Innovation Based Economic Development: 
International Efforts for Business Creation and Entrepreneurial Accelerator for Vietnam
AGENDA

• Speaker’s Background
• Brief introduction to Idea Foundry International & Pittsburgh City
  – IF innovation based programs
  – Case study of Wombat and Chroknow
• Why Pittsburgh?
  – Five Strategic Sectors
• How do these programs work for Vietnam?
  – Vietnam SED strategy
  – Innovation based programs process
    • The training stages
    • A complete Solution
  – EB5 visa program
• Q&A
Speaker’s Background

- Michael M. Matesic, President & CEO of Idea Foundry, Inc.
- Over the last 10 years at Idea Foundry and has invested in and participated in the development of over 100 technology start-ups, creating jobs in the region.
- Was Chief Executive Officer for two start-up companies and Chief Financial Officer for MetalSite, Inc., participating in the rapid growth of the company. While at MetalSite, Mr. Matesic led the startup of the company’s subsidiary, ScrapSite.
- Served as Senior Vice President and Chief Financial Officer for Anker Coal Group and its subsidiaries
- During his ten years with Anker Coal, Michael led a successful registration with the Securities and Exchange Commission, managed the company’s substantial growth, established and invested in various start-up companies and completed many acquisitions.
Idea Foundry International

- Not-for-profit founded in 2002 in Pittsburgh. Filling the gap between technology innovation and commercialization to create high-wage jobs.
- Increasing both the number of technology start-ups and their chances of survivability locally, regionally, globally
  - *Skills and knowledge* - experienced mentors, a structured process and tools to help develop business models.
  - *Funding* - financial support to pay the bills and access to capital to take it to the next level.
  - *Relationships* - a network of technical, commercial and financial resources to assist now and in the future.
- Over 90 companies created
- Over $1Billion research annually
A Glimpse of Pittsburgh

- http://vimeo.com/54497984
Why Pittsburgh?

- Strategic Location
- Educated, skilled workforce
- Affordable cost of doing business
- Access to world-class innovation
- High quality of life
Strong Foundation in Five Strategic Sectors

Health Care & Life Sciences

Advanced Manufacturing

Information & Communications Technology

Energy

Financial & Business Services
Advanced Manufacturing

- A century-long tradition of world-leading innovation and manufacturing excellence

- **Assets**
  - World HQ for global leaders
  - 120+ research centers
  - Nearly 96,000 skilled workers

- **Strengths**
  - Electrical equipment
  - Industrial machinery
  - Nanotechnology
  - Precision machining
  - Specialty chemistry
  - Specialty metals
Pittsburgh is the new center of American energy; ample natural resources and a 150-year history of energy innovation

**Assets**
- 800+ firms that directly support 50,000+ jobs
- Uniquely strong across seven energy industries

**Strengths**
- $1B in energy-related R&D funding
- National Energy Technology Lab
- Consol R&D Center, U.S.’s only private coal R&D facility
- University R&D
- Energy Alliance of Greater Pittsburgh
Financial & Business Services

- A center for asset management, banking and shared services for more than 150 years
- Largest industry contributor to Gross Regional Product, contributing 23%

**Assets**
- World HQ for global leaders
- Employing 230,000 people at some 15,000 firms
- Home to an above average concentration of lawyers, accountants and auditors
- Half of all U.S. bank deposits are located within 500 miles of Pittsburgh

**Strengths**
- Corporate HQ and Shared Services
- Legal Services
- Mortgage Servicing
- Transaction Processing
Health Care & Life Sciences

- Unique convergence of research and clinical assets

**Assets**
- 5,500+ HC&LS companies in the region
- $720M+ spent on Life Sciences R&D annually
- Nearly $500M in NIH Funding annually
- Specialized centers
  - McGowan Center
  - Quality of Life Technology Center
  - Hillman Cancer Center
  - Pittsburgh Life Sciences Greenhouse

**Strengths**
- Medical devices
- Regenerative medicine
- Tissue engineering
- Diagnostics
- Transplants
World-Class Research & Development
Tied to Commercialization

University of Pittsburgh

Carnegie Mellon

UPMC

Innovation Works

Pittsburgh Life Sciences Greenhouse

NETL

National Energy Technology Laboratory
World-Class Health Care

- University of Pittsburgh Medical Center (UPMC) ranked the 10th-best national medical system in the country, the highest ranked among Pennsylvania medical centers

- Children's Hospital of Pittsburgh, ranked in the Top 10 of “Best Children’s Hospitals Honor Roll”
  - Includes the 300,000 SF Rangos Research Center

