

Berkshire Innovation Center

Pittsfield, MA



Berkshire
Innovation
Center

Innovation and Manufacturing in the Berkshires

June 13, 2019

#Berkshire Rising

Scott Longley, *Executive Director*
Berkshire Innovation Center

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Goal of the Presentation

The Goal of this Presentation is to

- Provide an overview of the History of Advanced Manufacturing in the Berkshires**
- Provide an overview of the Berkshire Innovation Center.**
- This presentation will include an overview of:**
 - The BIC's facilities**
 - The BIC's services and the various programs**

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History of the Berkshire County

-Pittsfield-Birthplace of GE, and Former Home of GE Plastics, Ordinance and Transformer Business

- 1907-1987-GE had a significant history in Pittsfield
 - Jack Welch worked in Pittsfield
 - Occupied 300 acres, 50 + buildings on the Housatonic River
- 14,000 jobs lost when the Company left Pittsfield
- Significant pollution of the area due to PCB use

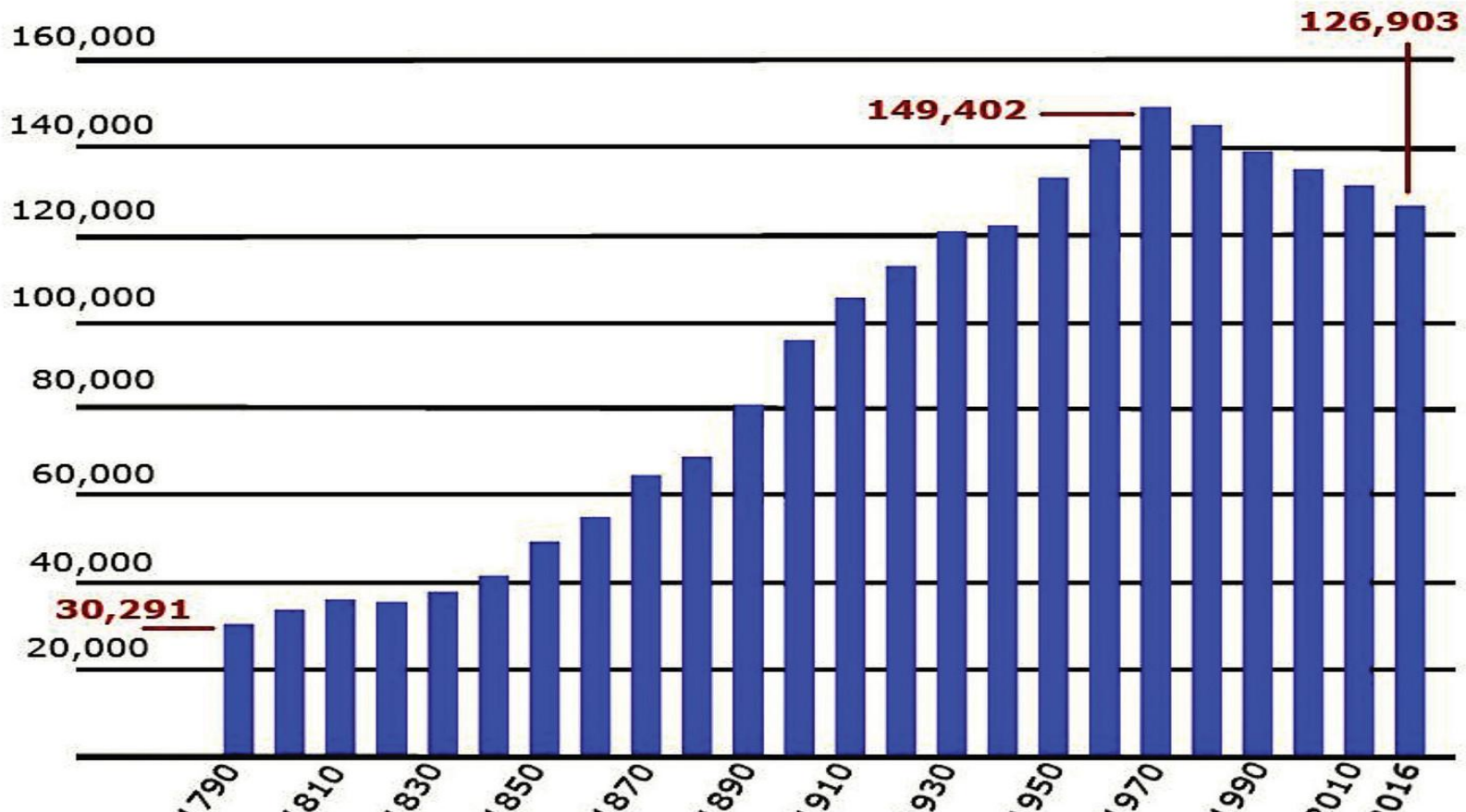
-North Adams-Former Home of Sprague Transformer

- 3,000 jobs lost
- 20% of the residents live below the poverty

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Population Decline-Berkshire County

