TMP 149: Creating a Market-Tested Startup Business Model

Course Title: Creating a Market-Tested Startup Business Model
Units: 4
Instructors: Steve Zahm (ucsbtmp149@gmail.com)
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TA: Grant Novins (tmp149ta@gmail.com)
Grading: Letter (ABCD/NP)
Days and Times: Mon/Wed 5:00 - 6:50 pm
Office Hours: Online or in-person, by appointment
Location: Phelps 1160
Webpage: LaunchPad Central, students must purchase subscription

Course Materials: Steve Blank, *The Startup Owner’s Manual*
*Note: Kindle Reader version is available at Amazon.com*
Alexander Osterwalder & Yves Pigneur, *Business Model Generation*

Note that page numbers cited for reading assignments are all from the printed (i.e., non-Kindle) text versions.

*LaunchPad Central*, a cloud-based course management application (available by subscription at launchpadcentral.com. Each student must purchase an individual 1-quarter subscription for approximately $40). Register at [https://launchpadcentral.com/signup](https://launchpadcentral.com/signup),
Organization Code = *(coming soon)*

Course lectures are available at:
[http://www.udacity.com/overview/Course/ep245/CourseRev/1](http://www.udacity.com/overview/Course/ep245/CourseRev/1)
Students must register online separately to view the lectures

Recommended Text: Eric Ries, *The Lean Startup*
*There will not be assigned readings from this text.*

Class materials and content are based extensively on the ideas and course materials created by Steve Blank and Bob Dorf. Learn more about Steve Blank and see examples of coursework using a similar syllabus at [www.steveblank.com](http://www.steveblank.com).
**Course Description:**
This course provides real world, hands-on learning on what it’s like to start a high-tech company. This class is not about how to write a business plan. It’s not an exercise on how well a student can use the library to research markets.

This is an experiential class – essentially a lab, not a theory or “book” class. Our goal is to create an entrepreneurial experience with all of the pressures and demands of an early stage startup.

You will be talking to customers, partners, and competitors, as you encounter the chaos and uncertainty of how a startup actually works. You’ll work in teams learning how to turn a great idea into a great company. You’ll learn how to use a business model to brainstorm each part of a company and the customer development and market validation process to get out of the classroom to see whether anyone other than you would want or use your product.

**Class Culture**
Startups communicate much differently than inside a university or a large company. At times this communication style can feel brusque and impersonal, but in reality it is focused and oriented to create immediate action in time- and cash-constrained environments. The instructors for this course have limited time and we will push, challenge, and question you in the hope you will quickly learn. The instructors will be direct, open, and tough – just like the real world. These comments aren’t personal, but they are part of the learning process.

We also expect you to question the teaching team, and to challenge our point of view if you disagree, and to engage in a real dialogue with the teaching team. We want 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.
Amount of Work

Projects are treated as real startup companies, so the workload will be significant. Teams have reported up to 20 hours of work per week, per team. Getting out of the classroom is what the course effort is about. *It's not about the lectures.* In fact, lectures will be provided outside of the actual class sessions, using online videos recorded by Steve Blank.

You will be spending a significant amount of time in between each of the class sessions talking to customers. **If you can’t commit the time to talk to customers, this class is not for you.** This class is a simulation of what startups and entrepreneurship is like in the real world: chaos, uncertainly, impossible deadlines in insufficient time, conflicting input, etc.

**Team Organization:** *This class is team-based.* Working and studying will be done in teams. Each student will only be admitted as a team member. *Teams must submit a proposal for entry before the class begins.* Projects and teams must be approved *before the class begins in January.*

Team projects can be software, a physical product, or a service of any kind. The teams will self-organize and establish individual roles on their own. There are no formal titles among team members.

Besides the instructors and the TA, each team will be assigned an industry mentor. The mentor will be an experienced entrepreneur or venture capitalist, and his or her role will be to provide assistance and support. Each team will be required to meet weekly with its assigned mentor using a scheduled online videoconference (we suggest using Google+ Hangouts for this purpose).

