



## Syllabus

**Instructors:** David Charron  
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**Teaching Assistant:** Rose Vieland

**Location:** NCI-Shady Grove Campus  
Seminar 100  
9609 Medical Center Drive, Rockville, MD 20850

### Schedule<sup>1</sup>:

*Pre-Claa Webinar* 2-3PM EST, April 11, 2019 Research Dissemination (on-line)  
*Pre-Class Webinar* 2-3PM EST, May 2, 2019 Introduction to the Course (on-line)  
*Opening Workshop:* May 6-8, 2019 in person at NCI  
*Online Classes:* Thursdays until the closing session  
*Closing Workshop:* June 27-28, 2019 in person at NCI  
*Office Hours:* Available each week. Online signup sheet will be provided.

**Required Texts:** [Business Model Generation](#) (BMG) by Osterwalder, et al.  
[Value Proposition Design](#) (VPD) by Osterwalder, et al.  
[Talking to Humans](#) by Constable, et al.

**Resources:** [NCI-SPRINT.com](http://NCI-SPRINT.com)

**Course Management:** LaunchPad Central (registration will be provided)  
<https://www.launchpadcentral.com/>

### Course Overview

SPRINT uses customer discovery to build plans for commercialization and dissemination of research results. To get the most from the course we required your team to interview at least 5 new people each week, 40 or more in total, and log your interview notes and insights. Teams that enter the course with open and beginner's mindsets do the best. Your progress on learning is measured by the number of interviews you complete and your understanding of how your ideas might be commercialized using the Business Model Canvas. Planning is critical to your success; please make your interviews the top priority.

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<sup>1</sup> Please see "Schedule at a Glance" for detailed schedule

# Class 1 at NCI: Business Models, Mission Models, and Customer Discovery (May 6, 2019)

## Due Before Class

### Participate in two webinars:

1. Pre-Class Webinar – 2-3PM EST, April 11, 2019 on [Research Dissemination](#)
2. Pre-Class Webinar - 2-3PM EST, May 2, 2019 [Introduction to the Course](#)

### Schedule (contact and confirm) 10 in-person or online interviews for Class 2 (May 7, 2019)

Come prepared with a list of potential interviewees that you will talk to during the “get out of the building” hours. These should be related to testing your business model hypotheses around customers/stakeholders and value propositions.

### Read and Watch

#### *BMC Overview and Understanding*

Watch on LPC: Lectures 1, 1.5a, 1.5b

Read in Business Model Generation:

- The 9 Building Blocks of the Canvas pp. 14-49
- Ideation pp. 134-145

Read VPD: Chapter 3 “Test”

#### *Customer Discovery Overview*

Read: Talking with Humans Book

Watch on LPC: the “How to Do Customer Discovery” Videos:

- *Preplanning 1, 2 & 3*
- *Interviews 1 & 2*
- *Asking the Right Question*
- *Death by Demo 1 & 2*
- *Assuming You Know*
- *Death by PowerPoint: Understanding the Problem*

### Prepare and upload presentation to Dropbox by 7:00 AM ET in PDF format<sup>2</sup>

3-minute presentations, 2-minute Q&A

- **Slide 1:** Team name and number (will be assigned in the LPC Platform); team member names and photos; business thesis (who is the “customer” for the intervention, what is the intervention, why will a customer use it).
- **Slide 2:** Your Business Model Canvas as you have entered on LPC.
- **Slide 3:** Tell us about the customer interviews you have scheduled. Why did you choose these people and what do you want to learn from them?
- **Slide 4:** Identify the “market size” or “population size” for your intervention – in total over time and most likely right now (who could you reach in next 12-24 months)
- **Slide 5:** Who or what are your direct competitors or substitutes? How are you different? Why should customers/stakeholders choose you?

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<sup>2</sup> Name your presentation using this convention: TeamNumber\_TeamName\_Date

## **Class 2 at NCI: Customer / Stakeholder Interviews (May 7, 2019)**

### **Interview at least 10 potential customers and record your interviews in LPC.**

Prior to coming to the kick-off you were asked to schedule 10 interviews with stakeholders relevant to your project. We strongly suggest doing all of your interviews in person. If it is absolutely necessary to conduct the interviews remotely, you should try to conduct the interviews using video conferencing software (e.g. skype) rather than over the phone so you can still register non-verbal cues. For the kickoff, please try to set up interviews with people in the **DC-metro area** rather than setting up remote interviews with individuals from your home location. You will have plenty of time to interview those individuals in the coming weeks.

You have all day for these interviews. You should start as early as possible and you can end late as long as you are back for office hours at the hotel in the evening.

