

Building the Ohio Innovation Economy

Panel IV: State and Regional Innovation Programs

Moderator: Rich Bendis, Innovation America



Current Trends and Challenges in State Innovation Programs

Dan Berglund, President & CEO, SSTI



The Role of NorTech: Promoting Innovation and Economic Development

Rebecca O. Bagley, President & CEO, NorTech



The Global Innovation Imperative

- Innovation is Key to Growing and Maintaining a Country's **Competitive** Position in the Global Economy and to address Global Challenges
- **Collaboration** among Small and Large Businesses, Universities, and Research Institutes is Essential for Innovation & Commercialization
- **New Institutions and New Incentives**, are increasingly important to support collaboration and foster innovation
- Competitive advantages are increasingly tied to human capital and innovation
- **Economic growth** is closely related to education/workforce, energy, climate change, environmental, natural resource, geopolitical issues & entrepreneurship



**INNOVATION
MATTERS**

How Leading Nations Responding to the Innovation Imperative?

They are providing four things:

- High-level Focus
- Sustained Support for R&D:
Leveraging Public and Private Funds
- Support for Innovative SMEs
- New Innovation Partnerships to bring new products and services to market

Note: Many countries and regions are investing very substantial resources to create, attract and retain industries in leading sectors



The New Locational Competition

Definition: The competition for economic activity

Intense and growing competition among nations and regions for well paid jobs and improving living standards.....



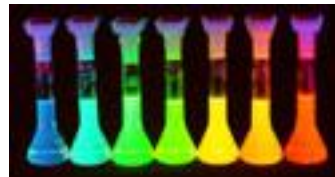
Innovation Economy: Definitions & Terminology

- Knowledge is the confident understanding of a subject, potentially with the ability to use it for a specific purpose
- Knowledge economy is based on creating, evaluating, and trading knowledge
- **INNOVATION** is the creation and transformation of knowledge into new products, processes, and services that meet market need.....and interactions, entertainment forms, and ways of communicating and collaborating



Implementing a New Innovation Paradigm

- Deviate from traditional perspectives
- Encourage public investment and risk taking
- Develop trust through collaboration
- Ensuring responsiveness to partners' missions
- Build consensus of all constituents through education, participation, and positive outcomes
- Move from TBED to IBED
- **Innovation-Based Economic Development**



