

7TH ANNUAL CONFERENCE OF THE TECHNOLOGY NETWORK

## Building A World-Class Knowledge Region

Leveraging Local Excellence Through Interregional Alliances



HEIDELBERG, GERMANY

Innovation Tour 29 September 2010  
Conference 30 September & 1 October 2010

Organized by The Technopolis Network  
In collaboration with BioRN Cluster

THE TECHNOLOGY NETWORK

Global Community for Regional Innovation Policy



# Trans-Atlantic Innovation Collaboration

September 30, 2010

*Presented by:*  
**Richard A. Bendis**  
**President and CEO**  
**Innovation America**

THE TECHNOLOGY NETWORK

Global Community for Regional Innovation Policy

# The World Has Changed

- **“Collaboration is Essential”**
- Convergence of Complex Challenges
- Loss of Jobs
- Growing US Trade Deficit
- Greater International Competition in manufacturing and service industries
- Competitive advantages are increasingly tied to human capital and innovation
- Economic growth is closely related to education/workforce, energy, climate change, environmental, natural resource and geopolitical issues



# Why Is Innovation Essential?

***“INNOVATION DISTINGUISHES BETWEEN A LEADER AND A FOLLOWER.”***

**-STEVE JOBS**



by DeskMundo





Changing local cities, to change the world.

by **2thinknow** Innovation Agency

# Innovation Cities™ Program.



[HOME](#) [THE VISION](#) [THE PROGRAM](#) [RESOURCES](#) [CITY GOVERNMENT](#) [SPEAKING](#) [MEDIA](#) [TELL US](#) [JOIN IN!](#)  
[ABOUT US](#)

## Innovation Cities™ Top 100 Index

2010 Index - The Green Book  
Global Innovation Review Series

How to build  
better cities

RANK	CITY	STATE	COUNTRY	REGION	2010 GRADE
1	Boston	Massachusetts	United States	AMERICAS	1 NEXUS
2	Paris		France	EUROPE	1 NEXUS
3	Amsterdam		Netherlands	EUROPE	1 NEXUS
4	Vienna		Austria	EUROPE	1 NEXUS
5	New York	New York	United States	AMERICAS	1 NEXUS
6	Frankfurt		Germany	EUROPE	1 NEXUS
7	San Francisco	California	United States	AMERICAS	1 NEXUS
8	Copenhagen		Denmark	EUROPE	1 NEXUS
9	Lyon		France	EUROPE	1 NEXUS
10	Hamburg		Germany	EUROPE	1 NEXUS
11	Berlin		Germany	EUROPE	1 NEXUS
12	Toronto		Canada	AMERICAS	1 NEXUS
13	Stuttgart		Germany	EUROPE	1 NEXUS
14	London		United Kingdom	EUROPE	1 NEXUS
15	Munich		Germany	EUROPE	1 NEXUS



# The Global Innovation Network

## Global Innovation Network



# Implementing a New Innovation Paradigm

- Willingness to deviate from traditional and parochial perspectives
- Encourage public investment and risk taking
- Developing trust through collaboration
- Ensuring the paradigm is responsive to partners' missions
- Building consensus of all constituents through education, participation, and positive outcomes
- Move from technology-based economic development to **Innovation-Based Economic Development (IBED)**



# Goals of Innovation-Based Economic Development

---

*Intervene at the margins of private sector investment flows of capital (financial and intellectual) to:*

- **Develop global innovation network**
- Address economic transition
- Capture the benefit of investments in research and development, higher education
- Build entrepreneurial cultures
- Help existing industries modernize
- Diversify both rural and urban economies



# Collaboration

**A recursive process where 2 or more people or organizations work together in an intersection of common goals.**



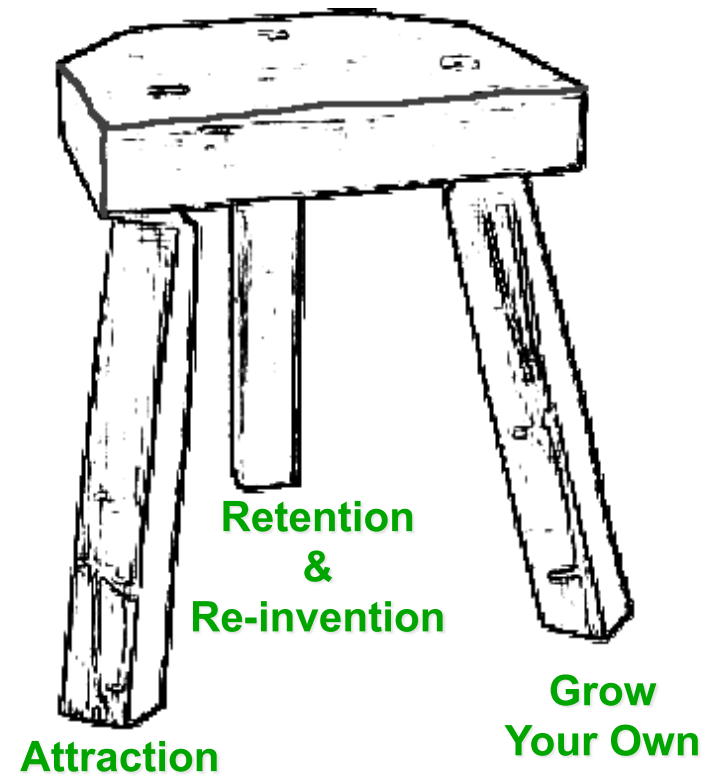
# Public/Private Partnership

- Progress is promoted by strong industry, government and university leadership
- Sustained by dynamic public/private partnerships
- These leaders create new, responsive models of governance
- Are all critical elements in a global innovation economy



# Economic Development

- Global Economic Development is a three-legged stool:
  - **Attraction**
  - **Retention & Re-Invention**
  - **Grow Your Own**
- IBED requires patience and persistence, continuity and consistency.
- Working with early-stage companies takes time.
- A balanced portfolio economic development strategy is best!