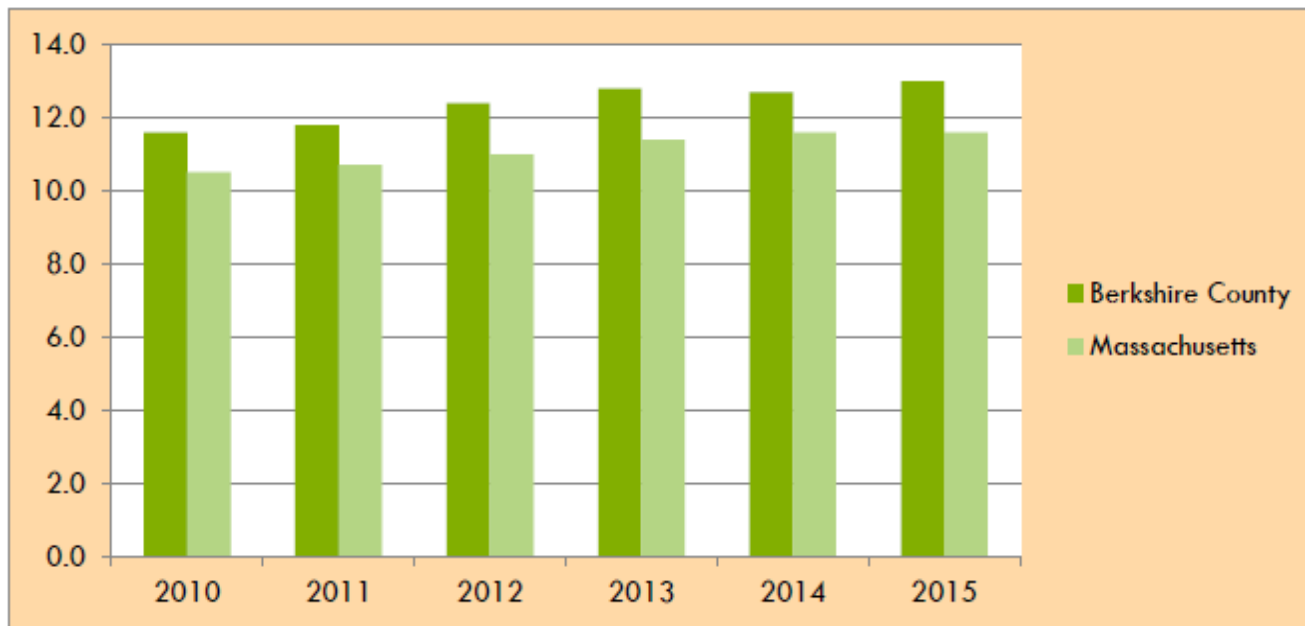


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Economic Challenges in Berkshire County

Percentage in Poverty in Berkshire County and Massachusetts, 2010-2015








In 2016-the Percentage of Families in Poverty increased from 11% to 13%

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Berkshire County Industry Clusters

Economic Performance of Berkshire Industry Clusters					
	Advanced Manufacturing and Engineering Services	Creative	Healthcare	Food and Agriculture	Hospitality and Tourism
Gross Regional Product	\$917,000,000	\$398,000,000	\$702,000,000	\$416,000,000	\$394,000,000
Total Jobs <i>including self-employed</i>	6,450	5,450	11,417	8,947	6,329
Job Growth 2010-2017 <i>-- Berkshire County</i>	3.1%	9.5%	3.0%	4.0%	6.3%
Job Growth 2010-2017 <i>-- Massachusetts</i>	3.4%	18.1%	14.6%	16.1%	11.7%
Job Growth 2010-2017 <i>-- United States</i>	8.8%	14.2%	14.2%	16.2%	8.7%
Industry Concentration	0.98	1.62	1.50	0.92	1.29
Average Wage & Salary	\$72,477	\$30,249	\$52,877	\$22,184	\$27,735
Jobs Multiplier	4.8	1.6	1.7	1.7	1.4

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History of the Berkshire Innovation Center

- The Massachusetts Life Sciences Act of 2008 provided:
 - Funds for the “Design, construction and development for life science incubator building in the William Stanley Business Park in Pittsfield”
 - The Massachusetts Life Science Center (MLSC)
 - Requested the City of Pittsfield conduct a feasibility study and develop a business plan for the future building
 - In 2013 an RFP was issued by Pittsfield
 - New England Expansion Strategic was awarded the contract for the Feasibility Study and the creation of business plan.

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Feasibility Study Guideline

-New England Expansion Strategies (NEES) presented to the MLSC Board of Directors

- MLSC set strict guidelines for the study
 1. Direct Engagement with Stakeholders
 2. Outreach to New York Organizations
 3. Right Fit for the Region - The Berkshires is a unique region of Massachusetts (i.e. what works in Cambridge-Boston, Worcester, Lowell will not necessarily work in the Berkshires)
 4. Definition of Incubator - The definition should be in the broad sense of the word
 5. Target Industries
 6. Phased Approach - The Feasibility Study and Business Plan will utilize a phased approach.

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Feasibility Study Guideline

- Phase One and Phase Two Guidelines were set by the MLSC
 - The Phase One Study
 - A Feasibility Study and a Conceptual Business Plan.
 - Phase Two
 - Detailed Business Plan
 - Operating Model
 - Facility Plan
 - Financial Pro Forma's
 - Formalized commitments and partnerships
 - Letters of Intent
 - MOU's

