

IDS 460/560: DESIGNING SOLUTIONS FOR DEFENSE - SPRING 2020

Course: IDS 460/560 *Designing Solutions For Defense:*

Solving National Security Issues with the Lean Model Launchpad

Instructors: Josh Hill (Criminal Justice), Henry Jones (Computing), James Wilcox (Business)

TA's: TBD

Location: Scianna Hall 1039

Days: Wednesdays

Time: 1:00PM – 4:00PM

Office Hours by Appointment:

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Webpage: <http://h4d.usm.edu/>

Also be sure to see the national H4D website at <https://www.h4di.org/>

Texts (Optional):

- The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company: Steve Blank & Bob Dorf, 2012
- Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers: Alexander Osterwalder & Yves Pigneur, 2010
- Value Proposition Design: How to Create Products and Services Customers Want (Strategyzer): Alexander Osterwalder & Yves Pigneur, 2014
- Talking to Humans: Constable & Rimalovski, 2014 (free PDF at <http://www.talkingtohumans.com/download>)
- Thanks for the Feedback: Douglas Stone and Sheila Heen, 2014

Additional Course Resources (Required):

Required videos for the course, as well as helpful supplemental materials, can be found in the **Course Resources** section at the bottom of the syllabus.

Speaking Intensive Requirement and Student Expectations:

Every student in the class will be expected to speak each week from Week 2 or 3 to Week 15 as part of the structured team presentations to the entire class (including instructors and visitors) for a total of 13-14 presentations. Every student is also expected to participate in the interview process with external experts conducted by the teams throughout the course to gather information for these presentations. Students will get feedback on their presentation performance directly from instructors and other students throughout the course, both during the class and outside. Consequently, this course meets the University's Speaking-Intensive Requirement (GEC 08), which states:

Competence in oral communication requires knowledge of the goals, rules, and audience in a particular situation; motivation to perform effectively; and, the ability to make a skilled presentation. The Speaking Intensive (SI) component should enable students to acquire appropriate oral communication skills. SI

courses must include at least two SI-related assignments, guidance and instruction in preparing those assignments, and a clear evaluation procedure to provide students with feedback about their work. Speaking assignments can include formal speeches, research presentation, lectures, small group presentations, debates, interviews, etc. Students should experience oral communication in ways that are germane to and will best serve them in their disciplines.

Course Goal:

Hands-on experience in understanding, and working with the Department of Defense (DOD) and the “Intelligence Community” (IC) on actual problems they currently confront

Notes:

1. The baseline Hacking for Defense (“H4D”) course provided by the national program is 10 weeks. The USM semester is usually 16 weeks. Therefore, some of the team-building tasks done prior to H4D at other universities will be done in the first three weeks of class. The “first class” in which the typical H4D student activities will be underway is
12 FEBRUARY 2020 (Week 3)
2. Teams are expected to interview 10 beneficiaries before the Week 3 class
3. Teams are expected to present their first Mission Model Canvas in the Week 3 class
4. All students should read the Intellectual Property section on the USM website - <https://www.usm.edu/institutional-policies/policy-rsch-otd-001>

OVERVIEW

DESIGNING SOLUTIONS FOR DEFENSE (DS4D) is the USM class that participates in the national HACKING FOR DEFENSE (H4D) program. H4D is designed to provide students the opportunity to learn how to work with the Department of Defense (DOD) and Intelligence Community (IC) to better address the nation’s emerging threats and security challenges. Unlike current practices in the DoD/IC that can stall and in some cases thwart rapid innovation, this course will provide a platform that can develop prototypes that match DOD/DHS/IC users’ needs in weeks. Agencies or Commands in the Department of Defense and Intelligence Community may provide follow-on funding to these student teams for further refinement and development of prototypes.