**Suggested Projects:** While your first instinct may be a web-based startup, we suggest that you consider a subject in which you are a domain expert. In all cases, you should choose something for which you have passion, enthusiasm, and hopefully some expertise. While not required, teams that build a web or mobile-based minimally viable application will be recognized for their additional efforts through extra credit towards their final grade.

**Deliverables**

1. Your weekly record of customer interactions as recorded on *LaunchPad Central* will be the core element of your course deliverables. You will be required to use the LaunchPad Central online blogging tool to author your course blog, as well as to
gather input from the teaching team and your industry mentor.
2. Your team will present a weekly in-class PowerPoint summary of the progress you make in your customer and market validation efforts.
3. Your final presentation will consist of a 15 minute “Lessons Learned” PowerPoint, as well as a 2-minute video outlining your customer and market validation journey.
4. Teams proposing a physical product may gain extra credit by building a prototype and providing the teaching team with a costed bill of materials.
5. Teams building a web product or mobile application should be able to build a minimally viable product. See http://steveblank.com/2011/09/22/how-to-build-a-web-startup-lean-launchpad-edition/

Grading Criteria

This course is team-based. 75% of your grade will come from your team progress and final project. The grading criteria are broken down as follows:

15% Individual participation in class. The individual participation grade will depend upon the quality and value of your feedback.

10% Completion of the Udacity online video course EP 245 no later than January 13th. A Certificate of Completion emailed to the course TA is required as proof of completion for this assignment. Finishing past the due date will lower your grade.

30% Out-of-the-building progress as measured by customer interview write-ups and team presentations each week.

Using LaunchPad Central, team members must:
1) update their business model canvas weekly
2) identify which team member did which portion of the work
3) log detailed reports on what the team did each week
4) log the results of your online meeting with your team’s industry mentor

20% - The team weekly “lesson learned” presentation (see appendix for format)

25% - The team final presentation and 2-minute video (see appendix for format)

NOTE: Grading will be based upon a team member’s ability to demonstrably go through the process and journey of customer and market validation. A failed business idea will not necessarily result in a low grade, and may in fact receive high marks.
Class Roadmap

Each week’s class is organized around:

- Student team presentations on “lessons learned” from getting out of the building and iterating or pivoting their business model.
- Comments and suggestions from other teams, and the teaching team, on the lessons learned.
- A free online video lecture series, which should be reviewed prior to each week’s class, on one of the 9 building blocks of a business model. The online class lectures are available free of charge, but each student must register for the course separately at the following URL:
  - http://www.udacity.com/overview/Course/ep245
  - Note that this free Udacity online video course must be completed no later than January 13th. Proof of completion will be required to be emailed to the course TA.

- Each team will capture their progression in learning by keeping an online blog using LaunchPad Central.

<table>
<thead>
<tr>
<th>Key Partners</th>
<th>Key Activities</th>
<th>Value Propositions</th>
<th>Customer Relationships</th>
<th>Customer Segments</th>
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<tbody>
<tr>
<td>Test Hypotheses:</td>
<td>Agile Development</td>
<td>Test Hypotheses:</td>
<td>Customer Segments:</td>
<td>Test Hypotheses:</td>
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<tr>
<td>Channel</td>
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<td>Demand Creation</td>
<td>Problem</td>
<td>Channel</td>
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<tr>
<td>(Customer)</td>
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<tr>
<td>(Problem)</td>
<td>Competitive</td>
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<td>User</td>
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</tbody>
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Customer Development Team

Agile Development

Test Hypotheses:
- Channel
- (Customer)
- (Problem)

Customer Development Team

Test Hypotheses:
- Size of Opportunity/Market
- Validate Business Model

Test Hypotheses:
- Pricing Model / Pricing

www.businessmodelgeneration.com
Pre-Class Preparation

(NOTE: The teaching team recommends completing the following items during Winter Break, prior to January 2016.)

