



Start Me Up Bootcamp

Syllabus

The program requires in-depth preparation and significant effort outside of the lab.

Required Texts

[The Startup Owner's Manual](#), Steve Blank and Bob Dorf

[Business Model Generation](#), Alexander Osterwalder and Yves Pigneur

Recommended Texts

[Value Proposition Design](#), Greg Bernard, Yves Pigneur, Alexander Osterwalder and Alan Smith

[Talking to Humans](#), Giff Constable and Frank Rimalovski

Bookmarks

Office Hours

Customer Interviews

Business Model Canvas

Team Presentations

Instructor Presentations

Schedule

Requirements for Enrollment

1. Attend as a Team consisting of a Technical Lead, Entrepreneurial Lead, and Mentor (if applicable).
2. *This course requires in-depth preparation and significant effort outside of the sessions.* Each Team member must commit to class time plus at least 15 additional hours per week for virtual Customer Discovery.
3. Before the bootcamp kickoff: Complete Assignment #1.

Course Goals

1. Provide I-Corps teams an experiential learning opportunity to help determine the commercial readiness of their technology.
2. Enable the Team to develop a clear go/no-go decision regarding commercial viability of the effort.
3. Develop a transition plan to move the technology forward to market, if the Team decides to do so.

Course Description

This course will provide I-Corps Teams with a real-world, hands-on learning experience to successfully transfer knowledge into products and processes that benefit society. The entire team will engage with industry, from talking to customers, partners and competitors to encountering the chaos and uncertainty of commercializing innovations and creating ventures.

This course is not about how to write a research paper, business plan, or NSF grant. It is not an exercise on how smart you are in a lab or a classroom or how well you use the research library. The end result is not a paper to be published.

This course is about “getting out of the building.” You will be spending a significant amount of time in between each of the lectures talking to customers and testing your hypotheses. If you cannot commit the time to talk to customers, the I-Corps™ program is not for you.

Teams

This is a team-based class. You will work in teams to turn your research and technology idea into a product, service, or process that benefits society. You will learn how to use a business model to brainstorm each part of an enterprise and customer development. You will “get out of the building” to see whether anyone other than you would want/use your product.

All three members of the I-Corps Team—Technical Lead, Entrepreneurial Lead and Mentor—should participate in all out of the building customer discovery activities. Each day will be a new adventure as you design experiments and test hypotheses on each part of your business model and customers.

As a part of this process, you will encounter issues on how to build and work with a team. We will help you understand how to successfully build and manage your startup team. We encourage I-Corps Teams to recruit any and all resources. Others, including students and non-students, may serve as extra members of the team.

Class Culture

The startup culture is dramatically different from the university culture most of you are familiar with. Startups communicate much differently than inside a university and lab. The class culture can feel brusque and impersonal, but it is intentionally oriented to simulate the time- and cash-constrained environments in which startups operate. We have limited time and we push, challenge, and question you in the hope you will quickly learn. We will be direct, open, and tough – just like the real world. We hope you can recognize that these comments aren't personal, but part of the process.

We also expect you to question us, challenge our point of view if you disagree, and engage in a real dialogue with the Teaching Team. This is all part of our wanting you to learn to challenge yourselves quickly and objectively, and to appreciate that as entrepreneurs, you need to learn and evolve faster than you ever imagined possible.

Attendance and Participation

1. All Team members must attend all classes. You are expected to come prepared for class by completing the readings and materials.
2. If you anticipate missing more than one online class, we recommend that you reapply to the I-Corps™ Program when you can commit the time to the course.
3. Getting out of the building is what the class is about. If you cannot commit at least 15 hours a week to talk with customers, don't enroll in the program.
4. You will present what you learn to the class and record your progress. During each Team's presentation, the Teaching Team will offer observations and guidance.