When allowed take photos of your customer's/stakeholder's place of work, the interviewee, situations and locations when they might encounter pains or possible gains, etc. These photos will be useful in reconstructing your learning journey and communicating with the teaching team at the end of the course.

Log your interviews into LPC immediately.

# Class 3 at NCI: Insights from Interviews (May 8, 2019)

## Due Before Class

### Read and Watch

- Read VPD: Section 1.1 “Customer Profile” and 2.3 “Understanding Customers”
- Read BMG: Customer Insights pp. 126-133
- Watch on LPC: Lecture 2 Value Propositions, Lecture 3 Customer Segments

### Prepare and upload presentation

10-minute presentation, 2-minute instructor Q&A

- **Slide 1:** Team name and number; team member names and photos; business thesis (who is the “customer” for the intervention, what is the intervention, why will customer use it). *The number of customer interviews since last session by type (in person, videoconference, phone).*
- **Slides 2-n:** What did you learn about your Customers and Value Propositions?
  - Hypothesis: Here’s What We Thought
  - Experiments: So Here’s What We Did
  - Results: So Here’s What We Found
- **Slide 3:** Value Proposition Canvas (focus on Customer Profile – Job/Pains/Gains)
- **Slide 4:** How do your customers (users) solve your identified problem/need today? Why does your solution solve it better than the competition or substitutes/alternatives?
- **Slide 5:** Current business model canvas with any changes highlighted. Must use the BMC in LPC and export from LPC to your presentation.
- **Slide 6:** Here’s what we are going to do for next week.

Upload your presentation to Dropbox by midnight ET in PDF format.

Use this naming convention: TeamNumber\_TeamName\_Date

# Class 4 WebEx #1: Problem Solution Fit with Revenue (May 16, 2019)

## Due Before Class

**Interview** at least 5 more potential customers and record your interviews in LPC (15 total).

## **Read and Watch**

- Read VPD: Section 1.3 “Fit” and Section 2.1 “Prototyping Possibilities”
- Read BMG: Prototyping pp. 161-168

## **Prepare and Upload Presentation**

10-minute presentation, 2-minute instructor Q&A

- **Slide 1:** Team name and number; team member names and photos; business thesis (who is the “customer” for the intervention, what is the intervention, why will customer use it).
  - *The number of customer interviews since last session by type (in person, videoconference, phone).*
- **Slides 2-n:** What did you learn about your customers and their inter-relatedness?
  - Hypothesis: Here’s What We Thought
  - Experiments: So Here’s What We Did
  - Results: So Here’s What We Found
- **Slide 3:** Customer workflow diagram (where do you fit in the customer’s process); reference “a day in the life”, p. 114 of VPD
- **Slide 4:** Customer ecosystem diagram showing “customer types/stakeholders” (beneficiaries - if any, users, decision makers, buyers, etc.) and money and influence flows (as appropriate)
- **Slide 5:** Create a diagram or storyboard of your MVP and how you might use it to test your Product-Market Fit
- **Slide 6:** Current business model canvas with any changes highlighted; Must use the BMC in LPC and export from LPC to your presentation
- **Slide 7:** Here’s what we are going to do for next week...

Upload your presentation to Dropbox by midnight ET in PDF format.

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# Class 5 WebEx #2: Problem Solution Fit with Revenue (May 23, 2019)

## Due Before Class

**Interview** at least 5 potential customers and record your interviews in LPC (20 total).

## **Read and Watch**

- Watch on LPC: Revenue Streams

## **Prepare and Upload Presentation**

10-minute presentation, 2-minute instructor Q&A

- **Slide 1:** Team name and number; team member names and photos; business thesis (who is the “customer” for the intervention, what is the intervention, why will customer use it).
  - *The number of customer interviews since last session by type (in person, videoconference, phone).*
- **Slides 2-n:** What did you learn about your stakeholder economics? Why would any of them adopt your product?
  - Hypothesis: Here’s What We Thought
  - Experiments: So Here’s What We Did
  - Results: So Here’s What We Found
- **Slide 3:** Revenue/Sustainability
  - What is your best guess for how your efforts to gain adoption of your idea can be sustained? Will anyone buy your product or service? What are the alternative revenue streams you will use to keep your effort moving forward? Why would those sources provide you with revenue?
- **Slide 4:** Current business model canvas with any changes highlighted. Must use the BMC in LPC and export from LPC to your presentation.
- **Slide 5:** Here’s what we are going to do for next week...

Upload your presentation to Dropbox by midnight ET in PDF format.

