The Fifth International Forum From Science to Business

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Rich Bendis BIO

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- ✧Chairman & CEO of Continental Healthcare Systems (NASDAQ IPO)
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Why Is Innovation Essential?

"INNOVATION DISTINGUISHES BETWEEN A LEADER AND A FOLLOWER."

-STEVE JOBS

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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

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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

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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…….

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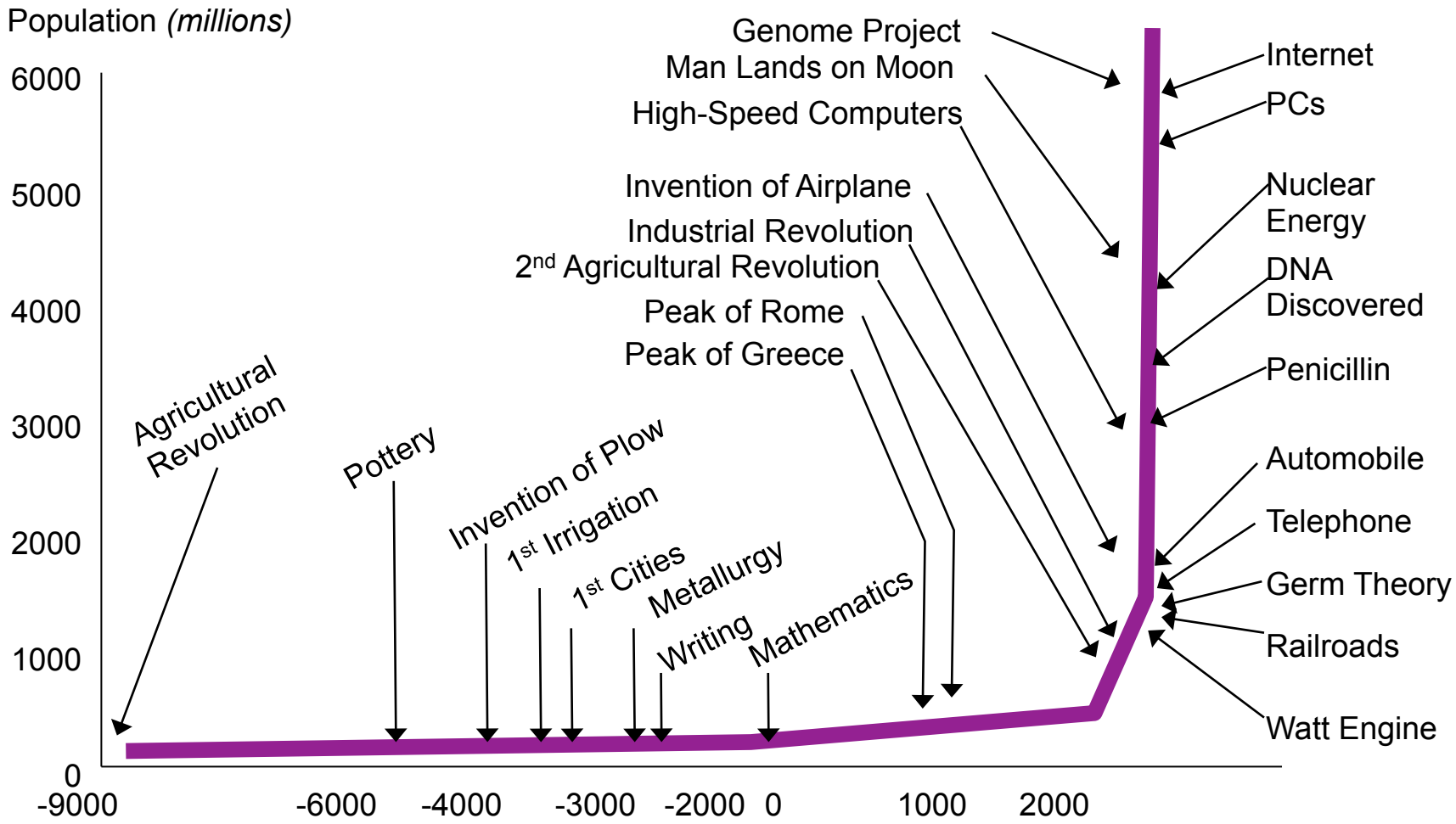
What is a National Innovation Strategy?

– ***"Those elements of science, technology, and economic policy that explicitly aim at promoting the development, spread, and efficient use of new products, processes, and services."***

– **A well-conceived, strategic approach to drive innovation that proactively anticipates and articulates the interactions among policies across:**

- Science and technology
- R&D
- Commercialization strategies
- Education & skills
- Immigration
- Statistics/measurement
- Tax
- Trade
- Intellectual property
- Competition/Regulatory
- Public procurement
- Public sector innovation

Growth of World Population and the History of Technology



Source: Milken Institute, Robert Fogel/University of Chicago

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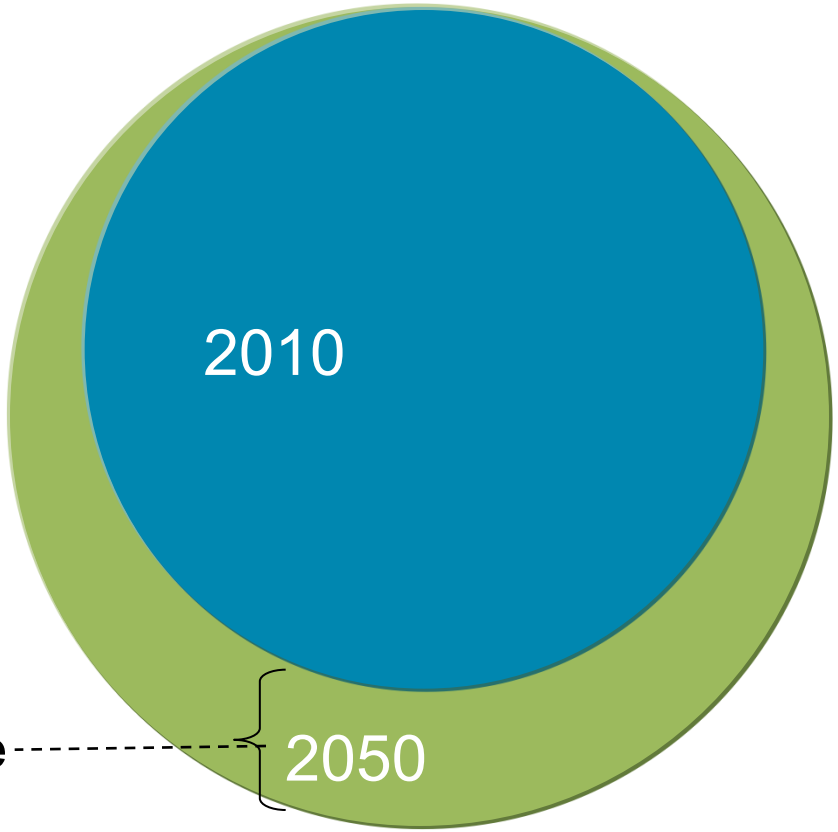
A Growing Population

World population will grow from 6,892,669,975 to 9,149,984,000



Source: Scientific American, 2010

Selected Nations with National Strategies

- China
- Denmark
- Finland
- Germany
- India
- Ireland
- Japan
- Korea
- Netherlands
- Norway
- Portugal
- South Africa
- Sweden
- Taiwan
- Thailand
- United Kingdom
- Uruguay
- United States

China

- $124B stimulus 2010/2011; will spend $170B in 2017 (from $26B 10 years earlier)
- Approximately 400M people lifted out of poverty (active, capital rich, growing middle class)
- Energy demands up 4x in next 10 years
- Rampant capitalism – Public equity markets “hot”
- 3 biggest IPOs (in history) in China/Brazil

Think about this:

- One 1M person city created every two weeks

India

- Per capita income : US $950 (38,084Rs)
- Purchasing Power Parity $3400.
- GDP: $1,367 B growing at 8-10%/ annum (currently 8.77%
- Foreign currency reserves increasing : $279B
- Median age group: 24 years - vibrant workforce
- 293M people will move out of poverty, 583M enter middle class, 23M Indians to become world's most affluent within 15 years
- Combined net worth of the 100 wealthiest people climbed to an all-time high of $300B in 2010

Think about this

- Poised to become 5th largest consumer economy ($1.5T) by 2025

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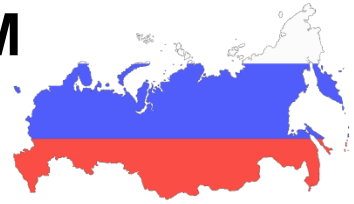
Brazil

- Economy growing at an annualized rate of 5%
- Sao Paulo will be the fifth-wealthiest city by 2025
- Self-sufficient in oil, large new offshore discoveries in 2007 likely to make it a big oil exporter by the end of next decade
- Ranked 10th in the world with a GDP of US$1.5 trillion in 2009

Think about this

- …After US, China, India, Japan, the 5th largest population with 191 million

Russia



- Population set to decline from 143M (2010) to 111M (2050)
- 2010 value of the biopharmaceutical market estimated to be approximately US $17.2B compared with US $10.4B in 2006
- Ranked 12 out of 25 in terms of active clinical trials with 1,084 sites with an average relative annual growth rate of 33%
- Launched a national 10-year plan to promote biotechnology including development of special economic zones for innovative biotechnology and several bioparks
- Nanotechnology – the engine of innovation and growth of technology building an industry by 2015 with a €30B initiative

Innovation Economy: Definitions & Terminology

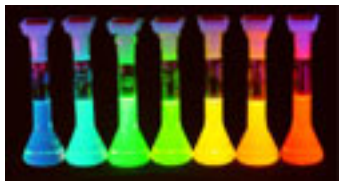
- Knowledge is the confident understanding of a subject, potentially with the ability to use it for a specific purpose