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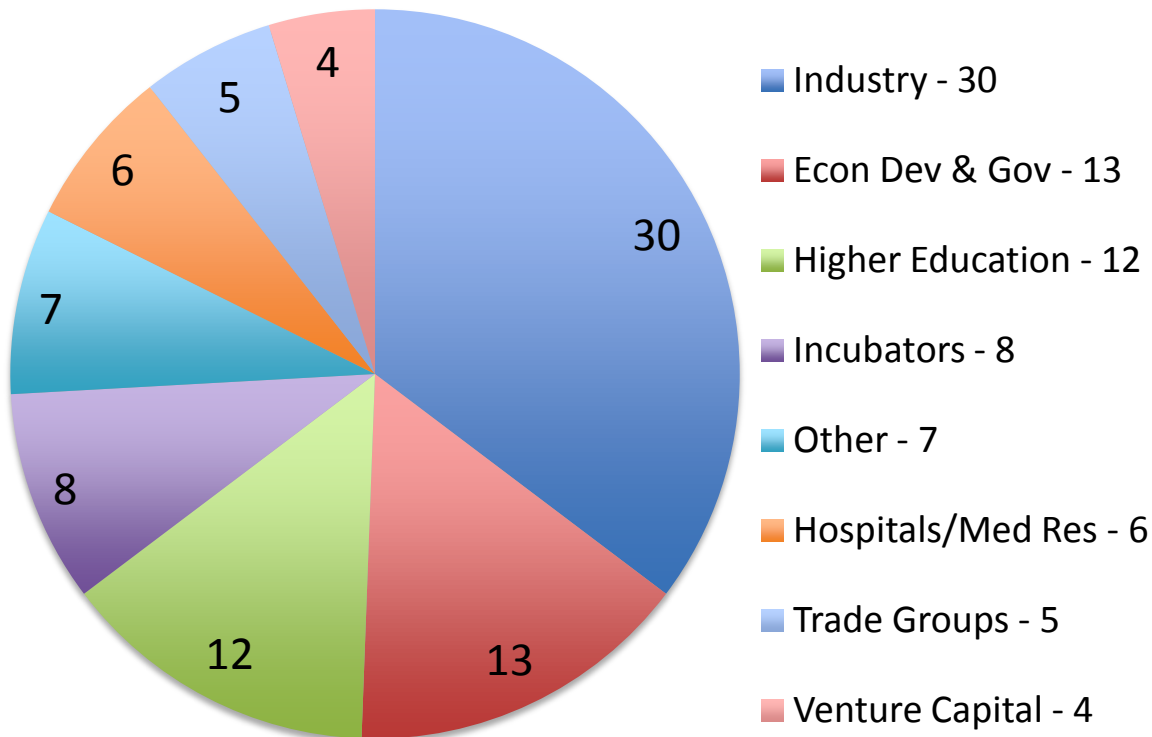
Extensive Industry & Stakeholder Participation

85 External Organizations

- Includes 40 from Berkshire County
- Additional 22 from Western MA, NY

30 Private Sector Companies

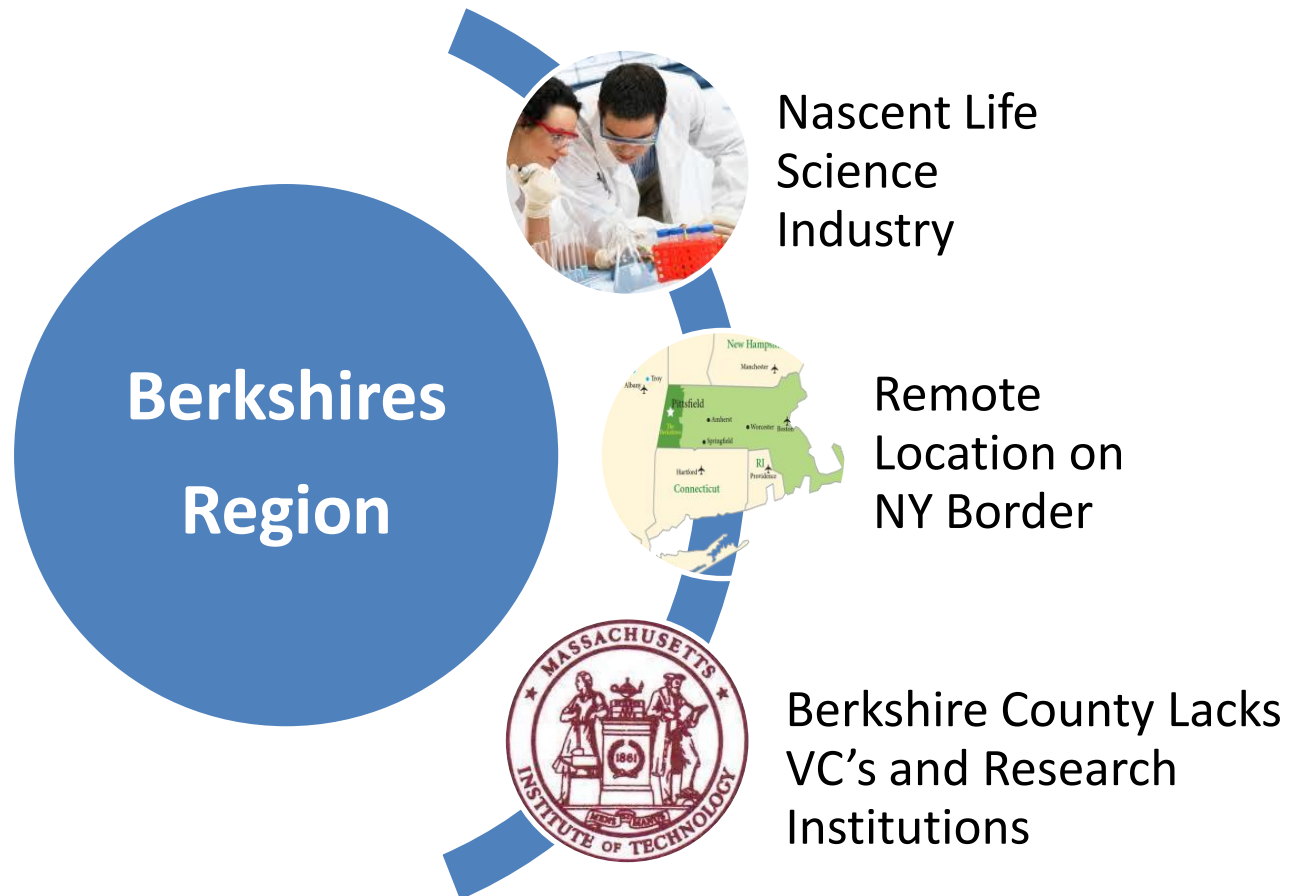
- Includes 26 from Berkshire County
- 6 Life Sciences & 20 Advanced Manufacturing



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Business Plan Addresses Unique Regional Challenges



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BIC Strategic Answer – Build on Regional Strengths