- West Penn Allegheny Hospital ranked in the top 50 centers in the nation for quality care in cardiology and heart surgery, gastroenterology and orthopaedics

Ranked by *U.S. News & World Report, 2011 & 2012*
Information & Communications Technology

- Synergy between corporate and academic R&D

- **Assets**
  - Universities
    - Carnegie Mellon, University of Pittsburgh, California University of Pennsylvania (PA), Indiana University of PA, Penn State University
  - 1,500 tech firms with 25,000+ employees
  - Nearly $1.8B in venture capital invested in emerging regional businesses in the past decade

- **Strengths**
  - Data storage
  - Agile robotics
  - Cyber-security
  - Networking hardware
  - Electro-optics
36 Colleges and Universities

- Over 36,000 degrees awarded annually
- 169,000 students enrolled annually
- World-Class Rankings
  - Carnegie Mellon
    - 1st-Best Computer Science Ph.D. program (U.S. News and World Report)
    - 35th-Best University in the World (London Times)
    - 5th-Best Business School (Wall Street Journal)
  - University of Pittsburgh
    - 88th-Best University in the World (London Times)
    - Best Business School Value in the U.S.; 8th-Best in the World (Financial Times)
We Worked Hard to Give Every Resident a High Quality of Life
Became sister cities in Dec 2\textsuperscript{nd}, 2008 after a period of various cooperative activities between people of Pittsburgh and Da Nang,

The partnership establishes a formal basis by which cities can develop and sustain cultural, social, educational and economic ties with one another.
OUR PROGRAMS
**Asian Innovation Accelerator**

Through our AIA Program, *Idea Foundry invests both time and money* to help Asian entrepreneurs germinate their initial concept into a business. This program provides cash and guidance focused on developing the idea’s commercial potential. *Throughout the process, Asian entrepreneurs benefit from expert mentoring, and a broad spectrum of business assistance tailored to their specific needs.* The goal of this program is to transition back to the sponsoring city/country up to 10 businesses per year including the entrepreneurial talent. Vietnam, Beijing and Wuhan are being proposed to participate in AIA.

**Pittsburgh Regional Investment Center**

Idea Foundry’s subsidiary is an approved Regional Center under the US Immigration Service to facilitate EB-5 visas. This involves the investment in job creating projects in our region by foreign nationals in exchange for permanent residency in the US. As an economic development agency, our Regional Center can be flexible to facilitate capital attraction in a variety of EB-5 eligible avenues. *We can find a project to meet any investor’s need and our larger projects are selected to meet the broadest of investors’ criteria.* The goal of this program is to not only facilitate the requirements of the US program but also to introduce the business and community values of the Pittsburgh Region to regions around the world.

**Innovation Economy and complimentary activities**

Idea Foundry has developed a proven, successful model for nurturing and mentoring new and existing businesses. *This model embodies successful technology transfer which has been adapted to accelerate technology commercialization and job growth.* Through a variety of educational, training and consulting offerings we hope to assist regions in Vietnam to accelerate the diversity of their economies by including more entrepreneurship and innovation.
FULL CIRCLE OF EFFORTS

- Core of our Program Services
  - Diagnostic
  - Work Plan
  - Consulting
  - Business Development

- Process Elements
  - Diagnostic
  - Work Plan
  - Consulting
  - Business Development

- TOOLS that help think through and build strong business relationships
  - Entrepreneurial education
  - Ecosystem development
  - Idea Foundry Model
  - Government consulting
  - Creative class of workers
  - Training in Pittsburgh and Vietnam

- Qualified job creating PA projects
- International investors
- Attract foreign business w/ EB5 funding to locate
- Students and their families as EB5 investors
- Entrepreneur training
- Business creation for Vietnam
- Talent filter for Pittsburgh
- Potential EB5 projects
- Vietnam innovation economy

Pittsburgh advantages
- Site selection process
- Facilitation and financing
- Welcome Center
- Community development
CASE STUDIES
• A Carnegie Mellon University spinoff launched in 2008
  – To commercialize groundbreaking usable security and privacy technologies
• Originally developed as part of one of the largest national research projects on combating phishing attacks.
• WST solutions address both the technical and human vulnerabilities associated with phishing.
• Wombat’s suite of training and filtering technologies offer the most compelling ROI proposition in the marketplace today and have been deployed in diverse sectors finance and banking, government, defense, telecommunication, education, and healthcare.

