



Future of MEP Centers: An MEP Center Perspective

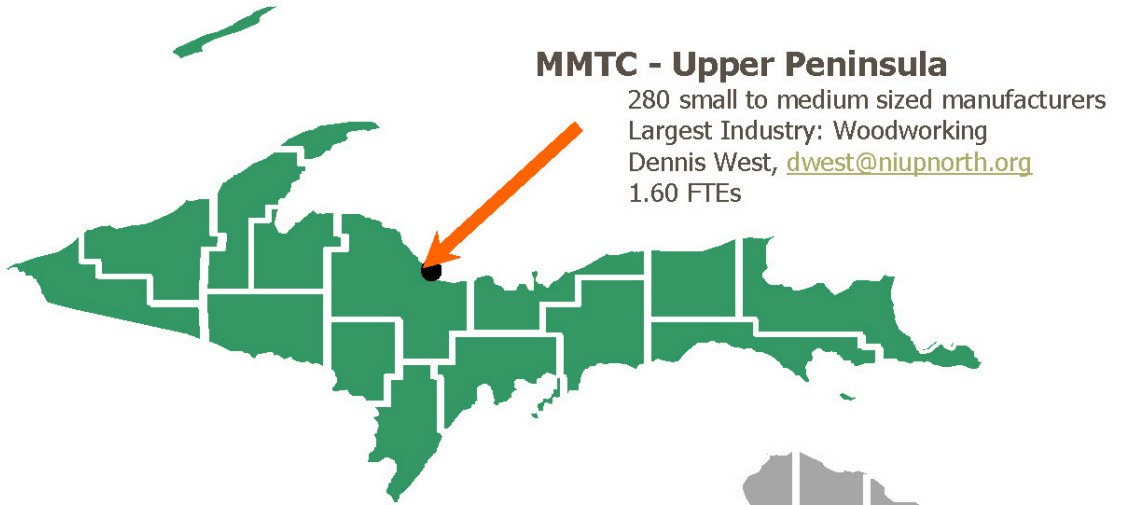
Michael J. Coast, President
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Visiting Committee on Advanced Technology

February 6, 2013

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a NIST | Network **PURE MICHIGAN**
MEP | Affiliate Michigan Economic Development Corporation



MMTC - Upper Peninsula

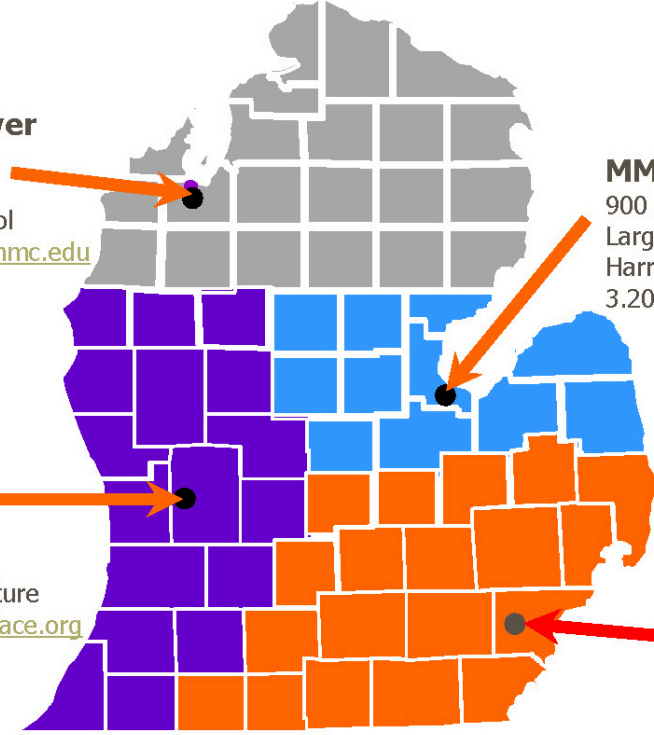
280 small to medium sized manufacturers
Largest Industry: Woodworking
Dennis West, dwest@niupnorth.org
1.60 FTEs