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# Class 6 WebEx #3: Go to Market Economics (May 30, 2019)

## Due Before Class

**Interview** at least 5 potential customers and record your interviews in LPC (25 total). To the extent possible, try to understand how your prospective customers buy (get), use and maintain (keep), and possibly upgrade (grow) your company's solutions over time.

## Read and Watch

- Watch on LPC: Channels
- Watch on LPC: Customer Relationships
- Optional Reading on Reimbursement (if relevant to your project):  
[Reimbursement Basics](#)

## Prepare and Upload Presentation

10-minute presentation, 2-minute instructor Q&A

- **Slide 1:** Team name and number ); team member names and photos; business thesis (who is the "customer" for the intervention, what is the intervention, why will customer use it).
  - *The number of customer interviews since last session by type (in person, videoconference, phone).*
- **Slides 2-n:** What did you learn about your Customer Relationships (Get/Keep/Grow strategy, CAC/LTV)?
  - Hypothesis: Here's What We Thought
  - Experiments: So Here's What We Did
  - Results: So Here's What We Found
- **Slide 3:** How will you distribute your product or service?
  - What is the distribution channel? Are there alternatives? What was it that made channel partners interested? Excited?
  - Draw the channel diagram - Annotate it with the channel economics
- **Slide 4:** Go to Market
  - Describe how you will acquire your first 100 users or buyers
  - Identify key metrics you will measure
- **Slide 5:** Demand Creation
  - How will you create demand?
  - What conferences do you need to attend?
  - Create an estimate and forecast for your company's demand creation budget
  - Do you have relevant Key Opinion Leaders (KOL's)? If so, who are they?
  - Do you need Scientific Advisory Board? Who should be on it?
- **Slide 6:** Current business model canvas with any changes highlighted; Must use the BMC in LPC and export from LPC to your presentation.
- **Slide 7:** Here's what we are going to do for next week...

Upload your presentation to Dropbox by midnight ET in PDF format.

Use this naming convention: TeamNumber\_TeamName\_Date

## Class 7 WebEx #4: Mid-point Review (Week of June 3, 2019)

This week will be the same as always with your presentations but they will be conducted one-on-one with the instructors. A sign-up schedule will be provided and the time slots may not correspond with the usual time for the WebEx meetings.

### Due Before Class

**Interview** at least 5 potential customers and record your interviews in LPC (30 total). Continue to focus your interviews on Customer and Value Proposition hypotheses. However, also add a few questions about Channels (where do customers access interventions today) and Customer Relationships (how do they learn about new interventions, how is a decision made to bring in a new solution, etc. – focus on “Get” part of Get/Keep/Grow funnel).

### **Prepare and Upload Presentation**

10-minute presentation, 2-minute instructor Q&A

- **Slide 1:** Team name and number; team member names and photos; business thesis (who is the “customer” for the intervention, what is the intervention, why will customer use it).
  - *The number of customer interviews since last session by type (in person, videoconference, phone).*
- **Slides 2-n:** What did you learn about your Problem Solution Fit or Product Market Fit over the prior sessions? Did you learn anything new about Channels and Customer Relationships that the customers expect for new interventions?
  - Hypothesis: Here’s What We Thought
  - Experiments: So Here’s What We Did
  - Results: So Here’s What We Found
- **Slide 2:** Display your original stakeholder map.
- **Slide 3:** Revise your customer/stakeholder map and update the money and influence flows. Identify the gaps in your dissemination/adoption strategy. How will you overcome those challenges?
- **Slides 4-X:** Revise the following slides:
  - List to be provided
- **Slide 5:** Current business model canvas with any changes highlighted; Must use the BMC in LPC and export from LPC to your presentation
- **Slide 6:** Here’s what we are going to do for next week...

Upload your presentation to Dropbox by midnight ET in PDF format.

Use this naming convention: TeamNumber\_TeamName\_Date



# Class 8 WebEx #5: Operations, Partners and Costs (June 13, 2019)

## Due Before Class

**Interview** at least 5 potential customers and record your interviews in LPC (35 total). Focus your interviews on your Revenue and Pricing hypotheses.