**Idea Foundry role**

• Provided investment and advisory services to WST that:
  – Help this enterprise to meet the rapidly growing demand for its anti-phishing training and filtering products.
  – Allowed WST to beef up its sales, marketing and business development activities
• Provides a software-based solution for the predictive design of controlled release food & drug formulations that are currently a challenge to design and manufacture.

• The technology, developed through years of research at the University of Pittsburgh allows Pharmaceutical and Food manufacturers to eliminate the costly trial and error usually involved in developing time-release formulations.

• ChroKnow’s proprietary algorithm does this by enabling predictive and optimized design of formulations before clinical trials or actual manufacturing thus saving both time and money while increasing accuracy.
Idea Foundry role: provided support through two of its programs:

- Faculty from the University were accepted into Idea Foundry’s **Life Sciences Accelerator Program** which provided financial support towards developing an Intellectual Property strategy and in-kind support to explore market potential.

- On establishing commercial viability, the company was structured and formed by Idea Foundry including ownership plans, sourcing of business talent to lead company and negotiating the technology transfer from the University.

- IF made a financial investment of $50 K in ChroKnow through its core **Transformation Fellowship Program** including additional in-kind business development support and incubation space. The efforts through the investment program focused on fundraising and go-to-market strategy and identification of early customer opportunities to further product development.
HOW DO THESE PROGRAMS WORK FOR VIETNAM?
The goal of the Vietnam is to establish strong foundation for a modern, industrialized society by 2020.

The government developed the Socio-Economic Development Strategy (SEDS) 2011-2020, which focuses on:

- structural reforms
- environmental sustainability
- social equity
- emerging issues of macroeconomic stability.

**Three important areas were defined in this strategy including**

1. Promoting human resources/skills development (particularly skills for modern industry and innovation)
2. Improving market institutions
3. Infrastructure development
The Eleventh Congress of Vietnam (Jan 2011) called for a more comprehensive approach to the country's renovation and decided to promote greater citizens' participation and unity within the country and to engage proactively in international integration.

The Congress re-affirmed Vietnam's approach to state-led development, but also revised key policy documents to place greater emphasis on market processes and non-state ownership of economic assets.
Making & Growing Jobs!

The Asia Innovation Accelerator Program has been created to foster job creation in Pittsburgh and in Vietnam by supporting early stage company creation in various industries and assist them to relocate or expand their business in Vietnam upon graduation. Create your own job!

What Will We Provide for You?

• Participants benefit from Idea Foundry’s proven system of business creation, the Tech Mentor™ process, which will enable them to study and develop a business around their own idea or one provided by Idea Foundry.

• Over a 6 to 12 month period the idea can be turned into a business either to remain in Pittsburgh or return with the participant to Vietnam.

• We maintain close relationships with programs throughout Vietnam so that relocating to Vietnam with the business is seamless and positioned to benefit from the acceleration and incubation programs provided by regions of Vietnam.
The Process

• Determine investors’s priorities for new businesses creation in Vietnam,

• Promote the program throughout the Pittsburgh region, targeting promising technologies and inventions by Vietnamese students, scholars and researchers.

• Identify technologies and entrepreneurs that match with Vietnam regional interests.

• Select potential candidates for our practical training program in order to help them set up own businesses in Vietnam.
The Process (cont)

• Provide practical training to selected candidates

• Transition potential business plans and participants back to Vietnam, so investors can assist them for further development and growth.

• Investors will provide the following sponsorship necessary to the program:
  • Cooperation and priority setting for the program;
  • Funds to support the program;
  • Assistance with identifying local market advantages and disadvantages;
  • Attendance at one or more events in Pittsburgh to promote Vietnam regional investment environment and preferential policies;
  • Facilitation for participants to start business in Vietnam, or to expand business presence there.
  • Idea Foundry will supply all of the infrastructure and forms for operations.
The training stages

A minimum six-month long program

- Pre-commercialization
  - The Technology Transferring Phase
- Commercialization
  - The Business Strategy Creating Phase
- Growth
  - The Asia Office Relocating Phase
Why a unique business system?

- Knew how to help companies, but needed to help them help themselves
  - Discovered that tools and more of a “team workshop” approach were essential.
  - Dollars and counsel were not enough for the earliest stage ideas.
  - Needed to encourage “process thinking”
- Developed our own comprehensive set of tools targeted specifically at start-ups because existing resources were:
  - Guides on what to do not how to do it
  - “An inch wide and a mile deep” or “a mile wide and an inch deep”
  - Too complex/theoretical for most entrepreneurs
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