Once your team is admitted to the course, prior to the first class session, you must:

- Read pages 14-49 of Osterwalder’s Business Model Generation.
- Read The Startup Owner’s Manual, pages 1-50
- Register for, and start progressing through, the Udacity.com online video course “How to Build a Startup” (EP245) by going to: http://www.udacity.com/overview/Course/ep245/
- Note that the online Udacity course Certificate of Completion is due by January 13th
- Name your team and use that team name when registering for LaunchPad Central
- Register for LaunchPad Central by going to: https://launchpadcentral.com/signup and using Organization Code = (coming soon)
- Download a PowerPoint version of the Osterwalder Business Model Canvas from the LaunchPad Central Resource Hub. You must use a filled-in version of the Business Model Canvas in each of your weekly presentations.
- Review the class syllabus “Week 1” details. You will be expected to present a completed business model canvas with your team during the first week’s class session on January 4th or 6th. You will also be expected to have completed the work required in the “Actions to Prepare for This Week’s Presentation,” “Watch Before Class,” and “Read Before Class” sections of the syllabus for those days.
(All Weeks)  

Agenda for Class Sessions

Each class session is 100 minutes long (5pm-6:50, M-W, Phelps 1160). We will take a five minute break at 6pm each class. Please be prepared to present your team’s progress in every class session. Four teams will present during each class session for 10 to 15 minutes each.

This is the format for weekly presentations:

Team Presentations: **10-15 minutes each**
- Slide 1: Cover slide with Team Name
- Slide 2: Current business model canvas with any changes marked
- Slide 3: What did you learn about your value proposition from talking to your first 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
- Slides 4+: Cover the “Items to Address” for the week in one slide. These items must be addressed in no more than 3 additional slides.

Do not vary from this format – we are interested in results, not presentation design.

If your team has not presented the prior class session, you will be expected to present during the next class. Each team presentation will follow the same format of presenting the overall business model canvas, the hypothesis that was tested during the prior week, the results of the test, and the learning that came from that test. After the presentation, the teaching team will provide feedback about the presenting team’s approach, methodology, execution, and conclusions. The teaching team may also request input from other students.

Students in class will record their comments and impressions from the student presentations on a shared Google Doc. Individual class participation grades will be largely based upon the quality and insight of a student’s comments and suggestions on this form.

We suggest that each team schedule their industry mentor videoconference (using Google+ Hangouts) for a time **before** the class session during which the team will present. The purpose of the mentor session is to receive feedback from the mentor on that week’s upcoming presentation.
Week 1  Jan 4th – Jan 6th

Subject Matter: Intro/Business Model/Customer Development

What’s a business model? What are the 9 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 is market size? How can you determine whether a business model is worth doing?

Items To Address in This Week’s Presentations:
- Write down hypotheses for each of the 9 parts of the business model.
- Come up with ways to test:
  - Is your business opportunity worth pursuing? (market size)
  - Each of the your business model canvas hypotheses
- Come up with what constitutes a pass/fail signal for the test (e.g. at what point would you say that your hypotheses wasn’t even close to correct)?

Actions To Prepare for This Week’s Presentation:
- Be prepared to present your business model canvas with your team for 3 minutes. You must have a slide version of Osterwalder’s Business Model Canvas filled out with your team’s initial entries for all nine boxes of the canvas.
- Conduct a test videoconference with all team members and your industry mentor. Google+ Hangouts are free for multiple participants while Skype requires an active payment plan for multiple video attendees. You must conduct a videoconference so that you can view your mentor and so that he/she can see you.
- Make sure you are registered for both LaunchPad Central and the Udacity online lectures
- Start team blog on LaunchPad Central

Watch/Review Before Class:
- Udacity.com “How to Build a Startup (EP245): Lecture 1 – What We Now Know” and “Lecture 2 – Business Models and Customer Development”

Read Before Class:
- Business Model Generation, pp. 86-119, 135-145
- The Startup Owner’s Manual, pages 1-50
Week 2  Jan 11th – Jan 13th

**NOTE**: Your Certificates of Completion for the online video Udacity Course EP 245 are due to the TA via email (tmp149ta@gmail.com) no later than January 13th. Every week past this date will lower your letter grade for this assignment by one full grade (e.g., from A to B to C). This assignment is 10% of your course grade.