In this DS4D/H4D class, student teams may either select from an existing set of problems provided by the DoD/IC community or, under certain circumstances requiring instructor approval, introduce their own ideas for problems (which may originate from other federal, state, or local government agencies than the DoD or IC) that need to be solved. Although teams pick a problem to solve, HACKING FOR DEFENSE is not a product incubator for a specific technology solution. Instead, it provides teams with a deeper understanding of selected problems and the host of potential technological solutions that might be arrayed against them. Using the Lean LaunchPad Methodology the class focuses teams to:

1. Solve extremely complex real-world problems
 2. Rapidly iterate technology solutions while searching for product-market fit
 3. Understand all the stakeholders, deployment issues, costs, resources, and ultimate mission value
 4. Delivery minimum viable products that match customer needs in an extremely short time
 5. Produce a repeatable model that can be used to launch other potential technology solutions
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GENERAL

| HOW YOU'LL LEARN | |
|-----------------------|--|
| Flipped Classroom | Unlike a traditional classroom where the instructor presents lecture material, our lectures are online at Launchpad Central (https://www.launchpadcentral.com/). Watching the assigned lectures is part of your weekly homework. The information in them is essential for you to complete your weekly interviews and present the insights the teaching team will expect in your presentation for that week. We expect you to watch the assigned lectures for the upcoming week before class and we will use time in class to discuss questions about the lecture material and to provide supplemental material. You need to come prepared with questions or comments about the material for in-class discussion. We will cold-call students to answer questions about the online lecture material. |
| Experiential Learning | You will be spending a significant amount of time in between each of the lectures outside the class talking to customers. Each week your team will conduct a minimum of 10 customer interviews focused on a specific part of the business model canvas. This class is a simulation of what startups and entrepreneurship are like in the real world: chaos, uncertainty, impossible deadlines in insufficient time, conflicting input, etc. |
| Inverted Lecture Hall | Sitting in the back of the classroom are experienced instructors and professionals who have built and/or funded world-class startups as well as seasoned military professionals with significant experience in the field. We won't be lecturing in the traditional sense, but commenting and critiquing on each team's progress. While the comments may be specific for each team, the insights are almost always applicable to all teams. Pay attention. |
| Peer to Peer Culture | While other teams are presenting the results of their weekly experiments, the rest of the class is expected to attentively listen, engage, and react to what they see and hear. Sharing insights, experience, and contacts with each other is a key way that this unique laboratory achieves results. |
| Class Culture | Startups communicate in a dramatically different style from the university or large company culture you may be familiar with. At times it can feel brusque and impersonal, but in reality, is focused and oriented to create immediate action in time- and cash-constrained environments. 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. This approach may seem harsh or abrupt, but it 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. This class pushes many people past their comfort zone. If you believe that your role of your instructors is to praise in public and criticize in private, you're in the wrong class. Do not take this class. You will be receiving critiques in front of your peers weekly. The pace and the uncertainty pick up as the class proceeds. As part of the process, we also expect you to question us, challenge our point of view if you disagree, and engage in a real dialog with the teaching team. |

GRADING

This course is team-based and 85% of your grade will come from your team progress and a final project. Your peers will also grade your contribution to your team. The grading criteria are broken down as follows:

In-class participation and course engagement – **15%**

- b) Written feedback to other teams provided throughout the semester, during class presentations via the webform
- c) Active attendance at each class
- d) Timely viewing of course videos viewed as evidenced by performance on short quizzes about the video content
 - i. There will be more quizzes earlier in the semester, and fewer as you gain your footing on applying the MMC

Primary coursework – **30%***

- (1) Must have 10 interviews (per team) per week!
- (2) Class presentations of MMC work and experiments
 - a. Identify which team member did which portion of the work
 - b. Detailed report on what the team did each week
- (3) Twitter engagement
 - a. Tweet about each of the customers/stakeholders you engaged with
- (4) Infographic using the course site
 - a. Number of interviews
 - b. Number of hypotheses tested
 - c. Number of positive/negative/partially supported results
 - d. Weekly emotion tracking

Team Video Projects – **25%**

The team video projects parallel the presentation, described below. In the first video, each team will recount their “journey” over the course of the semester – from receipt of the problem to final presentation. However, this video is not meant to focus on the development of the MVP, but rather the development of the team itself – how the class has shaped your experience, what you’ve learned, how you’ve changed, and the challenges and rewards the class has presented.

