

MODULE



Prototype and MVP Finalization

"If there isn't a source, it's probably not true"

- Ian Fowler

Introduction

The purpose of this module is to have students understand the difference and similarities between an MVP and a Prototype. Facilitators will introduce case studies to the class to illustrate these differences and show the development of an MVP to the final product. Students will also be introduced to the BMC and should begin working on their own BMC. By the end of the module students will have finalized their MVP's and meet with facilitators to discuss them.

Objectives

1. Students should understand the difference between an MVP and a Prototype
2. Students should come into to class with a near finalized MVP
3. Students should understand the importance and setup of a BMC
4. Students should have their MVP finalized and have meet with with facilitators

Agenda

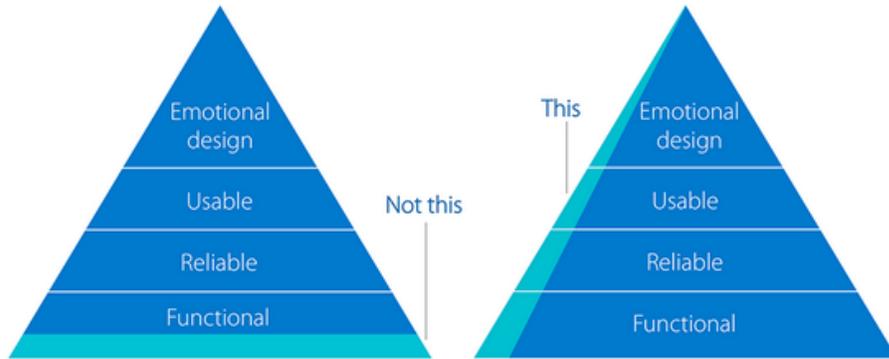
1. MVP review
2. Prototype vs MVP
3. MVP Case Studies
4. MVP Development
5. BMC
6. Individual Work time and check-ins

Lecture Notes

[MVP review\(5 min\)](#)

MVP Explained
MVP Sources

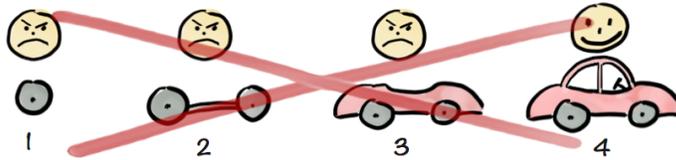
Minimum Viable Product



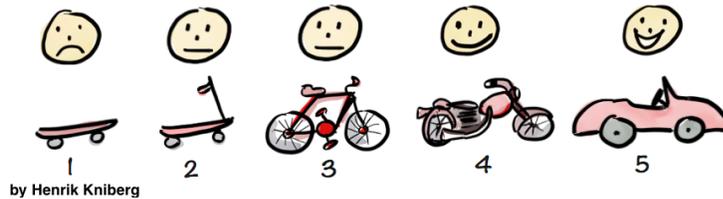
@jopas

September 2014 | With compliments to Aaron Walter

Not like this....



Like this!



by Henrik Kniberg

<https://www.interaction-design.org/literature/article/a-simple-introduction-to-lean-ux>

SocEnt Crash Course (SCC):

The Minimum Viable Product is a startup's way of gathering information about their vision and their way of developing it. It is a low-cost, low-effort attempt to simulate the functions/outcomes of a startup's product/service. It also creates a way for companies and entrepreneurs to measure their impact on the community and prevent them from making uninformed decisions. SocEnt students will use the principle of the MVP to create a product/service that addresses the pain point that they have studied.

An important distinction to remember is the difference between

the creation of the MVP and the beginning stages of the design thinking process. The feedback step of the design thinking process is about gathering data about your target audience in order to make an informed decision when it comes to creating iterations of your product/service; this may come in forms of surveys, etc. When creating an MVP, sending out a survey to your target audience is merely gathering feedback, so you need to have a version of your product that uses the least amount of time and resources and that is an actual MVP. An MVP enables users to experience the same purpose or goal that you are trying to accomplish with the complete product, and a survey does not accomplish that.

Note: Up to facilitator discretion. If students understand that there are different types of MVPs and can provide examples, then types of MVPs do not need to be touched on. If coverage is needed, don't just list off these MVPs--use a couple of them to illustrate the point of an MVP.

Prototype vs. MVP (10 min)

Purpose: For students to understand the difference between an MVP and a Prototype, and also connect this back to design thinking. (Students will be

making a MVP for their own project)

Materials: N/A

Directions: Explain the purpose of both an MVP and Prototype, as well as outline the differences and similarities between the two.

Facilitation Notes

Briefly compare and contrast prototypes and MVPs.

MVP: *refer to lecture notes* MVP, or minimum viable product, is the most basic or simplest version of a product that is created to get feedback from the target audience.

