Laurier’s LaunchPad:
Teaching Lean Methodology to Entrepreneurs

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Overview

• Lean methods are ideal for startups
• Methods can be implemented in multiple areas
• Qualitative results are very encouraging
• Tips on task conceptualization
LaunchPad Context

- Campus Linked Accelerator
- Stanford LaunchPad Steve Blank
- Business Model Canvas
- Real companies with real money
- Application component of entrepreneur program
Product Validation

- Lean Engineering/Prototyping
- Minimum function sets
- Core value
- Testable customer experience
Market Validation

- Lean Market Validation
- Minimum Viable Product
- Simulations
- Authenticity trade-offs
- Customer Experience
The Class Experience

- Flipped Classroom (Really flipped)
- Peer and Mentor Feedback
- Opportunistic Teaching
- Team driven questions and advice asks
What Lean Entrepreneurship Feels Like

- Entrepreneurial: Purest form of lean
- Manic
- High Energy
- Chaotic
- Counter-intuitive
- Nondeterministic
- WAY FUN!
Mentors

- 10 Active Mentors
- Individual Team Assignments
- Training and resource materials
- Individual guides for ensuring message delivery
Why Lean?

- Lean works best with few operational constraints
- Startup companies have no process covenants
- Complements learning and academic skills development
Lean Benefits

- Able to compress a typical 18 month evaluation cycle to 4-8 months
- Able to evaluate dozens of key value hypotheses
- Find unexpected maxima in value
- Low-zero entry barrier for use
Further Benefits

• High intensity quick failure attracts high energy motivated groups
• Perfect match for the validation stage of growth
• Integration with operational stages of growth require artful blending
• Design of interfaces between mutable or testable elements
Bartesian Lean Experience

- Entered program January 2014 (MBA)
- First idea HVAC optimizer for homes
- Business model ROI limited
- Environmental advantages inadequate to support business plan
Bartesian Lean Experience

- 2nd idea: “The Keurig for cocktails”
- 4-8 months of customer discovery before prototype
- Hypothesis tested and validated – 2 additional problems
- Target market changed
Bartesian MVP (Minimum Viable Product)

• Simulated experiences to validate market assumptions
• Found that simulations added realism that was impossible to evaluate verbally
• Data collection with explicit hypotheses and results tabulated with standard tools (Excel) = lean experiment design
LEAN PROTOTYPING MVP
Proof of Concept

Provided validation of key technical risks

Key technical lessons

- Design issues for capsule, mixing
- Plumbing system design issues
- Entry to full fidelity prototype program (HAX)
LEAN PROTOTYPING MVP
Full Prototyping

- Furthest team in customer discovery
- 4 months to operational prototype
- Progress fast because of confidence in product direction
- Still used lean methodology to validate minor design decisions eg. colour
Kickstarter Campaign

• Successful Kickstarter campaign (Top 1%)
• Market validation helped direct campaign towards target market
• Continued to use lean methodology to refine campaign
FULL FUNCTION PROTOTYPE
Lessons in Lean method application

- For in-process systems
  - Item extracted
  - Environment simulated
  - Learning experiments run
  - Impact analysis and re-integration
  - Replacement with improved module
Lessons for Lean Startups

- Lean methods ideal for ideation to operation
- Further Lean activities
  - Conscious design of modules and interfaces
  - Encapsulated and ‘hot swappable’
  - Isolation of likely change candidates
  - Allows for easier transition to scalable process
Questions?