- 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**



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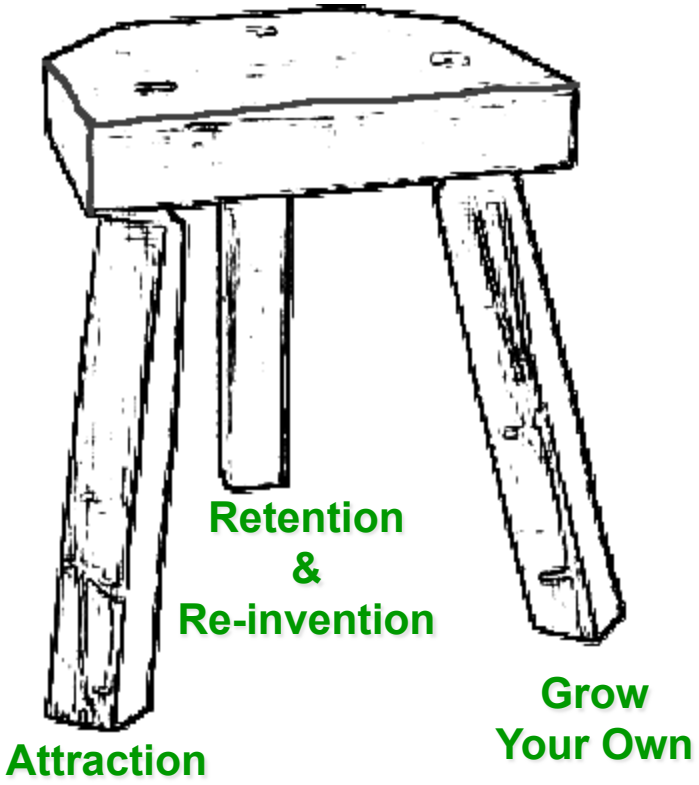
Economic Development

- 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

	Traditional	Innovation (Clusters)
• 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**

US Trends In TBED

- Cycles of emphasis over the years on different elements; elements continuing on the rise
  - Increasing expectation for community of university research
  - Growth of venture development organizations, private accelerators, and start-up weekends
  - Capital
- Reorganization of economic development efforts
  - Public-private partnerships
  - State TBED orgs merged into state economic development departments
  - Regional emphasis

US Challenges

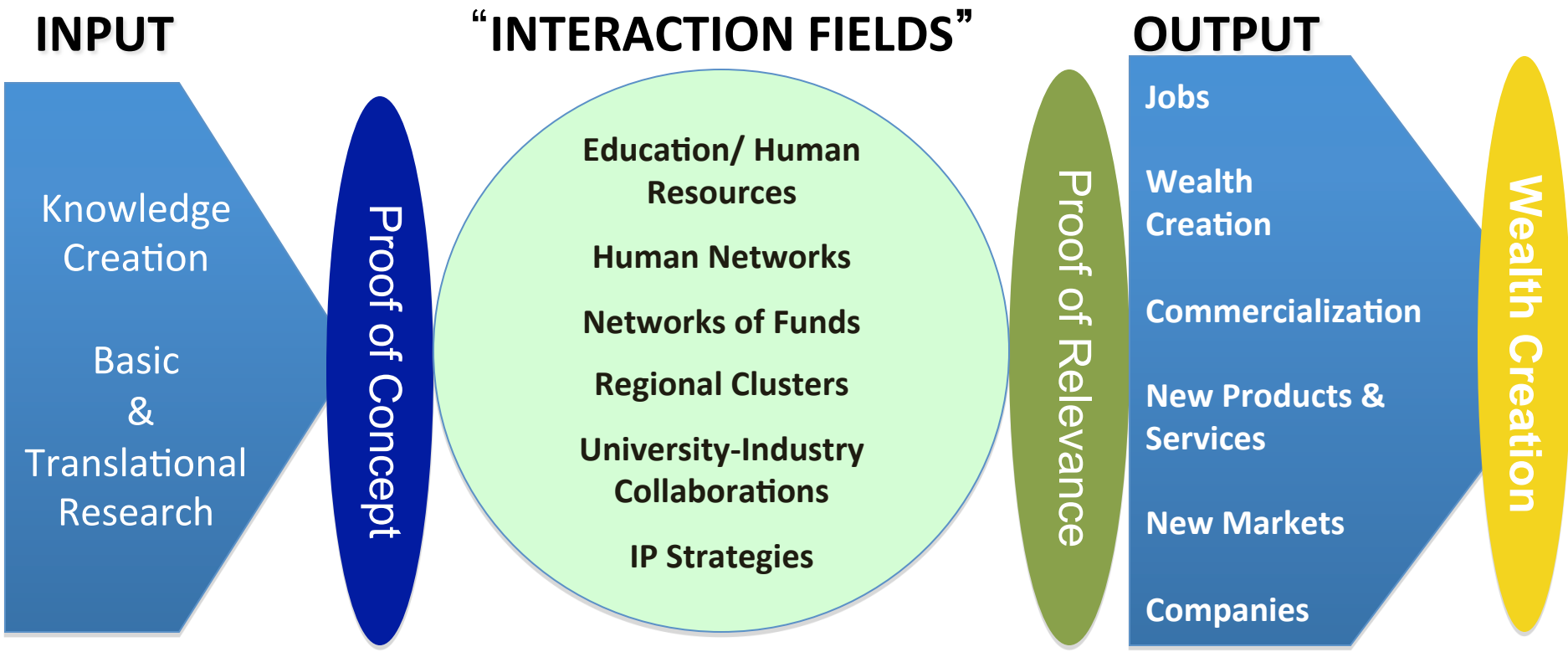
- A changing economy with a different recovery pattern
- Shortage of skilled workers once recovery in full swing
- Different expectations for higher education
- 28 new governors
- Fiscal pressures
- Federal approaches changing slowly

Lessons Learned

- Committed high-level leadership is required that understands:
  - Economic impact further down the road than other approaches
  - Research does not always succeed
  - Significant cultural differences between actors

- Action should be based on:
  - Understanding of needs, capabilities, and gaps
  - Filling gaps to encourage change in private sector behavior

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.

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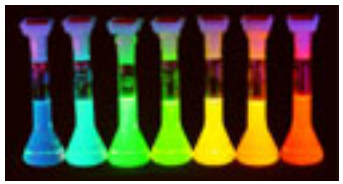

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Triple Helix of Innovation

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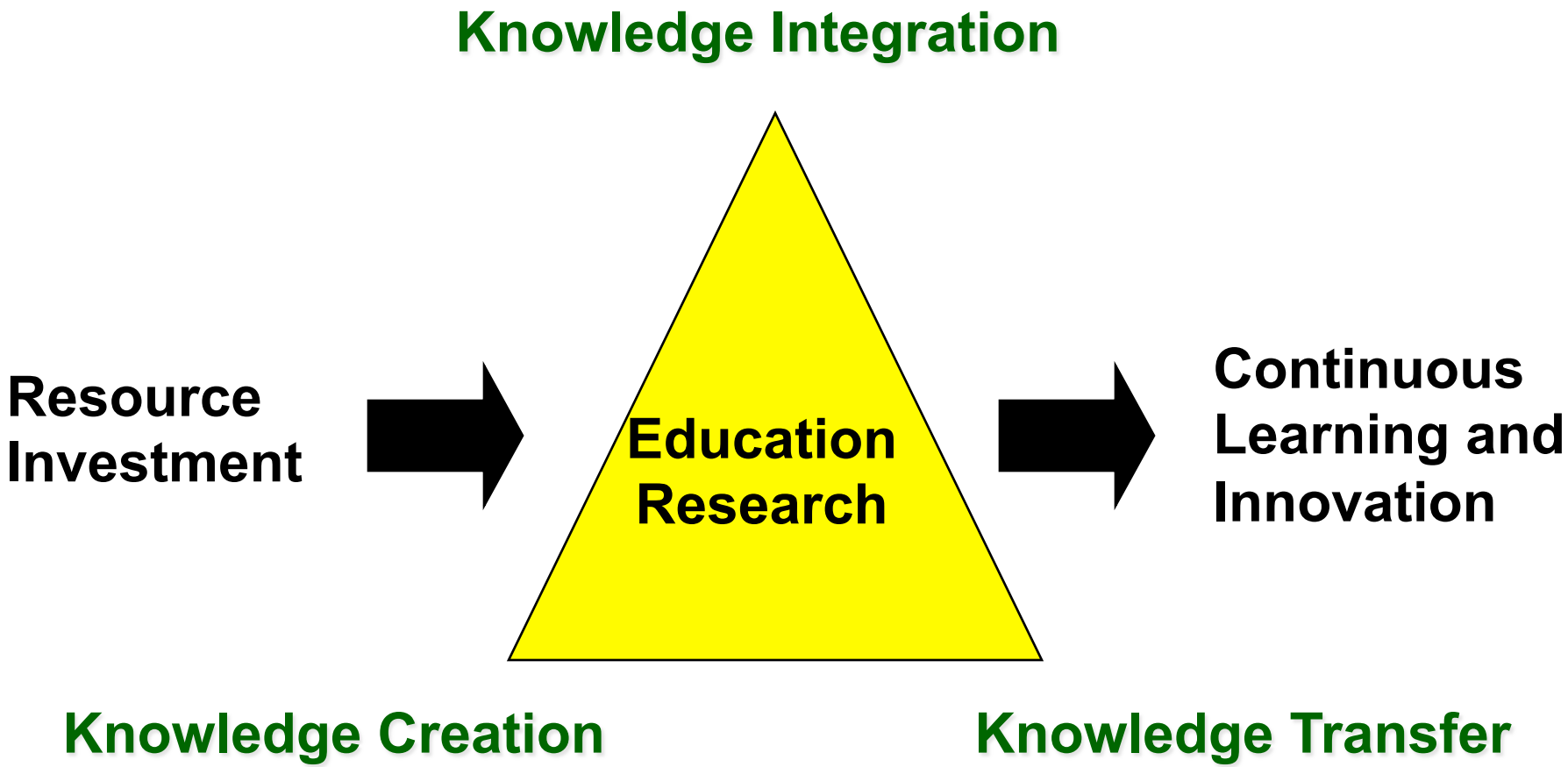
The Role of Education



The Role of Industry: Wealth Creation

Capitalism is a Process of Creative Transformation

"The interaction of technological innovation with the competitive marketplace is the fundamental driving force in capitalist industrial progress."

Joseph A. Schumpeter, 1942

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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

NSF

SBA.GOV
U.S. Small Business Administration

USDA

DEPARTMENT OF ENERGY · UNITED STATES OF AMERICA

NIST

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Federal Programs to Increase Innovation Capital

R&D Tax Credit Reauthorization (Pending)

- US ranks **24th out of 38 countries.**
- Provides **$9B in tax relief** to companies and individual - **$10B of R&D** can be supported by a permanent research tax credit.