Regional Innovation Clusters

Five Key Components to Consider When Defining Unique Regional Assets

*What you make, including
your existing &
prospective industry
clusters*

**ECONOMIC
BASE**

**ENTRE-
PRENEURSHIP**

*Your capacity to create
companies wholly new or
from existing firms*

*What you do: your
workforce skills &
human capital base*

TALENT

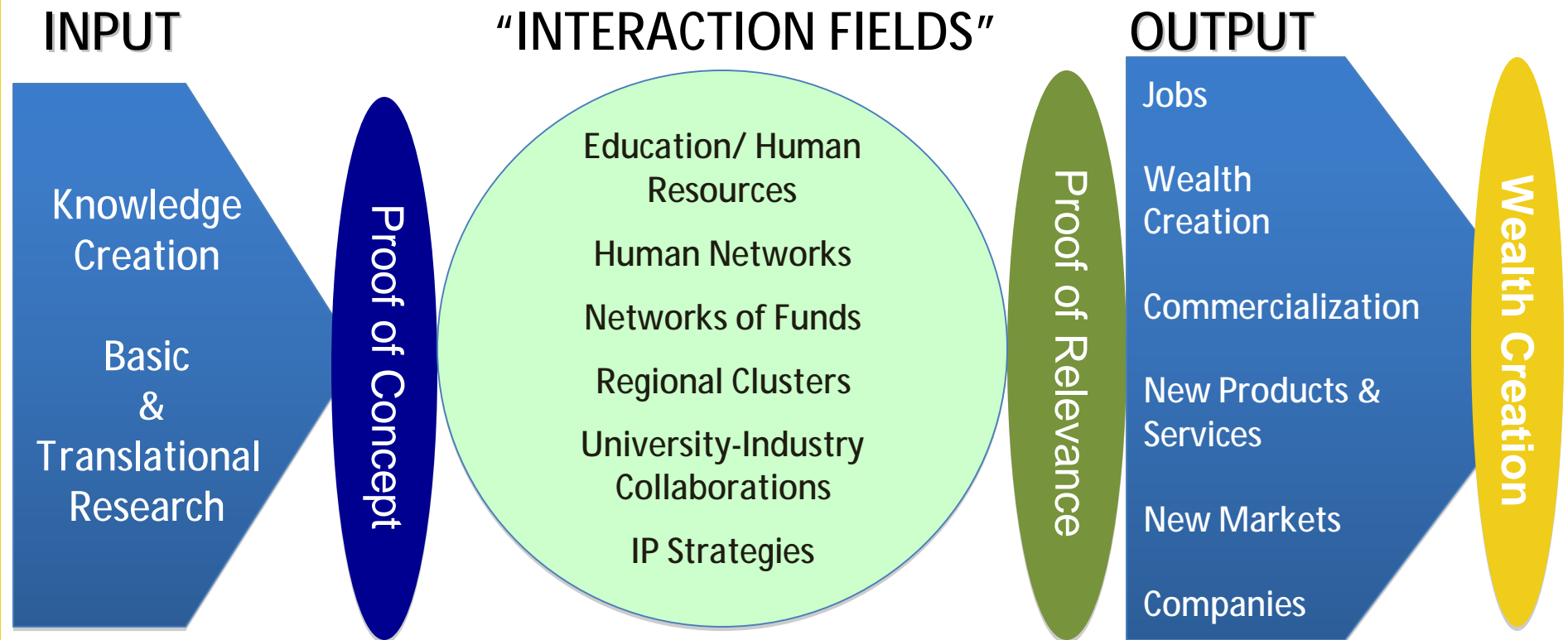
**INNOVATION
& IDEAS**

*Your capacity to innovate
and generate new ideas*

**Location, Infrastructure, Amenities,
Factor Costs, Natural Resources**

*The basic conditions defining the
economic milieu of the region*

Innovation Ecosystem



The concept of the **Innovation Ecosystem** stresses that the flow of technology and information among people, enterprises and institutions is key to a vibrant innovation process.

Triple Helix of Innovation



Government's Role in Innovation

- Long term vision and planning
- Identify gaps and trends in science, technology, innovation and SME development
- **Be a catalyst through long-term strategic investments and partnering**
- Develop a balanced and flexible research and development investment portfolio
- Encourage private sector innovation
- Establish performance-based research and development
- Accelerate the commercial exploitation of creativity and knowledge, through innovation and research, to create wealth, grow the economy, build successful businesses and improve quality of life

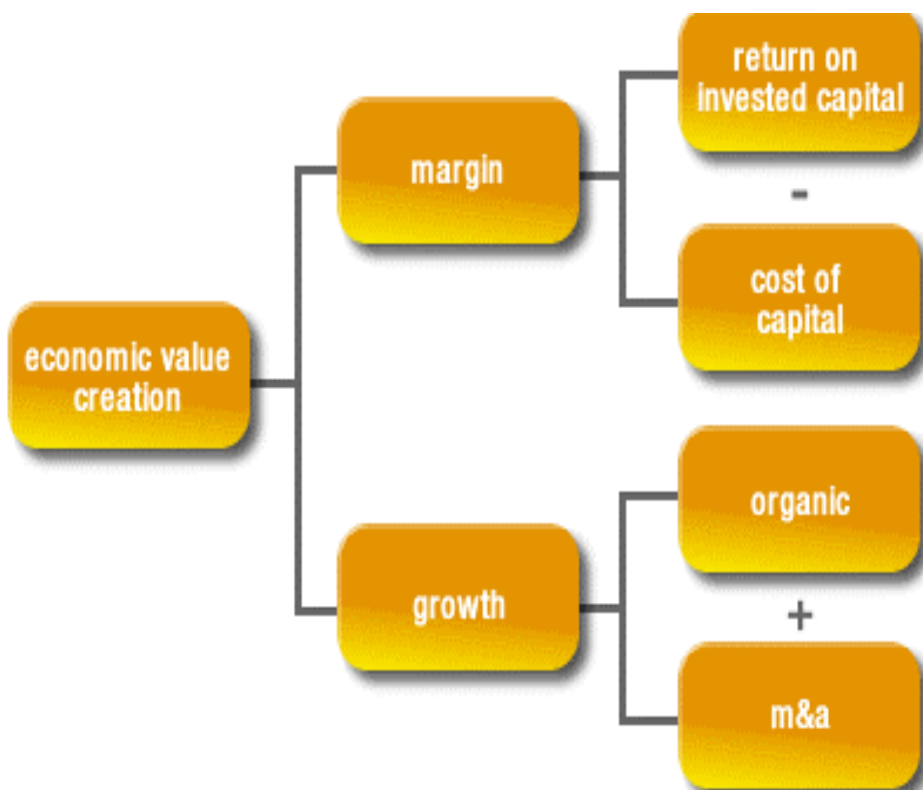
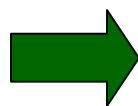