# Traditional & Innovation-Based Development

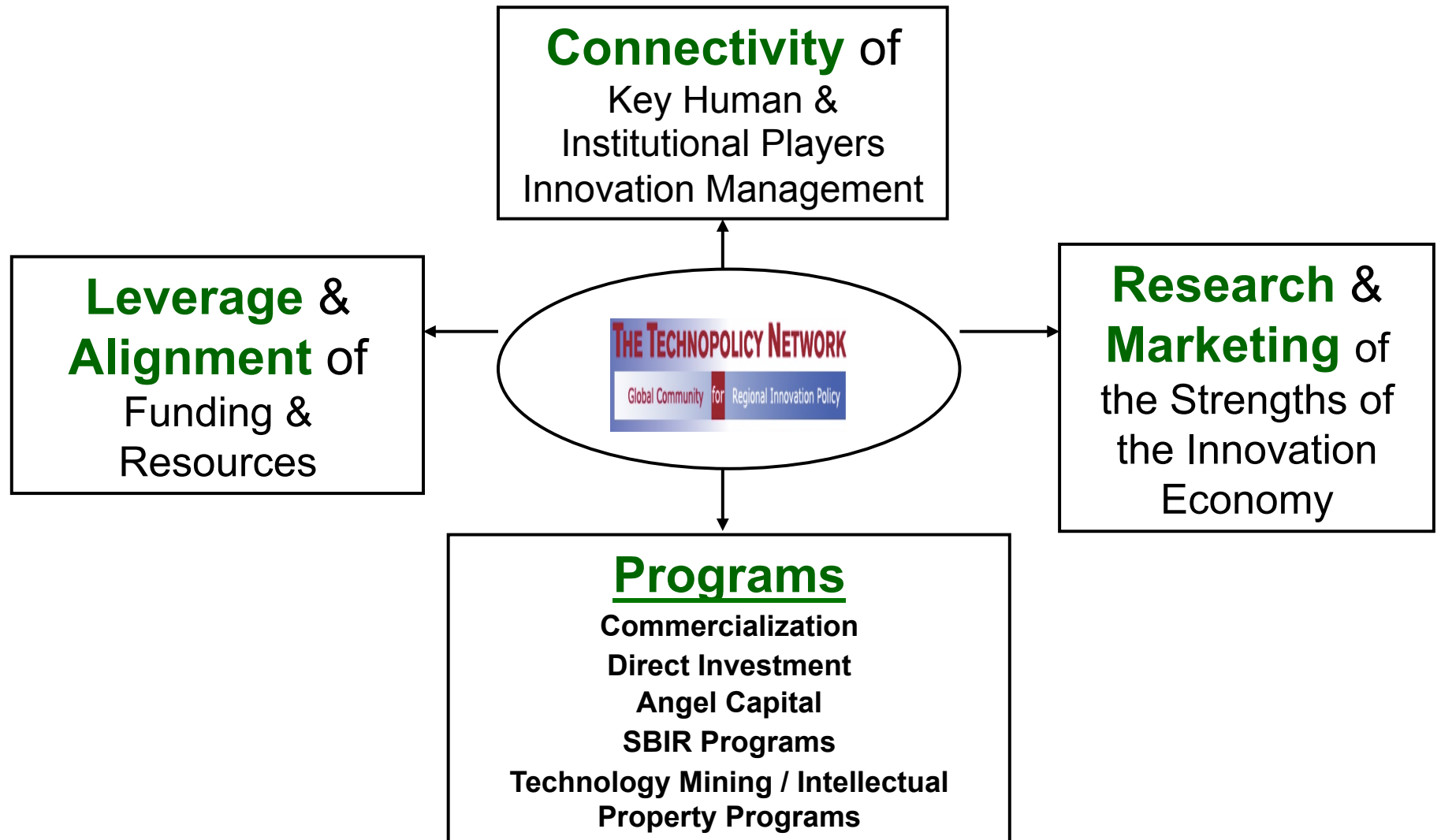
	<u>Traditional</u>		<u>Innovation (Clusters)</u>
• Competitive Basis	Natural resources Highways / Rail Proximity Costs	➔	Specialized talent Networks, information University research / professors Market understanding Global Reach
	i.e. PHYSICAL		i.e. KNOWLEDGE
• Key values / offerings	Business parks Incentives	➔	Access to research Workforce competencies Lifestyle
• Lead Organization	Chambers / EDCs	➔	Economic developers <b>INNOVATION INTERMEDIARIES</b>

# What is An Innovation Intermediary?

An Organization at the Center of the region's, state's or country's efforts to align local technologies, assets and resources to work together on advancing Innovation.



# 21<sup>st</sup> Century Innovation Intermediary





# Intermediary Best Practices

- Longevity
- Bipartisan Support & Champions
- Independent Organizations
- Continuous Reinvention
- PRIVATE SECTOR LEADERSHIP
- Understand Return On Investment
- Sustainability In Funding
- Accountable
- Innovative
- Effective Leadership
- Globally Connected