Secondary
Voc-Tech
Education

Berkshire
Community
College and
MCLA

Excellent
Quality
of Life

Low Cost
to Live &
Work

“Research Donut “

8 Major Research Institutions within
One Hour Radius of Pittsfield (MA & NY)

Manufacturing Know-
How and Leaders –
GD, SABIC, Crane

Life Science Supply Chain

30+ Companies in Berkshire County

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The Innovation Equation

"And, thus, we are all looking for the magic formula. Well, here you go: Creativity + Iterative Development = Innovation"

-James Dyson, Founder, Dyson

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Mission of the BIC

- I. **The Berkshire Innovation Center will Provide a Catalyst to Enable and Accelerate Innovation and Growth of Existing Companies in the Berkshire Region**
 - A. **Primarily focus: Small to Medium Sized Manufacturing Companies (SME's)**
 1. **In Life Sciences and Life Sciences Supply Chain**
 2. **Advanced Manufacturing & Technology**
 - B. **Objective**
 1. **Spur Economic Growth, Jobs, and Investment in the Region.**

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Leadership
/Mentor
Companies

Primary

Existing Small to
Medium Size
Manufacturers (SME's)
in Life Sciences, Life
Sciences Supply Chain
(Materials, Plastics),
Advanced
Manufacturing &
Technology

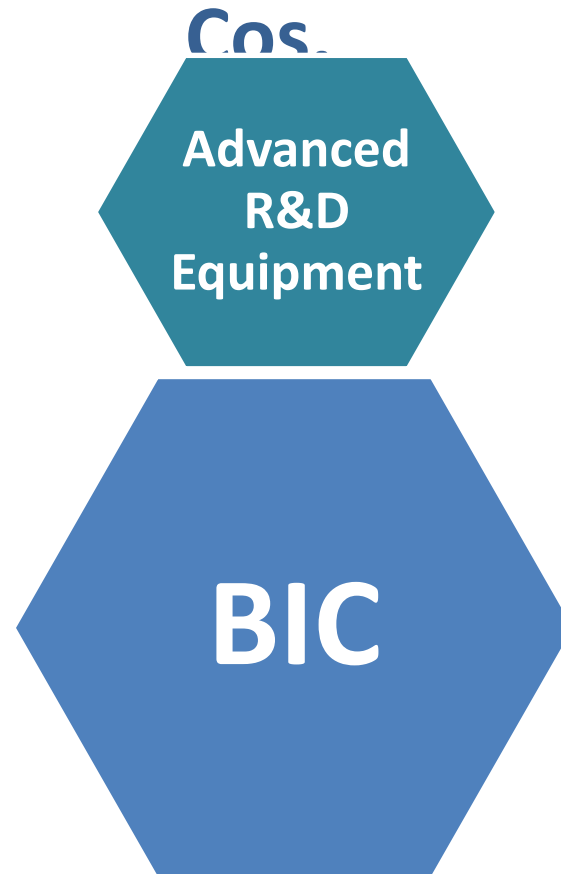
Startups



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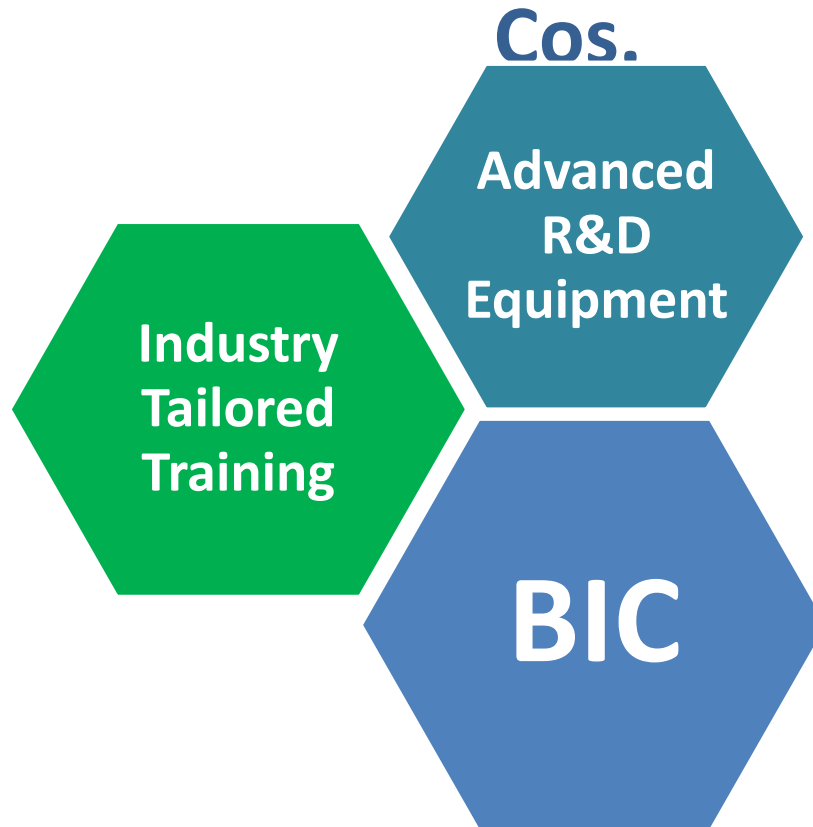
Delivering Advanced Capabilities to BIC Member



