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Strengthening MAGNET as an Element of the Ohio MEP Center

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- Non-profit organization with fundamental goal helping manufacturers become more competitive and grow
- Founded in 1984 as Cleveland Advanced Manufacturing Program; one of first MEP Centers in country
- Name changed to MAGNET in 2007 to reflect broader mission and geography
- 40 FTE's employees + 2 PT and 5 interns; FY12 budget ~ \$8.2M

We Wear Several Hats

- Element of regional economic development system in N.E.O. (18 counties)
- Edison Incubator (one of thirteen in State)
- Ohio Edison Center (one of seven w/ statewide responsibilities for motor vehicle/parts sector and new product development)
- Ohio MEP Center sub-contractor (one of two for general manufacturing assistance (29 county service area))

- Ohio Department of Development administers Ohio MEP
- TechSolve in Cincinnati and MAGNET in Cleveland are responsible for delivering general MEP assistance to the state's manufacturers
 - State divided into two service areas w/equal number of manufacturers
- To focus attention on the needs of smaller manufacturers (under 50 employees), the State has integrated the MTSBDC's (7 in the state) into the MEP system
 - Various free services provided to small mfg's.
 - TechSolve and MAGNET provide training and coordination
- State coordinates Edison Center program with MEP
 - State uses Edison funds to match MEP funding
 - Centers focus on delivery in 3 areas: 1) Manufacturing assistance; 2) Technology advancement; and 3) Cluster development



	Edison Center	Location	Functional Expertise	Industry Vertical
	BioOhio	Columbus	Biosciences	Biosciences
	Center for Innovative Food Technology (CIFT)	Toledo	Sensors/Safety Food Processing	Food Production & Agriculture
	Edison Materials Technology Center (EMTEC)	Dayton	Materials	Sensors & Electronics
	Edison Welding Institute (EWI)	Columbus	Joining Technologies	Advanced & Alternative Energy
	Manufacturing Advocacy & Growth Network (MAGNET)	Cleveland	Product Development	Motor Vehicles & Parts
	PolymerOhio	Westerville	Polymers & Advanced Materials, inc. Bioproducts	Advanced Materials
	TechSolve	Cincinnati	Machining	Aviation & Aerospace

MAGNET has provided services related to productivity & continuous improvement for many years:

- **Lean for Manufacturing**
 - Shorten lead times, optimize labor and materials costs, lower inventory and reduce scrap
- **Lean Product Development**
 - Reduce product development timeline from 30 to 50 percent
- **Lean Business, Administrative & Support**
 - reduced lead times by 30-50 percent for business, administrative and support functions
- **Quality Management**
 - Assess, improve and implement specific Quality Management requirements for specific industry
 - Quality Systems training: Six Sigma, ISO auditing
- **Workforce & Organizational Development**
 - Customized workforce services to optimize innovation and process improvements
 - Workforce intermediation

Other services offered or planned include export assistance, energy efficiency, and sustainable manufacturing

1. Automotive supplier projects
2. Publish Auto Sector Newsletter
3. Part of Honda Lean Conference
4. O.S.U. Center for Automotive Research Member/Collaborator
5. Member of Automotive Manufacturing Technology Education Collaborative (AMTEC)
6. Held N.W. Ohio Manufacturing Forum for Market diversification
7. Help organize and engaged in follow-up on NASA Automotive Supplier Workshop



- MAGNET's functional specialty in the Ohio Edison Center/ MEP system is product development
- Product Development Center created with Third Frontier funding 6 years ago
- 5 engineers and 4 interns work with companies in a variety of ways to design, develop, produce and commercialize new products
- Capabilities include 3-D rapid prototyping equipment and a full service machine shop

In its role as a workforce development intermediary for manufacturers, MAGNET addresses both workforce quality and quantity challenges

Quality:

- Auto Maintenance Technicians Education Consortium



- **NAM-Endorsed Skills Certification System**
Producing a High-Performance Manufacturing Workforce



Quantity:

- Ambassadors Program
- Returning Veterans Program





- MAGNET is part of regional business retention/expansion delivery system being organized by Team NEO through JobsOhio



- MAGNET is a resource to the 5 regional chambers/economic development organizations that are collectively managing the business retention/expansion work (Greater Akron Chamber, Greater Cleveland Partnership, Stark Development Board, Team Lorain County, and Youngstown/Warren Regional Chamber)
- Through these relationships, MAGNET will be available to provide:
 - Needs assessments (at no cost)
 - Subsidized services on a one-to-one matching basis in the areas of innovation, productivity and quality



Joint NIST-MEP funded project to connect manufacturers to innovation opportunities in advanced energy; collaborator on EDA-funded Regional Cluster Accelerator Project focused on advanced energy and flexible electronics



Joint Cleveland Foundation-funded project to help manufacturers access new markets through supply chain development; coordinated outreach to small manufacturers



MAGNET's Edison incubator is also an element of JumpStart's regional Entrepreneurial Signature Program; co-collaborator on "Speed to Market Accelerator" cluster project with NorTech and LCCC



Collaboration with NASA Glenn and O.S.U. Center for Automotive Research on initiative to transfer NASA technologies to automotive sector