The second team video is focused explicitly on the MVP the team develops to solve the problem presented. It can be considered a “pitch” video, and should contain a statement of the problem, a team introduction, the stakeholders the MVP serves, and a description of the MVP itself.

Each of these videos is expected to be 3 minutes or less.

Team final presentations – **30%**

As in the case of the videos, the final presentation must cover both the team’s “journey” as well as the MVP.

*This total is multiplied by a “peer grading multiplier” as assigned to you by your team at the end of the semester.

| Week | Team Presentation Topic | Lecture/ Presentation | Lecture Topic |
|-------------------|--|--------------------------|--|
| Week 1 Jan 22 | No Team Presentation, Team Formation Discussion/Problems, Course Overview | 1 | Background, Introductions, Problem Set, Instructor Q/A |
| Week 2 Jan 29 | Camp Shelby | 2 | DoD 101: Introduction and How to work with the DOD/DHS/IC Understanding the military rank structure |
| Week 3 Feb 5 | Mission Model Canvas | 3 | Customer Discovery; Beneficiary Development in the DOD/DHS/IC |
| Week 4 Feb 12 | Beneficiaries | 4 | Value Proposition |
| Week 5 Feb 19 | Value Proposition | 5 | Product/Mission Fit |
| Week 6 Feb 26 | Product/Mission Fit | 6 | Dual Use |
| Week 7 Mar 4 | Dual Use | | Mission Achievement |
| Week 8 Mar 11 | Mission Achievement | 7 | Buy-in & Support |
| Week 9 Mar 18 | Spring Break | 8 | |
| Week 10 Mar 25 | Buy-in & Support | 9 | Deployment |
| Week 11 Apr 1 | Base # 2 | | |
| Week 12 Apr 8 | Deployment | 10 | Activities, Resources, & Key Partners |
| Week 13 Apr 15 | Activities, Resources & Partners | 11 | Mission/Budget Cost |
| Week 14 Apr 22 | Mission Budget / Operating Plan & Cost | 12 | Protecting your IP Final Presentation Planning |
| Week 15 Apr 29 | Base # 3 | | |
| Week 16 May 6 | Lessons Learned: Final Presentations | 13 | Final Lessons Learned Presentations |

Weekly Assignments

Week 1 Assignments – Learning about Lean Startup, Hacking for Defense

| | |
|--------|--|
| Read | <p>Read the <i>Harvard Business Review</i> Article: <i>Why the Lean Startup Changes Everything</i></p> <ul style="list-style-type: none"> • https://hbr.org/2013/05/why-the-lean-start-up-changes-everything/ar/1 <p>Read the Rationale for the Hacking for Defense class</p> <ul style="list-style-type: none"> • https://steveblank.com/2016/01/26/hacking-for-defense-stanford/ <p>Get a sense of what's expected in a Hacking for Defense class (watch videos too)</p> <ul style="list-style-type: none"> • https://steveblank.com/2017/06/08/hacking-for-defense-stanford-2017-lessons-learned-presentations/ <p>Read from the Startup Owner's Manual (SOM):</p> <ul style="list-style-type: none"> • pp. 22-30: An Introduction to Customer Development • pp. 31-50: The Customer Development Manifesto • pp. 67-68: Overview of Customer Discovery <p>Read from Business Model Generation (BMG):</p> <ul style="list-style-type: none"> • pp. 14-49: The 9 Building Blocks of the Canvas • pp. 134-142: Ideation • pp. 200-211: Business Model Environment |
| Watch | <p>Watch two overviews of the <i>Business Model Canvas</i></p> <ul style="list-style-type: none"> • https://www.youtube.com/watch?v=QoAOzMTLP5s • https://www.youtube.com/watch?v=2FumwkBMhLo <p>and one overview of the <i>Value Proposition Canvas</i></p> <ul style="list-style-type: none"> • https://www.youtube.com/watch?v=ReM1uqmVfP0 <p>View the Beginners Mindset</p> <ul style="list-style-type: none"> • https://vimeo.com/78551898 <p>Udacity Online Lesson 1: What We Know Now</p> <ul style="list-style-type: none"> • https://www.udacity.com/wiki/ep245/downloads |
| Create | None |

