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.
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

• 1\textsuperscript{st} 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
The proven methodology of Agile Innovation applied to the specific needs of hardware startups

8-month program in our East Liberty workspace

Targeted mentorship and assistance with prototype development, engineering, user testing, design for manufacturing, supply chain management, and sales

Access to prototyping and manufacturing equipment and software
Office Space
Funding
Educational Sessions
Mentors & Advisors
Network, Community & Collaboration
Gear Results

Cycle 1 Companies post Demo Day

- 88% Raised Follow on Funding
- 50% Received Innovation Works Funding
- 63% Have Paying Customers
- 100% Continued Operations
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