

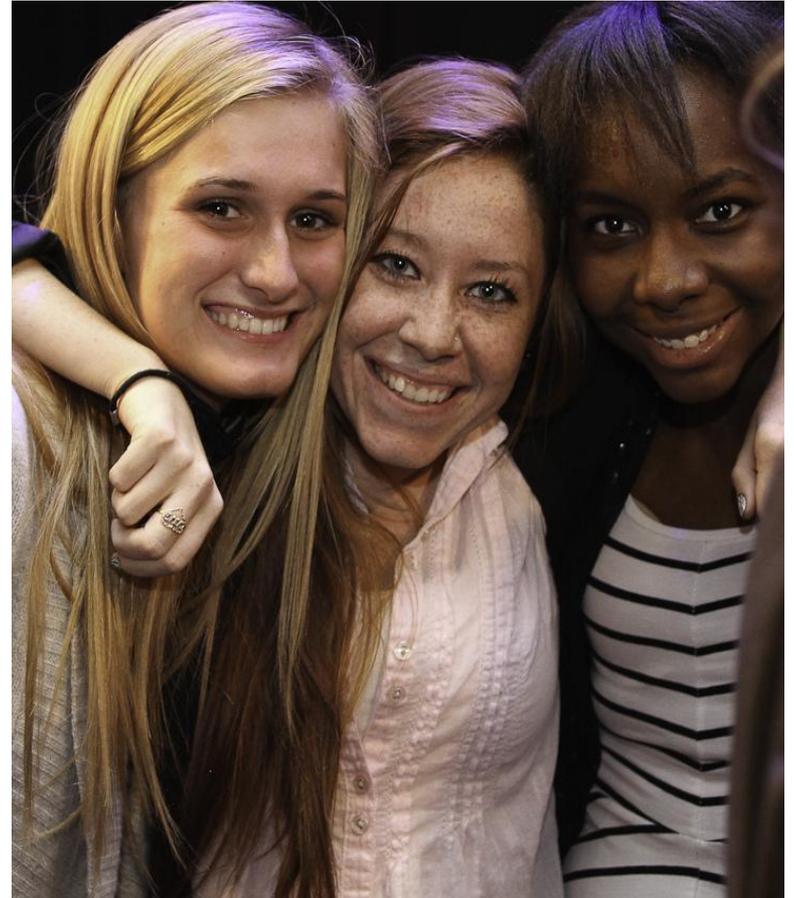


Technovation iridescent
CANADA

Unit 5 – Business Model part 2

Last Week: Revenue

- ➔ Share with the group
 - Your pricing approach
 - Why you chose it
 - Your target market size



Learning Objectives

- ➔ Starting Capital
- ➔ Understanding your business model
- ➔ Costs to run your business
- ➔ Understand profitability

Your Business Model

- ➔ Now that you have your revenue plan it is time to consider how to make a profit

$$[\text{Revenue}] - [\text{Operating Costs}] = [\text{Profit}]$$

- ➔ Profit is the money you have left over after collecting all your revenue and paying your bills

Starting Capital

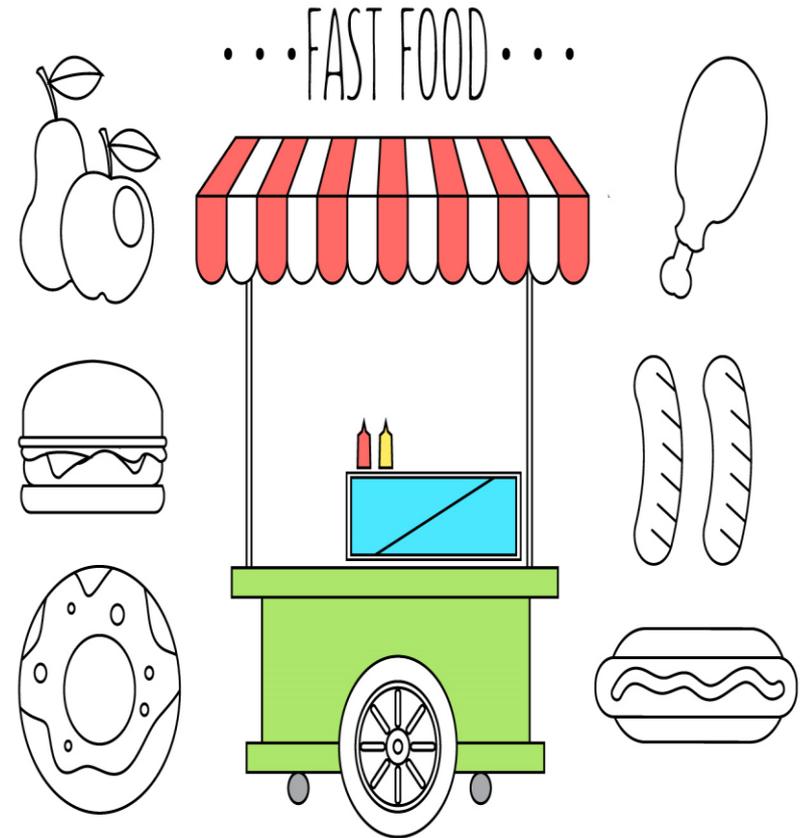
- ➔ The money you need to get your business going until you start getting revenue
- ➔ App fees
- ➔ Marketing costs
- ➔ Salaries
- ➔ Etc

