The Business of Making
Strategies for Success from Startup to Exit
what hardware used to be.
In recent years, Silicon Valley seems to have forgotten about silicon.
The Hardware Revolution

Removing Barriers to Entry

• Open source hardware
  • Arduino boards, etc

• Cheap pre-fab dev kits & sensors

• Access to tools and equipment for prototyping and early production
  • Techshop / makerspaces

• Crowdfunding platforms to prove early customer traction

• Infusion of capital from funding entities
Building a Successful HW Company

1. Customer Validation
2. Product/Market Fit
3. Company & Team Building
4. Investor Buy In
Smart Prototyping

- Fake it until you make it
- One hypothesis at a time
- Ugly & Fast beats Beautiful & Slow
Successful Products Start Simple

- 1st iPhone - iPod with up/down/left/right buttons
- 1st Fitbit - single pedometer, not wireless, no subscription revenue
- 1st DropCam - overpriced IP camera that was easier to use and had better software
Supply Chain Hacks

• Shop outside the box
• Ride high volume product coattails
• Alibaba & Other Online Matchmakers
• Never, ever be the guinea pig
Choosing a Manufacturing Partner

• New Factory or New Product – Not both

• Involve factory early – DFM

• Small production runs to start, increase slowly

• 1st Production Run....be there in person
Design for Manufacture in the U.S.

- Can be Lower Cost!
- Time to Market
- Inventory Carrying Costs
- Quality Control & IP Protection
Kickstarter Tips

• Key to success is before the launch
• Nail down 50%+ of total raise before launch
• Everyone wants to back a winner
• Your competitors are watching
Distribution Amplifies Every Choice

• Price high to start

• Do things that don’t scale

• Engineering:Software => Marketing:Hardware
PROFIT ≠ CASH
Regional Manufacturing Assets

- Over 8000 Manufacturers in the region
- Skilled Advanced Manufacturing Work Force
- Infrastructure to support new manufacturers
- Leading research universities and other technology institutions
Industry Diversity
#1 City in World for HW

- Regional Support for Manufacturing
- Experience working with early stage products
- Local Skilled Workers

PITTSBURGHERS KNOW HOW TO MAKE STUFF
What is an accelerator?

**Philosophy**
- Accelerate market learning through rapid iteration and testing early products with customers

**Unique Model**
- Focus on customer development intertwined with product design and development
- Mentorship, Education
- Community, Networking
- Funding
- Space

**AlphaLab**
- Founded Feb 2008 to build and accelerate Pittsburgh’s software/Internet ecosystem
- Leverage national and local trends
  - Decreasing cost to build software products
  - Agile development techniques

Charter member of Global Accelerator Network

#6 ranked accelerator nationally
Helping Companies Build Momentum

Accelerator
- Provide key resources to help a startup move faster toward product, customers, funding

Philosophy
- Be open to challenge and test your key assumptions quickly
Among Most Active in US

$70M Dollars Invested

$2.0B Follow-on Funding

300+ Companies Funded

up to $600k Invests up to $600k in early stage companies
Office Space
Educational Sessions
Network, Community & Collaboration
Demo Day
What do accelerators look for?

- Able to have a fundable plan by program end
- Unique, compelling solution with strong market potential
- Capital efficiency - ability to achieve significant milestones in short period of time
- Passion, commitment and capabilities of the team
What do we look for?

- Big problem & big market
- Off-the-shelf or new tech
- 21 weeks and $50k will get you to a point that you can raise funds (investment or revenues)
- Enter at the right stage to reach meaningful result by end of program
AlphaLab Gear Market Validation Module

- 21 weeks (April through August)
- Up to $75,000
  - $25k-$50k upon entry
  - Additional $25,000 convertible note provided that company receives $25,000 in purchase orders
- Well-positioned to apply for Manufacturing program
The Spring 2018 Market Validation application cycle is open!

AlphaLab Gear application process
– Deadline: Feb 11
– Interviews: Feb 27 & 28
– Offers: late March
– Cohort starts: April 9

alphalabgear.org/apply
AlphaLab Gear Hardware Cup

Applications are open! www.hardwarecup.com

2/6 Mid-Atlantic: Pittsburgh
2/13 Northeast: Boston
2/21 East Coast: DC
3/6 South: Austin
3/13 West Coast: LA
4/3 Midwest: Chicago
Japan, South Korea, Israel also holding Hardware Cups

4/18 & 4/19: International Finals in Pittsburgh

@AlphaLabGear #HWCup2018
38 Companies since 2013

85%+ Currently Operating

63% Have Paying Customers by Demo Day

95%+ Follow on Funding w/in 6 months of Demo Day