

MODULE

6

The Lean Startup

"Startup success is not a consequence of good genes or being in the right place at the right time. Startup success can be engineered by following the right process, which means it can be engineered by following the right process, which means it can be learned, which means it can be taught."

- Eric Ries, *Lean Startup*

Introduction

This module aims to go further into the lean startup than students have done in previous modules. It introduces three key features from the lean startup: the minimum viable product, the Build-Measure-Learn loop, and pivots. These three techniques are integral in the lean startup methodology, which focuses on minimizing risk, failing fast, and using the minimum amount of resources, time and funding.

Objectives

1. Students will be able to use the concept of BML (build-measure-learn) to improve their product/service.
2. Students will be able to identify and utilize the importance of failing fast.
3. Students will be able to explain what MVPs (minimum viable product) are and their importance.
4. Students will be able to understand the BML loop, its effectiveness, and know how to utilize it in their own SEVs (social entrepreneurial ventures).
5. Students will be able to understand what pivots are, when they should use them, and utilize them within their own SEV if necessary.

Agenda

1. The Lean Startup
 - a. Lecture (30-45 minutes)
 - b. Simulation (30 minutes)
2. Work Time (if time available)

SEV Progress

1. Students need to be prepared to present at MID next week.
2. Facilitators should have checked in with each group (during the last module or outside of class).

Module 5 Sources

The Lean Startup

MUST READ THIS! Summary of The Lean Startup by Eric Ries

Lecture Notes (30-45 minutes)

1. **(Optional) Intro to Lean Startup Activity (15 minutes)**
 - a. [Birthday Party Activity](#)
 - b. Or another quick and fun way to introduce the topic
2. **What is the Lean Startup?**
 - a. **Fail fast, fail cheap**
 - i. The concept is, startups try something, and then they gauge whether they are successful or not fast. If they fail, they fail fast and can quickly change their course of action
 - b. Minimize risk and losses
 - i. By simply going for it and not investing hours into planning and dollars into design, startups can limit the amount of stuff (time money resources) they put on the line.
 - c. Steps
 - i. Create a prototype (MVP), test it, measure the results, and learn from it (BML)
 - ii. Discuss what the lean startup method is and why it is effective in minimizing risk and reducing uncertainty.
3. **BML**
 - a. Build-Measure-Learn cycle
 - b. Build: Create an MVP to “fail fast, fail cheap”. The MVP is the “Build” of your very first iteration, and you constantly build your product/service through changes as you measure feedback.
 - c. Measure: From the MVP, the results should be observed
 - d. Learn: The results should then teach the venture something about their product/ service
 - e. How this cycle is central to the Lean Startup process because it is through this cycle that an entrepreneur essentially minimizes risk, which is the whole point of the Lean Startup. By creating an MVP through the first iteration of the BML cycle, making changes to the product/service as entrepreneurs learn from feedback, and pivoting, the BML cycle is integral to the Lean Startup.
4. **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 since 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](#)
5. **Pivots**
- a. Purpose
 - i. Pivots are a method for ventures to create change within their product/service. There are a numerous amount of different pivots, but all essentially change the previous version of the product/service into a newer, better version.
 - b. Repetition of the BML cycle
 - i. Although pivots don't always end the BML cycle, it is common to see pivoting occur after the learn stage. Once an MVP is created and tested, a venture is able to learn from the results. From the results, they can tweak their product/service (pivot).
 - c. [Types of Pivots](#)
6. [Combined Simulation](#)

Birthday Party

Purpose:

This will introduce the topic to the Lean Startup

Materials:

White board
Markers

Directions:

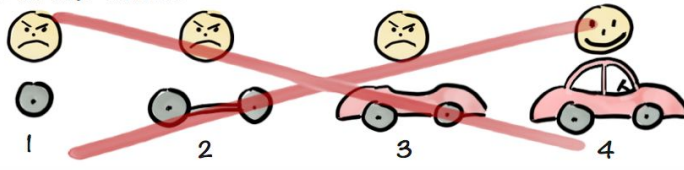
Divide the class into groups of 3-4. Tell the class they are in charge on planning someone's birthday party (it can be a facilitator or some random persona profile you

make) - the group with the best birthday party wins. Tell them a couple of things you like, and let them know that you are open to answering questions. Give them 10 minutes to plan and have them draw out their parties on the whiteboard. Let them know they should be prepared to give a 1 minute elevator pitch as a group. Let each group pitch. Tell them they all lost (if they all had super extravagant parties), because all this person simply wanted was a simple cake and a few friends. Explain how so much time, money, and effort was put into these parties. The students were also asking the wrong questions, and were purely focused on what you liked in general as opposed to what you wanted in a party. Relate this back to the the core principles of the Lean Startup and explain.