Sources of Starting Capital

- ➔ Your own time and money, friends and family
- ➔ Crowd-funding – small amounts from many people
 - Indiegogo, kickstarter, kiva
- ➔ Angel investors – wealthy individuals invest their money to get you started
 - Dragon's Den
- ➔ Venture capitalists – professional investors

Food Cart Business

- ➔ Starting capital from your parents:
- ➔ How much money do you need
- ➔ What are you buying
- ➔ How will you pay your parents back



Operating Costs

Fixed costs: Costs that remain the same despite the volume of goods or services produced, such as salaries, rent.

Variable costs: Costs that vary proportionally with the volume of goods or services produced.

Economies of scale: Cost advantages that a business enjoys as its output expands.

Economies of scope: Cost advantages that a business enjoys due to a larger scope of operations.

Food Cart Example

- ➔ Fixed costs: Your cart, your chef
- ➔ Variable costs: Food, Plates, Condiments
- ➔ Economies of scale: Bulk purchases of food and condiments as you grow
- ➔ Economies of scope: Adding drinks does not increase your fixed costs, increases your revenue

Putting it all together

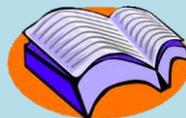
- ➔ **Startup capital** - initial amount of money that helps you get started, typically through different types of investors
- ➔ **Revenue** - total amount of money you get from your business activities (like sales)
- ➔ **Revenue model** - a plan on how to make money, or income
- ➔ **Operating cost** - the money you need to spend to run your business.
- ➔ **Profit** - the money you have left over after paying bills

Lots to think about!

- ➔ What needs to happen so your business is successful?
- ➔ How much money is required to get your business started and generating revenue?
- ➔ Did you think about more features to add to your app for your profit projection?
- ➔ Why did you choose the revenue model you did?
- ➔ How do you expect your business to grow?

Next Steps

- ➔ Work on your costs
- ➔ Build your business model

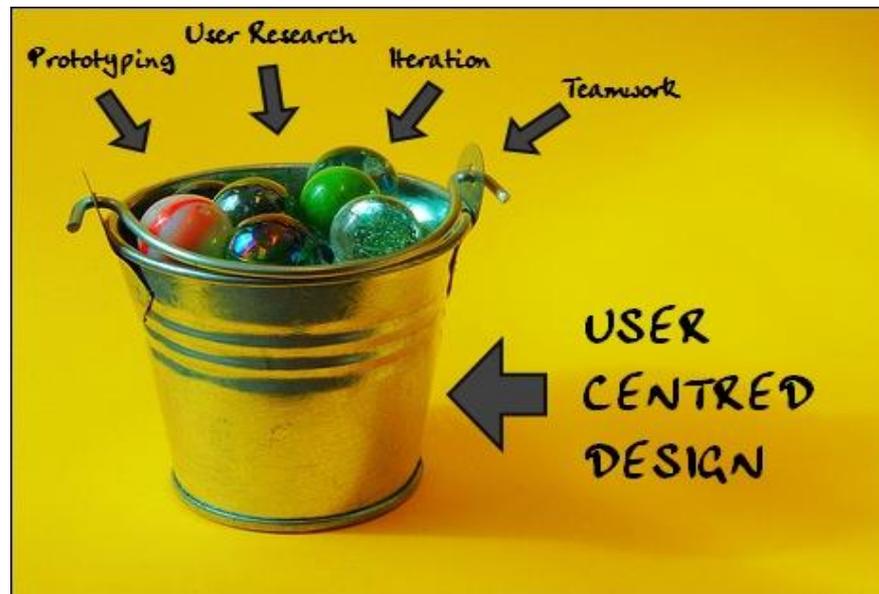


Page 29-30 in
your *workbook*

What is User-Centered Design?