National Angel Capital Tax Credit:

- **20+ states** have tax credits for early stage investment ranging **from 10-50%.**
- Senator Mark Pryor (D Arkansas) has proposed legislation talking about an across the board **25% credit.**
- Advantages to having credits includes **Increases the state's risk capital** market & **stimulates investment in new companies &** creates **new jobs** from startups.

Patent Reform Proposal:

- Proposed versions of the Patent Reform would switched U.S. patent priority from the existing **"first-to-invent"** system to a **"first-to-file"** system.

SBIR/STTR Reauthorization:

- Increase from **2.5% to 5%** the amount that each federal agency with an extramural research and development budget
- Increase in Phase I and Phase II awards

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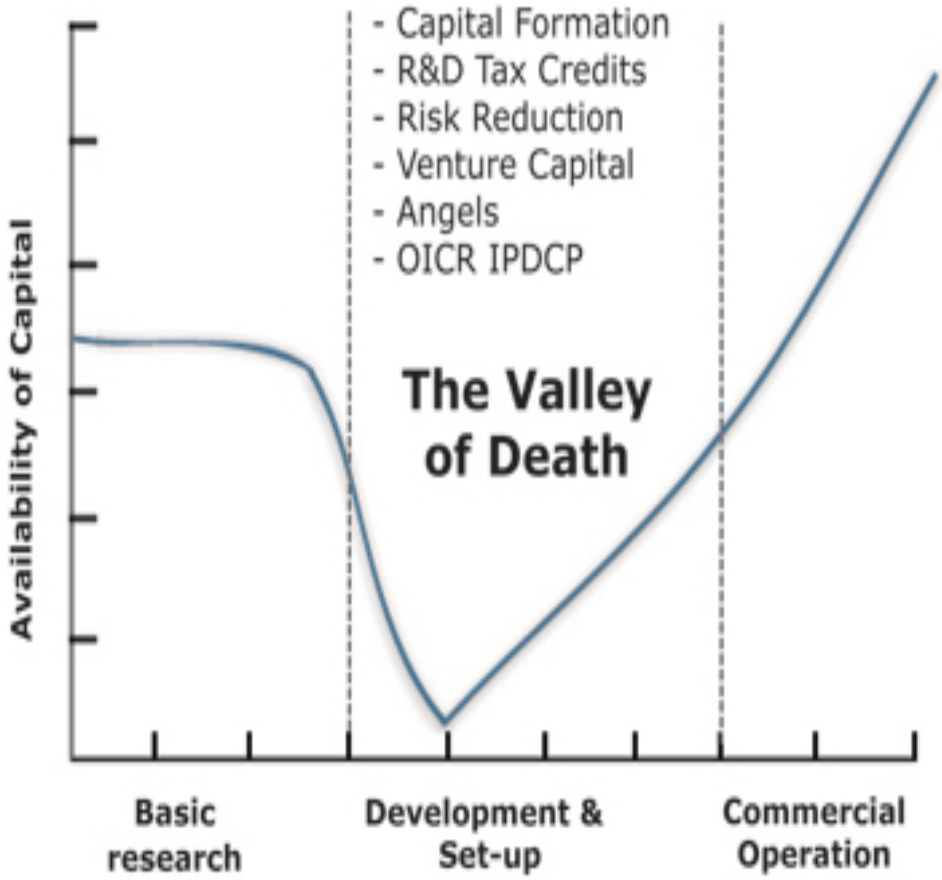
The Challenge

A Key Challenge is Converting U.S. Research Investments into Jobs and Growth

How to bring innovative firms across the Valley of Death?

Two Paths Forward: Both are Proven and Successful



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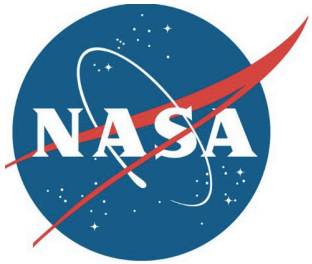
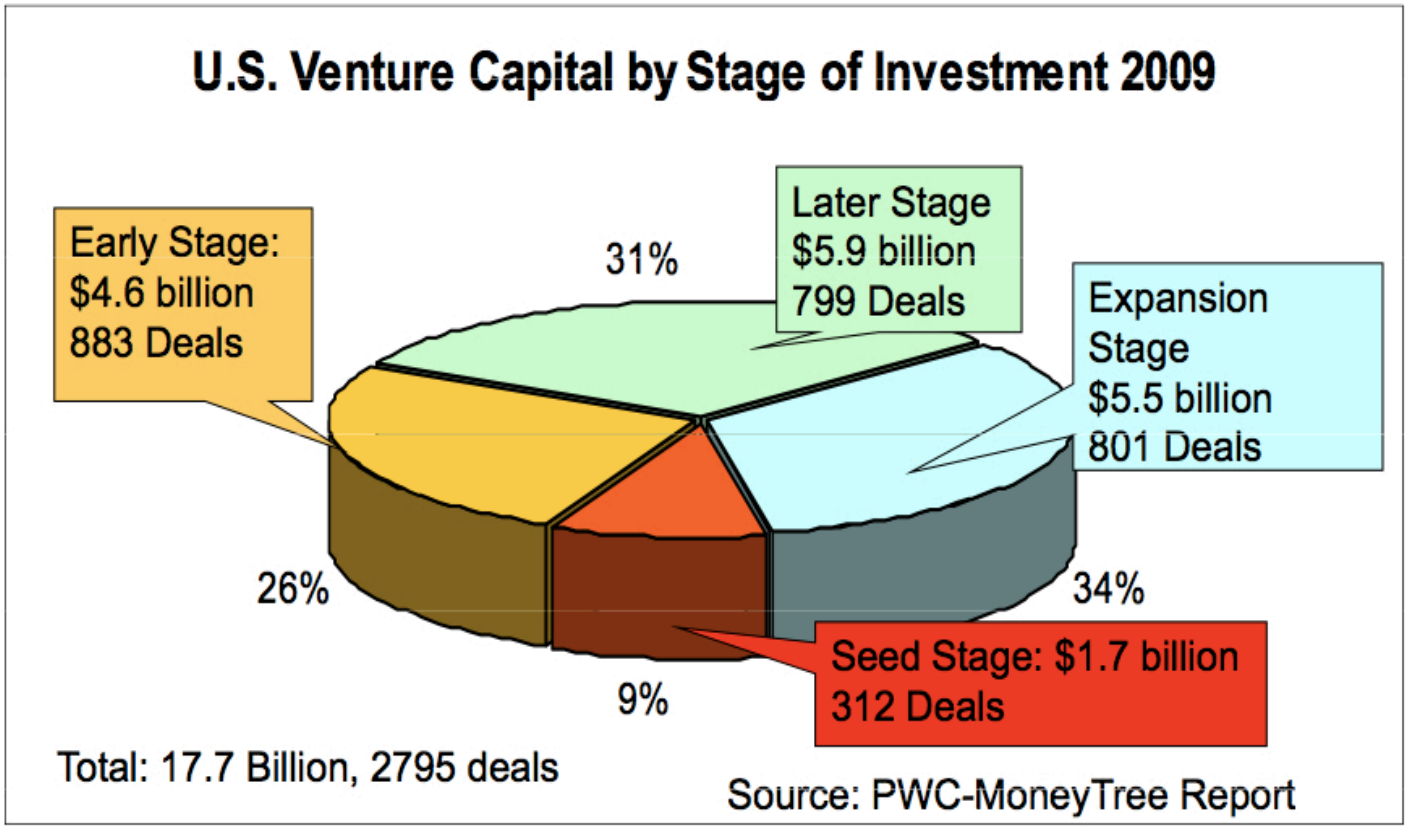
The U.S. SBIR & TIP Program



Venture Funding

Venture Funds are Only One Path

U.S. Venture Investments Down 37% in 2009



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The Small Business Innovation Research (SBIR) Program

- The SBIR Program converts Knowledge into Products to meet Government and Societal Needs

- SBIR is a highly-competitive, gated innovation system, providing merit-based awards to small companies to– Provide Proof of Principle

Develop Prototypes

- Successful Companies Attract Private Capital and/or win Public Contracts

- Largest U.S. Innovation Partnership Program: **$2.5 billion per year**

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SBIR - Small Business Innovation Research