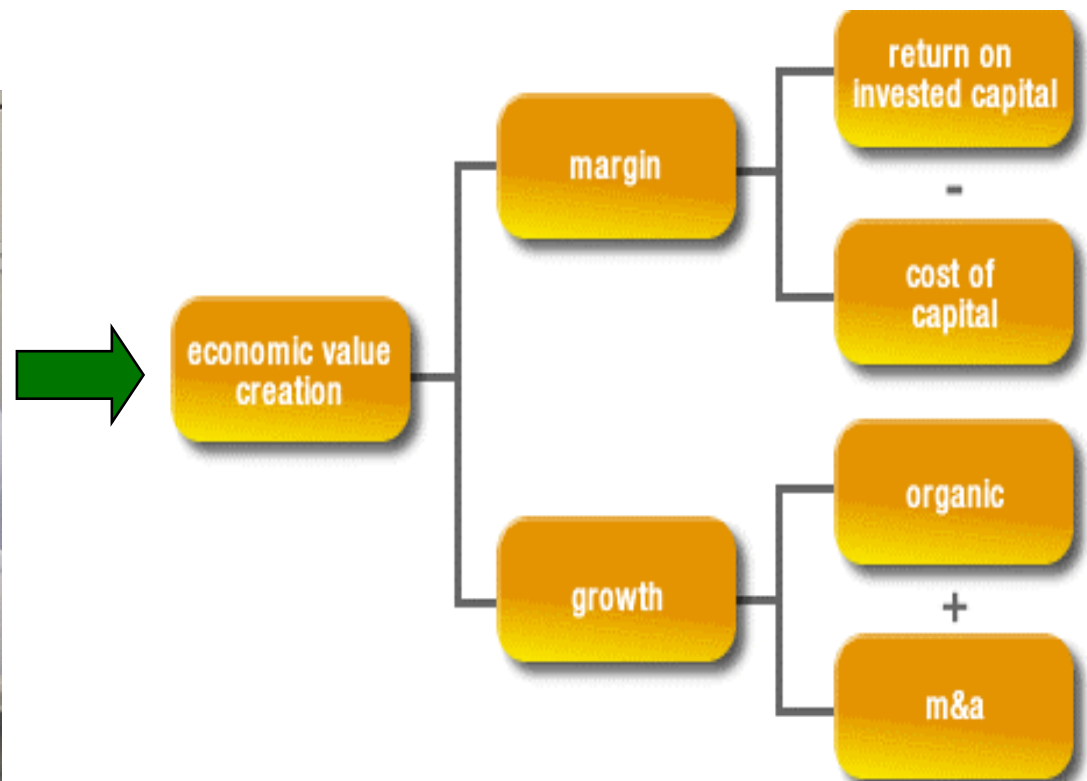


# Innovation Paradigm Shift

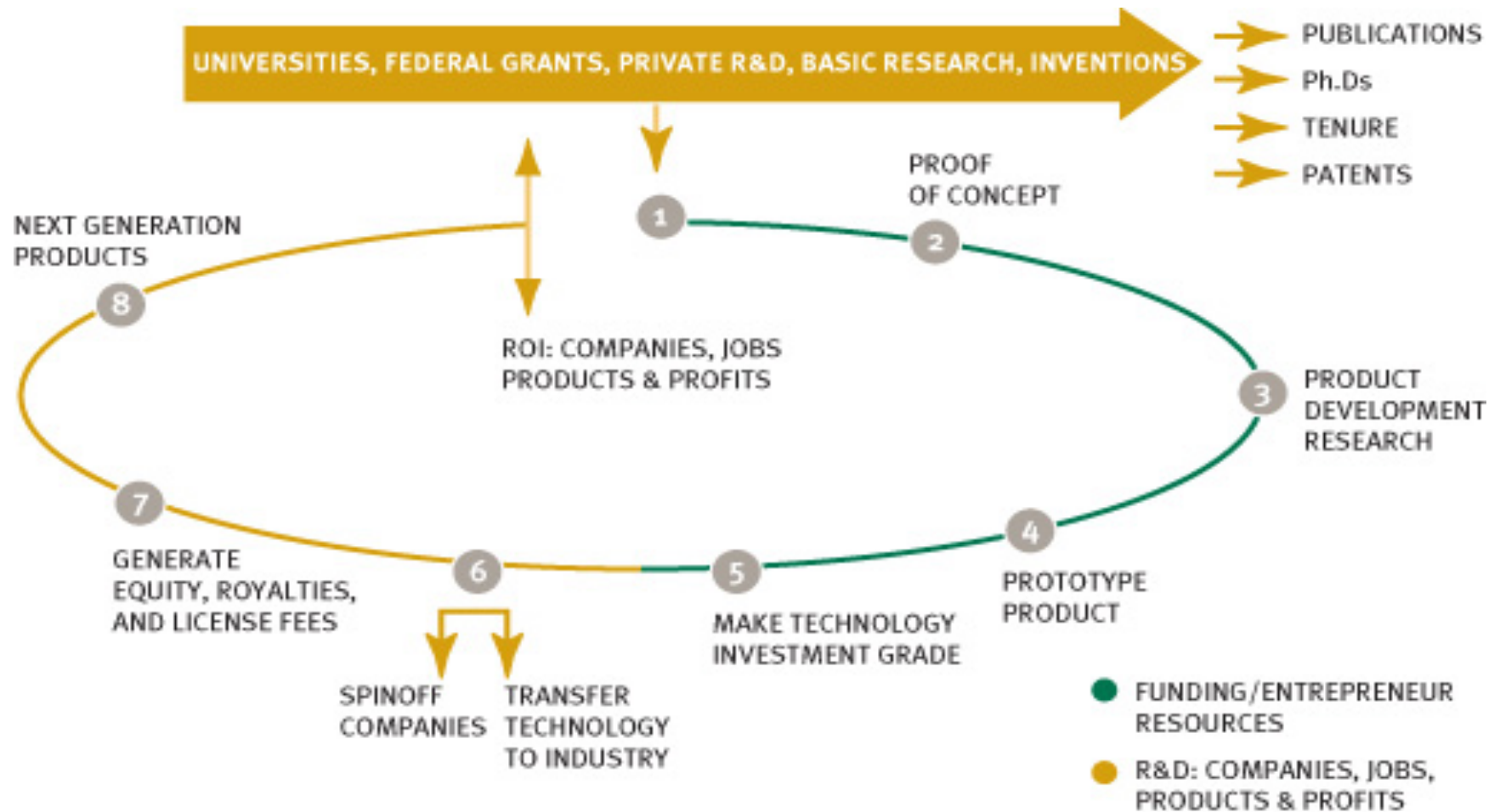
## PROOF OF CONCEPT (Technological Feasibility)



## PROOF OF RELEVANCE (Market Pull)



# Innovation Commercialization Model

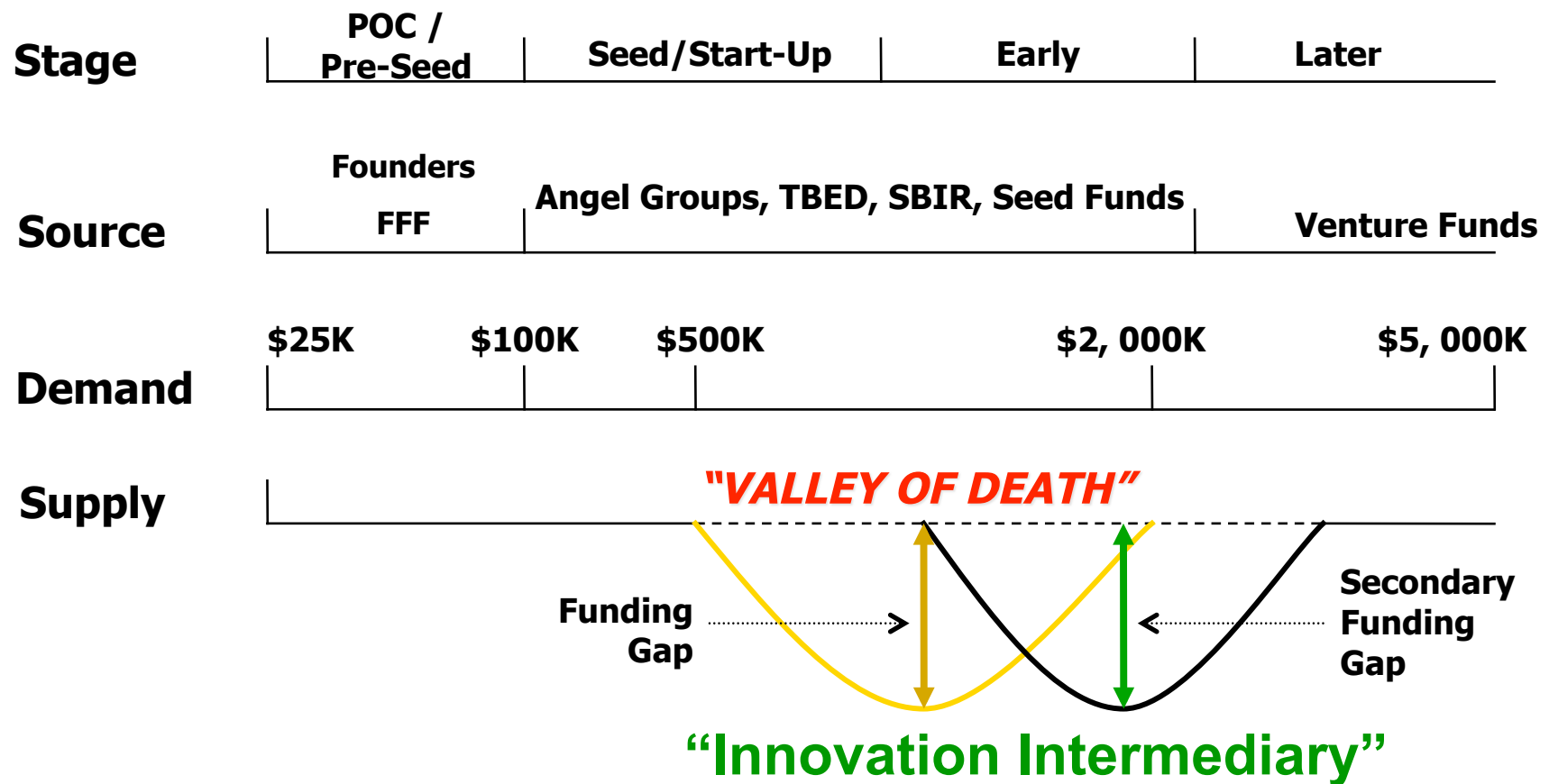






# Innovation Capital Valley of Death

## “VALLEY OF DEATH”



**Jobs! Jobs! Jobs!**

# Does Seed Investing **REALLY** Create Jobs?



# Public Investment In Job Creation

Category	CDVCA*	State of PA	State of MI	State of UTAH	Stimulus Bill
Funds Invested	\$26M	\$90M	\$291M	\$60M	\$800B
Jobs Created	3,700	8,150	28,854	2,047	1,000,000 To 4,000,000
\$ Per Job Invested	\$7,100	\$11,000	\$11,728	\$29,300	\$800,000 To \$200,000