Week 2 Assignments – Learning about the Mission Model Canvas and Customer Development

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| Read | <p>Read Startup Owner's Manual (SOM):</p> <ul style="list-style-type: none"> • pp. 76-81: Value Proposition and MVP • pp. 112- 122: Market Type • pp. 123-124 Competitors • pp. 189-199 Getting Out of the Building/ Experiments/ Contacts • pp. 472 Market Size • pp. 473-475 Product Features Checklist • pp. 487 Contacts Checklist <p>Read about what NOT to do with the canvas: http://www.spikelab.org/blog/correctly-use-business-model-canvas.html</p> |
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| Watch | <p>The Art of the Minimum Viable Product http://www.youtube.com/watch?v=Fj0qsAyKPN8 Udacity Online Lessons 1.5A and 1.5B: Business Models & Customer Development</p> <ul style="list-style-type: none"> • https://www.udacity.com/wiki/ep245/downloads |
| Create (8 min presentation + 4 min Q&A) | <p>Slide 1: Title slide</p> <ul style="list-style-type: none"> • Team name, team members/roles, support team (liaisons, mentors, problems sponsors) • Number of beneficiaries interviewed this week • Total number interviews completed • Three sentence description what the team does and why customers (which might be only your government sponsor at this point) should care <p>Slide 2: Introduce us to the team</p> <ul style="list-style-type: none"> • Discuss the details this first week only <p>Slide 3: Minimal Viable Product</p> <ul style="list-style-type: none"> • Show us your MVP of the week • Tell us what hypothesis the MVP is testing, what data you expected and what you actually received. <p>Slide 4: Customer Discovery</p> <ul style="list-style-type: none"> • Tell us about your first 10 beneficiary interviews. <i>Hypothesis:</i> Here's What We Thought <i>Experiments:</i> Here's What We Did <i>Results:</i> Here's What We Found <i>Action:</i> Here's What We Are Going to Do Next <p>Slide 5: Mission Model Canvas</p> <ul style="list-style-type: none"> • Updated Mission Model Canvas with week-to-week changes shown in red • If you have a multi-sided market, show sides using different colors |

Week 3 Assignments – Learning about Beneficiaries

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| Read | <p>Read Talking to Humans by Constable & Rimalovski (available free online) Read Business Model Generation (BMG):</p> <ul style="list-style-type: none"> • pp 127-133 Customer Insights • pp 161-168 Prototyping <p>Read Startup Owner's Manual (SOM):</p> <ul style="list-style-type: none"> • pp. 85-- 92: Customer Segments, Types, and Archetypes • pp. 203- 214: Problem Understanding • pp. 218- 219 Gain Customer Understanding |
| Watch | <p>Watch the Strategyzer overview, Episodes 1 to 3 https://www.youtube.com/playlist?list=PLBh9h0LWoawphbpUvC1DofjagNqG1Qdf3 What do customers get from you? https://videopress.com/v/glvHroJM</p> |
| Create | <p>Use online search tools and input from your sponsor to look for potential competitors, other ways to get the job done, and efforts that have been tried in the past</p> |

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| | <p>Update last week's PowerPoint, removing the Team Slide and adding a value proposition canvas at Slide 4 for each customer segment (you'll learn more over the next two weeks about this as well)</p> <ul style="list-style-type: none"> • What are the Gains, Pain, Customer Jobs? • How do they solve this problem(s) today? Does your value proposition solve it? How? • What is the Customer Archetype? <p>Record customer interviews and other activities in your blog</p> |
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Week 4 (and 5 – no class) Assignments – Learning about Value Propositions