## **Read and Watch**

- Watch on LPC: Lecture 7 Partners
- Watch on LPC: Lecture 8 Resources, Activities and Costs
- Read BMG: Open Business Models pp. 109-113 and Storytelling pp. 170-180

## **Prepare and Upload Presentation**

10-minute presentation, 2-minute instructor Q&A

- **Slide 1:** Team name and number; team member names and photos; business thesis (who is the “customer” for the intervention, what is the intervention, why will customer use it).
  - *The number of customer interviews since last session by type (in person, videoconference, phone).*
- **Slides 2-n:** Review your first business model canvas emphasizing the key activities and partners section:
  - Hypothesis: Here’s What We Thought on Day 1.
  - Experiments: So Here’s What We Did
  - Results: So Here’s What We Think Now
- **Slide 3:** To begin operating your commercialization project what key resources do you need that you currently do not have?
- **Slides 4-n:** What did you learn about your Partner’s needs and wants?
  - Hypothesis: Here’s What We Thought
  - Experiments: So Here’s What We Did
  - Results: So Here’s What We Found
- **Slide 5:** What types of partners do you absolutely need...and why? What are the risks for you and the partner(s)? How will the economic benefits/costs be shared?
- **Slide 6:** Current business model canvas with any changes highlighted; Must use the BMC in LPC and export from LPC to your presentation
- **Slide 7:** Here’s what we are going to do for next week...

Upload your presentation to Dropbox by midnight ET in PDF format.

Use this naming convention: TeamNumber\_TeamName\_Date

# Class 9 WebEx #6: Operations, Partners and Costs (June 20, 2019)

## Due Before Class

**Interview** at least 5 potential customers and record your interviews in LPC (40 total). Focus your interviews on your Key Activities and Partners hypotheses.

## **Read and Watch**

- Review on LPC: Lecture 8 Resources, Activities and Costs

## **Prepare and Upload Presentation**

10-minute presentation, 2-minute instructor Q&A

- **Slide 1:** Team name and number; team member names and photos; business thesis (who is the “customer” for the intervention, what is the intervention, why will customer use it).
  - *The number of customer interviews since last session by type (in person, videoconference, phone).*
- **Slide 2:** Costs and Capital Requirements
  - Provide an estimate of your market size or social impact analysis.
  - Estimate how much money you will need to reach your first major milestone.
  - What are the total capital requirements to reach success?
- **Slide 3:** Current business model canvas with any changes highlighted; Must use the BMC in LPC and export from LPC to your presentation.
- **Slide 4:** Here’s what we are going to do for next week...

Upload your presentation to Dropbox by midnight ET in PDF format.

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# **Class 10&11 at NCI: Lessons Learned and Next Steps (June 27-28, 2019)**

## **Due Before Class 10 (June 27, 2019)**

**Interview** potential customers and record your interviews in LPC (45+ total interviews).

### **Read and Watch**

- Review and Watch: Previous team's final presentations (<https://www.nci-sprint.com/past-team-journey-videos.html>)  
Watch: Story Telling Videos ([www.venturewell.org/i-corps/llp/videos/david-riemer/](http://www.venturewell.org/i-corps/llp/videos/david-riemer/))

### **Prepare and Upload**

Draft 2-minute Team Journey video

Draft 10-minute Lessons Learned presentation

Upload your presentation to Dropbox by 7:00 AM ET in PDF format.

Use this naming convention: TeamNumber\_TeamName\_Date

## **Due Before Class 11 (June 28, 2019)**

### **Prepare and Upload**

Final 2-minute Team Journey video

Final 10-minute Lessons Learned presentation

Upload your presentation to Dropbox by 7:00 AM ET in PDF format.

Use this naming convention: TeamNumber\_TeamName\_Date

## **Purpose of the Final Presentations**

While it may seem that the video and the presentation are separate, they actually combine to be your final presentation. The video is played first and the presentation follows. Your audience for both of these includes the cohort of SPRINT teams, the NIH, yourselves and lastly, but certainly not least, the teaching team. This is your opportunity to:

- inform and teach your fellow SPRINT teams about the lessons you have learned both specific to your business and general to entrepreneurship. Sharing your insights with your colleagues in SPRINT raises the skills of the entire cohort.
- show the NIH that your team has the capability to learn, improve, and succeed. Even if that success might not come from the idea you started SPRINT with.
- summarize and own your team's personal successes and failures that came from the intensity of the program. SPRINT does its best to create a safe environment for personal reflection and understanding. Some teams come out stronger, some teams have difficulties. All participants finish the course stronger, having learned about their capability to listen and empathize with customers, guess about and pivot business models to the right place, and deal with the real-world stress of doing something new and extremely challenging.
- And, through the above, satisfy the teaching team's goals that you experienced the entrepreneur's journey, remained open and coachable during that journey, and have reached the best decision possible regarding your opportunity.