Innovation Paradigm Shift

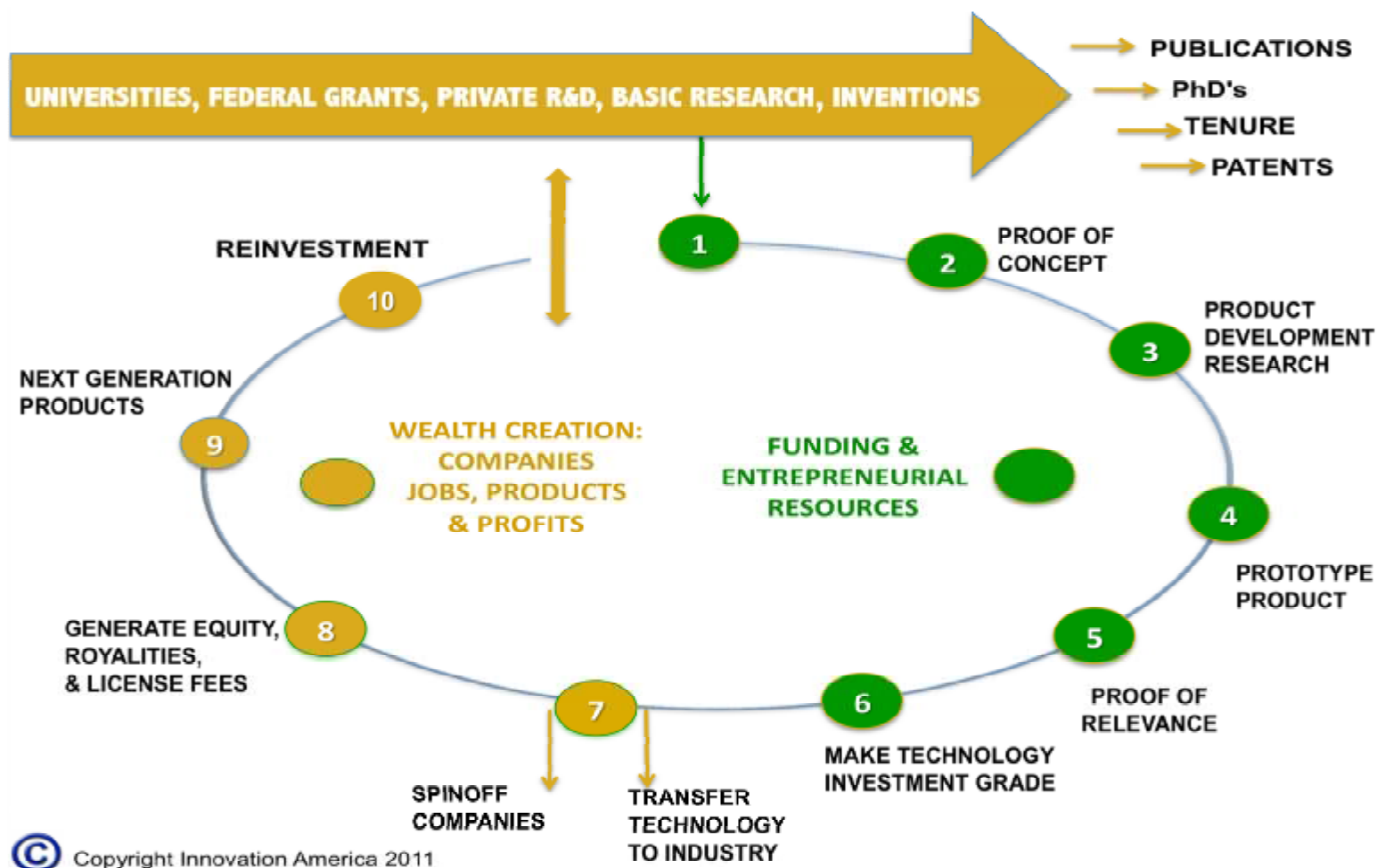
PROOF OF CONCEPT
(Technological Feasibility)
“It Works!”