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| Read | <p>Read through the 10 Tips to Remember about customer discovery interviews at https://s3.amazonaws.com/TalkingtoHumans/Talking+to+Humans+10+tips.pdf</p> <p>Read Startup Owner's Manual (SOM):</p> <ul style="list-style-type: none"> • pp. 222- 224: Market Knowledge • pp. 260-266 Product/ Market Fit • pp. 476- 477: Customer Segment Checklist <p>Read Value Proposition Discovery (VPD):</p> <ul style="list-style-type: none"> • pp. 7-25 Value Proposition Definition and Customer Profile |
| Watch | Udacity Online Lesson 3: Customer Segments |
| Create (8 min + 4 min Q&A) | <p>Update last week's PowerPoint, including every canvas with highlighted changes</p> <p>Insert a slide with a diagram of the relevant customer workflow after each Value Proposition Canvas slide</p> |
| Update | Team Blog |

Week 6 Assignments – Learning about Product/Mission Fit

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| Read | <p>Read Autonomow at http://steveblank.com/2014/10/03/my-students-grow-into-a-company/</p> <p>Read the Introduction and first four chapters of Thanks for the Feedback</p> |
| Watch | Udacity Online Lesson 6: Revenue Model |
| Create | Update last week's PowerPoint, including every canvas with highlighted changes |
| Update | Team Blog |

Week 7 Assignments – Learning about “Dual Use”

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| Read | <p>Read Business Model Generation (BMG):</p> <ul style="list-style-type: none"> • pp. 127-133 Customer Insights • pp 134-145 Ideation • pp 161-169 Prototyping <p>Read Startup Owner's Manual (SOM):</p> <ul style="list-style-type: none"> • pp 85-92 Customer Segments • pp 203-226 Test Problem Understanding • pp 260-266 Have We Found Product/Market Fit • pp. 476-477 Customer Segments Checklist |
| Watch | Udacity Online Lesson 2: Value Proposition |

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| Create (8 min + 4 min Q&A) | Slide 1 Title slide Slide 2: Customer Discovery Slide 3: Mission Model Canvas Slide 4: Value Proposition Canvas Slide 5 Minimal Viable Product <ul style="list-style-type: none"> ● What are the Products/Services, Pain Relievers, Gain Creators? ● What's the MVPs you'll test? |
| Update | Team Blog |

Week 8 (and 9 – no class) Assignments – Learning about Mission Achievement

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| Read | https://steveblank.com/2017/10/17/the-red-queen-problem-innovation-in-the-dod-and-intelligence-community/ |
| Watch | Watch the Strategyzer overview, Episodes 4 to 6 https://www.youtube.com/playlist?list=PLBh9h0LWoawphbpUvC1DofjagNqG1Qdf3 |
| Create | As a mid-term review, fill in all the questions in the Assumptions Exercise at https://s3.amazonaws.com/TalkingtoHumans/Talking+to+Humans+Assumptions+Exercise.pdf |
| | Update last week's PowerPoint, including every canvas with highlighted changes |
| Update | Team Blog |

Week 10 Assignments – Learning about Buy-in and Support

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| Read | Read chapters 7, 8, and 9 in Thanks for the Feedback |
| Watch | Udacity Online Lesson 4: Channels |
| Create | Update last week's PowerPoint, including every canvas with highlighted changes |
| Update | Team Blog |

Week 11 Assignments – Learning about Deployment

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| Read | Read Business Model Generation (BMG): pp. 147-159 Visual Thinking |
| Watch | Udacity Online Lesson 7: Partners |
| Create | Update last week's PowerPoint, including every canvas with highlighted changes |
| Update | Team Blog |

Week 12 Assignments – Learning about Customer Relationships

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| Read | Read Startup Owner's Manual (SOM): <ul style="list-style-type: none"> ● pp. 126-143 Customer Relationships Hypotheses ● pp. 296-303 Get/Keep/Grow ● pp. 480- 482 Relationships Checklist ● pp. 489 Test the Problem and its Importance |
| Watch | Udacity Online Lesson 5: Customer Relationships |
| Create | Update last week's PowerPoint, including every canvas with highlighted changes |