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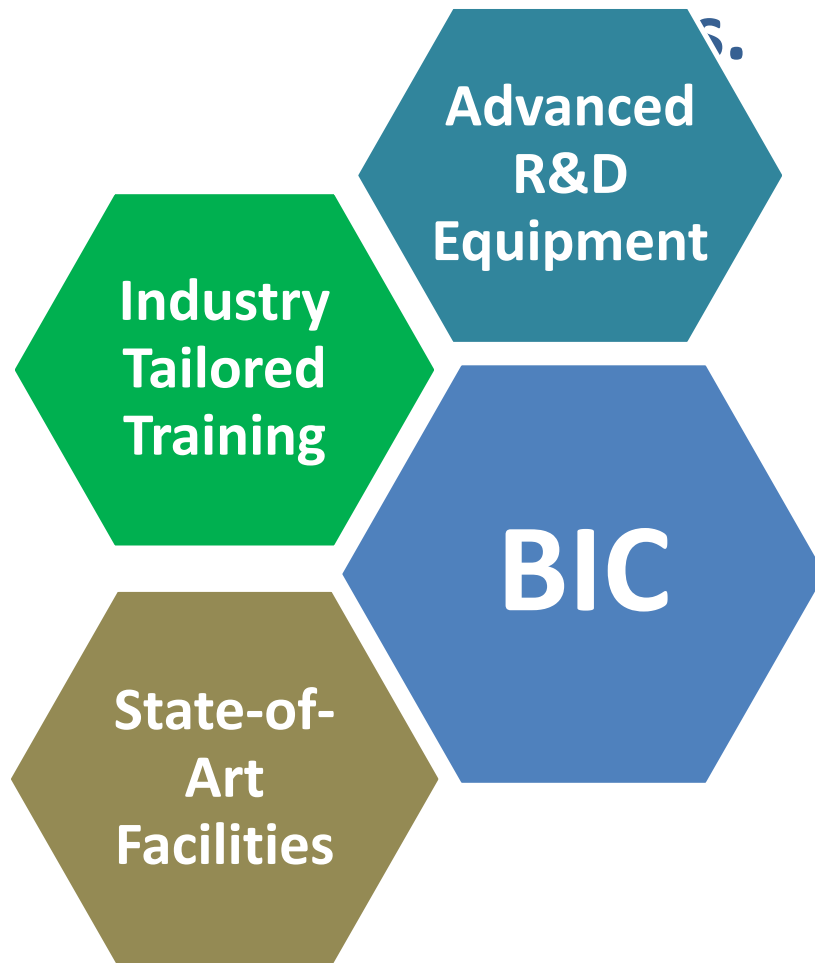
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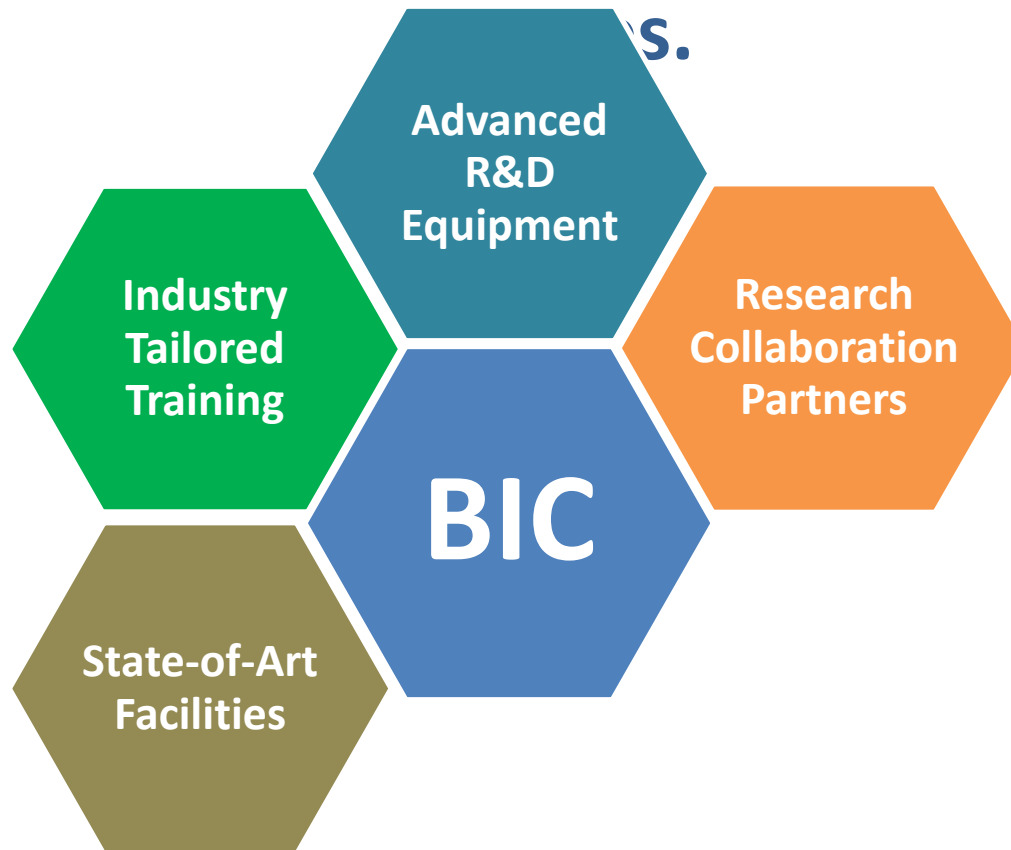
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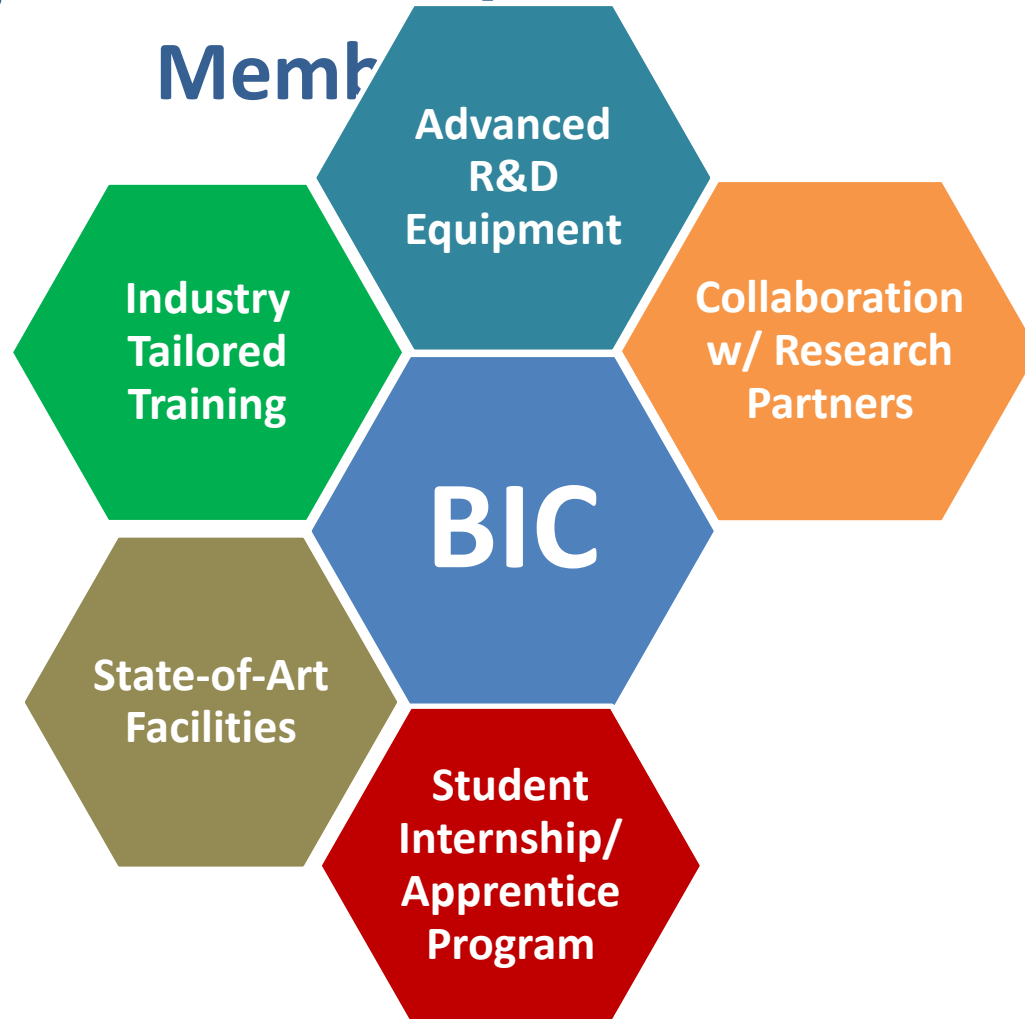