User-centered design means designing things with the **user** in mind.

This means remembering **you are not always the user.**



User Centred Design

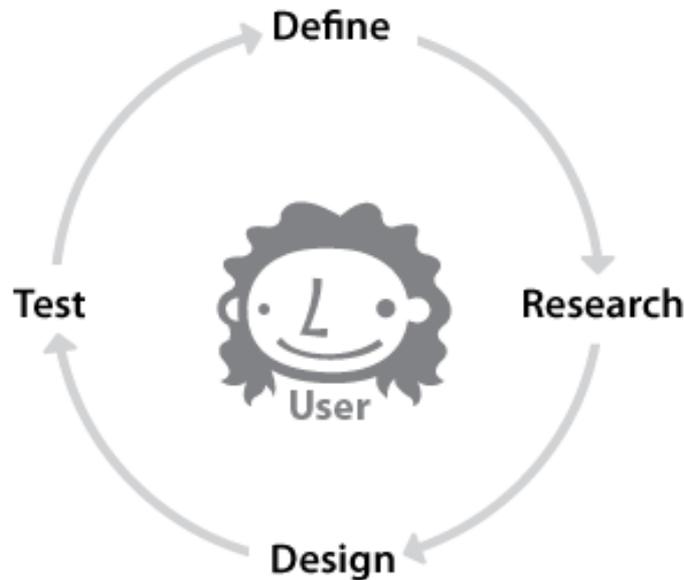
- ➔ In **User Centered Design**, you keep the user in the loop and incrementally build your app
 - Analysis & Research
 - Design
 - Test
- ➔ Repeat until you have a desirable product

Prototyping Lifecycle

What does your prototype need to do? What is the goal?

Testing and Redesign

- Have users test the prototype.
- Ask them questions about their experience
- Incorporate feedback and improve.



Prototyping cycle

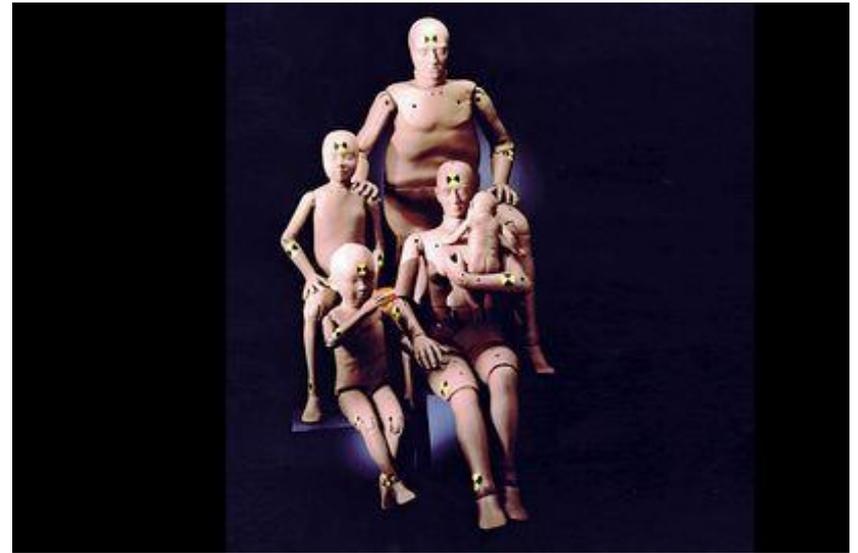
Analysis, Research, Design

- Who is your customer?
- What do they expect?
- What do they want?

What happens when you do not design with the user in mind?

Crash dummies used to only be made in the shape of adult men.
Women and children also ride in cars.

Airbags turned out to be a real problem for smaller people!