MMTC Regional Offices
A total of 12,580 small to medium sized manufacturers

Michael Coast, President
mcoast@mmtc.org
2.125 FTEs

MMTC – Northern Lower

500 small to medium sized manufacturers
Largest Industry: Machine Tool
Rich Wolin, rwolin@message.nmc.edu
3.15 FTEs



MMTC - Saginaw Valley/Northeast

900 small to medium sized manufacturers
Largest Industry: Automotive Supply
Harry Leaver, hleaver@svsu.edu
3.20 FTEs

MMTC - West

3300 small to medium sized manufacturers
Largest Industry: Office Furniture
William Small, smallw@rightplace.org
7.28 FTEs

MMTC – Southeast/Central

7600 small to medium sized manufacturers
Largest Industry: Automotive Supply
Bruce Knapp, bknapp@mmtc.org
40.5 FTEs



Our Mission

To enhance the global competitiveness of Michigan's small and medium-sized manufacturers

Our Focus

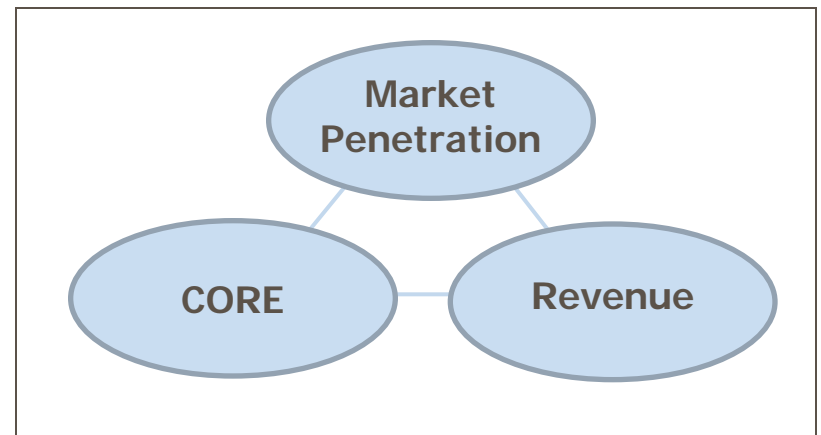
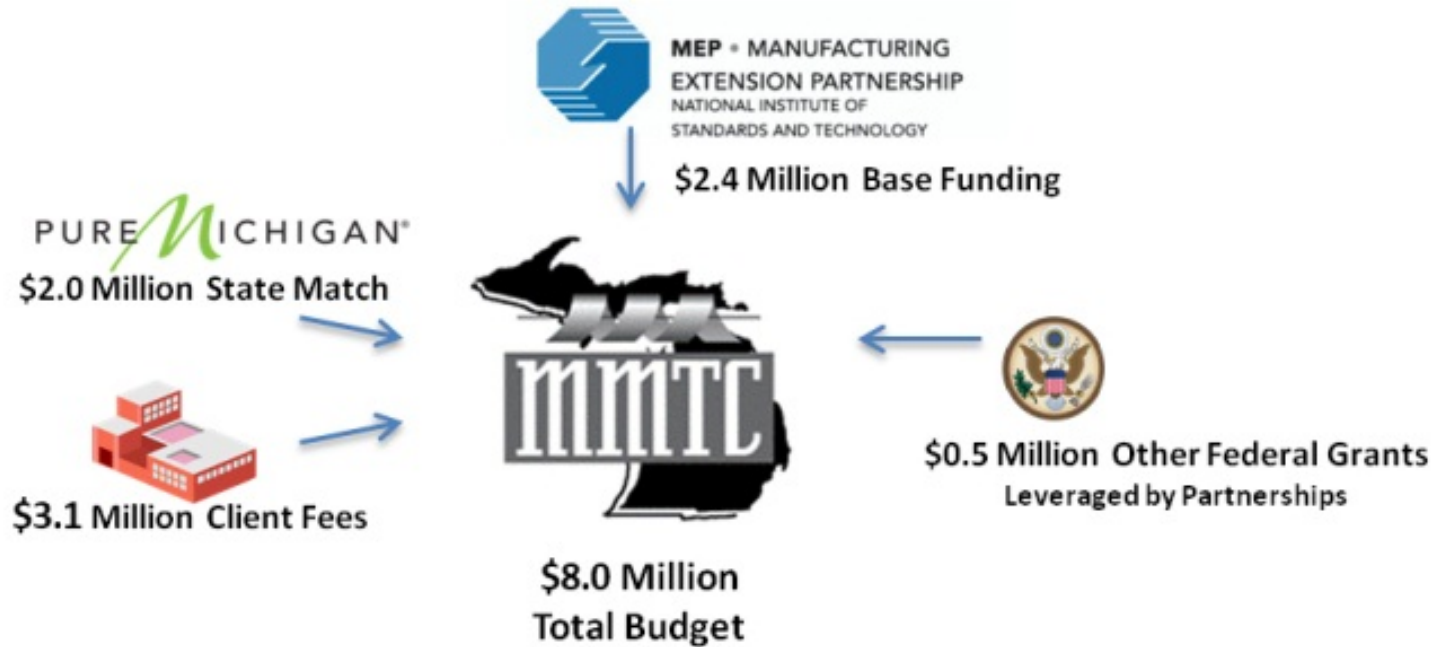
Survivable manufacturers with 20-249 employees
(65% of MI mfrs have 1-19 employees ... but they account for just 8% of MI mfg jobs)