*Subject Matter: The Value Proposition*

What is your product or service? How does it differ from an idea? Why will people want it? Who’s the competition and how does your customer view these competitive offerings? Where’s the market? What’s the *minimum feature set* for your product? 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?

*Items To Address in This Week’s Presentations:*
- What were your value proposition hypotheses?
- What did you discover from customers?
- Market Size estimates (TAM, SAM, addressable) -- include in your presentation

*Actions to Prepare for This Week’s Presentation:*
- Get out of the building and talk to 10-15 customers face-to-face
- Update LaunchPad Central with the results of your customer interviews
- Be prepared to present your business model canvas with your team.
- Hold your scheduled mentor videoconference

*Watch/Review Before Class:*

*Read Before Class:*
- *Post*: “Idea to Paying Customers in 7 Weeks: How We Did It”, [https://blog.bufferapp.com/idea-to-paying-customers-in-7-weeks-how-we-did-it](https://blog.bufferapp.com/idea-to-paying-customers-in-7-weeks-how-we-did-it)
NOTE: No class session on January 18th.

Get out of the building and get ahead on your customer interviews! If necessary, be sure to re-schedule your weekly mentor online meeting session. Due to shortened time available for team presentations, your LaunchPad Central entries will be closely reviewed by the teaching team this week – make sure the entries are detailed and comprehensive.

Subject Matter: Customer Segments

Who’s the customer? User? Payer? How are they different? How can you reach them? How is a business customer different from a consumer?

Items To Address in This Week’s Presentation

- What were your hypotheses about who your users and customers were? Did you learn anything different?
- Draw the diagram of “customer flow” and include in your presentation
- What are your hypotheses around customer acquisition costs? Can you articulate the direct benefits (economic or other) that are apparent?
- If your customer is part of a company, who is the decision maker, how large is the budget they have authority over, what are they spending it on today, and how are they individually evaluated within that organization, and how will this buying decision be made?
- What is it about your business model that resonates with customers?
- Did anything change about your Value Proposition?

Actions to Prepare for This Week’s Presentation:

- Get out of the building and talk to 10-15 customers face-to-face
- Update LaunchPad Central with the results of your customer interviews
- Be prepared to present your business model canvas with your team.
- Hold your scheduled mentor videoconference

Watch/Review Before Class:


Read Before Class:

- Business Model Generation, pp. 146-150, 161-168, 200-211
Week 4  Jan 25th-Jan 27th

Subject Matter: The Channel

What’s a channel? Direct channels, indirect channels, OEM. Multi-sided markets. B-to-B versus B-to-C channels and sales (business to business versus business to consumer)

Items to Address in This Week’s Presentation:
• What is your assumed customer lifetime value? Are there any proxy companies that would suggest that this is a reasonable number?
• Channel incentives – does your product or proposition extend or replace existing revenue for the channel?
• What is the “cost” of your channel, and it’s efficiency vs. your selling price.
• What are the barriers to entry?
• What kind of initial feedback did you receive from your users?
• Did anything change about Value Proposition or Customers/Users?

Actions to Prepare for This Week’s Presentation:
• Get out of the building and talk to 10-15 customers or channel participants face-to-face
• Update LaunchPad Central with the results of your customer interviews
• Be prepared to present your business model canvas with your team.
• Hold your scheduled mentor videoconference

Watch/Review Before Class:
• Udacity.com “How to Build a Startup (EP245): Lecture 5 – Channels”

Read Before Class:
• Business Model Generation, pp. 127-133
Week 5  Feb 1st - Feb 3rd

Subject Matter: Customer Relationships/Demand Creation

How do you create end user demand? How does it differ on the web versus other channels? Evangelism vs. existing need or category? General Marketing, Sales Funnel, etc.

Items to Address in This Week’s Presentation:
- Present and explain your marketing campaign. What worked best and why?
- Did anything change about Value Proposition, Customers/Users or Channel?