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| | Also on Slide 2: Customer Discovery <ul style="list-style-type: none"> • Draw the Get/Keep/Grow diagram - Annotate it with the key metrics |
| Update | Team Blog |

Week 13 Assignments – Learning about Activities, Resources and Partners

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| Read | <p>Get up to speed on these three related components at https://benpfsmith.wordpress.com/2013/05/28/key-partners-activities-and-resources/</p> <p>Read about each one individually at https://billyepperhart.com/blog/2015/03/30/developing-key-activities-business-model-canvas/ https://billyepperhart.com/blog/2015/03/16/building-key-partners-business-model-canvas/ https://billyepperhart.com/blog/2015/03/23/defining-key-resources-business-model-canvas/</p> <p>Read one company’s perspective on partners at https://www.heflo.com/blog/business-management/key-partners-in-a-business-model/</p> |
| Watch | Udacity Online Lesson 8: Activities & Resources |
| Create (8 min + 4 min Q&A) | <p>Update last week’s PowerPoint, including every canvas with highlighted changes</p> <p>Add a new Slide 2: What are your critical Activities?</p> <ul style="list-style-type: none"> • Software Development? Manufacturing? Freedom to operate/Intellectual Property? Regulatory approval? <p>Add a new Slide 3: What are your critical Resources? (Resources should match your critical Activities)</p> <ul style="list-style-type: none"> • What human resources will you need? What equipment resources will you need? What financial resources will you need to acquire all these resources? • Are they resources you already have? Do you need to acquire or partner with others to get them? How much will they cost? <p>Slide 4 Diagram of activities and resources/partners needed to accomplish them</p> <p>Slide 5 Mission Model Canvas</p> <p>Slide 6 Value Proposition Canvas</p> <p>Slide 7 Minimal Viable Product</p> <ul style="list-style-type: none"> • What are the Products/Services, Pain Relievers, Gain Creators? • What’s the MVPs you’ll test? |
| Update | Team Blog |

Week 14 Assignments – Learning about Mission Budget / Operating Plan and Cost

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| Read | <p>Read Startup Owner’s Manual (SOM):</p> <ul style="list-style-type: none"> • pp. 180-188 Revenue and Pricing Hypotheses • pp. 260-269 Verify Business Model • pp. 438 Metrics that Matter |
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| | <ul style="list-style-type: none"> ● pp. 528 Validate Financial Model |
| Watch | None |
| Create (8 min + 4 min Q&A) | <p>Slide 1: Title slide</p> <ul style="list-style-type: none"> ● Show us your MVP <p>Slide 2: What were your hypotheses about what Partners will you need? (Partners should match your critical Resources and Activities)</p> <ul style="list-style-type: none"> ● Why do you need these partners and what are risks? ● Why will they partner with you? ● What's the cost of the partnership? ● Diagram the partner relationships with any dollar flows ● What are the incentives and impediments for the partners? <p>Slide 3: What did you learn about your Costs?</p> <ul style="list-style-type: none"> ● Hypothesis: Here's What We Thought ● Experiments: So Here's What We Did ● Results: So Here's What We Found <p>Slide 4: What experiments do you run to test your fixed and variable costs?</p> <p>Slide 5: Mission Model canvas with any changes marked in red, Multi-sided markets shown in different colors (Is this a multi-sided market?)</p> <p>Slide 6: Diagram of Costs flows (a costed bill of materials for hardware/services)</p> <p>Slide 7: Rough three-year finance, operations and fundraising timeline.</p> <p>Slide 8: Diagram the finance and operations timeline</p> <p>Update MVP</p> |
| Update | Team Blog |

Week 15 Assignment: Final Presentation

Disability Accommodations

The statement below must be included on each syllabus:

If a student believes that they have a disability which is covered by the Americans with Disabilities Act (ADA) and makes them eligible to receive classroom or housing accommodations, they should contact the Office for Disability Accommodations (ODA) for information regarding the registration process. Disabilities covered by the ADA may include but are not limited to ADHD, learning disabilities, psychiatric disabilities, physical disabilities, chronic health disorders, temporary illnesses or injuries and pregnancies. Students should contact ODA if they are not certain whether their documented medical condition qualifies for ODA services. Students are only required to disclose their disability to the Office for Disability Accommodations. All information submitted to ODA by the student is held with strict confidentiality.