\*Community Development Venture Capital Association

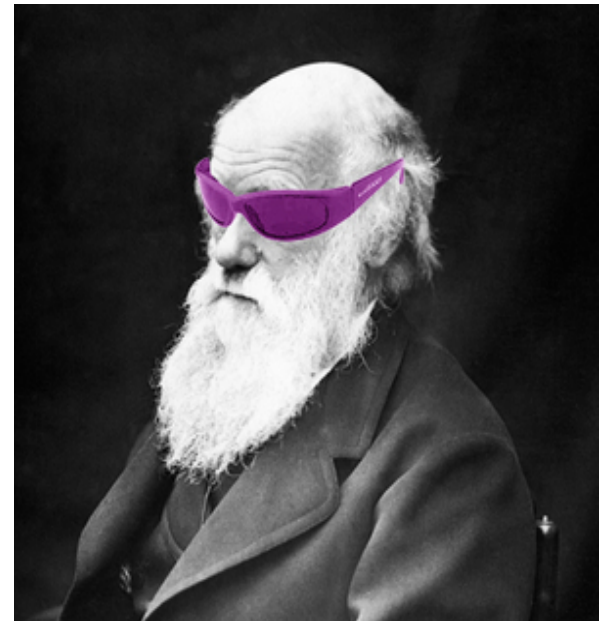
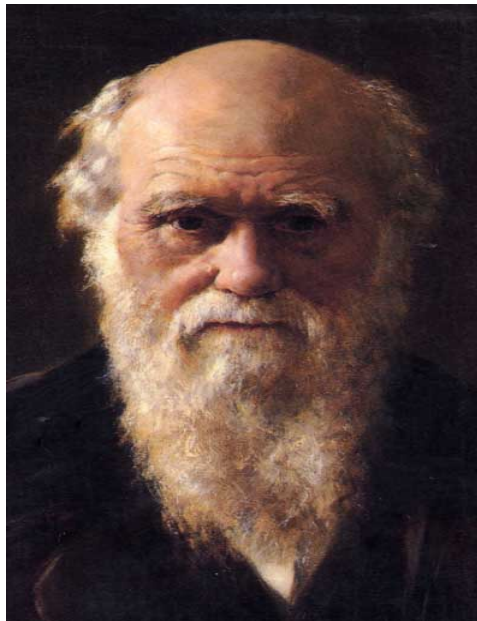




# Change Is Inevitable

“ It is not the strongest of species that survive, nor the most intelligent, but the ones most responsive to change.”

–Charles Darwin



# Innovation Intermediaries

- Innovation Intermediaries are "***companies that help other companies implement various facets of open innovation***".
- Enables other companies to explore the market for ideas without getting in over their heads, since the intermediaries can act as guides to help those other companies along the trail.
- There are different kinds of open innovation intermediaries, with some acting as ***agents*** (representing one side of a transaction) while others take on the role of ***brokers*** or ***market-makers***.



Source: Henry Chesbrough in his 2006 book "Open Business Models"

# Who Are Innovation Intermediaries?

- Intermediaries are individuals, organizations, networks or spaces which connect people, ideas and resources.
- They can take a variety of forms:
  - Incubate innovations by providing a 'safe' space for collaboration and experimentation;
  - connect entrepreneurs with the supports they need to grow their innovations; and others
  - Spread innovations by developing networks and collaborations.
  - intermediaries are needed to bring organizations and knowledge together to build supply networks and markets.



# Effective Innovation Intermediaries

- Need to reach across the boundaries that divide sectors, disciplines and fields.
- Need to attract innovative, entrepreneurial people: the job of intermediation needs to be highly creative.
- Need to be fluent in many languages – able to translate from the language of everyday needs to the very different languages of policy makers or investors for example.



# Collaborative Innovation Partnerships (CIPs)

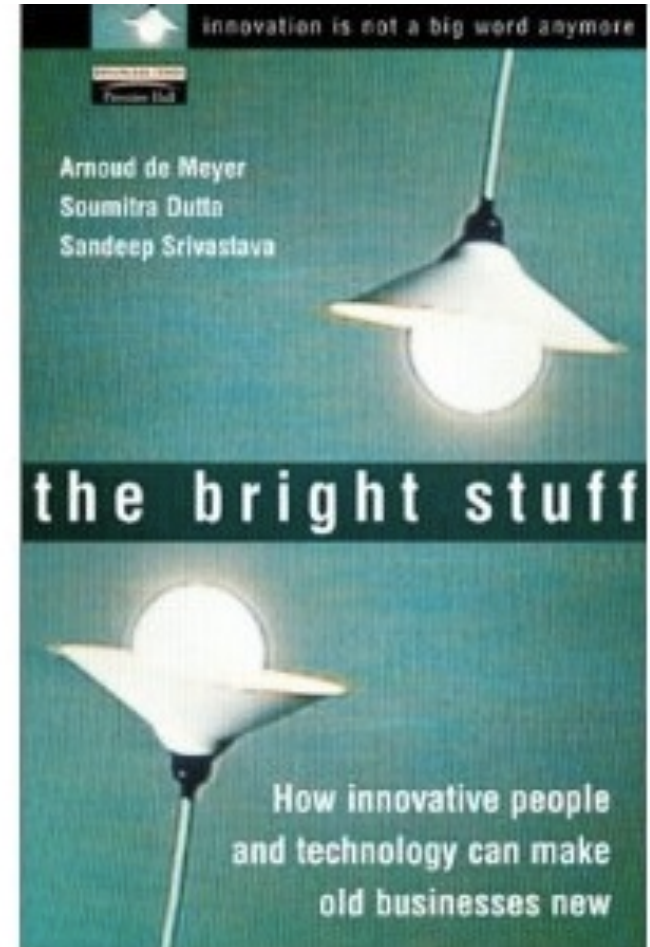
- CIPs are business solutions for companies looking to develop innovative products, services and processes.
- CIPs are cost effective methods of gaining access to well qualified people and experts within further and higher education institutions who can also help take their business forward.





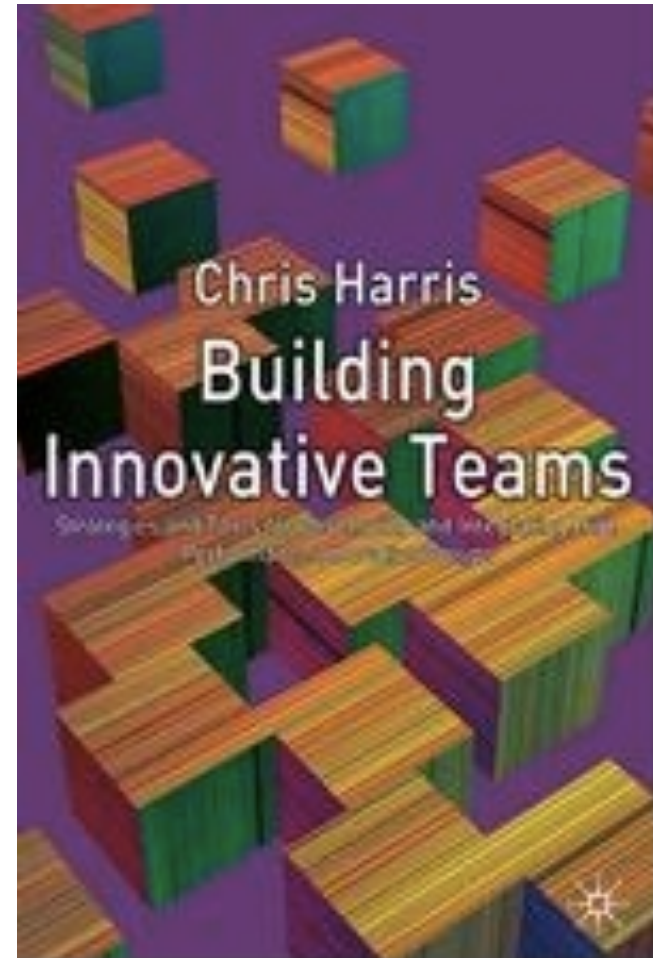
# Innovation Champions

- Innovation champions are individual consultants who produce ideas, network to find what else is being tried, and build coalitions of support.
- Innovation Champions embed processes and procedures within their organizations to develop a more creative culture which encourages new ideas and experimentation.