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Delivering Advanced Capabilities to BIC

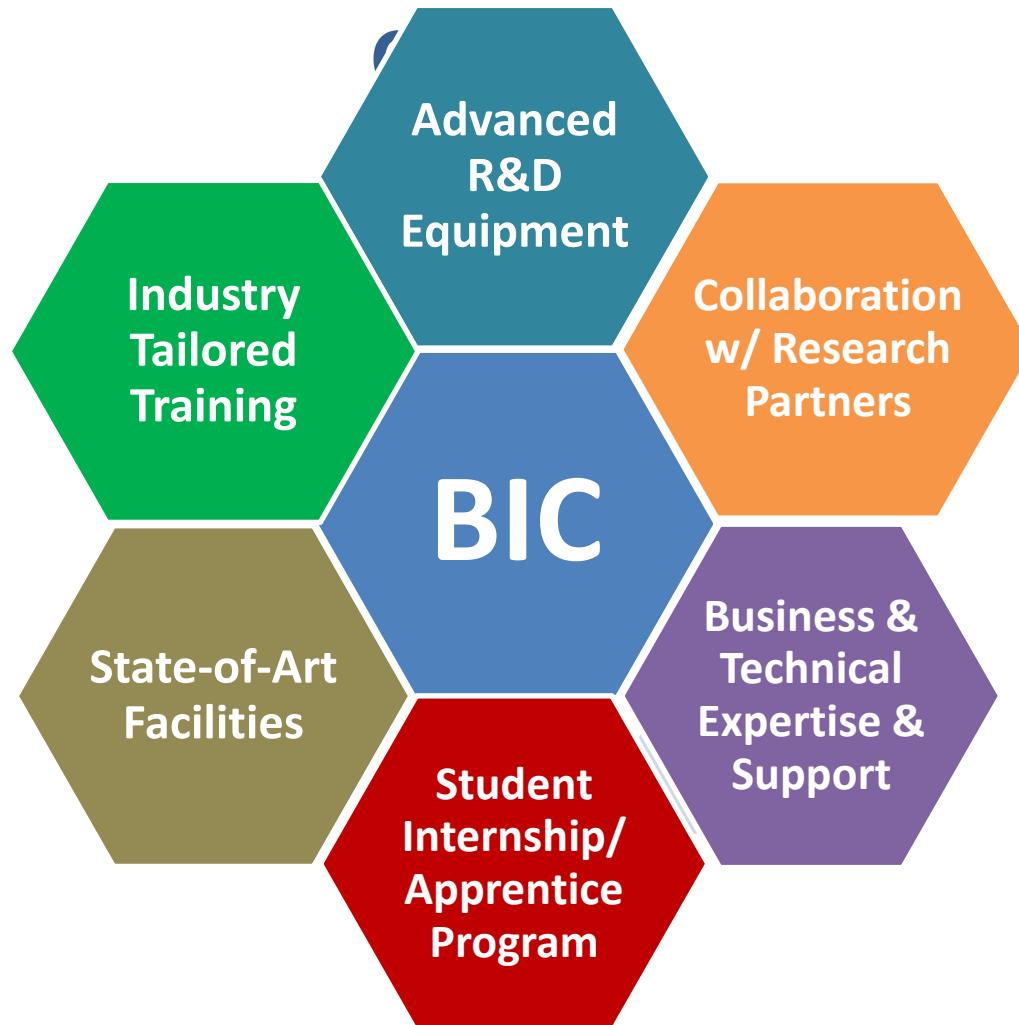
Members



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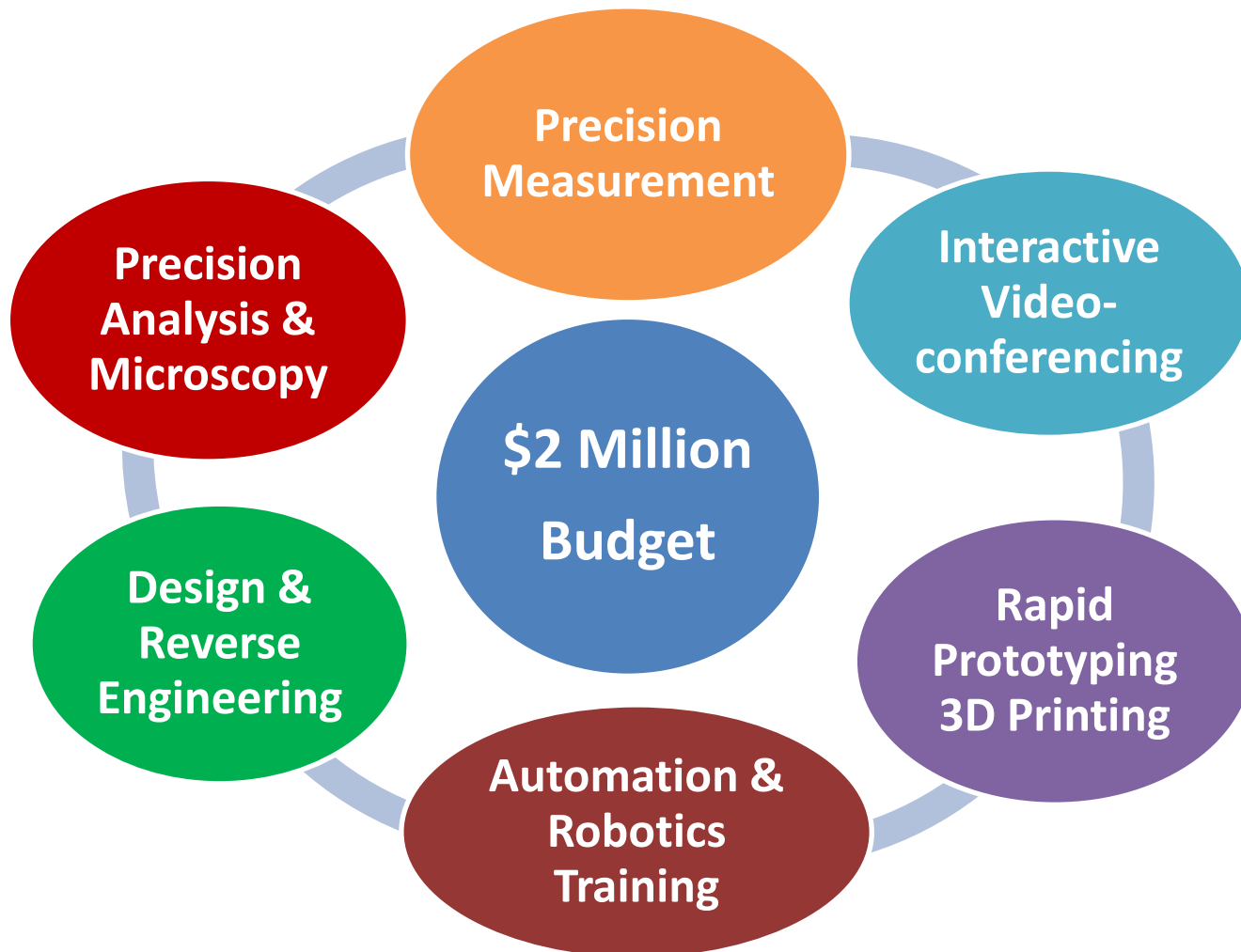
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Equipment Plan



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BIC Facility

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Key Strategic Partnerships for the BIC

- **Manufacturing USA - Become the Regional Focal Point for the 14 Institutes in the National Network for Manufacturing Innovation**
- **Partnership with the Massachusetts Green High Performance Computing Center**
- **Strategic Partnerships i.e Valley Venture Mentors, Tech Spring, CCAC, and UMASS Advanced Manufacturing Center**

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Unique Opportunities in the Berkshires

- **The BIC will create unique, Industry Specific Programming to attract out of region interest to the BIC-i.e. VR/AR Surgical Suite**
- **Launch of the BIC's RFP Program Network**
 - **Receive RFP's/RFQ's**
 - **Coordinate response to win the business for member companies**
- **The BIC will leverage the existing cultural assets (Tanglewood, Jacob's Pillow, etc) to offer opportunity for corporate meetings**
- **BIC will host Berkshire Focused Networking Events**
- **Alignment with the Berkshire Blueprint**