Our Metrics

A **public-private network** measured solely by the business results we have on client companies' costs, sales, and new and retained jobs



MMTC Business Model





Documented Business Results

Clients Surveyed October 2011-September 2012



Sales:
Created: \$59.9 Million
Retained: \$118.2 Million



Cost Savings:
\$16.4 Million



**Jobs Created or
Retained: 2,166**



**Investments
Made:
\$48.8 Million**

Clients Surveyed Over the Past Ten Years

Sales:
Created: \$662.8 Million
Retained: \$1.189 Billion

Cost Savings:
\$181.4 Million

**Jobs Created or
Retained: 14,887**

**Investments Made:
\$1.129 Billion**

Our federal sponsor funds an independent, third-party survey firm to measure the impact of the services we provide to Michigan manufacturers. MMTc clients are surveyed six months after project work is completed.



Improving the Domestic Supply Chain

Reducing the Total Cost of Procurement,
Reducing Supply Chain Risk

How MMTC Services Impact Large Company Supply Chains

Lower Costs

Better Quality Outcomes

Shorter Cycle and Delivery Times

Suppliers with Better Understanding of Own Costs

More Innovative, Collaborative Suppliers

More Agile Suppliers

Excellent \$-Denominated Supplier Options

Lower Disruption Risk



MMTC's Circle of Life:

Assess, Improve, & Train Leaders to Plan & Manage Growth

EVALUATION/ASSESSMENT



- On-Site Assessments
- Performance Benchmarking
- Transformation Planner
- Performed by Credible, Seasoned Professionals

BOTTOM-LINE IMPROVEMENTS



- Process Innovation
- Facility Layout
- Process Improvements
- Supplier Development
- Information Technology
- Green Resources

INNOVATION STRATEGIES

TOP-LINE GROWTH



- Customer cultivation (new and existing)
- New Product Innovation
- International Opportunities (exporting)
- Sales Training
- Website Improvement
- Market Intelligence/Research
- From Parts to Products

LEADERSHIP DEVT



- Vision and Planning
- Financial Understanding
- Executive Coaching
- Succession Planning
- Workforce Development




12 KEY METRICS

1. Gross Margin
2. Inventory Turns
3. Utilities
4. Scrap and Rework
5. Premium Freight
6. Days Receivables
7. On-time Delivery
8. Available Machine Hours
9. Machine Run Hours
10. Schedule Bumping
11. Employee Turnover
12. Value-Added per FTE