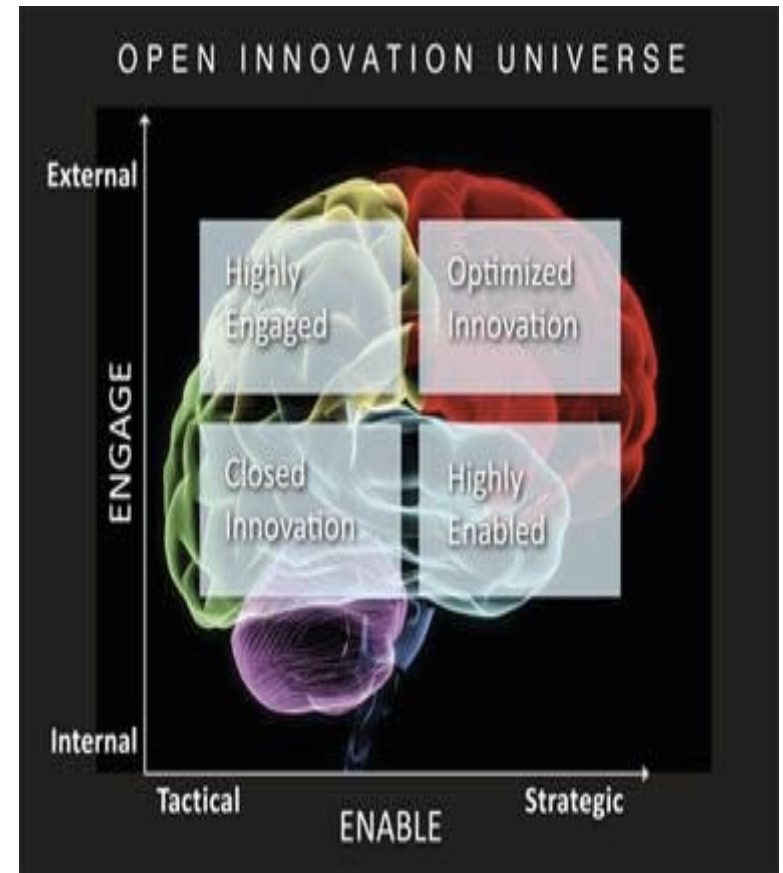
# Innovation Teams

- There are a wide range of innovation teams. Some work within organizations, either within or across departments, some are set up to encourage collaboration across organizations and some are designed to focus on particular issues or use a particular approach.
- The best innovation teams are multidisciplinary and able to engage a wide range of stakeholders in the design, development and evaluation of innovation.



# Innovation Intermediary Networks

- Networks can help to spread learning and best practice. Some networks deliberately try to cross-pollinate ideas, sharing emerging practice to stimulate creativity.



# Innovation Hubs

- **Innovation hubs are shared work spaces which are specifically designed to promote collaboration and innovation.**



# U.S. State IBED Programs





## Board of Directors

# KTEC Program Structure

## KTEC Staff

## Federal Initiatives and Partnerships

### Research

For Inventors, Entrepreneurs and  
University & Industry Scientists

- Advanced Manufacturing Institute (AMI)
- Kansas Polymer Research Center (KPRC)
- Information Technology & Telecommunications Center (ITTC)
- Higuchi Biosciences Center (HBC)
- National Institute for Aviation Research (NIAR)
- EPSCoR

### Investments

For Inventors, Entrepreneurs and  
New & Existing Companies

- Small Business Innovation Research (SBIR) Awards
- SBIR Bridge Funding
- State-Sponsored SBIR
- Applied Research Matching Fund (ARMF)
- ACE-Net
- Ad Astra Funds I & II
- Kaw Holdings (KIC)
- Wichita Ventures (WTC)
- Manhattan Holdings (MACC)
- Prairie Investments
- Quest Ventures
- KU Medical Center Research Institute Pre-Seed Fund
- Alliance for Technology Commercialization

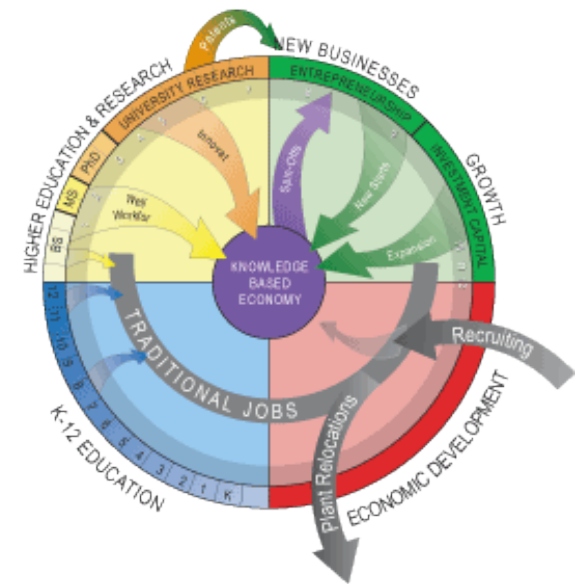
### Business Assistance

For Inventors, Entrepreneurs, Scientists  
and New & Existing Companies

- Kansas Innovation Corporation (KIC)
- Mid-America Commercialization Corporation (MACC)
- Wichita Technology Corporation (WTC)
- Mid-America Manufacturing Technology Center (MAMTC)
- Capital for Manufacturers (CFM)
- Information Research Corp. (IRC)
- Kansas Integrated Commercialization Information Network (KICIN)
- Intern Program
- Business Residency Program
- Inventor Development Assistance Program (IDAP)