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Unique Opportunities in the Berkshires

- **Transitioning legacy manufacturing base**
 - **From Plastics and Paper Manufacturers transitioning to builders of new products like Medical Devices**
 - **Injection Molders to World Class Mold Makers**
 - **Key opportunity to accelerate the “on shoring” movement**
- **Three special effects companies located in the Berkshires**
- **Developing software, coding, and testing cluster**
 - **General Dynamics-Mission Systems**
 - **NTS, Intertek**

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Q1-BIC Activities/Updates

- Identified as a Cluster Asset in the Healthcare and Advanced Manufacturing Cluster in the Berkshire Blueprint 2.0
 - Began meeting bi-monthly with 1Berkshire to discuss how to partner together to achieve the cluster goals
- BIC Website Update and Launch
- PEDDA Design Review Board
- Berkshire Robotics Challenge
- Co-Sponsor Berkshire Innovation Night
- Lever Business Challenge

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Q1-BIC Activities/Updates

- **Berkshire Community College Faculty Search Committee**
- **Partnered with the Mass Green High Performance Computing Center and the Northeast Cyber Team Initiative to offer a Pilot Program for BIC Members**
- **SBA and EDM-BIC Architect Update**
- **April 24th-Invited Panelist on the “Powering the Mass Innovation Ecosystem” in Boston.**
- **Launched the BIC RFP Pilot Program**