## **Honesty and Clarity**

SPRINT builds many skills but one, in particular, is your ability to sense when something is real versus being made up out of thin air. Your colleagues in the cohort will be listening to your presentation with that in mind. Stay honest to what you learned and make your points clearly. You have three different voices to use in doing this:

- Voice of the Customer. Use direct quotes, stories, photos, and anecdotes from your customers to bring them into the room. Use their names. Look back at your interview notes and photographs to make this real. What did they tell you that you didn't understand until later? What were the big surprises?
- Voice of your Team. Your team and teammates likely had notable "moments" during the program that can be used to illustrate how well, or not well, you worked together. These hard-won moments are often where the greatest learning and development happens. Bring the audience into these moments by using storytelling. Use pictures from your team meetings or each of you in your offices to build these stories. Find pictures that show emotion.
- Voice of the Business Opportunity. Your team started SPRINT with a business model guess. That business model very likely changed significantly over the weeks of the program and feedback from customers, your peers, and the teaching team. Each of those moments of change represents a moment of clarity for you and your team. How your business opportunity changed and why can be very useful for everyone in the

audience and represents your team's ability to learn as a startup venture. The source of these stories comes from your BMC and all the slides that you have created during the program.

To keep your audience interested and learning, build your video and presentation using these voices and the stories that surround them.

### **Team Journey Video - Two Minutes Max**

The video tells the story of your team's and your personal journey through SPRINT. It should include the lead-up to SPRINT, the key moments for your team during your customer discovery journey, and how you brought the process to completion. Storytelling is critical to making a compelling video. High-production values are not (some of the best videos have been very straightforward). Great videos have included clips of potential customers, video excerpts, locations traveled and other key visual and auditory moments during the course. Make it personal - include the team in the video as well as key "aha" moments. Your video will be played at the start of your presentation - avoid redundancy between the video and your presentation. This is NOT a marketing video for your product.

You will start outlining the video during the last two weeks of the course and will get feedback from the teaching team. Sample videos from prior cohorts are available.

Final videos should be < 50 MB each (sizes can be reduced in editing software) and 2 minutes or less.

### **Lessons Learned Presentation**

Each of the teams in SPRINT will have gone up a significant learning curve. You learned about your customers, business modeling the search for a valid business model, entrepreneurship and startups and yourselves. Your final presentation should describe the significant lessons learned, insights, Ah Ha moments or other realizations that occurred during the program. Your presentation must be less than 10 minutes. You cannot possibly cover everything you learned in 8-10 weeks in a 10-minute presentation. The final presentation is an exercise in distilling the most critical, surprising, and impactful things you learned in the process. Don't repeat a customer story or insight from the video in your presentation.

The subject of your presentation is your business and the development of the opportunity that you started the course with. We need to see "why" your business model canvas evolved the way it did. Include anecdotes about specific customer interviews that support the story of your business model evolution. If you have a demo, prototype, screenshots, etc. include it in your presentation only as a supporting character to illustrate your learning. We are not just interested in "what" your product is, but "why" your product is – what did you learn from customers that shaped your product vision and strategy and why do you think you have problem-solution fit?

Your slide deck should support your storytelling: don't read your slides. The following is one way to outline your slides for this presentation. It is a guideline only unless something is marked

“required.”

#### Cover slide (required)

- Team member names and photos; Company name and logo; Team number; Company business thesis; and, updated Number of customer interviews by type since the last session. This is your final update of this slide.

#### Why you?

- Give more detail about your team, individual roles and why this team got an SBIR and is in SPRINT.

#### Remind us of your starting point in SPRINT (required)

- What were you thinking when you started? You can show your Business Model Canvas on day 1. “Here was our original idea.”
- What you thought SPRINT would do for you, your expectations (this could be the start of your story)

#### Critical strategies and learnings you took in SPRINT

- Follow the classic method you know so well:
  - “So here’s what we did...”
  - “So here’s what we found (what was reality), so then...”
  - “This is why that was important and how it changed our ...”
- We were prepared to do these things but changed to these strategies over the course of the program
- Our low point was ...; Our high point was ...

#### Your search for a valid business model

- Tell us using your BMCs about your business model pivots. Tell the story of why you changed your thinking. Where were your preconceptions wrong?
- “So here’s where we ended up.” Tell us about: What did you learn? If you think this is a viable business; why or why not? Is this a happy ending? Why or why not?

#### Your next steps - broadly

- Based on where you ended up, what tangible action steps will you take?
- Almost all teams continue customer discovery. Tell us what you really need to continue your learning journey. What are the critical risks that you must mitigate?
- Give the audience a sense of the long-term opportunity and your team’s desire to pursue that.

#### Your next steps - specifically (required)

- Tell us a little about the critical next steps in the pursuit of your project. Are you going back to do more research? Will you continue to pursue this personally, or not? What are the next steps from a partnership standpoint?
- Consider both the short term steps and what you would like to see happen over the long run.