SBIR

•U.S. Federal Agencies with R&D Budgets in excess of **$100 Million**

•**2.5%** Set Aside of Extramural Research Budget = **$2 Billion**

•**$14 Billion** Awarded via 50,000 awards since Inception

STTR

•Largest 5 agencies participate

•**.3% set aside**

•Currently = **$100 million**

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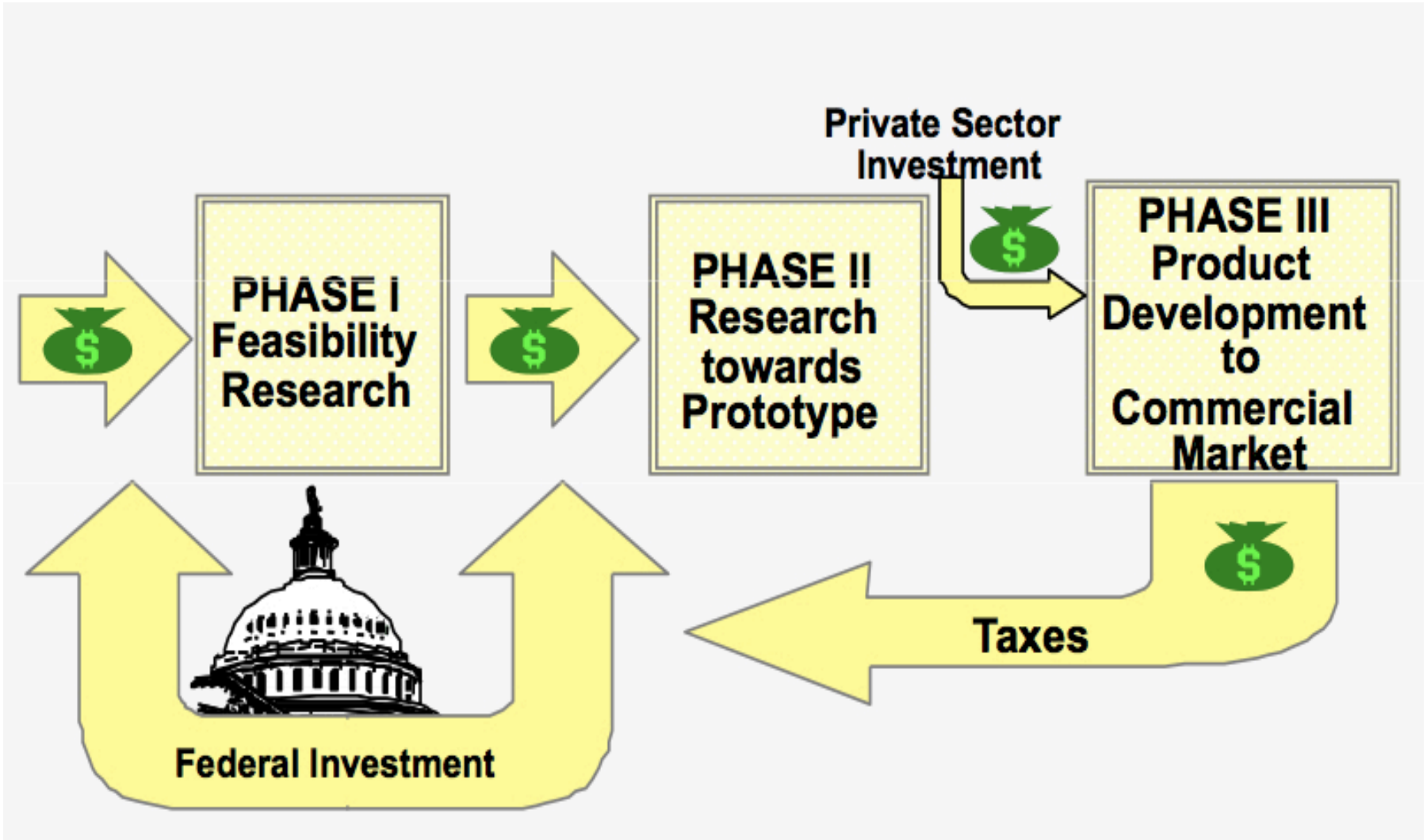
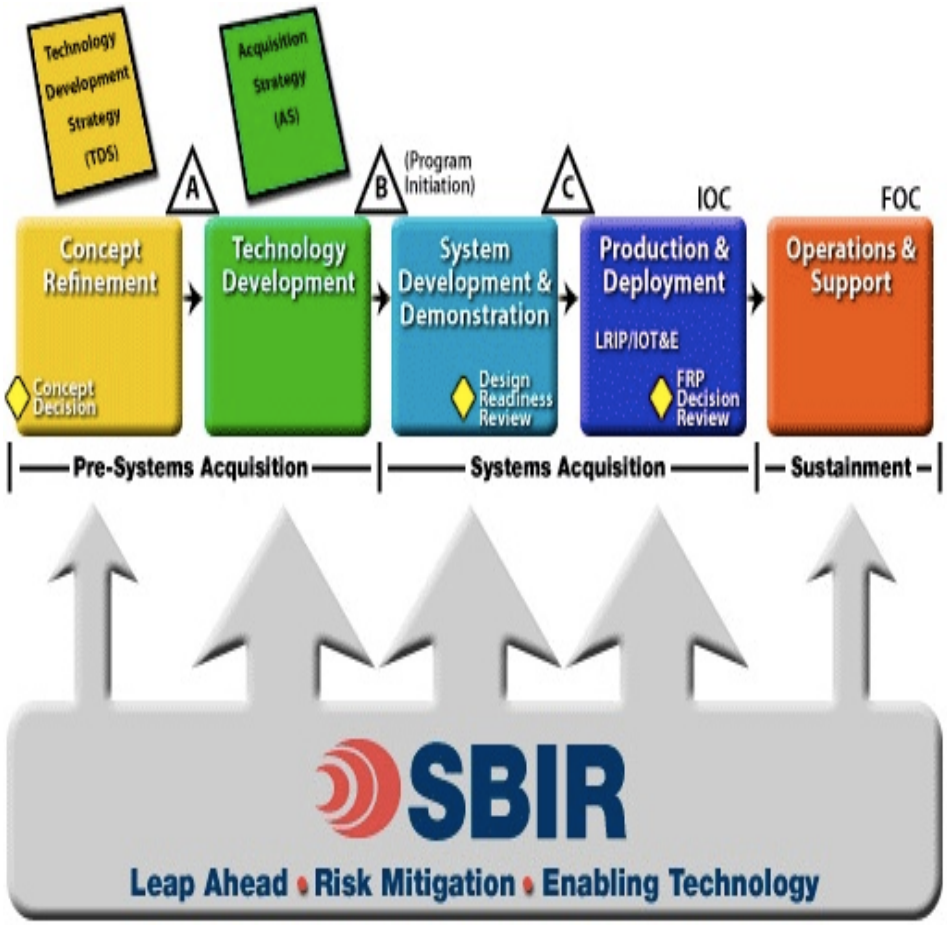
The SBIR Program



SBIR vs. VC Early Stage Investments 2010

SBIR/STTR = $2.5B

VC = $1.7B



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Advantages of SBIR

1. Significant amount of funds reserved for small, innovative firms
2. Public venture funds without dilution features
3. Funds high risk projects
4. No Payback
5. No personal guarantees
6. Firm retains IP – no dilution
7. Provides valuable credibility
8. Offers a simplified route to obtaining federal R&D funds

SBIR / STTR
Small Business Innovation Research
Small Business Technology TRansfer

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SBIR – The Mechanics of the Program

Phase I

•Evaluate viability and feasibility of an idea
•Up to **$150K** for 6 month period *(STTR 12 months)*
•Win Rates: *approx. 1-8 (varies widely)*

Phase II

•Expand results and Further pursue development
•Up to $1.000,000 for up to 24 months
•Win Rates: approx. 1-3 (varies widely)

Phase III Commercialization

•Most important requirement in getting to this point is having successfully won a Phase I and Phase II award.
    •Selling Product Development under a Phase II
    •Non-Government Funding to Develop Technology or Product
    •Non-SBIR Funding from Government to Develop Technology or Product

SBIR – Qualifications & Eligibility

1. Organized for-profit U.S. business
2. At least 51% U.S. owned and independently operated
3. Business is located in U.S.
4. Principal investigator primary employment is with small business during the project *(either business or university in STTR) 500 or fewer employees*

SBIR 2.0

Simplification and Streamlining

- Fast track applications 60days – from proposal to award
- Contracting - standardizing contracts
- "One-Stop-Shop" combine all agencies information in 1 web portal
- Evaluating opportunities to clarify and simplify data rights for the Federal Government and entrepreneurs.

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European Pre-Commercial Procurement

- The scope is R&D services only
- The application of risk-benefit sharing
- A competitive procurement designed to exclude State aid

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Innovation Partnership - Pennsylvania

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Small Business Investment Companies (SBICs)

SBIC MISSION - is to improve and stimulate the national economy and small businesses by:

•Stimulating/supplementing the flow of private equity capital and long term loan funds for the

- **•Sound financing---Growth---Expansion---Modernization** of small business operations while insuring the maximum participation of private financing sources.

EARLY-STAGE INNOVATION FUND (2012) – Funds made available to SBICs targeting early-stage firms in the **"Valley of Death,"** the segment of the venture capital market in which companies are often seeking their first dollar of institutional capital.

- •Over the past 4 years, only **6% of venture capital** has gone to finance companies early-stage with
- • **70%** of the capital deployed in 3 states: **California, New York and Massachusetts.**

Technology Innovation Program

The Technology Innovation Program (TIP)

- TIP accelerates innovation through high-risk, high-reward research in areas of "critical national need"
- Aim is to speed the development of high-risk, transformative research
- Targeted to address key societal challenges
- TIP provides funding to universities, small and medium-sized businesses, and consortia for research on promising technologies
- Awards are Merit Based
- Funding provided through cost-shared research grants, cooperative agreements, or contracts

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Federal Program Opportunities

I6 Green Proof of Concept Center

- **$12 Million**
- Proof of Concept Center
- Proof of Commercial Relevance Center

Jobs & Innovation Accelerator Challenge

- **$33 million** Cluster Program

USDA ARS Programs

- Partnership program with the commercialization of Ag-tech companies
- Opportunities for joint research programs (CRADAs)
- Joint research increases the likelihood of success
- These agreements can help strengthen state and national economic development and help U.S. businesses compete globally in the marketplace.
- E-RIC

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ITMO

Regional Innovation Clusters (RICs)

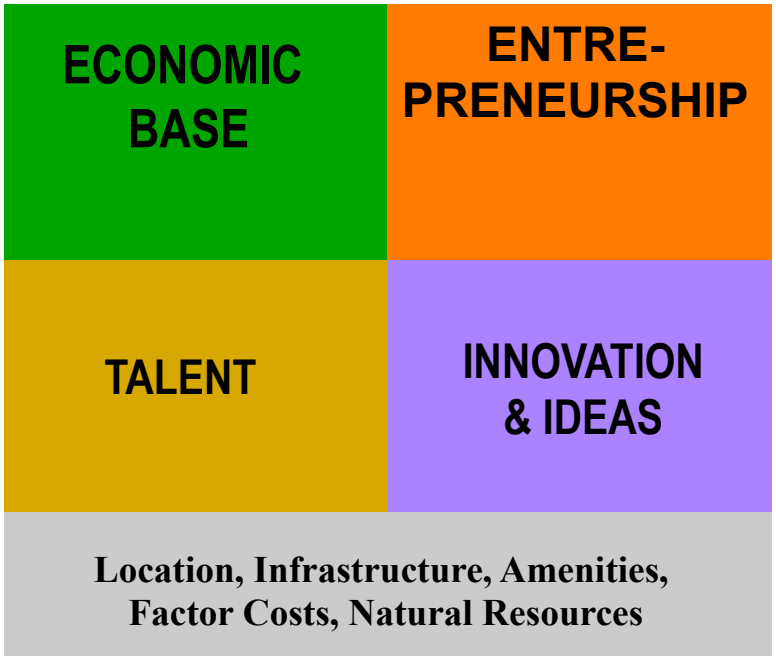
RICs are a geographically-bounded, active network of similar, synergistic or complementary organizations which leverage their region's unique competitive strengths to create jobs and broader prosperity.

Regional Innovation Clusters

Five Key Components to Consider When Defining Unique Regional Assets

What you make, including your existing & prospective industry clusters

What you do: your workforce skills & human capital base



Your capacity to create companies wholly new or from existing firms

Your capacity to innovate and generate new ideas

The basic conditions defining the economic milieu of the region

Why Do RICs Matter?

