contracted with Merwyn Research, Inc. to create a state-based marketplace <http://www.planeteureka.org/marketplace/arkansas/>
- § AIM provides a window into all the intellectual property, requests and capabilities of its entrepreneurs, inventors, and companies in the state.
- § To date AIM has approximately 50 technologies posted and 50 company needs and wishes
- § 20 matches and 2 licensing deals
- § Currently no cost to post technologies during this initial phase – afterwards \$2,000
- § For more information contact: Dan Curtis, 501-683-4411

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SUPPLIER DEVELOPMENT

Helping manufacturers strategically understand, maintain, and expand their positions in supply chains



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Supplier Scouting *Pilot Projects*

- § Defense Logistics Agency (DLA), Defense Supply Center Columbus: Helping DLA find manufacturers capable of producing hard-to-source National Stock Number (NSN) parts by leveraging the knowledge and relationships of our national network..

Defense Supply Center Columbus
Taking the Lead in Land and Maritime Support

- § BAE Systems, Inc.: Working with BAE Systems and Army ManTech to assess and develop capabilities of military suppliers to operate in a Model-Based Enterprise (MBE) environment as a critical step in DOD's implementation of MBE throughout its supply chain.

BAE SYSTEMS

- § Department of Veterans Affairs / NAVAIR: Developing procedures to find and assist veteran-owned and service-disabled-veteran-owned U.S. manufacturers capable of supplying material to meet NAVAIR demands.



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SUSTAINABILITY

Helping manufacturers gain a competitive edge, maintain profitability and job creating growth while increasing energy efficiency and reducing environmental impacts

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MEP Partnering to Support Manufacturing through Sustainability

GSN: Green Suppliers Network

E3: Economy, Energy, and Environment



What are GSN and E3?

Innovative models for collaboration among manufacturers, utilities, local government, and federal resources to enhance sustainability and competitiveness in local and regional economies as well as supply chains and to spur job growth and innovation.

Partners

The joint collaboration has expanded to include five U.S. federal agencies: DOC, SBA, DOL, DOE, and EPA. These federal partners work directly with local utilities, local government, and small- and medium-sized manufacturers.

"The goal I had for Central Metal Finishing Inc. from this program, provided by the Massachusetts Manufacturing Extension Partnership, was to achieve improvement in our competitive position operationally and environmentally. Based on our actions in the past six months, I project a savings of \$125,000. The total savings over an 18-month timeframe, which represents the timeframe to complete our project outline, is \$400,000. The most significant improvement which cannot be quantified is the capability and capacity of the CMF organization to understand the needs to be efficient in all that is done and to be flexible towards meeting the needs of the business and our customers." - Carol Shibles, President

Benefits for Manufacturers & Communities

Cost Savings

- \$ Increased process efficiencies and reduced waste
- \$ Profitable sustainability practices

Increased Competitiveness

- \$ State-of-the-art sustainable business practices
- \$ Technical support to drive entry into new markets
- \$ Job creation and retention

Access to Technical and Financial Resources

- \$ Additional funding through federal and state programs
- \$ Enhanced skills and capabilities for workers

Economic Growth

- \$ Improved competitiveness of existing manufacturers
- \$ Enhanced ability to attract new business
- \$ Increased manufacturing jobs or job retention
- \$ Trained workforce with skills for a sustainable economy

GSN and E3 *Project Impacts*



Green Suppliers Network

125 Reviews

Impacts to Date:

- § Environmental Impact Savings.....\$ 24,621,055
- § Energy Conservation.....861,436,419 kWh
- § Productivity Cost Savings.....\$ 36,214,040



E3 – Economy, Energy, Environment

4 Reviews

Columbus, OH Pilot Impacts:

- § Environmental Impact Savings.....\$ 1,909,538
- § Energy Conservation.....7,911,579 kWh
- § Capital Job Creation.....33



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WORKFORCE

Helping manufacturers develop a strong, engaged, and skilled workforce that spans all levels of the organization necessary for business growth



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Layoff Aversion

EMT Meets the Fitness Trainer

- § Utilize early warning networks, including state and local partners, to identify and stabilize “at-risk” companies before they reach critical condition
- § Work with companies to reduce operating costs and, once the company is in stable condition, identify business growth opportunities
- § Prevent layoffs – start by saving existing jobs and then begin creating new, secure positions within the company.
- § Expand Labor Workforce Investment Act - Commerce MEP collaboration



Preventive
vs.
Emergency
Care



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Layoff Aversion

Missouri Layoff Aversion Results

Year	2007	2008	2009	Total
# of companies engaged	29	25	15	69
Jobs retained	76	169	126	371
Jobs created	47	86	69	202
Sales Increases	\$ 3,454,000	\$ 27,973,112	\$ 10,825,000	\$ 42,252,112
Sales Retained	\$ 7,208,000	\$ 14,321,000	\$ 3,855,000	\$ 25,384,000
Cost Savings	\$ 8,371,392	\$ 22,595,212	\$ 10,257,659	\$ 41,224,263
Investments	\$ 1,770,200	\$ 3,182,715	\$ 1,753,535	\$ 6,706,450

Impact as reported by clients on surveys at the end of the project - estimated or anticipated.