Prototype: This is known as stage 4 in the design thinking process, and is when a preliminary or sample version of the product is built for testing. It is meant for testing within the own project team, and to make adjustments and edits quickly. A prototype should be close to the actual version or product in terms of features, look/appeal, and usability.

“Prototypes are built so that designers can think about their solutions in a different way (tangible product rather than abstract ideas), as well as to fail quickly and cheaply, so that less time and money is invested in an idea that turns out to be a bad one.

Prototypes are often used in the final, testing phase in a Design Thinking process in order to determine how users behave with the prototype, to reveal new solutions to problems, or to find out whether or not the implemented solutions have been successful. The results generated from these tests are then used to redefine one or more of the problems established in the earlier phases of the project, and to build a more robust understanding of the problems users may face when interacting with the product in the intended environment.

Instead, designers can provide simple, scaled down versions of their products, which can then be used in order to observe, record, judge, and measure user performance levels based on specific elements, or the users' general behaviour, interactions, and reactions to the overall design. These earlier versions are known as prototypes; they are not necessarily in the medium of the finished product as this may not be cost-effective in terms of time or money.”

Source:

<https://www.interaction-design.org/literature/article/stage-4-in-the-design-thinking-process-prototype>

MVP Case Studies (15 min)

Purpose: The purpose of this section is to introduce the different types of MVPs to students, especially those that they are most likely to utilize, and

familiarize the students with several case studies of different types of MVPs.

Materials: [Types of MVPs](#)

Directions: Walk through some of the MVPs in the list (outlined below) and some case studies.

Facilitation Notes

Briefly reiterate the different types of MVPs and talk about different successful case studies. Then, break the class into their groups and have them discuss which type of MVP would work the best for their product/service. Facilitators should go around to each group and help them identify which type of MVP they should make.

Case Studies:

1. The Video MVP

- a. Demonstrating what your product does can be better than just asking customers if they're interested in your product. Interest can be gauged much better by the number of customers actually sign up for your product.
 - i. Example: For Dropbox, they went from 5,000 people on their beta waitlist to 75,000. Their video also included many inside jokes about things that the tech, Reddit, Digg communities would appreciate.

2. Wizard of Oz MVP

- a. Sometimes your product will need a lot of time to program due to its complexity. In these cases, it can be difficult to create an MVP because all of the main features of your product will take time to develop. A solution to this has humans do the work instead of code.
 - i. Example: Take Aardvark as an example. This was a product that wanted to become a search engine for subjective questions. The creators could have jumped in and programmed an incredibly complicated system to do this but instead, they created an MVP first. They had users type in questions like "where is a good place to eat around here?" They answered the question by passing the question to people in another room. These people would answer the question. The customer was happy because the question was asked. This let them know that their idea was truly creating value for their customers. They learned this before they made an actual product.

3. Concierge MVP

- a. This type of MVP works by serving one customer extremely well. You pour all of your resources into this customer and learn as much as you can about what he or she likes and dislikes about your product. Then you add one more customer and repeat until you start seeing patterns. This MVP model allows you to learn what exactly creates value for your customers. Eventually, you will

need to devote time to creating a product that can automate this high level of service, but when you do, you will not be wasting resources because you have a basic set of problems that you know you need to solve.

- i. Example: Food on the Table was a start-up that figured out food you like to eat and matched you with grocery stores with the best deals. Once you sign up-selecting your grocery store and food your family eats-you can select what you were in the mood for each week: healthy, a lot, veggies, meat. Then, recipes and a shopping list were created for you based on all those parameters. So how many customers did they start with? One. Every week the CEO and VP of Product visited their one customer and gave her exactly what she wanted, acting like her personal concierge.

4. The Newsletter MVP

- a. Offer some information about your product's main features and ask customers to give you their email addresses if they are interested in receiving more information about your product. This type of MVP is super simple and can be done by anyone regardless of their technical skill. It is not as good as building a low quality product, but it does allow you to partially gauge what problems you are solving for customers.

- i. Example: <https://beta.snowshoestamp.com/> Try to order. You just give them an email.

5. Vapor-wear MVP

Create a website with a call to action conversion button that leads to nothing. Use the data on how many people clicked the signup button to see if people are interested.