5. When not presenting, you are expected to offer input to other teams' presentations.

Class Roadmap

Each class is organized around:

1. **Lectures** on the building blocks of a business model as described in Business Model Generation.
2. **Team presentations** on your "Lessons Learned" from getting out of the building and iterating or pivoting your business model.
3. Using the **Business Model Canvas** to help drive the Customer Discovery process.
4. **Office Hours** - Meet with Teaching Team members to receive individualized responses to your questions and comments. Your Team is strongly encouraged to make use of this knowledge resource.

Deliverables Overview

Customer Interviews

You are required to interview at least 20 people and log your interviews. This is a key metric used by the teaching team to evaluate your progress. We expect each team to reach a minimum 20 customer interviews total by the end. Planning is critical to your success, so please make your interviews the top priority.

Presentations

Your team will deliver presentations during the program. These serve as progress reports for the Teaching Team and your peers to monitor your progress and provide you guidance. Update your first slide each class to include the total number of customers you talked to. Presentation assignments will range in length from several minutes to over ten minutes. *Your team is asked to be fully engaged during the zoom session and be present on video.*

Detailed Course Schedule

All times listed are Eastern Standard Time (UTC/GMT -5 hour)

Kickoff Day 1

During this period, your Team is required to get out of the building and test your business model assumptions, meeting with about 10 customer contacts each week (with the objective of conducting at least 20 total contacts).

Assignment #1

Watch Videos

[Intro to I-Corps](#) (3 min)

[What is a Value Proposition?](#) (32 min)

[Customer Discovery](#) (18 min)

[Customer Discovery: outside the building: early mistakes to avoid](#) (25 min)

[Customer Discovery: understanding what the customer is telling you](#) (13 min)

Additional Resources (use for reference)

> [The Startup Owner's Manual](#), Steve Blank and Bob Dorf (available for download [here](#))
Pages 22–84 [loc. 19-83] and 195-199 [loc. 189-199]: *The Customer Development Model* and *Prepare for Customer Contacts*

> [Business Model Generation](#), Alexander Osterwalder and Yves Pigneur (free version available for download [here](#))
Pages 14–51 [loc. 268-842]: *Definition of a Business Model*

> Giff Constable, “12 Tips for Early Customer Development Interviews”
<http://giffconstable.com/2010/07/12-tips-for-early-customer-development-interviews>

> Presentations from previous I-Corps™ Teams to assist you in your own preparation:
<http://www.slideshare.net/sblank/tagged/i-corps>

> See also <https://steveblank.com/category/lean-launchpad> for background and blog posts on the Lean LaunchPad method and classes.

DELIVERABLE DUE

PRESENTATION FORMAT

1. A **2-slide presentation** to present your Team (3 minutes), using the template below.

- a. Slide 1: Team name, University logo, Product picture/product description (one sentence), Pictures/names of your Team members.
- b. Slide 2: Populated [Business Model Canvas](#)

2. List of **20 interviews** that you will do in the “get out of the building” hours. These should be related to testing your business model hypotheses.

Save your list using this naming convention:

TeamNumber_TeamName_Date (e.g., 195_DataComm_05062013)

Kickoff Day 1 Schedule

	Session
	<p>Test Zoom</p> <p>The online room will be open for 10 min prior to when the kickoff begins. Log on during this time to test video, sound and troubleshoot technical issues, even if you are not scheduled to present, log on during this time to test your system.</p> <p>Please sign into Zoom using the following convention: TeamNumber_Your Name_Role, e.g., 201_John Smith_EL</p>
	<p>Introduction to I-Corps and Value Propositions - Ivy Schultz</p> <ul style="list-style-type: none"> • Teaching Team Introductions • Class Goals • Teaching Philosophy • Expectations of You <p>What’s a business model? What are the parts of a business model? What are hypotheses? What is the Minimum Feature Set? What experiments are needed to run to test business model hypotheses? What’s “getting out of the building? What is market size? How to determine whether a business model is worth doing?</p>
	<p>Team Presentations</p> <p>Teams present their business model canvas to the entire classroom. Each Team is allotted 4 minutes total, to include 3 minutes of presentation and 1 minute for Teaching Team comment.</p>