Actions to Prepare for This Week’s Presentation:
- Get out of the building and talk to 10-15 customers face-to-face
- Update LaunchPad Central with the results of your customer interviews
- Be prepared to present your business model canvas with your team.
- Hold your scheduled mentor videoconference

Watch/Review Before Class:
- Udacity.com “How to Build a Startup (EP245): Lecture 6 – Customer Relations”

Read Before Class:
- The Startup Owners Manual, pp. 126-168, pp. 296-351
Week 6  
Feb 8th - Feb 10th

Subject Matter: The Revenue Model

What’s a revenue model? What types of revenue streams are there? How does it differ on the web versus other channels?

Items to Address in This Week’s Presentation:
- Test pricing in front of 10-15 customers
- What’s your business revenue model?
- How will you package your product into various offerings if you have more than one?
- How will you price the offerings?
- What are the key financials metrics for your business model?
- What are the risks involved?
- What are your competitors doing?
- Assemble an income statement for the your business model. Lifetime value calculation for customers.
- Draw a diagram of your model’s payment flows
- Did anything change about Value Proposition or Customers/Users, Channel, Demand Creation?

Actions to Prepare for This Week’s Presentation:
- Get out of the building and talk to 10-15 customers face-to-face
- Update LaunchPad Central with the results of your customer interviews
- Be prepared to present your business model canvas with your team.
- Hold your scheduled mentor videoconference

Watch/Review Before Class:
- Post, “Choosing the Right Revenue Model”, http://blog.growthfunders.com/raising-money-for-your-startup-

Read Before Class:
Week 7                                                                 Feb 17th

**NOTE:** No class session on February 15th. Get out of the building and get ahead on your customer interviews. If necessary, be sure to re-schedule your weekly mentor online meeting session. Due to shortened time available for team presentations, your LaunchPad Central entries will be closely reviewed by the teaching team this week – make sure the entries are detailed and comprehensive.

**Subject Matter:** **Partners**

Who are your partners? Strategic alliances, competition, joint ventures, buyer supplier, licensees.

**Items to Address in This Week’s Presentation:**
- Talk to actual partner candidates as part of your 10-15 interviews.
- What partners will you need?
- Why do you need them and what are risks?
- What are the incentives and impediments for the partners?
- Why will they partner with you?
- What are the benefits for an exclusive partnership?
- What’s the cost of the partnership?
- Did anything change about Value Proposition or Customers/Users, Channel, Demand Creation, Revenue Model?

**Actions to Prepare for This Week’s Presentation:**
- Get out of the building and talk to 10-15 customers/partner candidates face-to-face
- Update LaunchPad Central with the results of your customer interviews
- Be prepared to present your business model canvas with your team.
- Hold your scheduled mentor videoconference

**Watch/Review Before Class:**
- Udacity.com “How to Build a Startup (EP245): Lecture 8 – Partners”

**Read Before Class:**
Week 8  Feb 22nd – Feb 24th

Subject Matter: **Key Resources & Cost Structure**

What resources do you need to build this business? How many people? What kind? Any hardware or software you need to buy? Any IP you need to license? How much money do you need to raise? When? Why? What is the importance of cash flows? When do you get paid vs. when do you pay others?

**Items to Address in This Week’s Presentation:**
- What’s your expense model?
- What are the key financials metrics for costs in your business model?
- Costs vs. ramp vs. product iteration?
- Access to resources. What is the best location for your business?
- Where is your cash flow break-even point?
- Assemble a resources assumptions spreadsheet. Include people, hardware, software, prototypes, financing, etc.
- Draw the diagram of a finance and operations timeline
- When will you need these resources?
- Roll up all the costs from partners, resources and activities in a spreadsheet by time.
- Did anything change about Value Proposition or Customers/Users, Channel, Demand Creation, Revenue Model, Partners?

**Actions to Prepare for This Week’s Presentation:**
- Get out of the building and talk to 10-15 customers face-to-face
- Update LaunchPad Central with the results of your customer interviews
- Be prepared to present your business model canvas with your team.
- Hold your scheduled mentor videoconference

**Watch/Review Before Class:**

**Read Before Class:**
- *The Startup Owner’s Manual*, pgs. 169-175, 180-188
Week 9  
**Subject Matter:** Preparation for Final Presentations

February 29th  
Class Summation: What Have We Accomplished?