- a. Example: Amazon one-click delivery

MVP Development (15 min)

Purpose: Talk about the role of prototypes and MVPs in the Design Thinking process. Explain the iteration process of developing upon the initial prototype/MVP. Discuss the loop between the Ideate, Prototype, and Testing

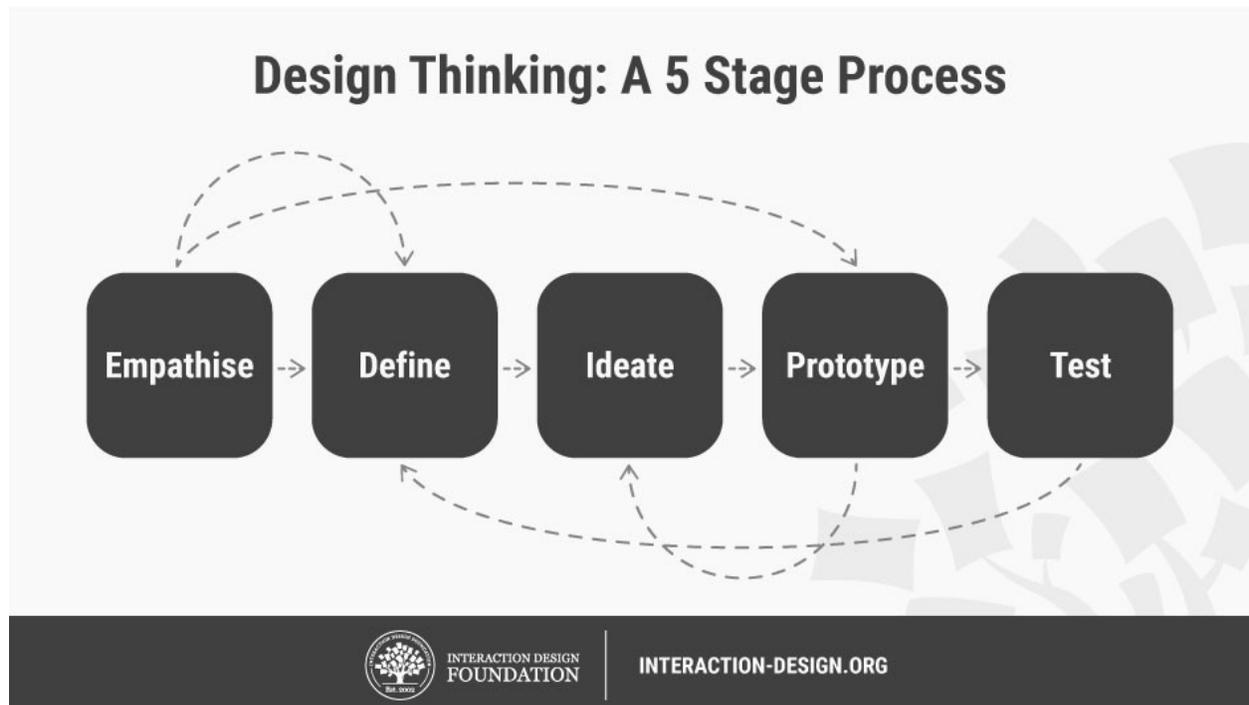
steps of design thinking. Reiterate that there will be several iterations of the MVP before the MVP is finalized.

Materials: N/A

Directions: Talk through the last three steps of design thinking and explain the iteration process.

Facilitation Notes

Talk through the last three steps of the design thinking model and emphasize the iterative nature of the process. Discuss the continuous loop between the Ideate, Prototype, and Test steps until the prototype is finalized.



Business Model Canvas (BMC) (15 min)

Purpose: The purpose of this section is to introduce the BMC to students and give them time to work on their own BMCs. *The students will need to include a complete BMC on their SLX presentations.*

Materials: N/A

Directions: Talk through each section of the BMC and help students relate the sections to their own projects.

Facilitation Notes

Introduce the BMC and explain the different parts of it. Walk through each section with a visual pulled up. Have the students break up into their project groups and work on making their BMC. Facilitators should walk around and help groups, if necessary, with making their BMCs. Remind students that they have to include a BMC in their SLX presentation.