TRANSFORMATION PLANNER		Client Data Entry	
Current Company: Demo Company Current Group: Industry Current Sector: stamping			
	Company Values	Percentile	
Annual Revenue	\$10,750,000		
Cost of Goods Sold	\$9,545,000		
Purchased Material	\$5,895,750		
Labor and Overhead	\$3,649,250		
Gross Margin	\$1,205,000 (11.21% of Revenue)		
Average Inventory	\$1,362,500		
Inventory Turns	7.01		
Outside Services	\$158,000		
Utilities	\$287,500		
Value-Added	\$4,408,750		
Cost of Scrap (Total)	\$387,500		
Cost of Scrap (Material)	\$127,875		
Cost of Rework	\$200,000		
Scrap and Rework (as % of COGS)	\$587,500 (6.16% of COGS)		
Premium Freight	\$12,000		
Average Receivables	\$1,650,000		
Days Receivables	56.02		
On-Time Deliveries	88.50%		
Machine Hours Available per Year	4576		
Machine Hours Running per Year	3112		
Available Machine Hours as % of Hours/Year	52.24%		
Machine Run Hours as % of Available Hours	68.01%		
Schedule Bumping	15.00%		
Annual Employee Turnover	7.50%		
Avg. Number of Hourly Employees	79		
Avg. Number of Salary Employees	22		
Average Work Week	52		
Full-Time Equivalents (FTE)	124.7		
Average Hourly Pay	\$10.89		
Value-Added per FTE	\$35,355		

Outside Services

Typically accounted for under SG&A Expenses these include outside purchases of Accounting, Legal services, Advertising & Marketing and Payroll services; Sales Commissions paid to non-employees and Shipping (including Premium Freight).

Cost of Scrap (Total)

The value of all material, parts, and products that were not salable. Please include both the labor and material cost associated with scrap, but include only the scrap due to errors, NOT unavoidable design scrap or offal.

Note: If your company has a scrap allowance built into your quotes, calculate the annual value of this allowance and add it to the scrap. Typically when a company is calculating scrap as a percentage (%) then take the % x COGS to determine value.

Full-Time Equivalents (FTE)

Calculated as your salaried employees, plus the number of hourly employees as if on a 40-hour work week.

Value-Added per FTE

Annual Revenue - (Purchase Materials - Outside Services - Utilities) / FTE

Machine Hours Running per Year

The total number of hours that a machine is actually making product over the course of a year. Report an average, per machine, for those machines you consider regular use or production machines. Do not include tryout or occasional use machines.

Close

Cost of Goods Sold

This includes:

- Utilities (Factory Power & Heat)
- Purchased Materials
- Direct Labor
- Indirect Labor
- Manufacturing Overhead
- Premium Freight
- change in inventory from beginning to end of year

Gross Margin

Inventory Turns

Automatically calculated by dividing cost of goods sold by average inventory.

Schedule Bumping

The percent of production orders that were stopped so that other rush or hot jobs could be inserted into the manufacturing process.

Gross Margin

Does not include SG&A (Sales, general and administration)

Value-Added

Defined as Annual Revenue less Purchased Material, Outside Services and Utilities.

Close

Leadership-In-Action

3-Day Executive-Level Hands-on Workshop Focused on Planning & Leading Change:

- Benchmark Organizational Performance
- Create a Culture of Improvement
- Expect Results