- They create a transition path from unemployment or underemployment to high-skill jobs.
- On average, jobs within clusters pay higher wages.
- Regional industries based on inherent place-based advantages are less susceptible to off-shoring.
- Create many new job opportunities for American workers.
- They connect disenfranchised communities to new career and educational opportunities.
- They stabilize communities by re-purposing idle manufacturing assets, engaging underutilized human capital, and contributing to improvements in the quality of life.

Federal Role In RIC Development

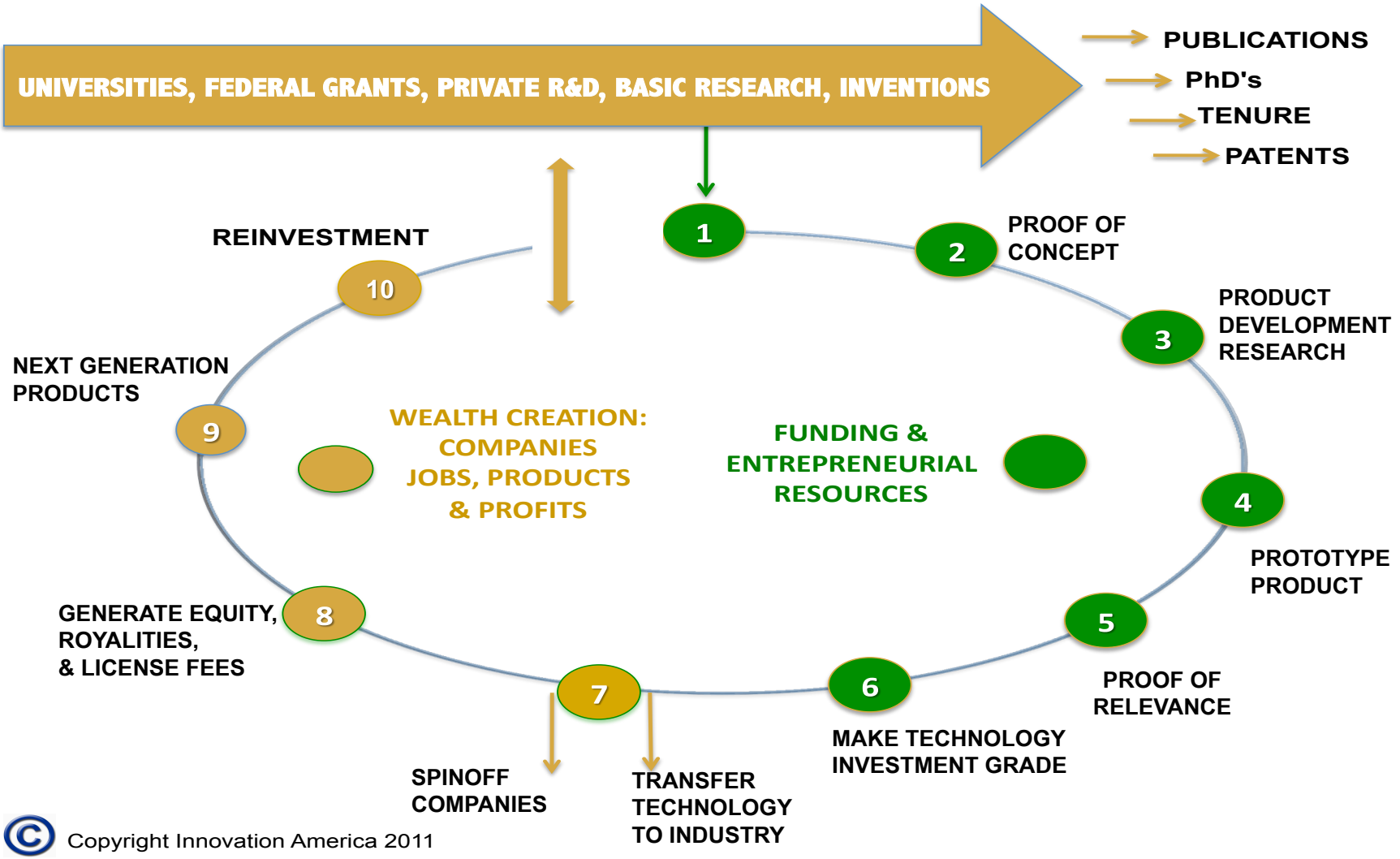
The Federal Government's role is to help self organizing, bottom-up RIC participants become all they can be.

- Identify existing – **NOT** creating new RICs
- Convener of relevant stakeholders
- Creator of overarching framework to support national networks of clusters
- Disseminator of information
- Provider of targeted capital investments

Best Practices in RIC Management

- **Regionally-Led** from existing networks & assets – bottom-up approach
- **Involve partnerships between private and public** at all levels (i.e. local, regional, state, and Federal)
- Unique **strengths of region are built upon** rather than trying to copy other regions (i.e. everyone can't support a biotech cluster)
- **Different strategies are developed for different clusters**
- Well-funded initially and **self-sustaining over the long-term**
- **Linked with relevant external efforts**, including regional economic development partnerships and cluster initiatives in other locations

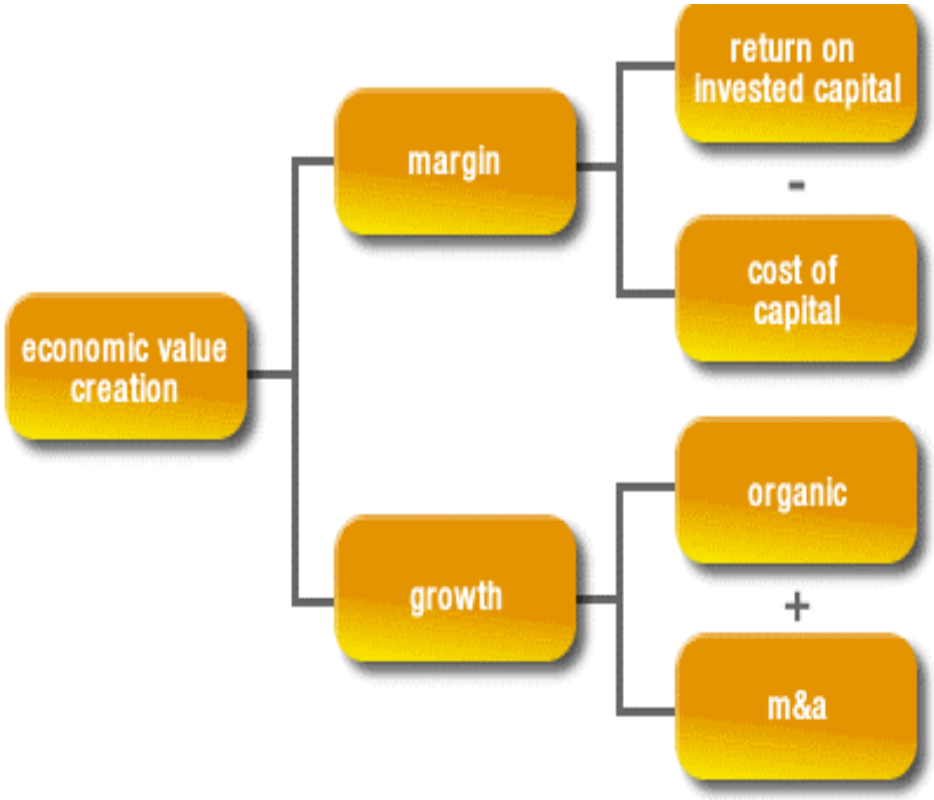
Innovation America Commercialization Model



Innovation Paradigm Shift

PROOF OF CONCEPT
(Technological Feasibility)
"It Works!"

PROOF OF RELEVANCE
(Market Pull)
"It Works To Solve A Problem"



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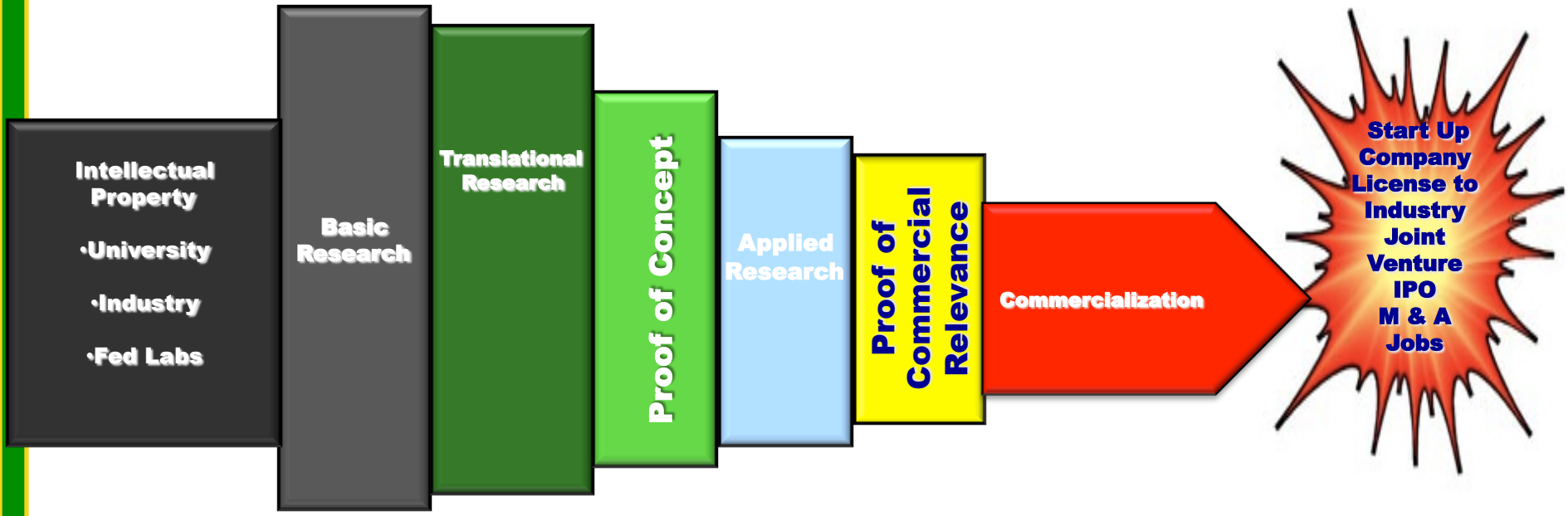
Iowa Integrated Innovation Commercialization Network ™

Knowledge Infrastructure: Interns → MBA's → PhD's → Post Docs → Univ. Research → IIICN → Mentors/Advisors → Industry