PROOF OF RELEVANCE
(Market Pull)
“I’ll Buy It!”



Innovation America Commercialization Model



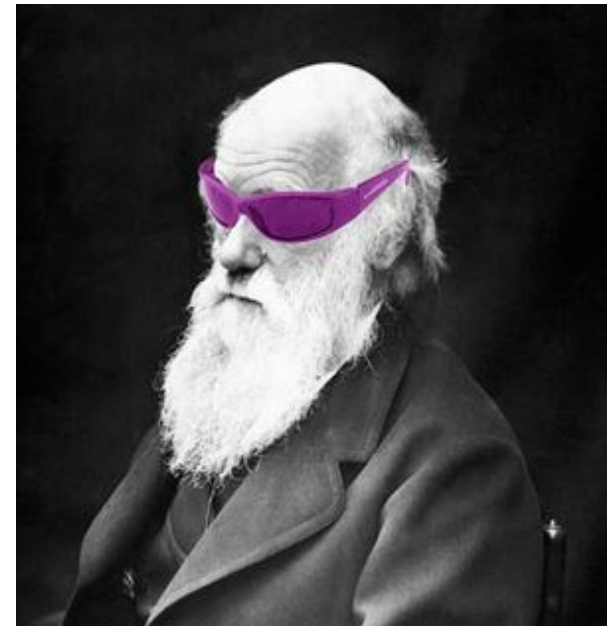
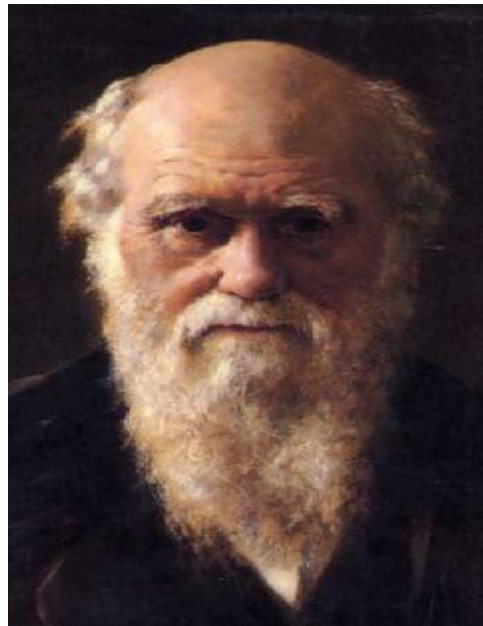
U.S. State Innovation Programs



Darwin on Collaboration

“ It is the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed.”