Top-Line Growth – *Four* Strategies

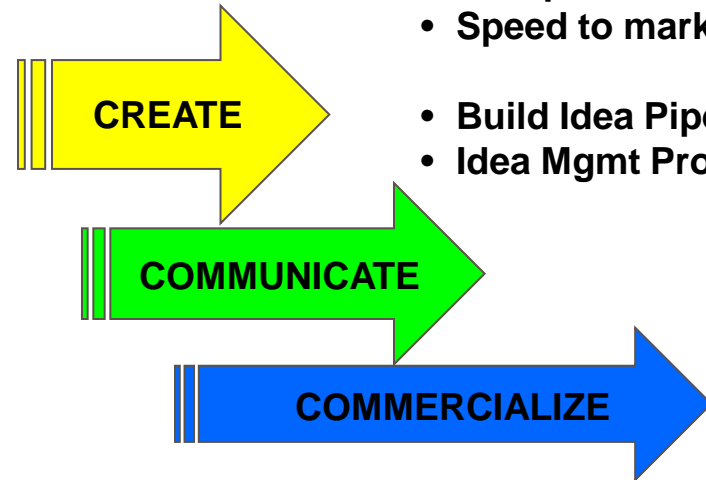
2. Lead Generation

- New Customers – current markets
- Identify Prospects, qualify Leads
- More sales
- Build Lead Pipeline
- Sales Mgmt Process



4. Innovation

- New Ideas for Growth
- New products/services
- Speed to market
- Build Idea Pipeline
- Idea Mgmt Process



1. Customer Cultivation

- For fast growth
- Current Customers
- More sales
- More profits
- Build Referrals
- Customer Mgmt Process



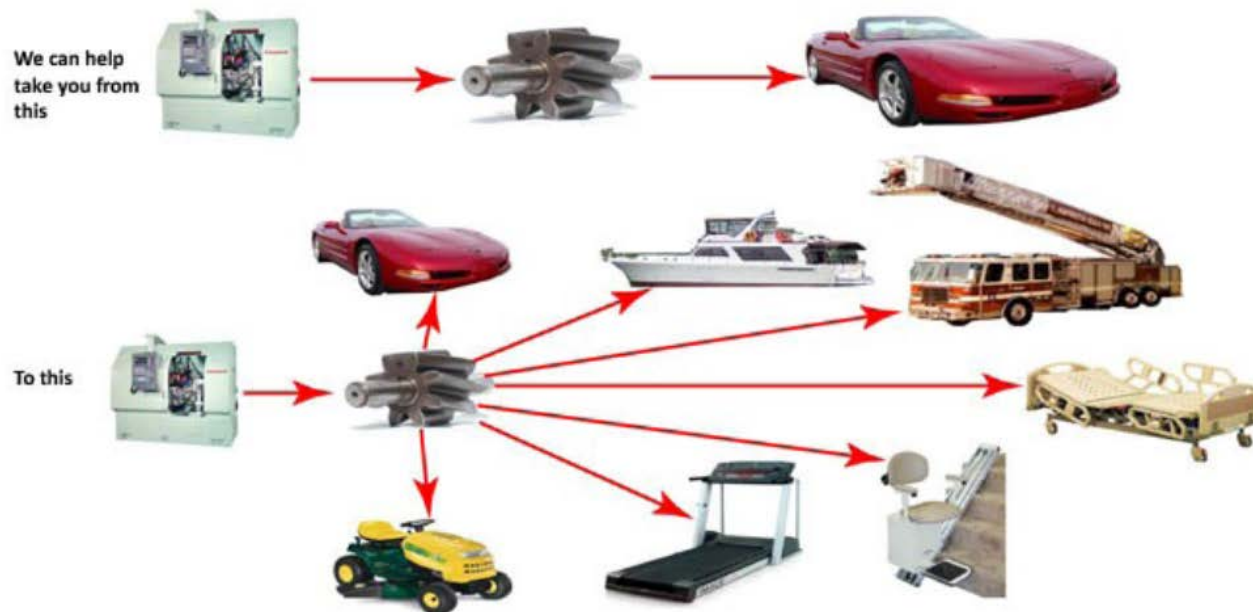
3. Market Diversification

- New Customers – New Markets
- New market Entry -US & International
- Research “best fits”
- Build Market Pipeline
- Market Mgmt Process



Growth Services

Shrinking orders from their traditional customers have caused many Michigan companies to begin looking for new customers. MMTC's Growth Services program assists your company in aligning its core competencies and strengths with new markets and customers, leading to increased sales and sustainable growth.