Address:

The University of Southern Mississippi
Office for Disability Accommodations

118 College Drive # 8586
Hattiesburg, MS 39406-0001

Voice Telephone: 601.266.5024 or 228.214.3232

Fax: 601.266.6035

Individuals with hearing impairments can contact ODA using the **Mississippi Relay Service** at 1.800.582.2233 (TTY) or emailing ODA at oda@usm.edu.

Note that faculty members must accommodate students with disabilities and must adhere to the excused absence policy of the University. Faculty members are required to excuse absences in which a student misses class in his or her capacity as an official representative of the University. In such cases, students must be given a reasonable opportunity to make up work. See [Faculty Handbook 3.4.2.10](#).

Documentation in these two cases will come from ODA or from the official body for which the student serves as a representative.

Academic Integrity

All students at the University of Southern Mississippi are expected to demonstrate the highest levels of academic integrity in all that they do. Forms of academic dishonesty include (but are not limited to):

1. Cheating (including copying from others' work)
2. Plagiarism (representing another person's words or ideas as your own; failure to properly cite the source of your information, argument, or concepts)
3. Falsification of documents
4. Disclosure of test or other assignment content to another student
5. Submission of the same paper or other assignment to more than one class without the explicit approval of all faculty members involved
6. Unauthorized academic collaboration with others
7. Conspiracy to engage in academic misconduct

Engaging in any of these behaviors or supporting others who do so will result in academic penalties and/or other sanctions. If a faculty member determines that a student has violated our Academic Integrity Policy, sanctions ranging from resubmission of work to course failure may occur, including the possibility of receiving a grade of "XF" for the course, which will be on the student's transcript with the notation "Failure due to academic misconduct." For more details, please see the University's [Academic Integrity Policy](#). Note that repeated acts of academic misconduct will lead to expulsion from the University.

H4D FINAL ASSIGNMENTS

The final portion of the class is in 3 parts. The first two consist of videos summarizing (in video 1) the “journey” of the group across the semester and (in video 2) the development of your understanding of the MVP your team has created.

The insights behind these two videos will be combined in the final presentation, which will walk viewers through both your group’s journey, as well as the development of the MVP. This presentation is essential to get right. It needs to contextualize your MVP within the context of your group’s interpersonal development/development within the course while still helping those viewing understand *how* you solved the problem you took on and what your solution is. All within 10 minutes.

To assist with this, we offer the guidance below.

Deliverables: On the final day of class, each team will present a 10-minute “Lessons Learned” presentation and will have 8 min Q&A from the teaching team and any guests, as well as 2 videos (~3 minutes each) detailing the group’s journey over the course of the semester and the development of the MVP, respectively.

Final Presentation:

Goal: Communicate what you learned in 10 weeks and how you learned it. Do this by showing what you learned (photos, diagrams) and how you learned it (stories of interviews, insights).

Use the language of class: interview, iterations, pivots, restarts, experiments, MVPs, evidence. The focus of your presentation will be on how you gathered evidence and how it impacted your understanding of your business models, while you were building your MVP.

Strategy: Tell us how you used customer discovery and MVPs to evolve your mission model through iterations, and how the accumulation of evidence outside the classroom led you to pivot. Contextualize this in your group’s growth over the semester.

Potential Tactics: show the following

- Initial hypotheses and petal diagram
- Quotes from customers that illustrate learnings insights
- Diagrams of key parts of the Canvas: customer flow, channel, get/keep/grow
- (before and after)
- Pivot stories
- Screenshots of the evolution of MVP
- Demo of final MVP
- Bring any “show and tell” items

View sample presentations from other courses (mostly at Stanford) at:

<http://bit.ly/1WDOUez>

and others at:

<http://www.slideshare.net/sblank>

3-minute video(s):

In addition to your 8-minute presentation, create two, 3-minute videos to be shown at the beginning of your final presentation.