Analysis & Design

- ➔ Use the problem statement you created:
 - What is the problem?
 - Who does the problem affect and how?
 - Why is it important to solve?
 - What is the solution?
- ➔ Create a goal for what your app will do
- ➔ Make sure it is clear and achievable in an app!

Understand Your Stakeholders

- ➔ A good design requires knowing your users
- ➔ What functionality will they need?
- ➔ How easy does the app have to be?
- ➔ Does it need to be fun?
- ➔ Does it have to be fast and efficient?

Personas

Persona Template

A persona is a description of a prototypical person (real or fictitious) who will be using the app. A persona lets you design with a specific user in mind, rather than designing for 'everybody.' Create as many personas as you need to capture the main categories of people who will be using the app.

	Name	
	Occupation	
	Age	
	Gender	
	Technical Comfort	
	Other Relevant Demographics	

Background

Goals

Needs

Pain Points

	<p>SUSAN 32 NYC "WORKING MOM"</p>	<ul style="list-style-type: none">• MARRIED• 2 KIDS, AGE 5 & 9• WORKS LONG DAYS AS A LAWYER• HUSBAND WORKS @ HOME• VALUES TIME w/ FAMILY
<p><u>NEEDS</u></p> <ul style="list-style-type: none">• DOESN'T KNOW WHAT HER KIDS DO @ SCHOOL• TOO BUSY TO HELP w/ HW• NO COMMUNICATION w/ TEACHER	<p><u>SERVE BY</u></p> <ul style="list-style-type: none">• ENABLE GOOD CONVERSATION w/ KIDS• MAKE IT EASY TO REACH THE TEACHER	

User Scenarios

- ➔ Stories of: "A day in the life of..."
- ➔ What does the user intend to do
- ➔ Why do they want to do it
- ➔ What are the expected outcomes
- ➔ The more stories – the better

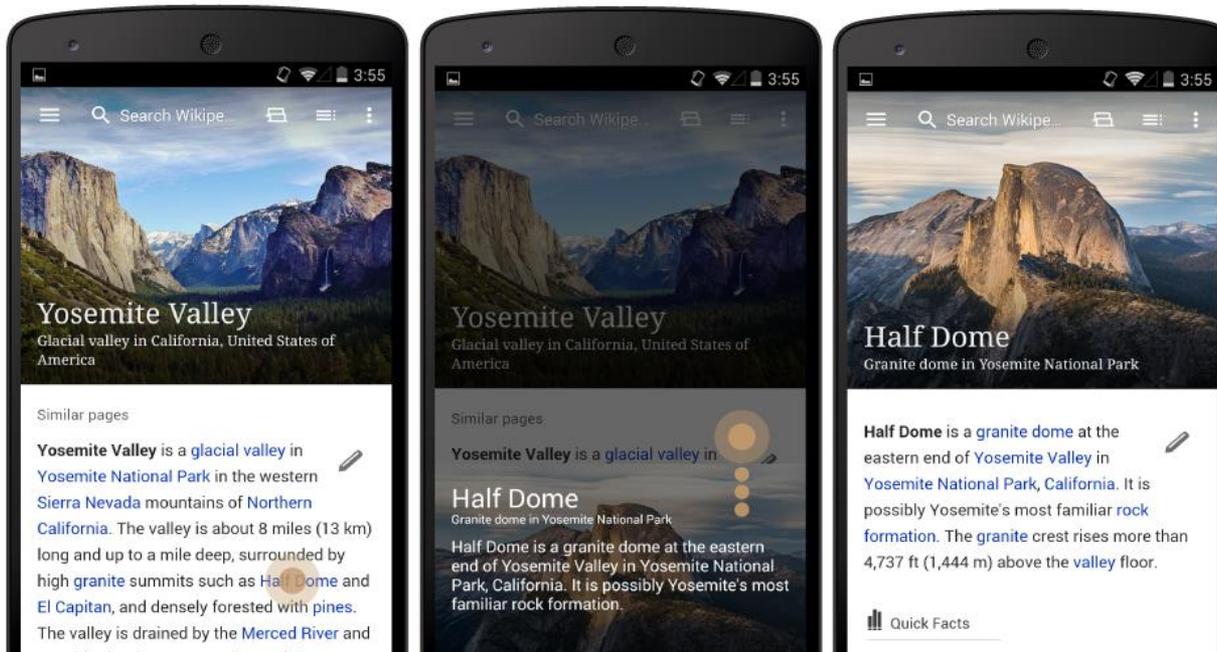
Lets Try it! (5min)

- ➔ Brainstorm different users for your app
- ➔ Try creating a persona for one of your users

Prototyping Solutions

A prototype is an early sample, model, or release of a product built to test a concept or process, or to act as a thing to be replicated or learned from.