<p>Key Partners </p> <p>Who are our Key Partners? Who are our key suppliers? Which Key Resources are we acquiring from partners? Which Key Activities do partners perform?</p> <p>KEYNESIAN TIME REQUIREMENTS Specialization and economy Reduction of risk and uncertainty Acquisition of particular resources and activities</p>	<p>Key Activities </p> <p>What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams?</p> <p>KEYNESIAN TIME REQUIREMENTS Production Process design Partners/network</p>	<p>Value Propositions </p> <p>What value do we deliver to the customer? Which one of our customer's problems are we helping to solve? What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying?</p> <p>KEYNESIAN TIME REQUIREMENTS Research Performance Customization "Building the old Doer" Design R&D/status Price Cost Reduction Risk Reduction Accessibility Convenience/usability</p>	<p>Customer Relationships </p> <p>What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones follow us into adulthood? How are they integrated with the rest of our business model? How costly are they?</p> <p>KEYNESIAN TIME REQUIREMENTS Personal attention Customer Personal Assistance Self Service Automated services Communities Co-creation</p>	<p>Customer Segments </p> <p>For whom are we creating value? Who are our most important customers?</p> <p>KEYNESIAN TIME REQUIREMENTS Mass Market Niche Market High Income Diversifier Multi-segment Platform</p>
<p>Key Resources </p> <p>What Key Resources do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue Streams?</p> <p>KEYNESIAN TIME REQUIREMENTS Physical Intellectual (brand patents, copyrights, etc.) Human Financial</p>		<p>Channels </p> <p>Through which Channels do our Customer Segments want to be reached? How are we reaching them now? How are our Channels integrated? Which ones work best? Which ones are most cost-efficient? How do we integrate them with customer routines?</p> <p>CHANNEL STRATEGIES 1. Awareness How do we raise awareness about our company's products and services? 2. Evaluation How do we help customers evaluate our organization's Value Proposition? 3. Purchase How do we allow customers to purchase specific products and services? 4. Delivery How do we deliver a Value Proposition to customers? 5. After sales How do we provide post-purchase customer support?</p>		
<p>Cost Structure </p> <p>What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive?</p> <p>IN YOUR BUSINESS MODEL Cost structure based on cost structure, for price value proposition, maximum automation, extensive outsourcing Value Driver (Diversifier) or value creation, premium value proposition</p> <p>KEYNESIAN TIME REQUIREMENTS Fixed Costs (salaries, rents, utilities) Variable Costs Economies of scale Economies of scope</p>		<p>Revenue Streams </p> <p>For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay?</p> <p>How much does each Revenue Stream contribute to overall revenues?</p> <p>FIXED Salary/wage Lease fee Subscription Fee Licensing Royalty fees Advertising</p> <p>FIXED PRICES List Price Product Feature dependent Customer segment dependent Volume dependent</p> <p>DYNAMIC PRICES Negotiation (bargaining) Self Management Real time market</p>		

Sections of the BMC

- **Key partners**- a list of all external sources that might be of use to make the product more valuable or achieve the goal better.
- **Key Activities**- list of activities the company needs to do to achieve the goal
- **Key resources**- list of resources necessary to achieve the goal
- **Value proposition**- the value of the product or service that you are offering to your target audience
- **Customer relationship**- relationship a company has with its customers
- **Channels**- ways your customers can come in contact with the company (through social media, television, etc.)
- **Customer Segments**- how your company will divide your target audience into smaller subgroups to determine interest
- **Cost structure**- how much will it cost to create the product and where does that number come from
- **Revenue streams**- where will your revenue come from

Supplemental REVIEW CONTENT:

Facilitation Notes

In this section, go over the definition of an MVP briefly and explain the importance of having one. Remind the students that they will need an MVP for SLX.

MVP INFO (5 minutes)

1. What is an MVP?
 - a. **Minimal Viable Product**
 - b. Low-cost, low-effort
 - i. An MVP should not be as grand as the full product/service; rather, it should be a way for a venture to better understand their target audience and their product/service while maintaining low-cost and low-effort..
 - c. Should simulate the functions/outcomes of a startup's product/service
 - i. An MVP cannot merely just be a method for feedback, but it must mimic the same function of a startup's product/service. Hence, minimum viable product, meaning that an MVP should, in simpler terms, be a scaled down version of the true product.
 - d. The build stage of BML aligns with the creation of the MVP
 - i. Although the creation of an MVP can result at other times, a common stage for MVP creation is the build stage of the BML loop.
 - e. From the MVP, ventures measure the results and learn from them thereafter
 - i. Following the build stage, the measure and learn stage are where an MVP is tested and results are received. With the results, a venture is able to decide whether the MVP has been successful or not. Therefore, with such information, the venture is able to change their final product/service in order to better it.
 - f. Without an MVP, the possibility to waste energy, time, and resources is more likely because the role of an MVP is to garner target audience interest in the product/service.
 - i. If ventures did not create MVPs, they would spend a lot of time, energy, and resources in order to create the perfect product/service on their first try. If the product/service fails, then all has gone to waste. As a result, the role of an MVP is largely important to a startups success.
 - g. Types of MVPs

MVP Explained

MVP Sources

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Types of Prototypes

- Low-fidelity: prototyping involves the use of basic models or examples of the product being tested. They can either be models that are cheaply and easily made, or simply recounts or visualisations of them.
 - Examples:
 - Storyboarding.
 - Sketching
 - Card sorting.
 - 'Wizard of Oz'.
- High-fidelity: prototypes are prototypes that look and operate closer to the finished product.
 - Examples
 - a 3D plastic model with movable parts (allowing users to manipulate and interact with a device in the same manner as the final design)
 - an early version of a software system developed using a design program such as Sketch or Adobe Illustrator

- Concept car