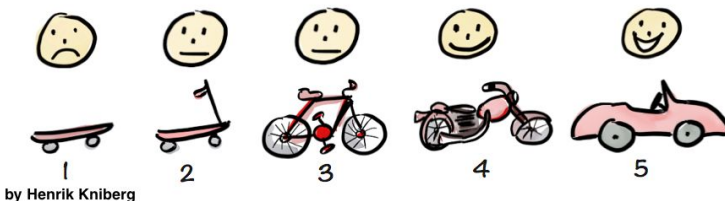
MVP Explained

MVP Sources

Not like this....



Like this!



by Henrik Kniberg

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 in 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: Don't just list off these MVPs--use a couple of them to illustrate the point of an MVP in conjunction with a case study. We can send these out to students to read on their own but it's not effective to just read out descriptions.

Some Types of MVPs:

P.S (There are a myriad number of MVP's available and it is up to entrepreneurs to create anything that suits the business they are creating. This is just a few examples so they can get ideas out of it.)

1. **The Pay No Attention to the Eight People Behind the Curtain (Wizard of Oz) MVP**

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 is have humans do the work instead of code.

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.

2. **The Concierge MVP**

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.

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.

3. **The Newsletter MVP**

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.

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

4. **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 sign up button to see if people are interested.

Example: Amazon one-click delivery

5. **The Video MVP**

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. 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.

Pivots Explained

Resources:

1. Ries, Eric. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Crown Business, 2014.
 - a. Information regarding the types of pivots and what a pivot is + what it is used for

SocEnt Crash Course (SCC):

A pivot is not simply when a company changes their course in product strategy. A pivot is a *purposeful*, structured experiment that is used to test a business hypothesis. These business hypotheses focus on a core value or component of the venture - whether it be the platform, structure, problem, cost flow, customer base, etc. Examples of pivots are outlined below.

Although some pivots are formed after impact measurement, they can still be formed as a result of a change in knowledge and research regarding that topic, But also without impact measurement to support a pivot, there is no way of knowing whether the company had been better off without the pivot. This is a matter of pivoting or persevering - if a company is experiencing a stall in growth, or is not receiving any users at all, the company should decide whether a pivot is necessary and the reason behind the pivot.

The types of pivots, outlined by Eric Ries in The Lean Startup, are listed below. You can choose several to facilitate depending on what you think your class would be interested in + which case studies you want to use.

Don't just list these off--use a couple of them to illustrate the point of an MVP in conjunction with a case study. We can send these out to students to read on their own but it's not effective to read out descriptions.

1. **Zoom-In:** in this situation, a single feature becomes whole product and everything else in the product is cut away. This pivot helps organizations find and retain focus by delivering the [minimum viable product](#) (MVP) as fast as possible.
2. **Zoom-Out:** what was considered the whole product now becomes a single feature of a much larger product. This is the reverse of the zoom-in pivot. Companies use this pivot

- when they have data that shows a single feature set, i.e. a product, is insufficient to support the customer, users or market segment and decide to make the product more expansive.
3. **Customer Segment:** sometimes after a product is launched, it attracts real customers, but not the customers in the original product vision. While disappointing, this pivot encourages the product designers to reposition and optimize the product adoption by a more appreciative market segment.
 4. **Customer Need:** in some situations early customer feedback indicate that the problem being solved by the product is not very important. Other times, the customer does make money available to buy the product. This pivot requires the product team to find a real customer problem worth solving and worth paying for.
 5. **Platform:** this pivot refers to a change from an application to a platform or vice versa. Many product designers envision their solution as a platform for future products. Most customers buy solutions, not platforms.
 6. **Business Architecture:** [Geoffrey Moore](#), author of the famous book [Crossing the Chasm](#), observed many years ago that there are two major business architectures: high margin, low volume (complex systems model) or low margin, high volume (volume operations model). This pivot recognizes that a company cannot do both at the same time.
 7. **Value Capture:** this pivot refers to the monetization or revenue model for the product. When using this pivot, leaders changes how the company captures value. Many software products today offer free versions with minimally sufficient functionality. Later, they ask users to pay to unlock greater power. Unfortunately, the free model doesn't capture much value for the business.
 8. **Engine of Growth:** there are [three primary growth engines](#) for a startup: viral (users promoting the product), sticky (customer retention) and paid growth models (advertising). Picking the right model can dramatically affect the speed of growth and profitability. This pivot seeks to change the engine of growth.
 9. **Channel:** there are many different ways, or channels, to deliver a product to the customers. This pivot asks the business to select a different product delivery channel with greater effectiveness. A channel pivot usually requires unique pricing, feature and/or competitive positioning adjustments.
 10. **Technology:** sometimes a startup discovers a way to deliver the same solution to the customer by using a completely different technology. Companies make this pivot when new technology can provide superior price and/or performance to improve competitive position.