Management



State & University Funding: POCC → Demonstration Fund → POCR → State Funds → Iowa Seed Fund

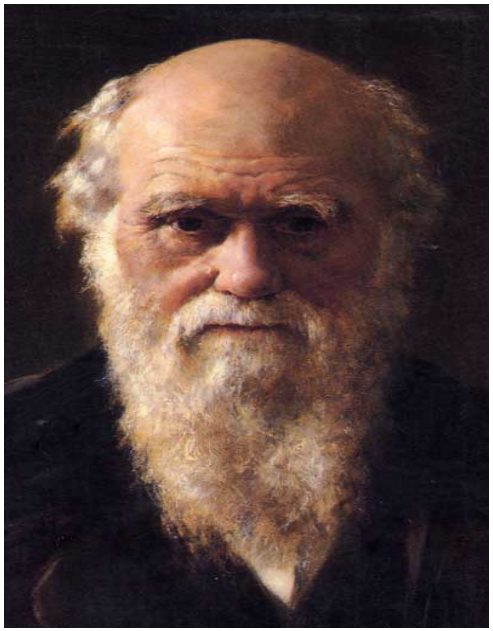
Federal & Public Funding: SBIR/SSTR Phase I&II → TIP → SBIR 2B → I6 Green → E-RIC → Other Public Funds

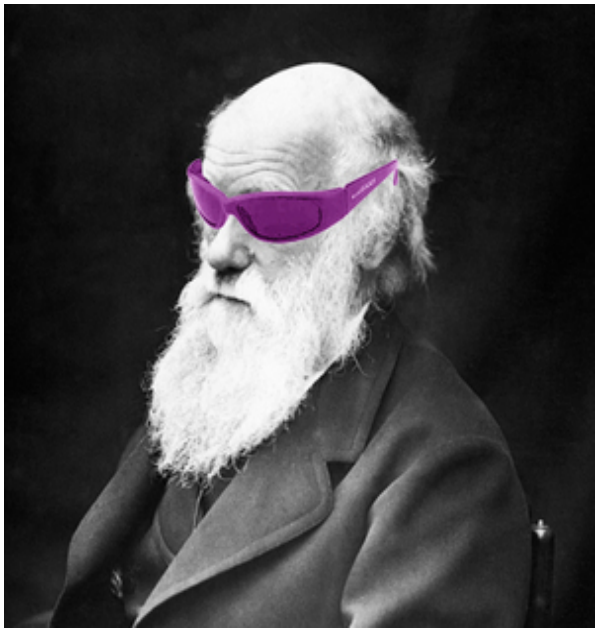
Private Funding: Foundation → Angel → Seed → Venture Capital → Mezzanine → Debt → Bank

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





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ИТМО

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.

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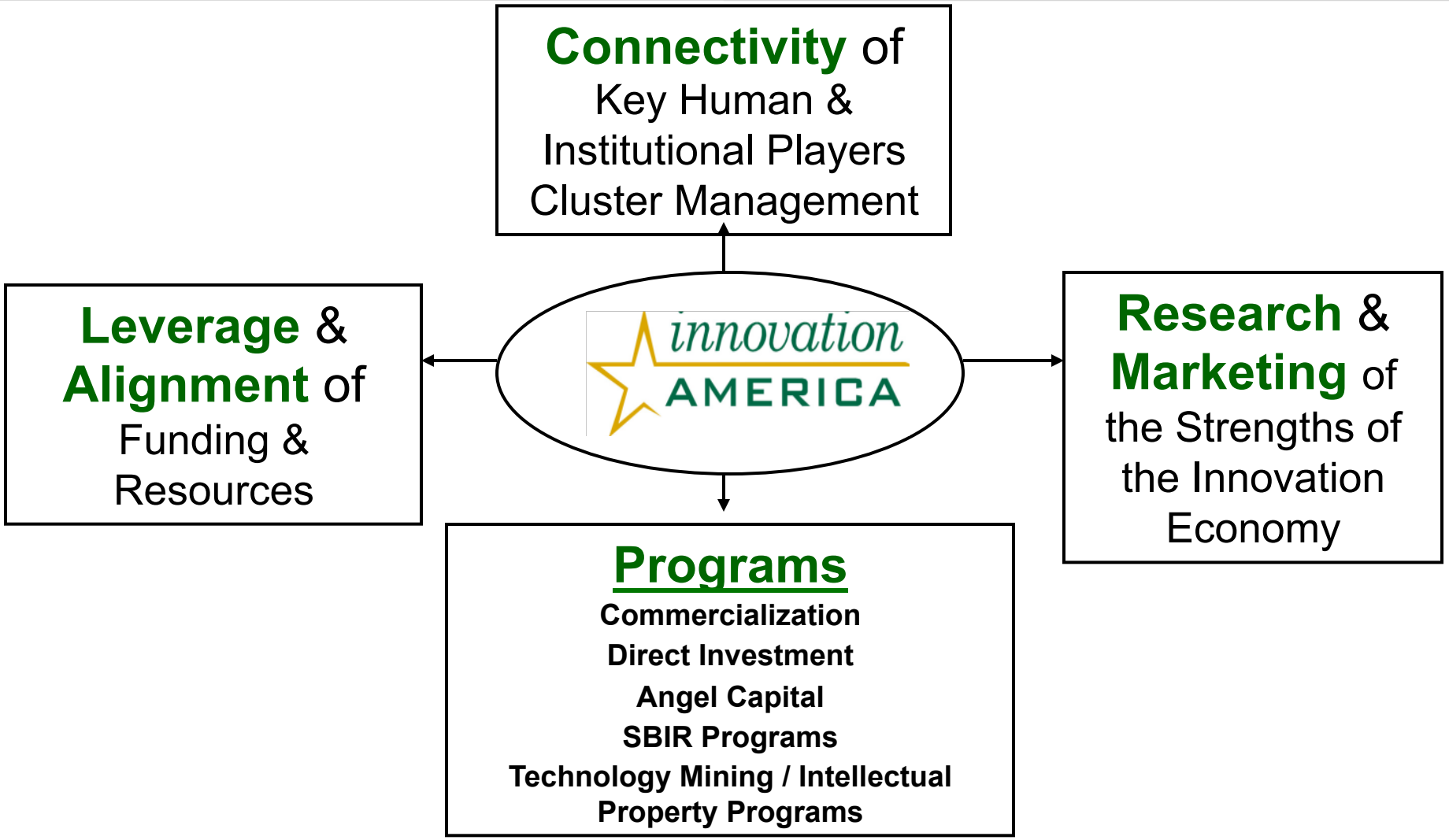
21st Century Innovation Intermediary



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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

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

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U.S. State Innovation Programs

Successful Funding Models

Ohio Third Frontier
Innovation Creating Opportunity

$700M 5-yearBond Issue
62% Taxpayer vote approving

KANSAS BIOSCIENCE AUTHORITY

$581M 15 year Wage-tax TIF

TNInvestco

TTDC
TENNESSEE TECHNOLOGY DEVELOPMENT CORPORATION

$160M VC Premium insurance
Tax Incentives

POSITIVELY MINNESOTA
Department of Employment and Economic Development

$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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Utah Science Technology and Research Initiative (USTAR)

•Established to generate more technology-based start-up firms, higher paying jobs, and additional business activity leading to a state-wide expansion of the Utah's tax base.

•USTAR is comprised of three program areas:
  - •Research Teams, Research Building Projects, and regional Technology Outreach

•Research Teams: World-class research teams have been recruited to Utah and developed internally within six strategic innovation focus areas:
  - •Energy
  - •Biomedical Technology
  - •Brain Medicine
  - •Nanotechnology
  - •Imaging Technology
  - •Digital Media

USTAR
Turning innovation into industry.

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Innovation 2 Enterprise - Oklahoma

- Private not-for-profit focused on wealth creation by growing OK technology-based entrepreneurial economy
- Works directly with universities, entrepreneurs, researchers and companies to help commercialize technologies, launch and grow new businesses and access capital
- Funding
  - Proof of Concept Fund
  - Seed Capital Fund
  - Angel Network
- Entrepreneurial Development

i2E
INNOVATION TO ENTERPRISE

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Kansas Bioscience Authority – Economic Impact

Through June 2010, KBA investments have helped generate:

- **1,195** new **jobs**
- **$212.6 million in capital expenditures**
- **$86.6 million in new research funding**
- **$48.3 million in equity investments**
- ***Including estimated wages of jobs, that represents a $9.41 return to the state's economy for each $1 invested by the KBA***

KANSAS BIOSCIENCE AUTHORITY

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Regional IBED Intermediaries