The Journey:

The initial video should summarize the personal/interpersonal journey your team went on, highlighting key changes in morale, development of skills, confidence, and challenges. Really think about what the course has done for you in terms of both personal and team development. What will you take away from the course that you can apply in the future? Storytelling quality is critical. High production value is not (some of the best videos have been very straightforward). Make it personal - include the team in the video as well as key "aha" moments. This video is about the discovery process. It is NOT a marketing video for your product.

MVP Development:

The second video should summarize the development of your MVP. While it can include some interpersonal developmental aspects, it should focus on the key customer insights that took you from your initial idea to the final development of the MVP. Storytelling quality is critical. High production value is not (some of the best videos have been very straightforward). While the video focuses on your MVP, it is not a "pitch," but rather the story of the development of your MVP.

See sample videos here <https://www.slideshare.net/sblank/videos>

Course Resources

Online Lectures:

"Udacity EP345": <https://www.udacity.com/wiki/ep245/downloads>
from the online course <https://www.udacity.com/course/how-to-build-a-startup--ep245>
(Requires free personal login to view all the content)

Lean Launchpad Resources:

- See <http://steveblank.com/category/lean-launchpad/> for more Lean Launchpad resources, in particular his slides and videos: <https://steveblank.com/slides/> and two-minute videos: <https://steveblank.com/category/2-minute-lessons/>
- Steve Blank's Tools & Blogs for Entrepreneurs: <http://steveblank.com/tools-and-blogs-for-entrepreneurs/>
- Beneficiary Discovery tutorials: <http://venturewell.org/i-corps/llpvideos/>
- To get an overview of the Business Model Canvas

The Business Model canvas is one of the three components of the Lean Method. The Mission Model Canvas we use in Hacking for Defense is a derivative. Read about the business model canvas here:

<http://businessmodelgeneration.com/canvas/bmc>

- To get an overview of the Value Proposition Canvas
The Value Proposition Canvas is a subset of the Business & Mission Model Canvas. Read about it and download it here:

<http://www.businessmodelgeneration.com/canvas/vpc>

- Background of why Alexander Osterwalder designed the Value Proposition canvas here

<http://businessmodelalchemist.com/blog/2012/08/achieve-product-market-fit-with-our-brand-new-value-proposition-designer.html>

- You'll need to understand the reward and the challenge of working with the Department of Defense – and this slide deck is a good place to start. The instructors have the background information to go with it.

<https://www.slideshare.net/sblank/h4d-dod-101-workshop-040516>

Customer Development Videos

(These will help with Beneficiary Development)

“How to do Customer Discovery” Videos:

The videos below are short tutorials about how to practice Customer Discovery. You can find them on Vimeo or on VentureWell.org

- <https://vimeo.com/groups/190717>
- <https://vimeo.com/groups/204136>
- <http://venturewell.org/i-corps/llpvideos/>

Pre-Planning Customer Discovery

- Pre-Planning Pt. 1 (4:55)
- Pre-Planning Pt. 2 (3:25)
- Pre-Planning Pt. 3 (1:29)

Customer Discovery Interviews

- Interviews Pt. 1 (5:40)
- Interviews Pt. 2 (3:49)
- Asking the Right Question (2:37)

Outside the Building

- Death by Demo 1 (2:18)
- Death by Demo 2 (1:45)

- Assuming You Know (1:56)
- Understanding the Problem (3:22)
- Customers Lie (2:37)
- The Distracted Customer (3:12)
- Engaging the Customer (3:37)
- Customer Empathy (2:25)
- The User, the Buyer & the Saboteur (2:24)
- Multi-Person Interview (2:03)
- B-to-B to C (2:15)
- Existing vs. New Markets (5:29)
- Interviews in Public (2:11)

Back in the Building

- Extracting Insight from Data (2:59)
- Getting the MVP Right (3:34)
- The “Other 85%” (2:32)