- Charles Darwin



Transition from Eco Devo to IBED

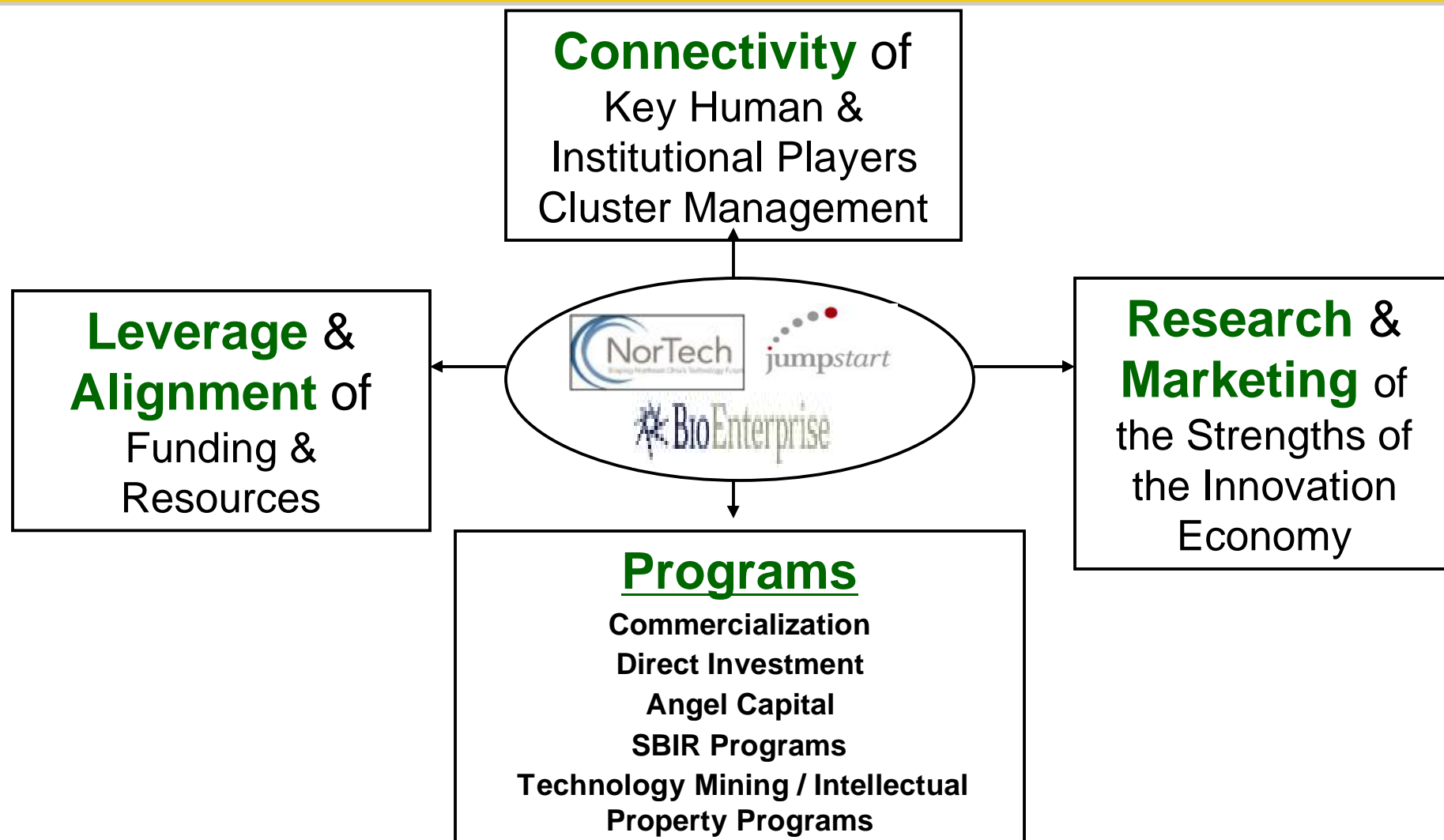
	<u>Traditional</u>		<u>Innovation (Clusters)</u>
• Competitive Basis	Natural resources Highways / Rail Proximity Costs	➔	Specialized talent Networks, information University research / professors Market understanding Global Reach
	i.e. PHYSICAL		i.e. KNOWLEDGE
• Key values / offerings	Business parks Incentives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

What is a 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.



21st 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



Regional IBED Intermediaries



Northeast Ohio IBED Intermediaries



NorTech, (the Northeast Ohio Technology Coalition) is a nonprofit Technology-Based Economic Development (TBED) organization that champions growth in Northeast Ohio's 21 county region. Foundation funded.



JumpStart is creating economic transformation in Northeast Ohio by providing resources to entrepreneurs to grow their high potential, early stage companies.



BioEnterprise is a business formation, recruitment, and acceleration initiative designed to grow health care companies and commercialize bioscience technologies



Team NEO advances Northeast Ohio's economy by attracting businesses worldwide to the 16-county Cleveland Plus region.