	<p>Best practices for customer interviews - Dario Vasquez</p> <p>How to call on people you don't know. How to get the most out of people you do. Expectations, speed, tempo, logistics, commitments. How do I protect my IP when I speak to partners? Does Lean work for non-software efforts? How do I interview? How is an interview different from a sales call?</p>
	<p>Get out of the building!</p> <p>Meet with potential customers after Day 1 of the kickoff. <i>Schedule these meetings prior to coming to the kickoff if possible.</i> Using the contacts you've already prepared and the interviews you've previously scheduled, interview at least 5 potential customers to generate findings about your value proposition hypotheses. We encourage you to set up meetings to talk to potential customers in-person or a video call.</p> <p>Getting a good start and maintaining a good pace of discovery interviews has proven to be a key success factor for the best performing teams. You will be presenting your results tomorrow in your updated business model canvas.</p>

A schedule of Office Hours will be made available. Make every effort to attend office hours, as required by the bootcamp program.

Assignment #2

READ

Read BMG: pp. 86–111, *Multisided Platforms*; pp. 126–133 *Customer Insights*; 135–145, *Ideation*

Read SOM: *Intro to Customer Discovery* pages 53–84; *Customer Segments* pp. 85–92; *Testing Problem Understanding* pp. 203–226; *Have We Found Product/Market Fit?* pp. 260–266; *Customer Segments Checklist* pp. 476–477.

Steve Blank, “What’s a Startup? First Principles,”

<http://steveblank.com/2010/01/25/whats-a-startup-first-principles>

Steve Blank, “Make No Little Plans – Defining the Scalable Startup,”

<http://steveblank.com/2010/01/04/make-no-little-plans---defining-the-scalablestartup>

Steve Blank, “A Startup is Not a Smaller Version of a Large Company”,

<https://steveblank.com/2010/01/14/a-startup-is-not-a-smaller-version-of-a-large-company/>

Watch Value Proposition videos:

https://www.youtube.com/playlist?list=PLw540Wq5kay866m6A6xI7KOwE_Ah7is4m (28 min)

ASSIGNMENT

- If you haven’t completed 5 customer interviews, get out of the building some more
- Generate a value proposition hypothesis
- Review customer discovery videos
- Update your business model canvas based on your findings
- Log your interviews in your AirTable or Excel

PRESENTATION FORMAT

Prepare 4-minute presentation

Slide 1: Title slide

- Team number
- Team name

- Revised business thesis
- Total number (#) of customer interviews, delineated by type (in person, video call, phone) using interview icons (see image below of different contact communications - include this table on your first slide)

Slide 2 - n: How will you test your hypothesis with customers during interviews?

Hypothesis: Here's What We Think

Experiments: So Here's What We Will Do

Iterate: So Here Are Potential Alternative Hypotheses

Slide 3: Business model canvas with any changes marked in red, different customer Segments shown in different colors

Slide 4: Tell us about your Market size (TAM/SAM/Target). See Chapter 3 of the Startup Owner's Manual for market sizing. The example below has been helpful for teams in the past:



Slide 5: Here's What We Are Going To Do Tomorrow

What are your proposed experiments to test customer segment, value proposition of the hypotheses: What constitutes a pass/fail signal for each test (e.g. at what point would you say that your hypotheses weren't even close to correct).

Save your list using this naming convention:

TeamNumber_TeamName_Date (e.g., 195_DataComm_05062013)

Kickoff Day 2 Schedule	
	Session
	Test Zoom The online room will be open for 10 min prior to when the kickoff begins. Log on during this time to test video, sound and troubleshoot technical issues, even if you are not scheduled to present, log on during this time to test your system.
	Team Presentations Teams present their business model canvas. Each Team is allotted 6 minutes total to include 4 minutes for presentation, 2 minutes for Teaching Team comments.
	Customer Segments - Prof. John Kymissis What is your product, service, or program and what problem is it solving? How does it differ from an idea? Specifically who will want it and why? Who's the competition and how does your customer view these competitive offerings? Where's the market? What's the minimum feature set? What's the Market Type? What was your inspiration or impetus? What assumptions drove you to this? What unique insight do you have into the market dynamics or into a technological shift that makes this a fresh opportunity?
	Get out of the building!

