Activity 1
How to Build a Prototype

Now that you have decided on the hypothesis, what to test and measure, the next step is to design your Minimum Viable Product or MVP.

It is important for you to see the connect between a prototype and an MVP. Often a prototype precedes an MVP and sometimes, the prototype itself can become your first MVP. Conceptually, there are differences between a prototype and an MVP. This document illustrates the differences between a prototype and an MVP and provides the principles of prototyping which will help you design and build your MVP. You can also download it from Edcast.

A) Differences between an MVP and a Prototype

Area	Prototype	MVP
Purpose to	Test feasibility and proof of concept	Maximize validated learning for the least effort
Focus is	Presentation to stakeholders	Deployment into production
Features include	Some that may be discarded in the MVP	Basic and functional
Designed for	Small audiences – often stakeholders	Sizable customer groups
Legacy	Discarded after testing	Ist version of a complete solution
Feedback sought on	Product concept and idea	Product features and functionally
Composition may include	Mock-up, video, presentation	A functional basic product
Customer value	Demonstrates promised value	Delivers tangible initial value
Timing - Built when	Business case and product unproven, insufficient funds, risks unknown	Business case and product sound, sufficient funding, minimal risks
Testing	Market need	Product solution
Revenue	Not for sale	Sold to early adopters

Source: https://www.quora.com/What-is-the-difference-between-a-prototype-and-a-minimum-viable-product-MVP

B) Principles of Prototyping

1. **Make it visual and tangible**

   It is recommended that you make your prototype a concrete physical product or representation.

2. **Focus on the core value proposition**

   You might be tempted to create a fancy prototype by adding the fine details and complex functionality. Instead you should focus on the most basic and important aspects of the product, which are critical to the customers.

3. **Start with a rough, quick, and cheap prototype**

   Don't expect to make the perfect prototype. It is only meant to help you visualize and obtain feedback to improve the product. So work on it quickly and don't spend a lot of money on it.

4. **Expose your work early and get feedback**

   Even if you have only a very rudimentary prototype, make sure you showcase it and get feedback.

5. **Learn faster by failing early and often**

   It's ok if you don't get it right. So, the more you fail, the more you learn and better the product. The faster it happens, the better. So don't be afraid to fail. It's ok if initial feedback is not great. Remember, feedback is invaluable.

6. **Use creativity techniques**

   Creativity techniques are methods that encourage you to think creatively. They include idea generation techniques like brain-storming and mind-mapping. They nurture problem-solving abilities and innovative approaches.

7. **Use 'extreme' or outrageous prototypes**

   It's ok to build prototypes that are extreme or out of the box. You will get a lot of feedback on them to improve it. So it's perfectly ok to build something completely wacky!

8. **Accept all facts are not equal**

   You will get all kinds of feedback. You need to gauge and use them carefully.

9. **Test irreversible decisions twice as much**

Be extra careful of decisions that can't be reversed. In case you need to drastically change something in your prototype, make sure you test atleast twice and get feedback before opting to make the change.

10. **Don't panic and solidify the direction before you are ready**

   Don't decide what needs to be done next, in a hurry. Make sure you have good reason before you make any major decisions on the design of the product.

11. **Measure results to track what works and what does not**

   It is important to be objective and measure what actually works and what does not.

12. **Keep track of all that you have learned**

   Maintain a log of all the versions of prototypes you have built along with the feedback you had received on each one that lead to building of the next.

Activity 2
Test Card

You would have seen the video explaining the concept of designing your experiment using the Test Card. This document will help you work on it in class and you can keep referring to it. You can also download this handout from the LMS.

This document shows the steps to fill in the Test Card, an example for it and the Test Card template. Go through the instructions and the example and fill in the template to design your experiment.

A) Instructions to fill in the Test Card:

Step 1 - Describe the hypothesis you want to test

Step 2 - Write about the test or outline your experiment

Step 3 - Define the data you are going to measure

Step 4 – List the criteria to decide if your assumption or hypothesis was correct or not.

Activity 2
Test Card

B) Example of how to fill in a Test Card:

Title of experiment: Pricing of cookies
Date of start: 22 November
Date of finish: 22 December
Step 1: Hypothesis
We believe that *people will pay $1 each for our cookies with real fruit*
Step 2: Test
To verify that, we will *set up a stall selling 3 varieties of our cookies near our college cafeteria*
Step 3: Metric
And measure *the sales per day*
Step 4: Criteria
We are right if *we get an average sales of $50 per day*

Activity 2
Test Card

C) Test Card

Title of experiment:	
Date of start:	
Date of finish:	
Step 1: Hypothesis	
We believe that *(describe the hypothesis you want to test)*	
Step 2: Test	
To verify that, we will *(outline the experiment)*	
Step 3: Metric	
And measure *(define the data you are going to measure)*	
Step 4: Criteria	

Show a Demo of Your Prototype

Showcase Your Prototype!