Our Impact in FY2011

- 57 Events - Attended by 1,601 People from 791 Companies
- Sold 99 Fee-for-Service Projects
- Served 551 Manufacturing Companies through face-to-face interaction (meeting, event attendee, proposal or project)
- Economic Impact:

Increased/Retained Sales	\$296,407,262
Cost Savings	17,420,3000
<u>Investments</u>	<u>50,354,263</u>
Total impact	\$364,181,825
Jobs Created/Retained	1,382

- Highly tenured staff at this point; engineers are core
- Hiring generally done through posting on Monster, other on line resources and through networking
- Staff participate in:
 - professional association workshops & conference (such as SME, PDA, SAE)
 - MEP training
 - Professional development programs at area colleges
- Currently have 5 staff in various stages of Eureka Black Belt Training

- Have five full time sales staff (business associates)
- Outreach offices in Warren & Toledo
- Use electronic, print and social media for targeting outreach
- Employ newsletters and e-communication, advertising, events to reach potential clients
- Creating new business unit to manage innovation engagements (through PRISM)
- Shifting from “Point Solution” Service to ongoing relationship with Clients to engage with them in long term business strategy



PRISM

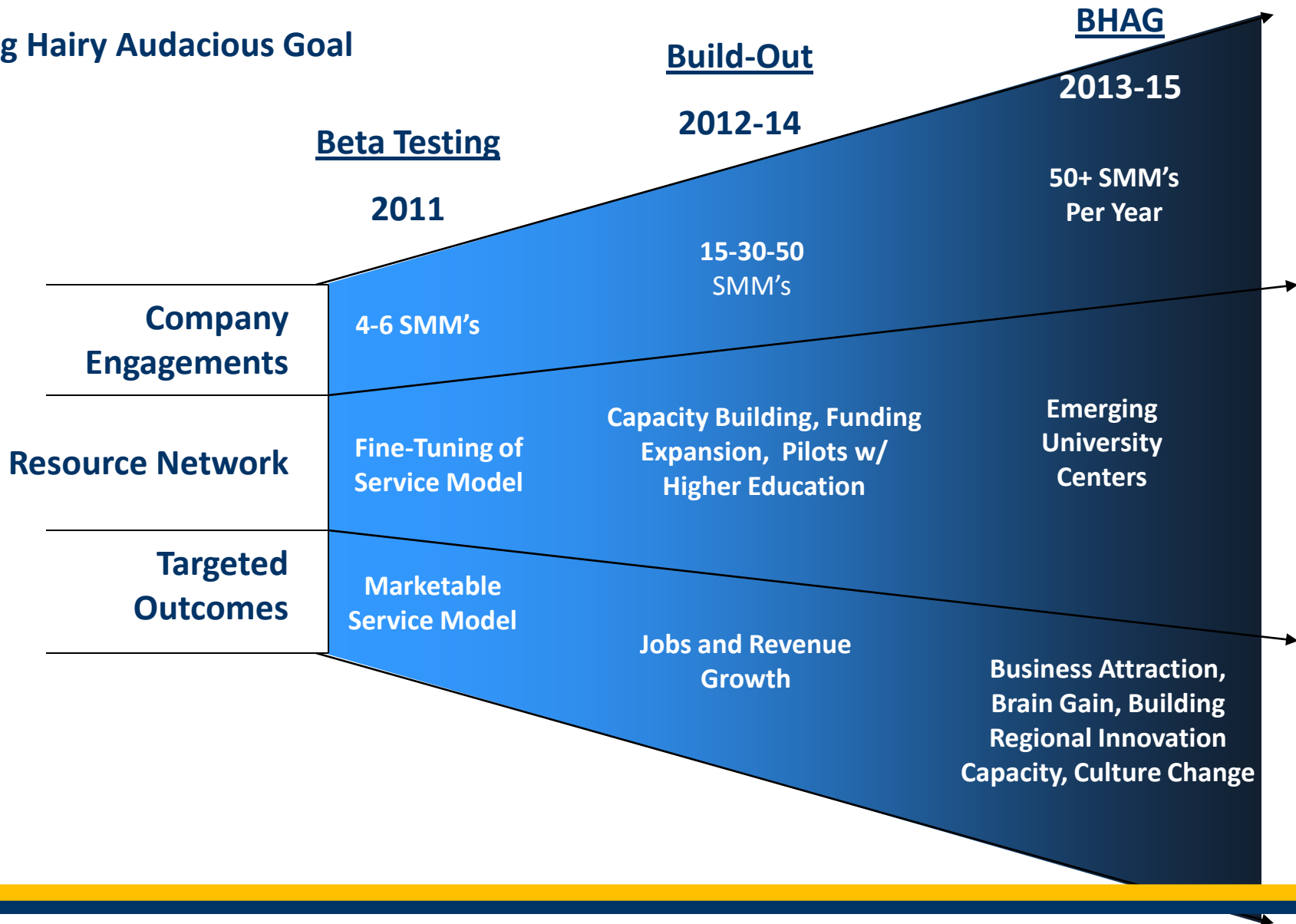
Partnership for Regional Innovation
Services to Manufacturers