March 2\textsuperscript{nd}  
Presentation Rehearsals & Questions

- Review: Autonomow, Mammoptics, Agora, and Personal Libraries final presentations (available on [http://www.slideshare.net/](http://www.slideshare.net/), search by project name)

We'll talk through some these example slides and presentations from previous courses taught by Steve Blank, discuss the presentation format we're asking you to follow and the reason(s) why, and then we'll be working with all of the teams on an ad hoc basis, walking around, talking about where you are, what you're working on, answering questions, and encouraging you as we all whip our presentations into shape.

Week 10  
**Subject Matter:** Lessons Learned Presentations

March 7\textsuperscript{th}  
Team Presentations of Lessons Learned (Four Teams)

*Each team will present a 10 to 15-minute “Lessons Learned” presentation about their business in front of the teaching team and potential investors, and a 2-minute video.*

March 9\textsuperscript{th}  
Team Presentations of Lessons Learned (Four Teams)

*Each team will present a 10 to 15-minute “Lessons Learned” presentation about their business in front of the teaching team and potential investors, and a 2-minute video.*

*Note that this course will not have a Final Exam or Course Session after March 9\textsuperscript{th}.*
Lessons Learned – Final Team Presentation Format

10 to 15-minutes: Team Videos & Lessons Learned Presentations

Deliverable: Each team will present a 2-minute video and then provide an 8-10-minute “Lessons Learned” presentation about their business.

“Lessons Learned” Presentation Format

▪ First: Play your two-minute video. The video should illustrate your business model idea and the lessons learned on the journey of customer and market validation.

▪ Slide 1: Team Name, your product, what business you ended up in and number of customers you talked to.

▪ Slide 2: Team members – name, background, expertise and your role for the team

▪ Slide 4: The size of the opportunity

▪ Slide 5: Business Model Canvas Version 1 (use the Osterwalder Canvas).
  So here’s what we did (explain how you got out of the building)

▪ Slide 6: So here’s what we found (what was reality) so then, …

▪ Slide 7: Business Model Canvas Version 2 (use the Osterwalder Canvas).
  We iterated or pivoted…explain why and what you found.

▪ Slide 8: So here’s what we did (explain how you got out of the building)

▪ Slide 9: So here’s what we found (what was reality) so then,

▪ Slide 10: Business Model Canvas Version 3 (use the Osterwalder Canvas).
  We iterated or pivoted…explain why and what you found.

▪ Etc… Every presentation requires at least three Business Model Canvas slides.

▪ Etc… Every presentation requires a channel diagram, distribution diagram and customer archetype or customer flow diagram.

▪ Etc… Every presentation requires hypotheses you tested, experiments you ran and the results of those experiments.

▪ Side n – “So here’s where we ended up.” Talk about:
  1. what you learned;
  2. whether you think this a viable business; and
3. whether you want to pursue this business idea after the class.

- Final Slides – Click through each one of your business model canvas slides.

Links to online examples of final “Lessons Learned” presentations:
See http://www.slideshare.net/sblank/tagged/stanford
Examples include Colorwheel, Gamespeed, Parkpoint, Zillion, etc.
TMP 149 Application Form

This application is how we choose the students who make it into the class. We’re interested in your background and why you want to take the class.

Who are you?
1. First Name, Last Name
2. Student ID Number
3. Email Address
4. Phone Number

What are you studying?
1. Undergraduate School, Major and Graduation Year
2. Do you have any non-academic work experience? If so, what?
3. What unique talent or expertise do you bring to the class?

Why This Class?
1. How did you hear about this course?
2. Why do you want to take this class?

Team/Company Idea?
1. Who are the members of your team, and what’s the idea?
2. Why is this the best idea you can come with?

Why You?
If there was one spot left in the class and we were choosing between you and another applicant, tell us why you should be the person in the class? Your team?