# Kansas Bioscience Authority

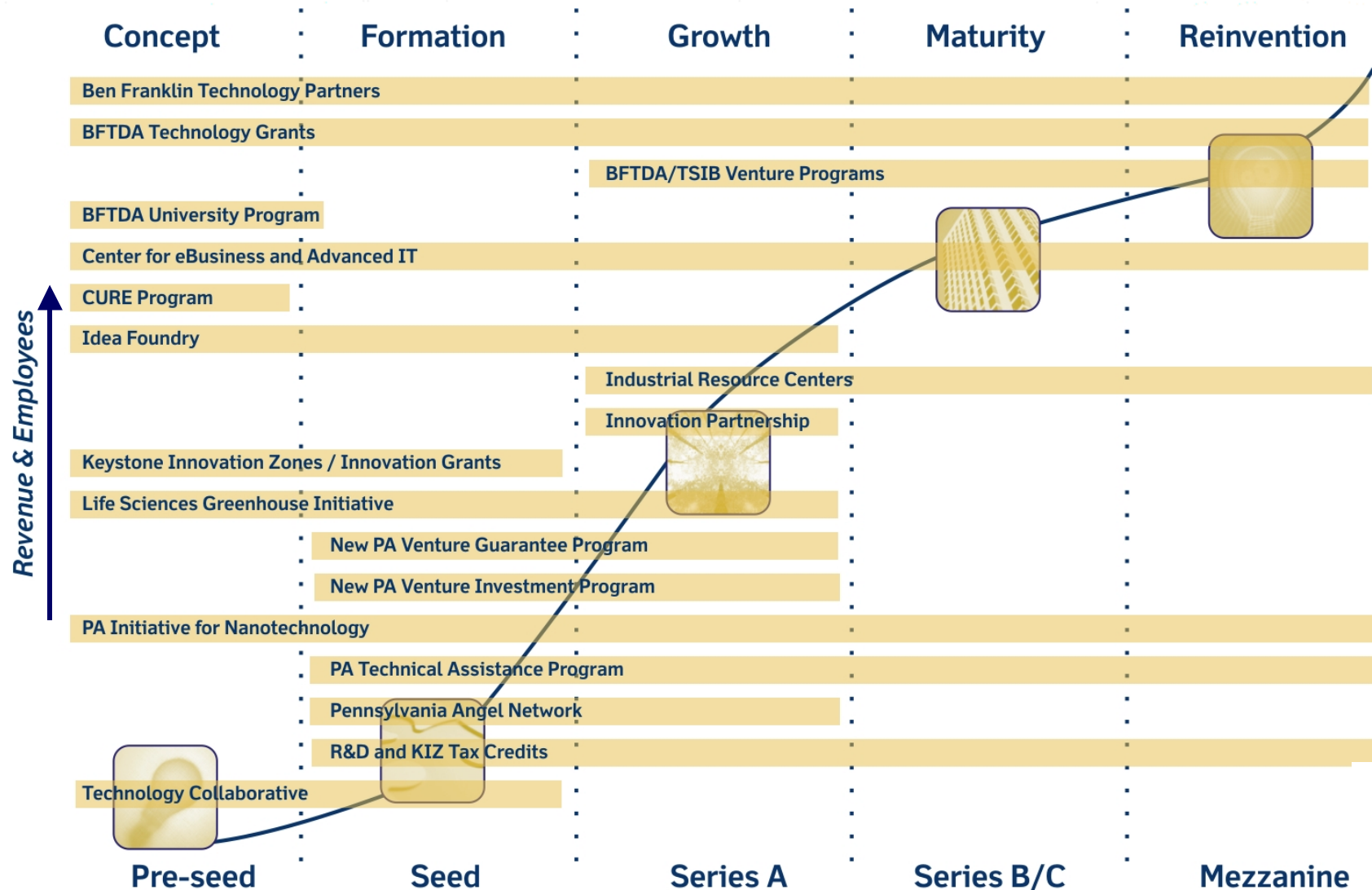
- \$581 million state-funded independent bioscience TBED organization
  - \$75.5 million program budget; \$3.5 million operating budget
  - 18 employees (8 “deal” people)
- Investment priorities
  - Expand the quantity and quality of bioscience research
  - Focus on the commercialization of bioscience discoveries
  - Foster formation and growth of bioscience companies
  - Position Kansas for international leadership in key clusters



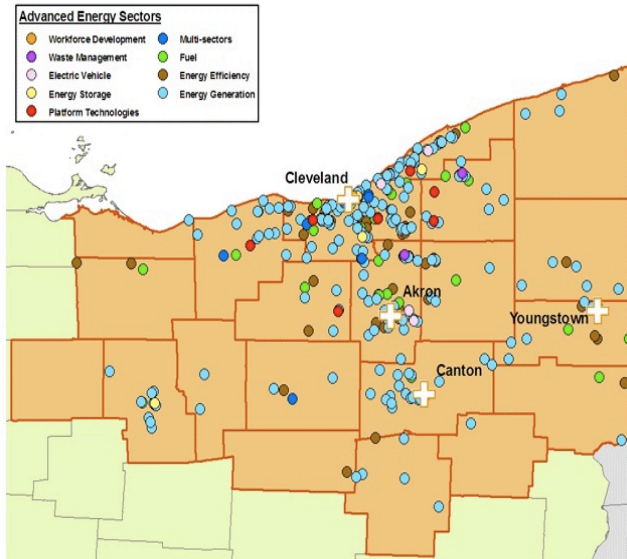
# Technology Investment

## Technology-based Economic Development Tools Along the Continuum

> ready > set > succeed

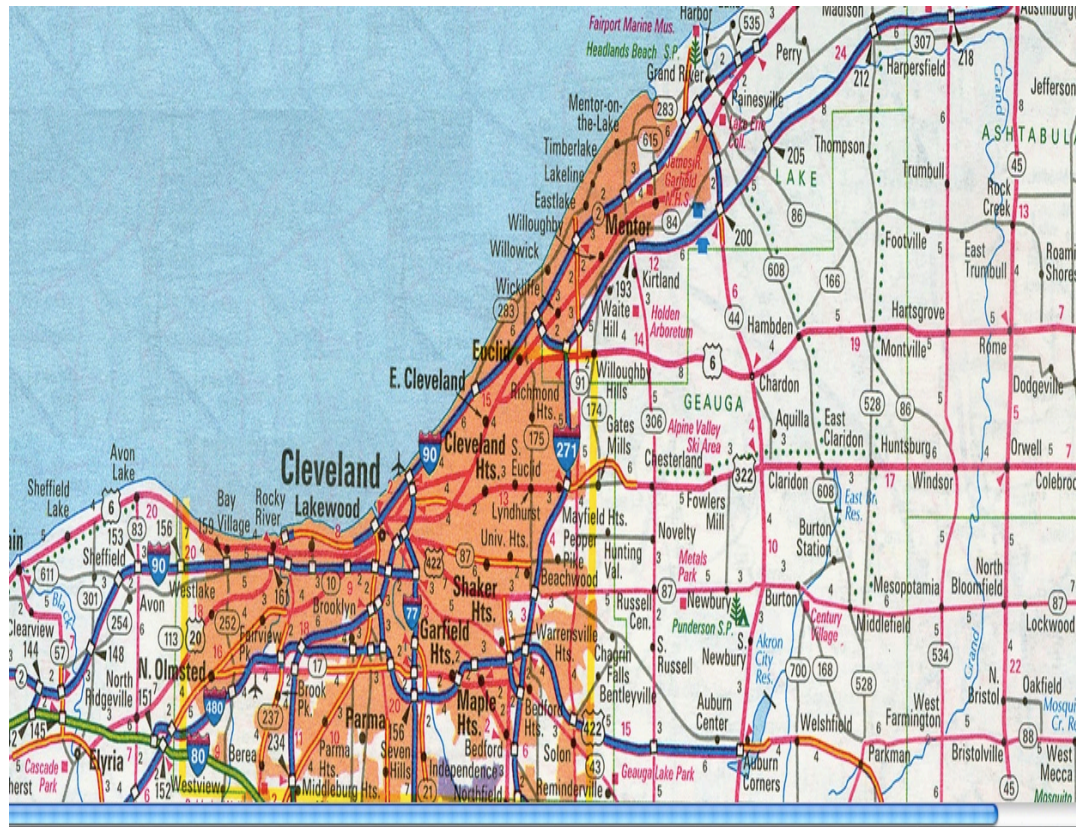


# U.S. Regional IBED Intermediaries





# Northeast Ohio IBED Intermediaries



**THE TECHNOLOGY NETWORK**

Global Community for Regional Innovation Policy



# Canada's Innovation Intermediaries



innovacorp

**NRC** | The National Research Council



# MaRs Canadian Intermediary

MaRs Goal: To build great companies. And a vibrant and diverse Canadian economy.