Innovation Works

Northeast Ohio IBED Intermediaries

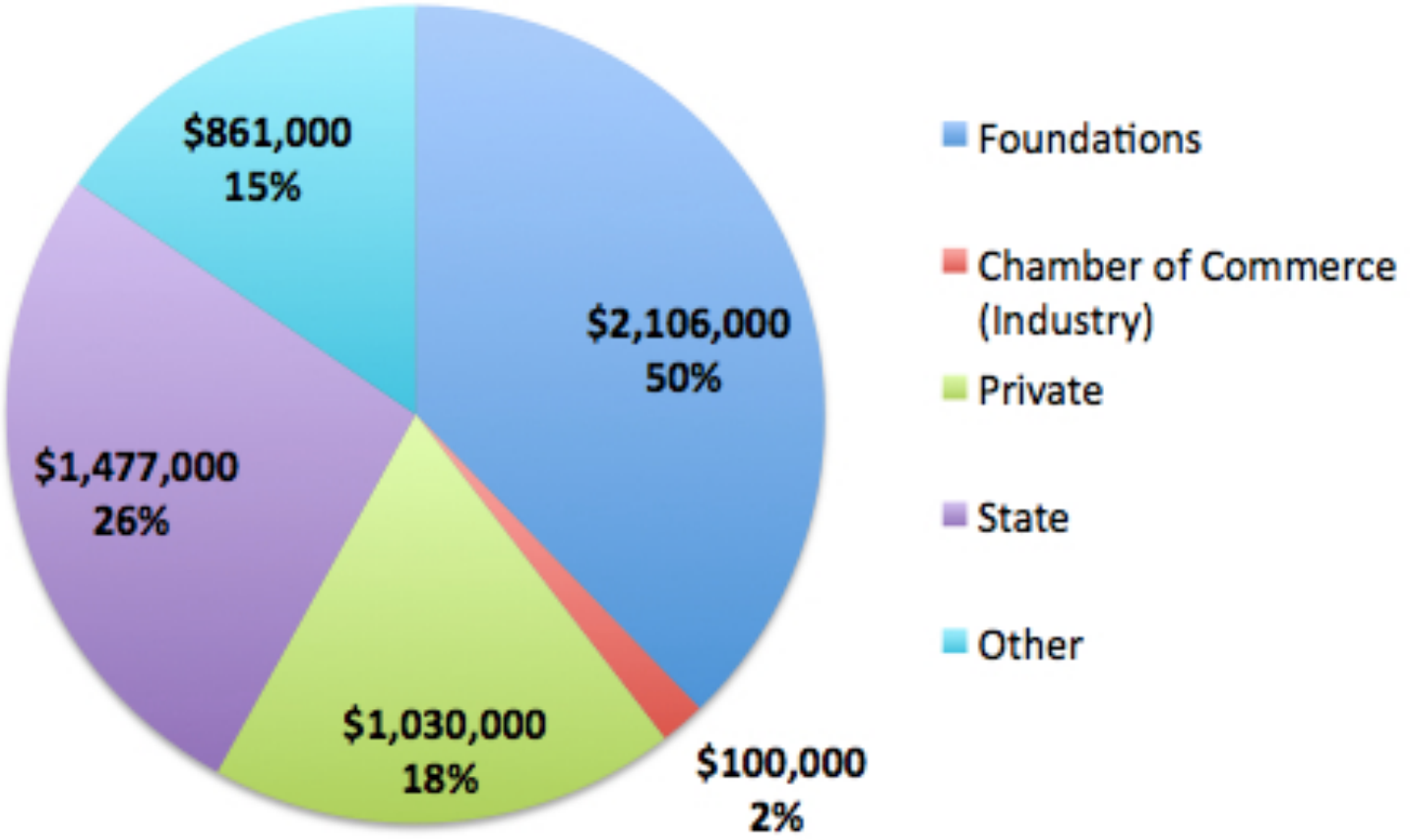
NorTech, (the Northeast Ohio Technology Coalition) is a nonprofit Technology-Based Economic Development (TBED) organization that champions growth in Northeast Ohio's 21 county region. Foundation funded.

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.

BioEnterprise of Ohio 2011 Projected Sources of Funding Projected Funding



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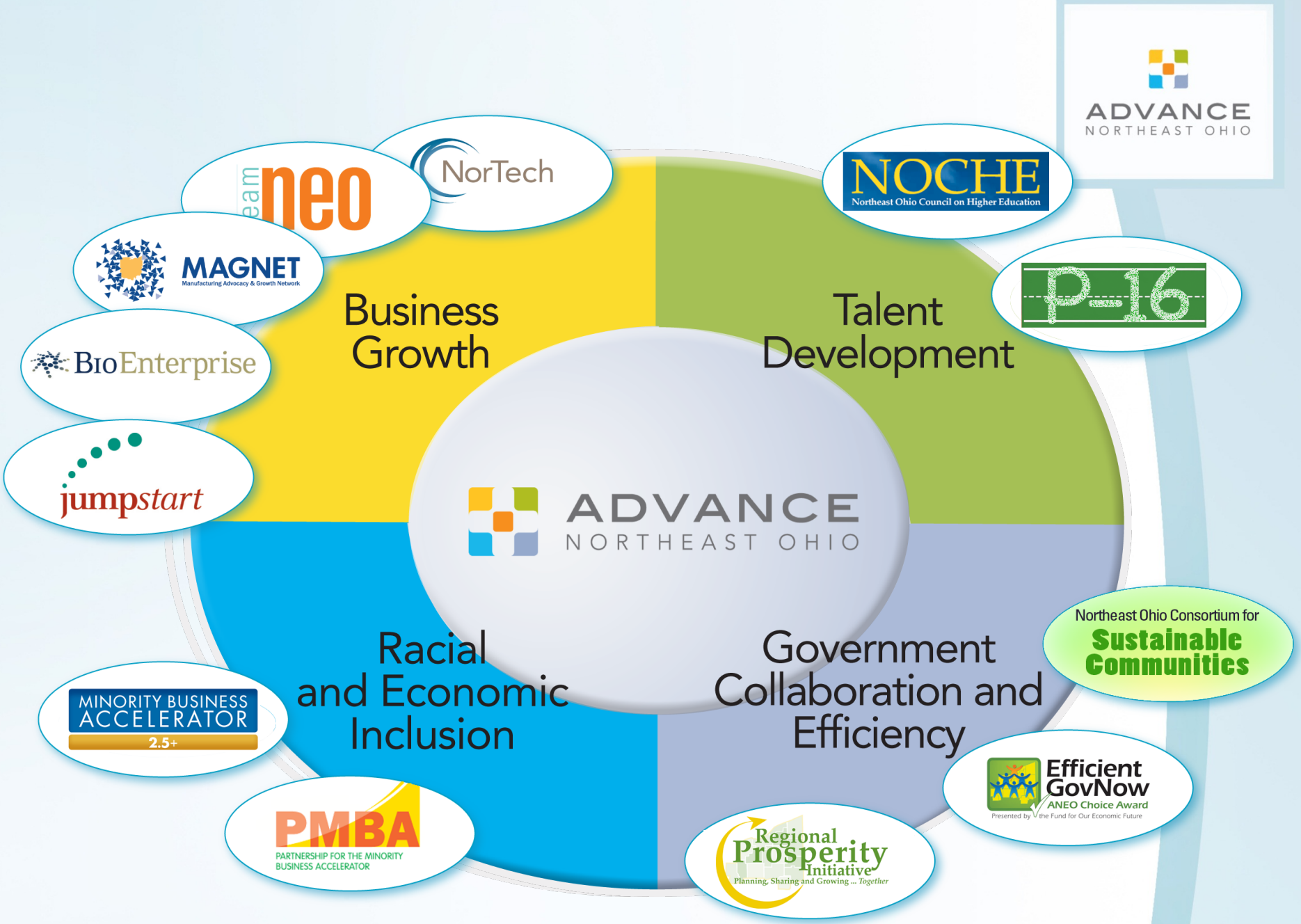

ADVANCE
NORTHEAST OHIO
team neo
NorTech
NOCHE
Northeast Ohio Council on Higher Education
MAGNET
Manufacturing Advocacy & Growth Network
P-16
BioEnterprise
jumpstart
Business Growth
Talent Development
ADVANCE
NORTHEAST OHIO
Racial and Economic Inclusion
Government Collaboration and Efficiency
Northeast Ohio Consortium for
Sustainable Communities
MINORITY BUSINESS ACCELERATOR
2.5+
PMBA
PARTNERSHIP FOR THE MINORITY BUSINESS ACCELERATOR
Efficient GovNow
ANEO Choice Award
Presented by the Fund for Our Economic Future
Regional Prosperity Initiative
Planning, Sharing and Growing ... Together

The New Economy Initiative for Southeast Michigan (NEI)

Founded:2008

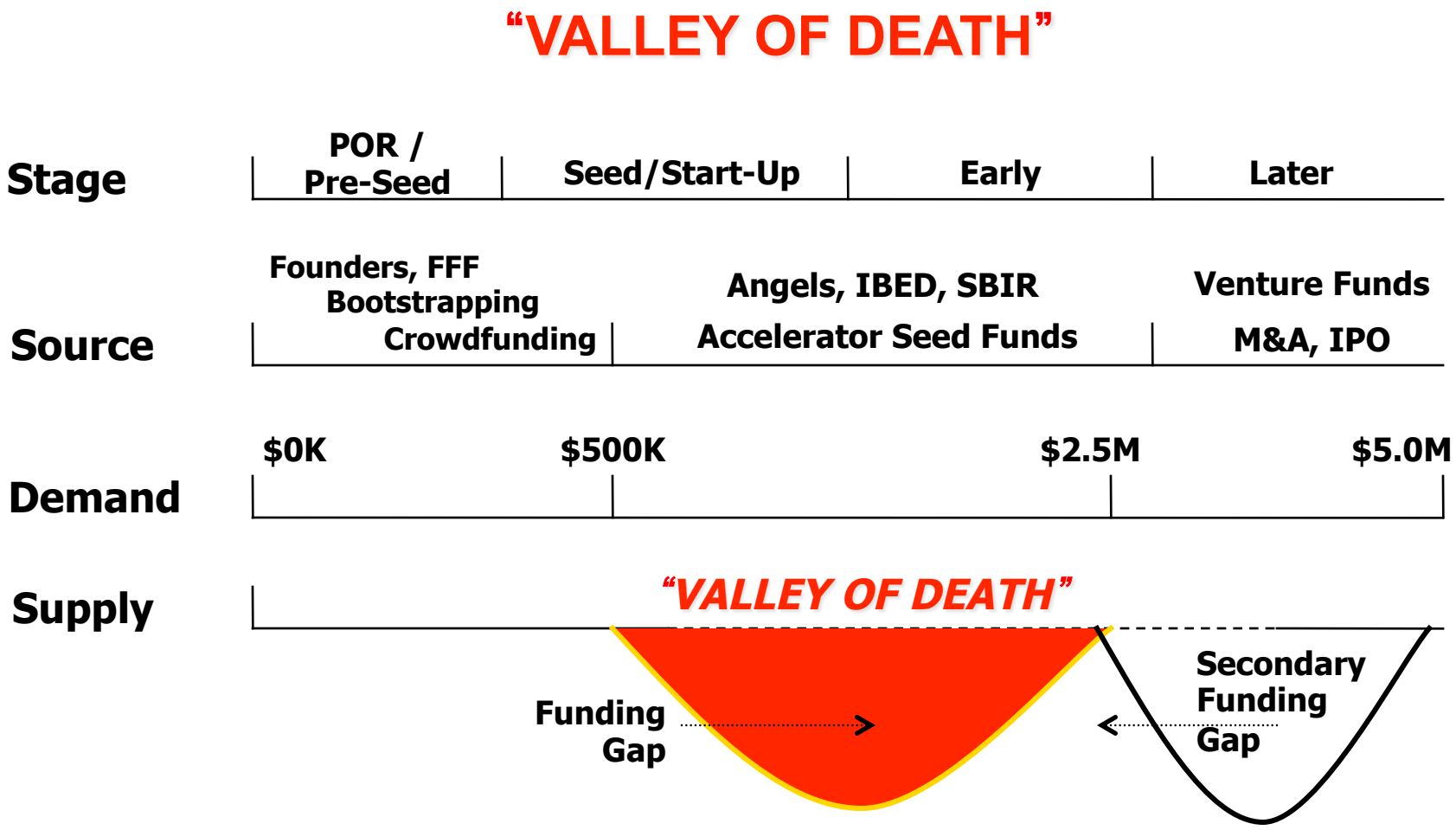
Organizational Mission: Unique philanthropic initiative aimed at helping to restore southeast Michigan to a position of leadership in the new global economy.