- Wikipedia



Why Paper Prototyping?

- ➔ You can quickly and communicate your ideas in a visual way.
- ➔ It's collaborative! When you work on paper, it's more casual and conversations spring out of experimentation
- ➔ It's inexpensive! You don't have to spend a lot of money to create a paper prototype.
- ➔ You don't have to be a technical expert for this part of the process
- ➔ You can confirm design decisions before you spend time developing the technology

Create a paper prototype

- Make some paper prototypes of your app
- These prototypes are often referred to as wireframes. They exhibit the basic features of the app without any colors or pictures involved just yet.



Usability Testing

Ask potential users to share their thoughts about your prototype.



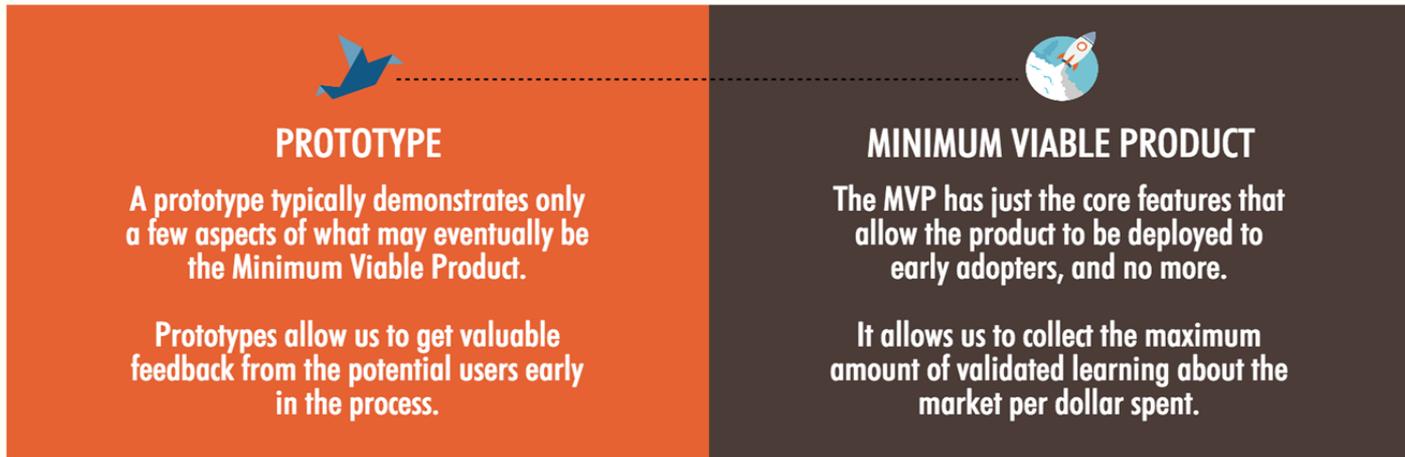
Conducting a test

- ➔ Organize your paper prototype to show the flow
- ➔ Show it to your stakeholders
- ➔ Ask them questions
- ➔ Write down their responses!
- ➔ Adapt your app based on what you learn



Aim for a Minimum Viable Product

PRODUCT LIFE-CYCLE



Next App Steps

- ➔ Finish your personas and user stories
- ➔ Create a paper prototype
- ➔ Test and refine your prototype

Housekeeping

- ➔ Next week we will be at Govt of Canada, Shopify, Youi.tv – check your email and facebook
- ➔ March 8th Registration deadline for global competition – registered with approvals!
 - Don't leave it to the last day!!!!!!
- ➔ April 26th Submission deadline

Competition

- ➔ Ottawa – in person May 6/7
 - First place team \$1000, Second \$500
 - Top teams move to semi-finals

- ➔ Global semi-finals - virtual
 - Top 5 jr and sr teams go to finals



- ➔ Global finals – in person in California
 - Top prize senior \$15,000 , junior \$10,000
 - Prizes for top submission in each UN theme