- MaRS helps entrepreneurs bring new and innovative ideas to the marketplace.
- MaRS offers a comprehensive range of business services. And experienced advisors guide our clients every step of the way.
- MaRS works with entrepreneurs in a range of sectors
  - Advanced materials and engineering
  - Cleantech
  - Information technology,
  - Communications
  - Entertainment
  - Life sciences and health care
  - Social innovation



# European Innovation Intermediaries



# Fraunhofer German Innovation Intermediary

## International locations

Fraunhofer-Gesellschaft



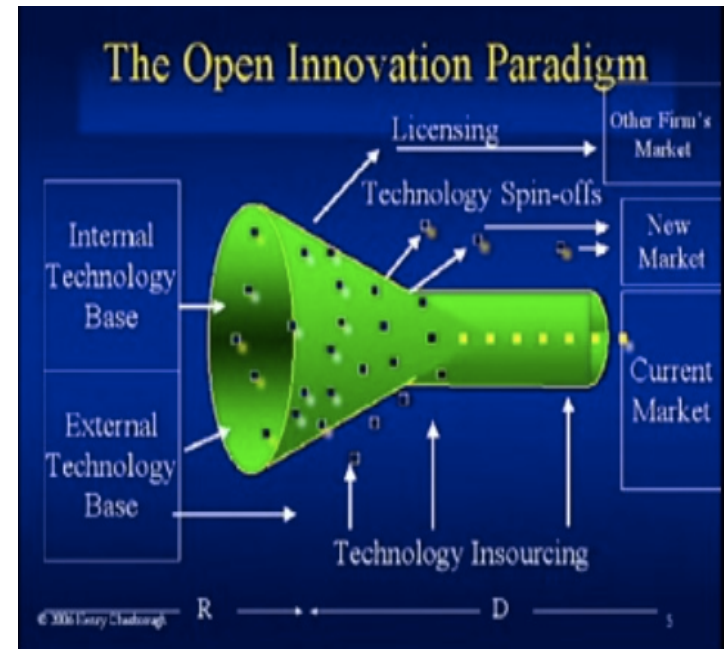
Fraunhofer



Global Community for Regional Innovation Policy

# Open Innovation

- “Open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology”
- The central idea behind open innovation is that in a world of widely distributed knowledge, companies cannot afford to rely entirely on their own research, but should instead buy or license processes or inventions (e.g. patents) from other companies.

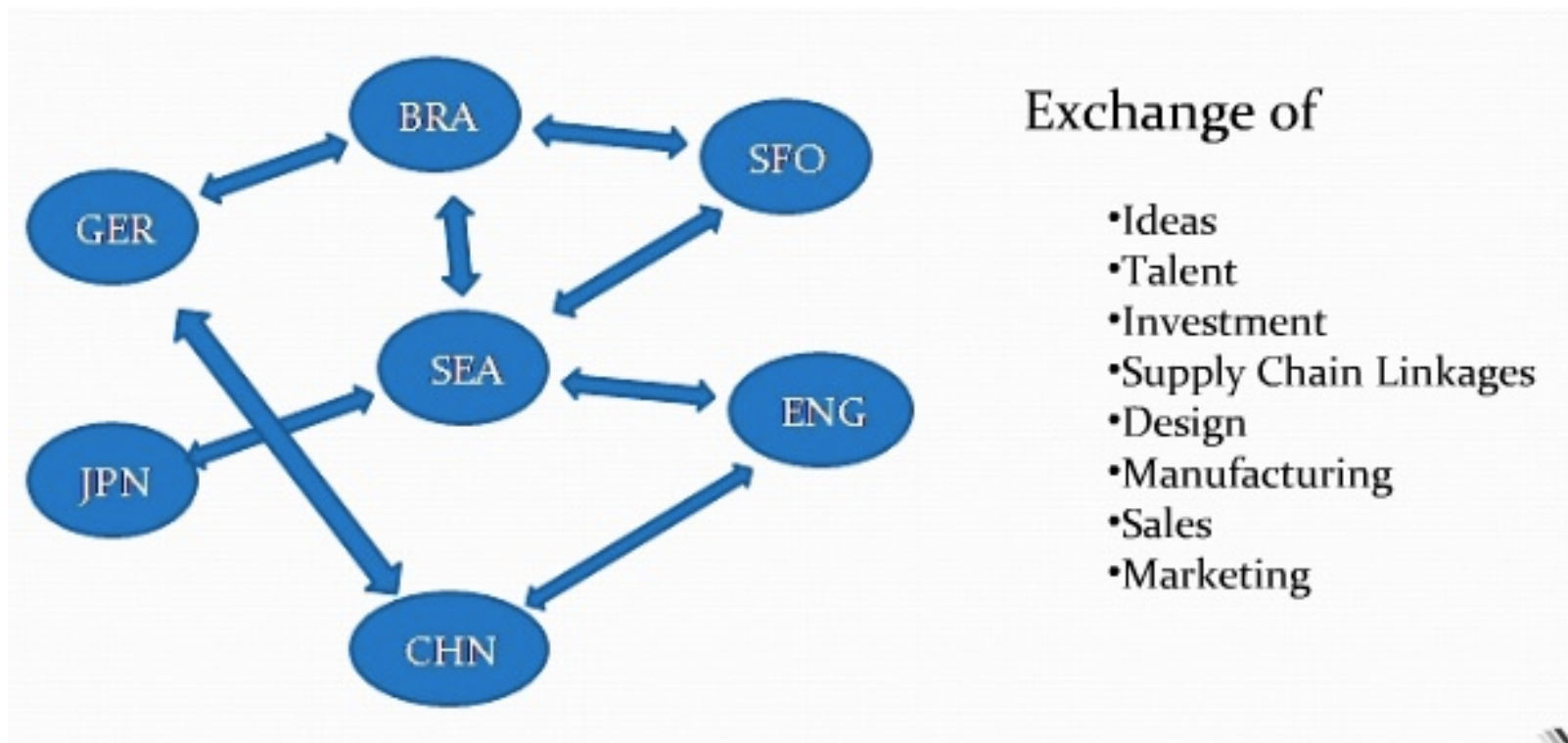




# The Global Innovation Network for the 787



# Global International Intermediaries



# What Works for Effective Global Intermediaries

- **FOCUSED & INTEGRATED** Science & Technology Collaboration
- **PRIVATE** Sector Leadership and **COMMITMENT**
- Organization's function as a **BUSINESS**
- Successfully manage a technology investment portfolio for **ROI**
- Operational **FLEXIBILITY**
- **ACCOUNTABILITY** with measurable outcomes
- Experienced **PROFESSIONAL** team
- Focus on the **INDUSTRY CLUSTER** needs
- **SUSTAINABLE** Funding

# Building a Transatlantic Innovation Economy

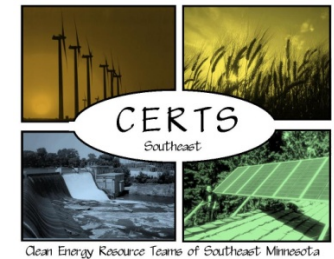
## Recommendations on Approach to Innovation Dialogue

- Identify and address specific barriers and impediments to transatlantic innovation and collaboration
- Drive effective regulation and regulatory alignment to stimulate transatlantic innovation
- Adopt common trade policies toward third countries as regards to innovation policies