Innovation Strategies for Transformation: Four Case Studies in Growth

- **J.C. Gibbons**: market diversification beyond a dominant automotive customer
- **Omega Plastics**: from auto tooling to multi-industry contract manufacturing
- **St. Clair Systems**: leveraging cost reductions to succeed as an exporter
- **Aluminum Blanking**: investment avoidance and leadership focus to crack new niche

Case Study: J.C. Gibbons

Challenge: Heavy reliance on one customer in the automotive industry

Result: Grew non-automotive business, reducing dependence on automotive from 75% to 29%. *Key: repurposing existing products to serve replacement knee market*



Medical Prosthetics

Livonia, MI
20 employees

Case Study: Omega Plastics

Challenge: Develop and execute a plan to diversify customer base from 90% automotive

Result: Achieved design and production efficiencies, and implemented new market strategies, to diversify customer base into medical device and consumer packaging markets. *Key: leadership alignment to transform company's role*



Omega Plastics' Success

- Mastered SMED to decrease changeover time to support business model with many more smaller jobs for many more customers
- Secured ISO 13485 certification (Medical Device quality standard)
- Invested \$160,000 in clean room
- Secured more than 25 new customers in multiple new market segments within and beyond medical
- Increased value-added per FTE by 93% through efficiency and growth

Case Study: **Saint Clair Systems**

Challenge: Decrease production time to compete with low-cost countries' machine-builders

Result: Sharply cut lead time & hence production costs, resulting in 48% of sales from exports beyond North America.

Key: using lean as a competitive weapon



Rob Gladstone, President and Mike Bonner, Vice President
Washington Township, MI
22 employees

Saint Clair Systems' Success



Before and after shots.



Case Study: **Aluminum Blanking**

Challenge: Achieve large operational improvements to regain lost market share in metal blanks

Result: Management alignment, employee engagement, and fixed cost avoidance helped secure a new \$1.6-million contract with a new customer in a stainless steel market niche. *Key: leadership focus on time compression to gain an advantage in customer service*



Rick Hole, President
Pontiac, MI
100 employees

Aluminum Blanking's Success

- Establishment of autonomous maintenance and a work order priority board, boosting throughput and saving the company \$150,000
- \$33,000 in annual energy cost savings
- Avoidance of need for additional floor space, saving \$3 million
- “Found capacity” within the existing footprint held down fixed costs, helping company secure a \$1.6-million contract in a new stainless steel market niche

Forecast: More Hard Work Ahead

- Manufacturing performance critical to state's and region's comeback:
 - Michigan still down >400,000 mfg. jobs from 1998-2000
 - Detroit 3's share barely half what it was in 1978
 - No growth in Michigan mfg. jobs since January 2012
- A moment of threat and opportunity:
 - A weak dollar and rising Asian costs could help keep more Michigan mfrs. in the game ... *if cost & quality are good enough.*
 - Vehicle lightweighting to meet 2025 CAFÉ standards could bring a sea-change in materials and fabrication ... *if mfrs invest.*
 - More new products can be designed and built in Michigan ... *if more mfrs embrace this model & move beyond parts-making.*

... To seize the opportunity, many more MI SMMs will need help to invest and improve performance.

MMTC Moving Forward

- **Leadership** competency and sponsorship critical to achieving and sustaining success
- Focused **management team** with competency across full range of business domains essential ... and relatively rare
- **Employee engagement** critical to “discretionary effort” needed to take firms to next level
- **Profitable growth** – not just hanging on – must be the explicit goal

To address these, MMTC strives to:

1. Move more mfrs. toward *new product contract mfg.* model, including through new multi-agency project
2. Engage C-level management to plan *succession to owners willing to invest*
3. Ensure a fully *competent and aligned leadership* committed to profitable growth