The New Economy Initiative for Southeast Michigan (NEI)

Founded:2008

Organizational Mission: Unique philanthropic initiative aimed at helping to restore southeast Michigan to a position of leadership in the new global economy.

Original Funding: \$100M – 8 year initiative - 10 national and local foundations

Goal: Accelerate the transition of metro Detroit to an innovation-based economy. Entrepreneurial Eco-System

- Capitalizing on Existing Assets and Resources
- Build and employ a more skilled and educated workforce
- Urban Entrepreneurial Partnership provides assistance to 150 minority automotive suppliers to diversify their customer bases to aerospace, alternative energy, medical devices, military and homeland security.



COTEC - Portugal

Founded: May 2003 - COTEC is a national innovation intermediary that supports innovative high growth SME's and is funded by largest private corporations in Portugal

Mission: □ To promote the competitiveness of companies established in Portugal, through the development and the diffusion of a culture and practice of innovation as well as of “resident” knowledge □

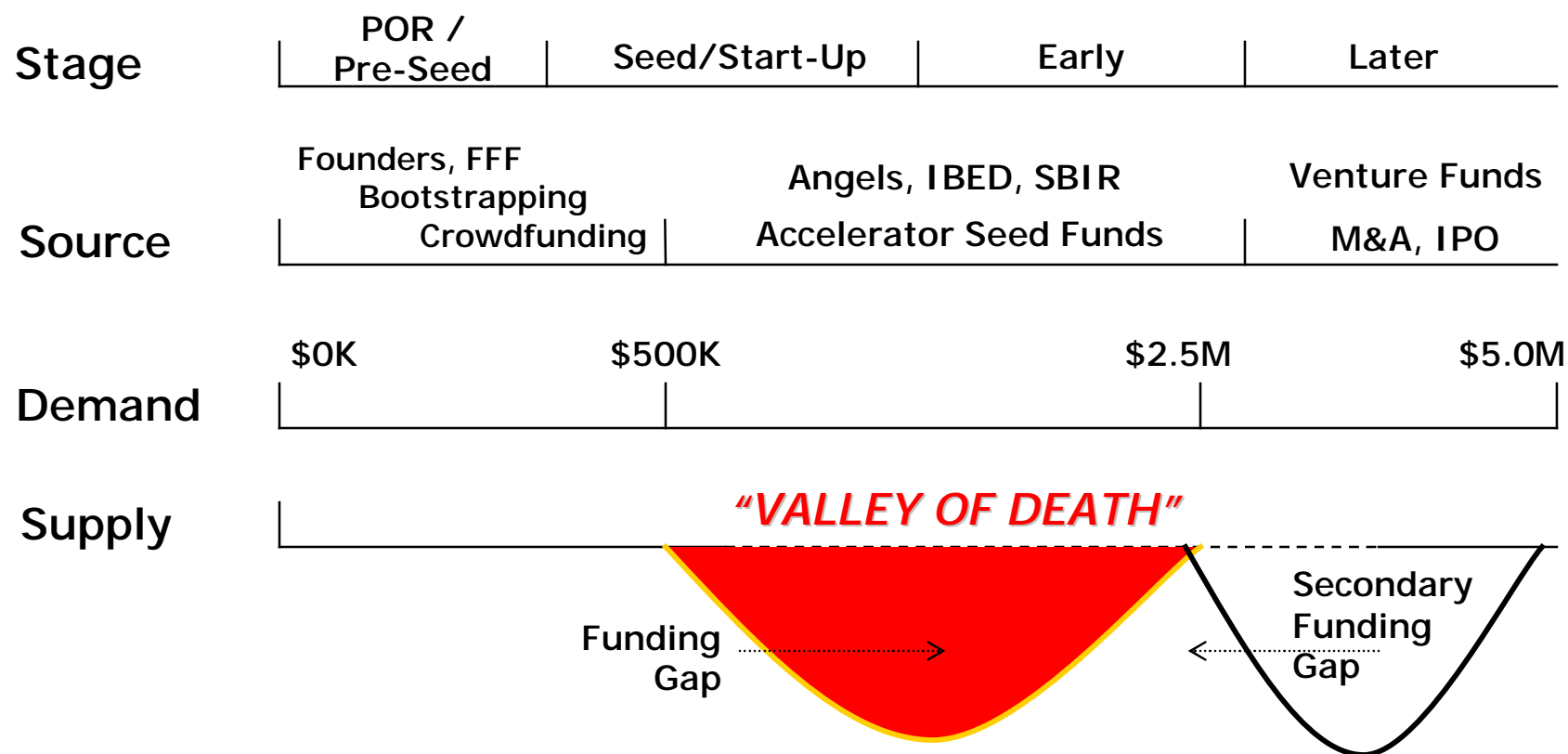
Vision: □ To become a key agent of business innovation in Portugal, by challenging both public and private organizations of the national innovation system (NIS) and by coordinating its intervention with them