The goal of PRISM is to help SMM's realize their growth plans faster, cheaper, and with less risk while creating a continuous flow of innovation from concept thru launch

by

Leveraging the region's assets (capital, talent, higher education, government, and other companies) to create sustained manufacturing growth, including a flow of SMM job growth at scale

* Big Hairy Audacious Goal



Sources of Support

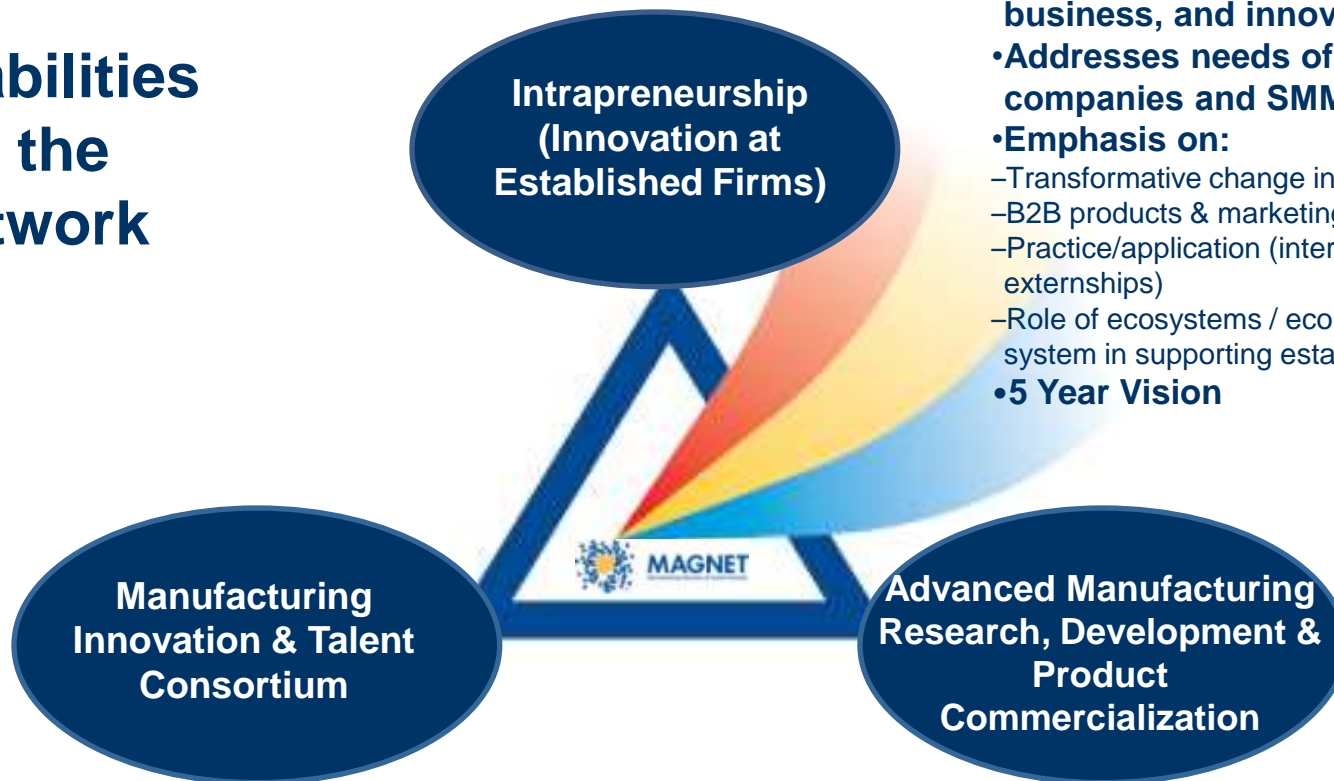
- Fund for Our Economic Future
- The Cleveland Foundation
- Greater Cleveland Partnership
- ODOD/JobsOhio
- NIST-MEP
- Economic Development Administration
- U.S. Department of Labor

Execution Partners

- NorTech
- Lorain County Community College
- JumpStart
- WIRE-Net
- Case Western Reserve University
- University of Akron
- Cleveland State University
- Cuyahoga County

Capabilities in the Network

Organizing Innovation



- Degreeed & Continuing Ed program bringing together engineering, business, and innovation
- Addresses needs of both big companies and SMM's
- Emphasis on:
 - Transformative change in established firms
 - B2B products & marketing
 - Practice/application (internships and externships)
 - Role of ecosystems / economic development system in supporting established firms
- 5 Year Vision

Staffing/Executing Innovation

- Network of community/technical colleges in the region with a focus on skilled workforce development and commercialization support

Operationalizing Innovation

- Four-year research educational institution(s) as partner(s) in non-profit entity(ies); focus on conception/design/development/commercialization of manufactured products

1. Maintain Core Resources Necessary for:
 - Sustainability
 - Scaling Up for More Impact
2. Help Explore Innovative Funding Models
3. Support with Implementing New MEP Priorities/and Performance Metrics
4. Keep SMM's at the Table in Design & Implementation of National Initiatives