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Q2-Next Steps-Upcoming Activities

- **April 30th-Guest Speaker ASQ Berkshire Quarterly Meeting-
"Innovation in the Berkshires**
- **On June 4th- Host a visit from Ira Moskowitz, the Director of
Advanced Manufacturing Program for the Mass Tech
Collaborative**
- **Began discussions with Pharmaceutical Non-profit to offer
Advance Life Science Trainings at the BIC**
- **Continued discussions with a BIC Member and the State on
how we can support their future hiring plans**
- **BIC AV and IT RFP**
- **BIC Software RFP-Equipment and Room Rental Program**
- **Health Insurance Market Study**

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What Role does Engineering for the BIC and Berkshire County

- Engineering and Creative Design is the Foundation of Innovation
- Productivity without Creative Design quality is meaningless
- With the increased decentralization of manufacturing,
Engineering is PARAMOUNT
- NEXT FLEX
Flexible Hybrid Electronics-Manufacturing Institutes U.S.A.
- BIC FELLOWSHIP PROGRAM

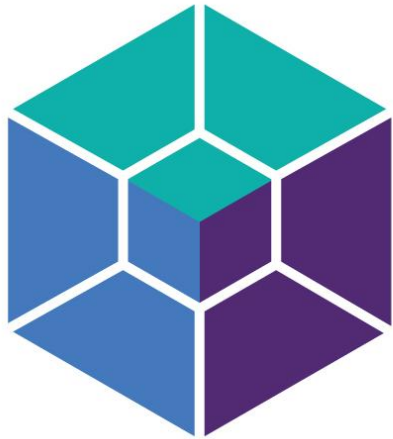
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BACKUP SLIDES

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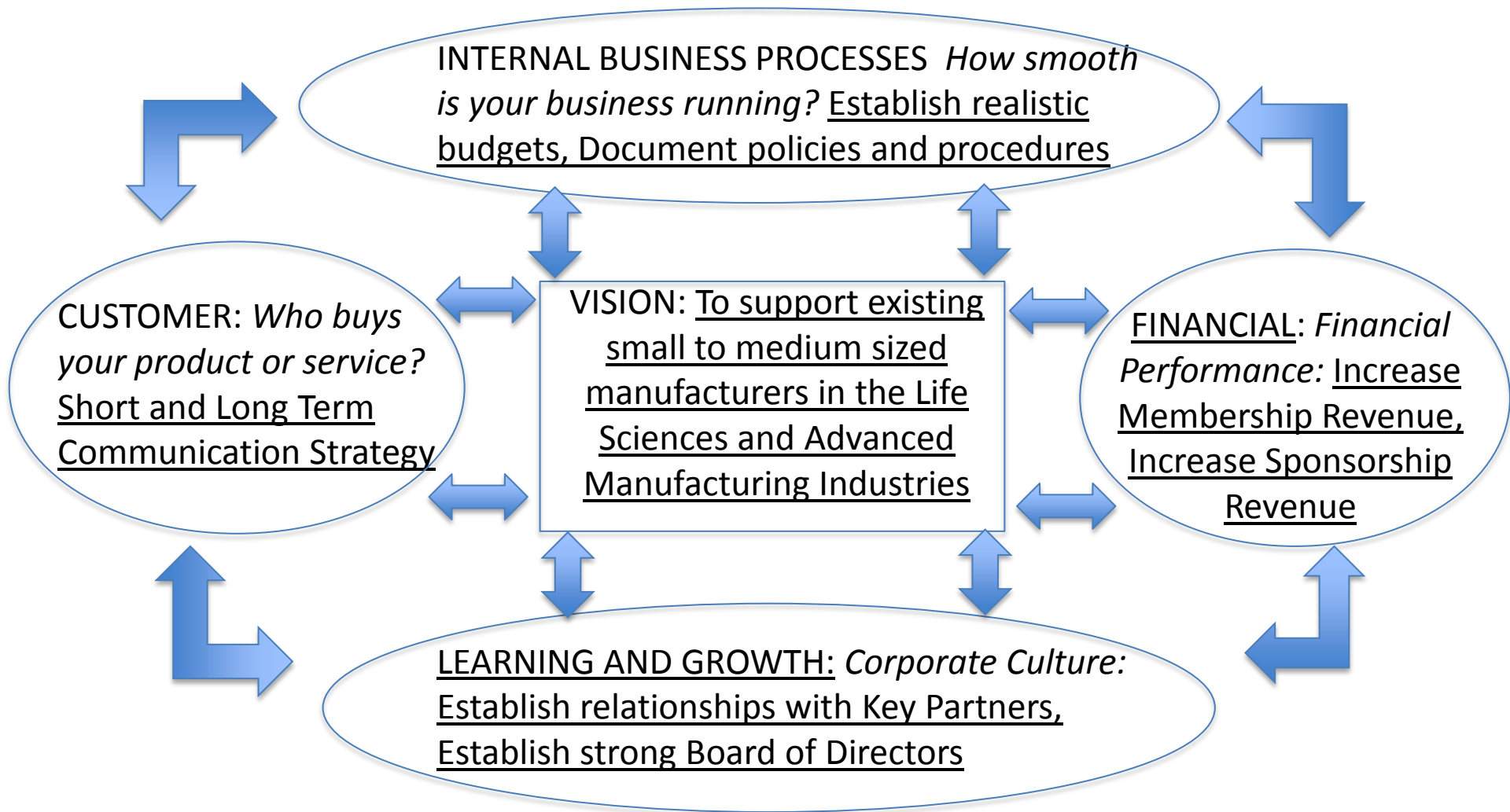


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BIC Balanced Scorecard



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Balanced Scorecard Berkshire Community