Strategic Themes:

- To promote a culture of innovation as a crucial source of company competitiveness
- To foster the practice of innovation by all the agents of the NIS
- To influence the strategic orientation of both the Portuguese and the European Innovation Systems
- To remove context barriers to innovation

Innovation Capital Valley of Death

“VALLEY OF DEATH”



Funding & Resources for Innovation Capital

Seed



IBED



Federal



Angel



Entrepreneur



Successful Funding Models



Third Frontier
Innovation Creating Opportunity

\$700M 5-year Bond Issue
62% Taxpayer vote approving



**KANSAS BIOSCIENCE
AUTHORITY**

\$581M 15 year Wage-tax TIF

TN InvestCO



TTDC

TENNESSEE TECHNOLOGY
DEVELOPMENT CORPORATION

\$160M VC Premium insurance
Tax Incentives



\$60 Million
Angel Tax Credits

GPIC

**Greater Philadelphia Innovation Cluster
for Energy Efficient Buildings**

A U.S. DOE Energy Innovation HUB

\$129M E-RIC Grant



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Innovation Intermediary Commercialization Structure

Investigation	Technical	Market	Business
Proof of Concept	Technology Concept Analysis	Market Needs Assessment	Venture Assessment
Development Phase			
Feasibility	Technology Feasibility	Market Study	Economic Feasibility
Planning	Engineering Prototype	Strategic Marketing	Strategic Business Plan
Introduction	Pre-Production Prototype	Market Validation	Business Start-Up
Commercial Phase			
Full Scale Production	Production	Sales and Distribution	Business Growth
Maturity	Production Support	Market Diversification	Business Maturity

University Commercialization Centers

MIT - BOSTON



UCSD – San Diego



THE GAP



Academic Research

- Federal Grants
- Corporate Sponsored Research

- » Technology risk
- » Market risk



Commercial Enterprise

- Investors Commercialize
- Angels
 - VC's
 - Corporations



Key Difference Between Incubators and Accelerators

Incubators - incubators allow for slower growth, although they typically have some requirements as to how long companies can remain in the incubators before they graduate.



Accelerators - as their name implies, focus on an intense, boot-camp-like experience to get new businesses up and running in a matter of months.



Accelerators

AUSTEN
BioInnovation
INSTITUTE IN AKRON


AKRON GLOBAL BUSINESS
ACCELERATOR
An Initiative of the City of Akron


techstars


PIPELINE
KTEC'S ENTREPRENEURIAL FELLOWSHIP

 **Combinator**

DREAMIT
VENTURES

**startup
bootcamp**


THE ACCELERATOR
NATIONAL MATERIALS SCIENCE INNOVATION
AND COMMERCIALIZATION ACCELERATOR

 **innovation
AMERICA**

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 **NorTech**
Shaping Northeast Ohio's Technology Future



Best Practices in Innovation Entrepreneurial Support



The PIPELINE is the nation's premier state-sponsored technology entrepreneur fellowship program. PIPELINE is designed to systematically identify high potential technology entrepreneurs and match them with best-in-class training, resources and mentors to facilitate their dynamic growth in Kansas.



Bill Gates - Microsoft

“Never before in history has innovation offered promise of so much to so many in so short a time.”





Richard A. Bendis
President and CEO
Innovation America

2600 Centre Square West
1500 Market Street
Philadelphia, PA 19102

(215) 496-8102

rbendis@bendisig.com

www.innovationamerica.us

www.innovationamerica.us/daily