Flickr Pivot: Flickr began as an online roleplaying game called Game Neverending, where users would travel around a digital map and trade, buy, or sell items. The game also had a photo-sharing mechanism which became the most valuable part of the site. So the site pivoted from the game to an exclusively photo-sharing website, at which point it was acquired by Yahoo. This was a **Zoom-In** pivot, where one feature of the product became the entire product.

YouTube: Youtube began as a dating site on which users would share information about themselves, but within the first five days of the product's existence no one had uploaded a video. So Youtube's founders decided to nix the dating site aspect and opened it up for videos from all people. This could be either a **customer segment pivot** or a **zoom-in** pivot.

Salty Girl Seafood: Started off as a way to link restaurants & chefs to sustainably sourced fish and encourage fisheries to engage in environmentally friendly practices. Into their first year, pivoted towards consumers directly and made pre-portioned and pre-prepared seafood meals while still keeping the elements of selling sustainable,

traceable fish. This is a **customer segment pivot**.

PayPal: PayPal started off as a money transference application on PDAs (early incarnations of the smartphone), but when PayPal became the preferred method of payment for eBay users, the company moved to an internet platform accessible through the browser. This is a **platform pivot**.

How do you know whether or not to pivot?

After researching and/or evaluating your SEV, you may find out that the original pain point you targeted is not a real pain point - you will need to make a **customer need pivot**.

Outside of your SEV, when you have an MVP out and you're able to get results back from the experimental release, the aforementioned impact measurement will help you decide whether or not to pivot. If you do not have a significant consumer base, or if you've found that your company is not making an impact, that is when you should consider pivoting rather than persevering.

Combination Simulation (30 minutes)

Purpose:

This simulation will provide a way for students to apply their knowledge learned in this lesson, and ensure understanding. The previous topics (lean startup, BML, MVP, pivots) are all applied into a BML cycle to solidify the information.

Materials:

Different problems

Whiteboards + Markers

Directions:

Assign a different problem to each SEV group and tell them to come up with a solution and an MVP testing that solution (build stage). [you can choose from the problems listed below]

Different Problems:

- A large majority of people who need glasses/contacts don't like to wear them, but because they don't, it increases the possibility of fatal accidents at cross sections.
- A number of computers have weak hinges and break as a result of long term stress on the area.
- The backs of poor students are hurt by heavy backpacks. What can we do to relieve their burden?
- Aglets aren't enough to protect shoe laces from fraying
- Tempered glass screen protectors lead to some glass fallout when they break, becoming a hazard.
- For winter-sport athletes in Waterloo, Canada; Athletes become

- out of shape during the season due to lack of practice areas.
- Kids living in Maine do not have enough intake of nutrition
- People from 1508 don't have friends
- Seniors during second semester chronically missing check
- Art hipsters in Los Angeles who eat lunch alone
- Teachers who have second semester seniors who don't do their work

After coming up with an MVP, we will provide them with "feedback" on how their MVP worked (measure stage). Students should be able to take away information/data from the feedback (learn stage) and will pivot to create a better solution to the initial problem. Go through this process several times (2-3) to allow them to start thinking about what is the best way to come up with a pivot and apply it effectively.

Wrap-up:

1. Explain the purpose of each topic (lean startup, BML, MVP, pivot) in the context of this simulation.
2. Along with that, the importance should be mentioned.
3. The information garnered from this activity should be something that the students are able to take and apply to their own SEV's.