Midpoint

Assignment #3

READ

- BMG: 109-113 *open business models*
- SOM: pages 98–105 *Channels*, 242-244 *meet the channel*, 332-337 *Channel Roadmap*, 406–411 *distribution channels*, 478 *channels checklist*

WATCH

- [Why PI's and Founders Need to Get Out of the Building](#) (2:14) UCSF
- [Insights on: Channels – Week 3](#) (14:52) UCSF

ASSIGNMENT

- Get out of the building and talk to as many customers as you can
- Update your business model canvas based on your findings
- Log your interviews in AirTable and sign up for office hours

PRESENTATION

Prepare and upload 5-minute presentation to Google drive

Slide 1: Cover slide

- Team Information: member names, Team name, Team number
- Your Business Thesis: who is my customer, what is my product, why will they buy it
- Number of customer interviews completed since you last presented plus total number of interviews. Please use the [interview icons](#) to illustrate the number and kinds of interviews you conducted.

Slide 2 – n: What did you learn about your value proposition from talking to your customers?

- *Hypothesis*: Here's What We Thought
- *Experiments*: So Here's What We Did
- *Results*: So Here's What We Found
- *Iterate*: So Here's What We Are Going to Do Next

Final slide: Current business model canvas with any changes marked

Save your list using this naming convention:

TeamNumber_TeamName_Date (e.g., 195_DataComm_05062013)

Midpoint Schedule	
	Session
	Test Zoom <p>The online room will be open for 10 min prior to when the kickoff begins. Log on during this time to test video, sound and troubleshoot technical issues, even if you are not scheduled to present, log on during this time to test your system.</p>
	Introduction <p>A brief introduction by the Teaching Team.</p>
	Team Presentations <p>Teams present their business model canvas. Each Team is allotted 7 minutes total to include 5 minutes for presentation, 2 minutes for Teaching Team comments.</p> <p>During each presentation, the Instructors will facilitate a discussion among all the EL's in the session directed at each team's presentation and will also facilitate a discussion aimed at the week's assignment.</p>
	Customer Segments Case Studies - Prof. John Kymissis <p>Explore the art of customer segments and the business model canvas through case study examples to understand the specific problem being solved by a product or service. How do you determine the problem/solution fit for your customers and the overall product/market fit?</p>
	Get out of the building!

Assignment #4

READ/WATCH

- Previous I-Corps teams final presentations
- [Steve Blank presentations channel](#) for examples and other resources to be provided
- [Lessons-Learned Day Presentation Skills Training - Steve Blank](#): This session will help prepare you, not only for your team's final presentation in this class, but with life skills that will hopefully benefit you in multiple venues for many years.

ASSIGNMENT

- 20+ customer interviews
- "Get out of the building" and talk to as many customers as you can
- Update your business model canvas based on your findings

PRESENTATION

Prepare 8-minute "Lessons Learned" presentation

This will be different from your previous presentations as the objective is to tell the story of your journey through the Customer Discovery process.

This presentation should:

- Tell a story of what you did (e.g. customer discovery, mistakes, etc.) and what you learned
- Focus on insights rather than data points
- Highlight your "a-ha!" moment(s)
- Include images and graphics that support your story
- Text should be brief and legible (i.e., large enough to be read)
- Begin with an introduction of your Team (Team name and number, member names and roles, total interviews completed, and total in-person interviews).
- Include multiple iterations of the Business Model Canvas (including first, last, and points of critical pivots) and diagrams. Make sure these slides are legible, in a large enough font to be read and understood.
- End your presentation stating your team's next steps after the bootcamp.

Your slide deck should support your storytelling: don't simply present a narration of your slides. Deliver your team's story in a dynamic and engaging way!