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.

Innovation Capital Valley of Death



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ИТМО

Funding & Resources for Innovation Capital

Seed

jumpstart

BioEnterprise
A Leader in Growing BioScience Companies

500 STARTUPS

First Round CAPITAL

Delaware Innovation Fund

NYSTAR

IBED

NorTech
Shaping Northeast Ohio's Technology Future

Ohio Third Frontier
Innovation Creating Opportunity

Ben Franklin Technology PArtners

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MICHIGAN
ECONOMIC DEVELOPMENT CORPORATION

Maryland TEDCO
Technology Development Corporation

KANSAS BIOSCIENCE AUTHORITY

edc
NEW JERSEY ECONOMIC DEVELOPMENT AUTHORITY

Federal

SBIR & STTR

TIP
Technology Innovation Program

SBA
U.S. Small Business Administration

SBIC Program

CRADA

PCP

NRC·CNRC Canada
NRC Industrial Research Assistance Program

Angel

ohio TechAngels

MAG
MID-ATLANTIC ANGEL GROUP

TECH COAST ANGELS

JumpStart NEW JERSEY ANGEL NETWORK

LORE ASSOCIATES

RobinHood VENTURES

SouthCoastAngels
"A Member Managed Angel Fund"

New York ANGELS

Entrepreneur

AUSTEN BioInnovation
INSTITUTE IN AKRON

techstars

Y Combinator

seedcamp

PIPELINE
KTEC'S ENTREPRENEURIAL FELLOWSHIP

DREAMIT VENTURES

NASVF
Advancing Innovation Capital

SSTI

Federal Laboratory Consortium
FLC
For Technology Transfer

ACA
ANGEL CAPITAL ASSOCIATION

nbia

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ИТМО

International Commercialization Alliance

FORMATION OF THE INTERNATIONAL COMMERCIALIZATION ALLIANCE

Goals:

- **Promote international networking and partnerships** with a potential outcome of creating new multilateral or bilateral partnerships
- **Share exemplary practices in the commercialization** of outcomes from research in each of our regions
- **Provide feedback** to support these assessments and the metrics
- **Host annual conference** to present and discuss the successful practices, emerging models & determine relevance universally
- **Share outcomes of commercialization** in our regions and the impact of publicly funded research on our customers and stakeholders.

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Global Innovation Intermediaries

/www.nrc-cnrc.gc.ca/index.html

www.americancouncils.org/

www.europa.eu/index_en.htm

www.startupamericapartnership.org/

www.americancouncils.org/

www.innovationamerica.us

http://www.fumec.org.mx/v5/

http://en.ifmo.ru/

European Innovation Intermediaries

cotec Portugal
Associação Empresarial para a Inovação

http://www.cotec.pt

INNOVATION NORWAY

http://www.innovasjonnorge.no

TEKES

http://www.tekes.fi

VINNOVA

http://www.vinnova.se

TECH sud-est south east

http://techsoutheast.ca/index.php

NL Agency
Ministry of Economic Affairs, Agriculture and Innovation

http://www.senternovem.nl

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ИТМО

What Is A Road Map…..Why Is It Needed?

- A roadmap answers the ***question "Where do we want to be and how to we get there?"***
- A cluster roadmap ***provides strategies and action*** plans to best ***achieve a vision of the future shared by a critical mass*** of industry-related organizations.
- The strategies and action plans are developed according to the unique strengths of the cluster and region as compared to a global market opportunity.

Innovation America: Innovation Road Map Process

1. Literature Review of Comparables
2. Key Stakeholder Interviews/Recommendations
3. Asset Mapping/Cluster Analysis
4. GIS Innovation Mapping
5. Innovation Benchmarking/Index (Peer 2 Peer)
6. Innovation and Entrepreneurship Resource Identification (Entrepreneur Resource Guide and Database)
7. Innovation Economic Development Organizational Analysis and Matrix
8. Innovation & Commercialization Gap Analysis (programs & services)
9. Innovation Ecosystem Public Policy Recommendations
10. Develop Strategic Plan
11. Organizational Leadership and Staffing
12. Operations/Implementation Plan and Program Portfolio
13. Branding/Marketing Strategy and Market Research
14. Economic Impact Analysis
15. Celebrate Success

Innovation America Road Map Process

Задача	Результат
Исследования инноваций	
1. Обзор сравнений	Отчет и анализ сравниваемых субъектов, институтов или географических регионов
2. Ключевые интервью заинтересованных сторон и представления	Отчеты интервью и рекомендации
3. Картография активов/Анализ кластера	Карта активов-база данных всех инноваций и того что с ними связано. Отчет по целевым инновационным секторам и рекомендации
4. Инновационные этапы	Отчет по показателям инноваций, сравнивающий экономические объекты, или отчет, в котором определенные экономические объекты сравниваются с другими подходящими индикаторами инноваций

Innovation America Road Map Process

Инновационные ресурсы	
5. Системы географической информации, картография инноваций	Процесс развития и осуществления программы Географических информационных систем и системы Картографии инноваций
6. Инновации, коммерциализация, финансирование и идентификация предпринимательских ресурсов	Публикация и печать путеводителя по ведущим инновациям, коммерциализации, финансированию и идентификации предпринимательских ресурсов, совместно с развитием он-лайн базы данных инновационных ресурсов
Программы и анализ политики развития экономики, основанной на инновациях	
7 Организационный анализ инновационного экономического развития и матрица	Отчет, сравнивающий все организационные структуры экономического развития, финансирования и программы
8. Gap анализ инновационной экосистемы (программы и сервисы)	Основанный на вышеперечисленных заданиях, составляется отчет выявляющий программы инновационной экосистемы и пробелы в сервисах
9. Государственная политика инновационных экосистем и рекомендации к финансированию	Разработка рекомендаций по проверенной или заново составленной инновационной политике, для того чтобы заполнить пробелы и составить план необходимых действий

Innovation America Road Map Process

Стратегический план, структура организации и разработка стратегии	
10. Создать Стратегический план развития экономики, основанной на инновациях	Публикация стратегического плана с рекомендованной организационной структурой, управлением, бюджетом и источниками финансирования, операционный план, включающий развитие инновационного взаимодействия/ частно-государственного партнерства
11. Организационное лидерство и персонал	Разработать организационную структуру с рекомендациями по должностным обязанностям
12. Операции/план разработки и портфолио программы	Разработать тактический операционный план для реализации
Маркетинг и метрика	
13. Брендинг, маркетинговая стратегия и исследования рынка	Разработать детализированный маркетинговый план\ план по брендингу и коммуникационной стратегии
14. Анализ экономического вклада	Разработка методологии процесса и метрики для анализа экономического вклада. Отчетность
15. Празднование успеха	Делитесь своим успехом

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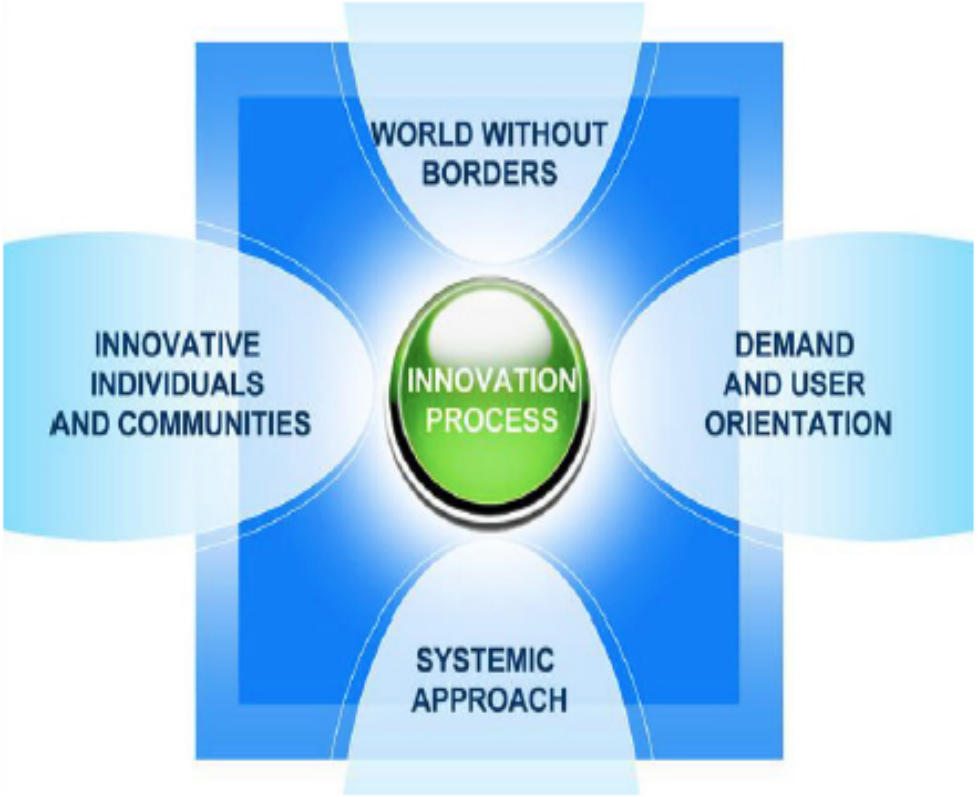
Finland's National Innovation Strategy

Proposal for

Finland's National Innovation Strategy

Initial release – this document will be published in it's final form by the Ministry of Employment and the Economy once it has been passed by the Government



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ИТМО

Finland's National Innovation Action Plan

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ИТМО

Elements of an Innovation Road Map

- Develop an Innovation Road Map & implementation strategy
- Create an Early-stage innovative job Fund of Funds (FOF)
- Development a SBIR & STTR type program
- Develop a Technology Innovation Program (RTIP)
- Create a Federal Angel Capital Investment Tax incentive
- Create a R&D Tax Credit program
- Create the 1st electronic Innovation & Entrepreneurship Clearinghouse

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Bill Gates - Microsoft

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

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