Entrepreneurship 101

Kit Needham
Not all Startups are the Same

<table>
<thead>
<tr>
<th>Small Business/Life-Style</th>
<th>Investment/Exit</th>
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<tbody>
<tr>
<td>- Known business examples to learn from</td>
<td>- Untested business model with a high degree of uncertainty</td>
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<tr>
<td>- Funded by banks or stockholders</td>
<td>- Funded by investors (angels and VCs)</td>
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<td>- Business plan</td>
<td>- Business model</td>
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<tr>
<td>- Sustain a particular level of income</td>
<td>- Grow big quickly and sell (exit)</td>
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<td>- Provide dividends or increased stock price</td>
<td>- Provide a 5x-10x return to the investors</td>
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The Players

• Incubators
• Accelerators
• TBEDs
Incubators

• Where the commercialization plan ‘hatches’
  – Mentoring/coaching/guidance
  – Access to materials
  – Introductions to advisors, domain expertise
  – May provide space
  – May provide micro-grants

• Goal – get initial seed funding
Pittsburgh: A Community of Innovation
FOR INVESTMENT/EXIT START-UPS

<table>
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<tr>
<th>Idea Development</th>
<th>Startup</th>
<th>Early Growth</th>
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<td>UNIVERSITIES</td>
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Accelerators

• Fixed term, cohort-based programs
  – Provide mentorship and educational components
  – Highly competitive to get in
  – Get seed investment ($20k-$50k) in exchange for equity

• Goal – “Demo Day” to attract follow-on investment

• Examples: AlphaLab/Gear, Idea Foundry, Tech Stars, Y Combinator, DreamIt Ventures, etc
Pittsburgh: A Community of Innovation

Universities leveraging $1 billion research and student innovation

- Idea Foundry
- Idea Institute
- Idea Innovation

Olympus Incubators

ACCELERATORS

- AlphaLab Software
- AlphaLab Gear Hardware & Robotics
- Idea Foundry Healthcare & Life Sciences
- Entertainment & Education
- Social Enterprises
- Water
- Thrillmill
- DemandCo

Startup

Early Growth

Rapid Growth

EXIT
Pittsburgh: A Community of Innovation

Universities leveraging $1 billion research and student innovation

Idea Development

Incubators

Startup

Early Growth

Rapid Growth

EXIT

Olympus

Idea Foundry

Innovation Works

IT Medical Devices

Idea Foundry

Healthcare & Life Sciences

Entertainment & Education

Social Enterprises

Water

Accelerators

AlphaLab Software

AlphaLab Gear Hardware & Robotics

Idea Foundry

Medical Devices

Thrillmill

Thinktiv

Pittsburgh Life Sciences Greenhouse
MONEY/FUNDING

Investors

• INVESTORS
  – FRIENDS & FAMILY (& FOOLS)
  – CROWDFUNDING
  – ANGELS and ANGEL GROUPS
  – SUPER ANGELS
  – VENTURE CAPITALISTS
Angels vs VCs

### Angels
- High net-worth individuals i.e. their own money
- Tend to invest locally
- Tend to invest early ($25k - $50k)
- Often form Angel Groups to research and co-invest in deals (e.g. BlueTree)

### Venture Capitalists
- Create a fund using other people’s money
- Seek deals from everywhere and often require them to relocate nearby
Angels: Majority of Startup Funding

Funding by Source and Stage - 2011

Angel Investors 2011
- $22.5B
- ~66,000 deals
- 42% seed/startup
- 55% early stage
- ~318,500 individuals

Venture Capital 2011
- $29B
- ~3,750 deals
- 3.5% seed/startup
- 68% later/expansion capital
- Total 791 firms (not all active)

Sources: UNH Center for Venture Research, PwC MoneyTree and NVCA
MONEY/FUNDING
Terms

Terms
- Seed Funding
- Series A, B, etc.
- Valuation
- Convertible Debt
- 10x return
- Exit (Sale or IPO – Initial Public Offering)
People

• Steve Blank – *4 Steps to Epiphany*
  “Get out of the building”
• Eric Reis – *The Lean Startup*
  – MVP (Minimal Viable Product)
  – Feedback Loop

Build

Learn

Measure
People and Terms

- Steve Blank – “Get out of the building”
- Eric Reis – “The Lean Startup”
- Business Model Canvas

The Business Model Canvas

Key Partners

Who are our key partners? Which key activities do partners perform? Are we acquiring from partners?

Key Resources

What key resources do our value propositions require? Our distribution channels / customer touchpoints / revenue streams?

Key Activities

What key activities do our value propositions require? Our distribution channels / customer touchpoints / revenue streams?

Value Propositions

What value do we deliver to the customer? Which one of our customers’ problems are we solving? Which bundles of products/services do we offer to each customer segment? Which customer needs are we satisfying?

Customer Relationships

What type of relationship does each of our customer segments expect us to establish and maintain? Which ones have we established? How are we integrating with the rest of our business model?

Customer Segments

For whom are we creating value? Which are our most important customers?

Channels

Through which channels do our customer segments want to be reached? How are we reaching them now? How are our channels integrated? Which ones are most cost-efficient? How are we integrating them with customer touchpoints?

Revenue Streams

For what value are our customers ready to pay? How much does each revenue stream contribute to overall revenue?

Cost Structure

What are the most important costs inherent in our business model? Which key resources are most expensive? Which key activities are most expensive?

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Pittsburgh: A Community of Innovation
Funding for investment/Exit Startups

**FUNDING**

**Idea Development**
- *Foundations*
  - Funds startups

**Startup**
- Federal Govt
  - SBIRS/STTRs
    - Funds startups

**Early Growth**
- State: DCED
  - Funds IW and subs, PLSG

**Rapid Growth**
- VCs: Adams, Birchmere, PEP, Draper, etc.
  - Funds startups

**EXIT**

**PUBLIC SECTOR;**

**PRIVATE SECTOR**
Pittsburgh: A Community of Innovation
LifeStyle and Investment/Exit Startups

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Pittsburgh: A Community of Innovation
LifeStyle and Investment/Exit Startups

Idea Development

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Rapid Growth

Maturity

Education

Mentoring

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Small Business Development Centers- Pitt; Duquesne
Innovation Practice Institute –Pitt Law School (Start Smart) with CMU
SCORE
CWE
Powerlink

IEE - Pitt
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LifeStyle and Investment/Exit Startups

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- **Education**
- **Mentoring**
- **Space/Support Services**
Q&A

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FOR INVESTMENT/EXIT START-UPS

Idea Development

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UNIVERSITIES

Idea Foundry

Tech Incubators

OLYMPUS

IDEA FOUNDRY

INNOVATION INSTITUTE

Pgh Life Sciences Greenhouse

ACCELERATORS

AlphaLab

SOFTWARE

AlphaLab Gear

HARDWARE & ROBOTICS

Idea Foundry

HEALTHCARE & LIFE SCIENCES

ENTERTAINMENT & EDUCATION

SOC. ENTERPRISES

WATER

Acclerators

INNOVATION WORKS

IT MEDICAL DEVICES

FUNDING

GOVERNMENT

FED SBIRS

STATE DCED

FOUNDATIONS

ANGELS

BlueTree Allied Angels

Keiretsu Forum

VCs: Adams, PEP, Birchmere, Draper,