Please be sure to practice your presentation to fit the **8-minute** time limit. There will also be 2-3 minutes for Q&A from guest speakers.

The following is a *sample* of an appropriate set of slides for this presentation:

Slide 1: Cover Slide

Team name, total number of interviews, total number of in person interviews. Include a couple lines about what your initial idea was and the size of the opportunity

Slide 2: Team members

Name, background, expertise and your role for the team

Slide 3: Business Model Canvas, Version 1

Verbally address, “Here was our original idea...” (make sure this is legible, use a large font)

Slide 4: “Here’s what we did...”

Explain how you got out of the building, who you met, etc. (e.g. display logos and photos of customers, or a map of the territory covered)

Slide 5: “What we found was...” (reality)

Include illustration of customer archetype or market size diagram to show what was learned from this new information.

Slide 6: Business Model Canvas, Version 2

Illustrate the iteration or pivot. Explain why and what you found: “We then advanced this hypothesis...”

Slide 7: “So here’s what we did”

Explain how you got out of the building and perhaps include photos of the countryside or the factory you visited.

Slide 8: “And here’s what we found” (reality)

Include a photo and a great quote(s) summarizing a key lesson learned.

Slide 9: Business Model Canvas, Version 3.

“So then, we iterated or pivoted...”, explaining why and what you found.

Slide 10: “Next Steps”

State the team’s plans going forward after.

Save your list using this naming convention:

TeamNumber_TeamName_Date (e.g., 195_DataComm_05062013)

Finalé Schedule	
	Session
	Test Zoom The online room will be open for 10 min prior to when the kickoff begins. Log on during this time to test video, sound and troubleshoot technical issues, even if you are not scheduled to present, log on during this time to test your system.
	Introduction A brief introduction by the Teaching Team.
	Team Presentations Teams present to the entire class. Each Team is allotted 8 minutes total with an additional 2-3 minutes for Teaching Team comments.
	L2M Program Overview - Columbia Tech Ventures Assess the readiness of your technology and your next steps.
	Get out of the building!

Glossary of Common Terms and Acronyms

Agile development: Iterative and incremental development, where solutions evolve through collaboration

Business Model Canvas: template for developing and documenting new business models, made up of 9 key building blocks

Customer archetype: fictional character created to represent the different user types within a targeted demographic, attitude and/or behavior set that might use a site, brand or product in a similar way.

Customer discovery: Process of asking questions to understand needs and pain points of potential customers

EL: Entrepreneurial Lead; often a grad student or postdoc

IM: Industry Mentor; generally referred to as the Mentor

Innovation Corps or I-Corps™: pronounced I-CORE (the ps is silent)

IP: Intellectual Property such as discoveries and inventions, often protected by patents and trademarks

MVP: Minimum Viable Product; the basic product (or service) you can take to market

NCIIA: See VentureWell

NDA: Non-Disclosure Agreement; confidentiality agreement

Node: Nodes support regional needs for innovation education, infrastructure and research and work cooperatively to build, utilize and sustain a national innovation ecosystem.

NSF: National Science Foundation

OEM: Original Equipment Manufacturer

Peer Review Document: An online document for comments and suggestions

PI: Principal Investigator

SAM: Served Available Market

TA: Teaching Assistant

TAM: Total Available Market

Teaching Team: The class instructors; usually serial entrepreneurs, entrepreneurial educators and technologists

TL: Technical Lead; a faculty member, senior research scientist or postdoctoral scholar with deep and direct technical expertise in the actual core technology about which the I-Corps™ team is exploring commercial potential. Typically, the Technical Lead will also serve as the proposal Principal Investigator (PI).

Value Proposition: What value do we deliver to the customer? What customer needs are we satisfying?

VC: Venture Capitalist; a person (or organization) who provides capital to startup ventures

VentureWell: A higher education network that cultivates revolutionary ideas and promising inventions. NSF's I-Corps™ partner with curriculum development and logistics.