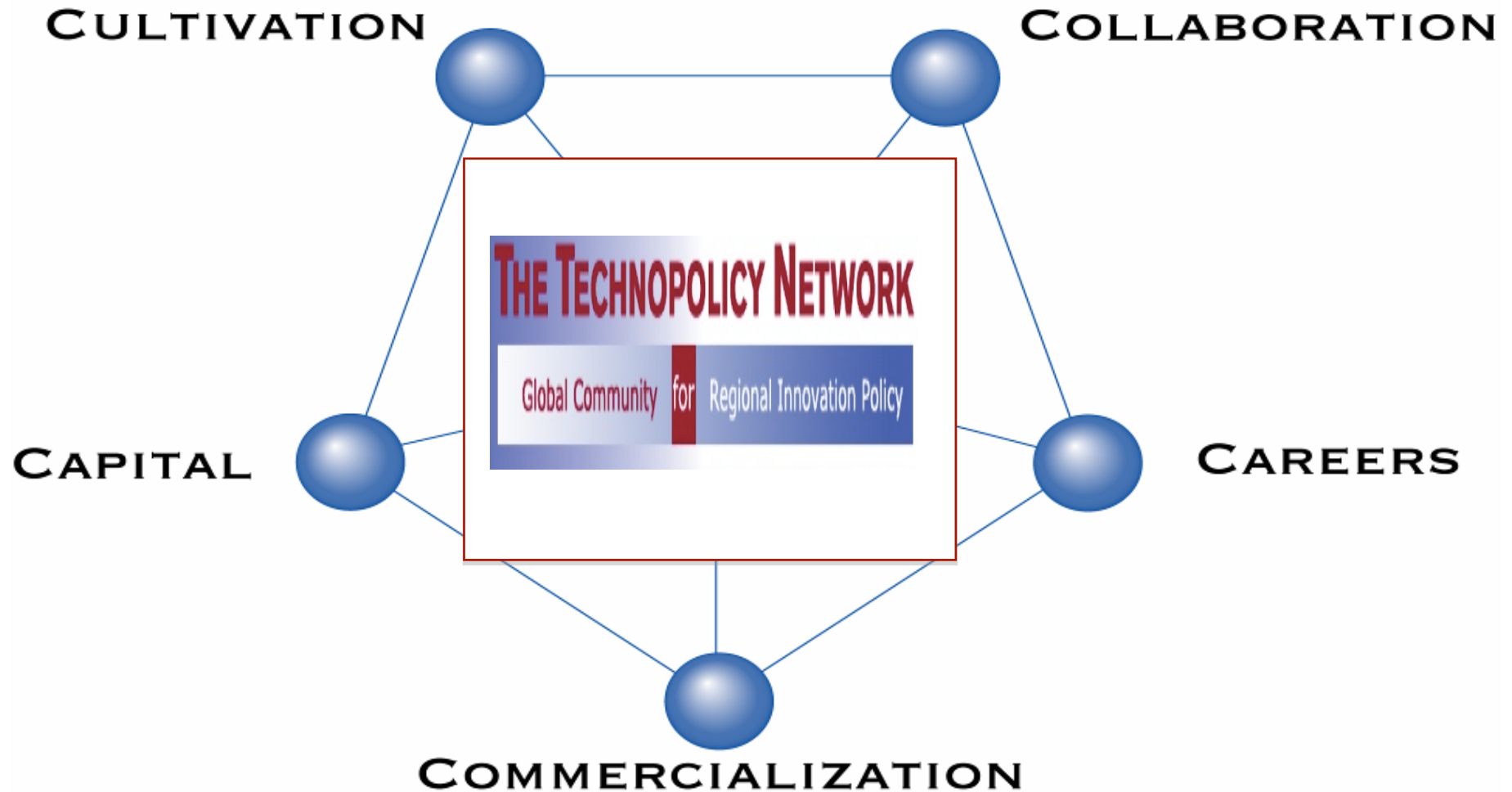
# Recommendations on Issue Priorities for the Innovation Dialogue

1. Healthcare IT and Product Approval
2. Energy Efficiency and Clean Technologies
3. Raw Materials Efficiency and Security
4. Development of ICT Technologies and New Technology Regulatory Cooperation





# Innovation Paradigm



# Partners in International Innovation



<http://www.aurp.net/>



<http://www.angelcapitalassociation.org/>



<http://www.cdvca.org/>



<http://www.nbia.org/>



[www.nvca.org](http://www.nvca.org)



<http://www.nasvf.org/>



<http://www.autm.net/>



<http://www.ssti.org/>



Québec 



intelligence innovation investissement international inspiration



Canada 



European Private Equity & Venture Capital Association

<http://www.evca.com/>



<http://www.eban.org/>



<http://www.astp.net/>



<http://spice-group.net/>

**THE TECHNOLOGY NETWORK**

Global Community for Regional Innovation Policy

# innovationDAILY

Get a **FREE**  
subscription to  
**Innovation**  
**America's**  
**innovationDAILY**  
newsletter.

**Subscribe to:**

**www.innovationamerica.us**

Sign Up / Login



The Daily pulse of Global Innovation!  
Brought to you by Rich Bendis and Innovation America

Home About US Initiatives In The News InnovationDAILY-WEEKLY Partners Publications Calendar Contact Us

## Building a World Class Cluster: Richard Bendis as Plenary Speaker in Heidelberg Germany

Monday, 23 August 2010 00:00 | Written by Administrator |  



Richard Bendis is participating as a plenary speaker in The Technopolicy Network Annual Conference "Building a World-Class Knowledge Region", Heidelberg, Germany, 29 September - 1 October.

Against the backdrop of Biotechnology Region Rhein Neckar (BioRN), Germany's award winning top-cluster, The Technopolicy Network is organizing its 7th Annual conference.

The conference will focus on the aspects that are needed to create a knowledge region that is truly of world-class. To this extend the importance of international alliances will be stressed. Bendis is a globally-recognized expert in shaping innovation-based clusters and a front runner in strengthening ties of innovation intermediaries across the Atlantic. Bendis is chairman of The Technopolicy Network's Transatlantic Innovation initiative to strengthen ties between Europe and North America in the field of Innovation. This comes at a moment that globalization and growing competition increases the necessity of strategic alliances to preserve ones' leading position in knowledge intensive innovation. The work group anticipates and promotes a more intensive collaboration between European and North-American countries in the innovation field. Outcome of last year's Transatlantic Innovation event, which Bendis also participated in, includes the setting-up of transatlantic



### Top Innovation Bloggers



Rich Bendis voted as the 4th best Innovation Blogger in the World in 2010 by BloggingInnovation Voters

Thanks to all those who voted for Rich!

### Receive DAILY Updates

For the ultimate convenience, have this content delivered to your inbox every day.

Email Address:

Full Name (Optional):



## A Call to Action



"Somebody has to do something, and it's just incredibly pathetic that it has to be **US**."

--Jerry Garcia of the  
Grateful Dead

**The US is YOU!**





**Richard A. Bendis**  
**President and CEO**  
**Innovation America**

2600 Centre Square West  
1500 Market Street  
Philadelphia, PA 19102

**(215) 496-8102**

[rbendis@bendisig.com](mailto:rbendis@bendisig.com)

[www.innovationamerica.us](http://www.innovationamerica.us)

[www.innovationamerica.us/daily](http://www.innovationamerica.us/daily)