



Technovation iridescent
CANADA

Unit 4 – Business Model

Last Week: Branding

- ➔ Share with the group
 - More feedback from Surveys
 - Any changes or adjustments?
 - Company name and Positioning Statement



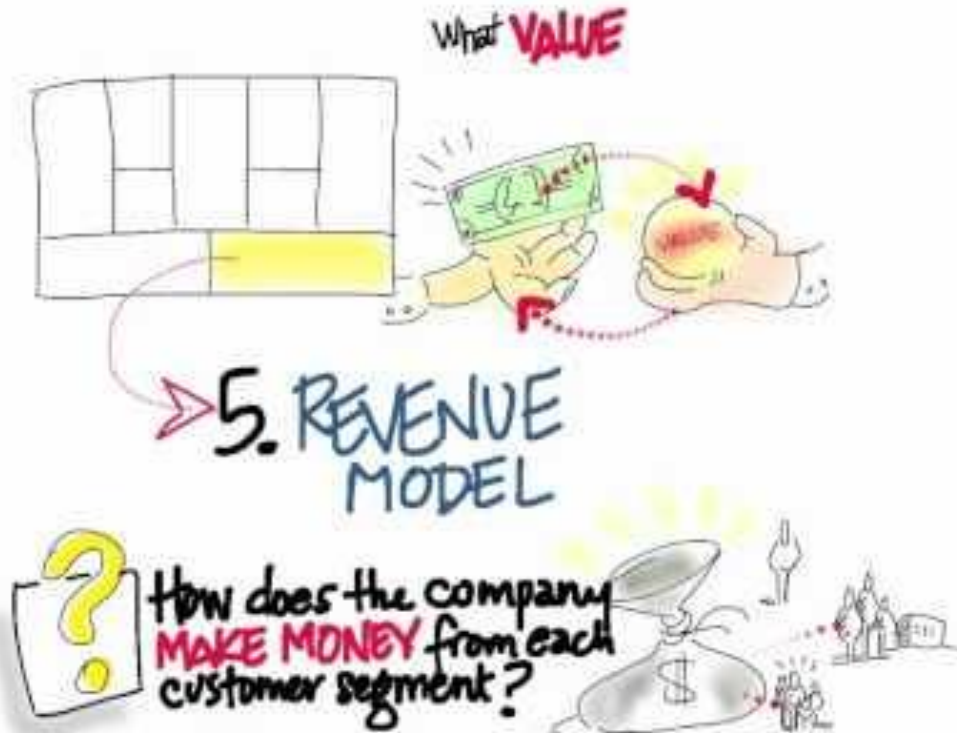
Learning Objectives

- ➔ Develop a revenue model
- ➔ Pricing strategy
- ➔ Understanding Revenue Growth

Elements of your business model

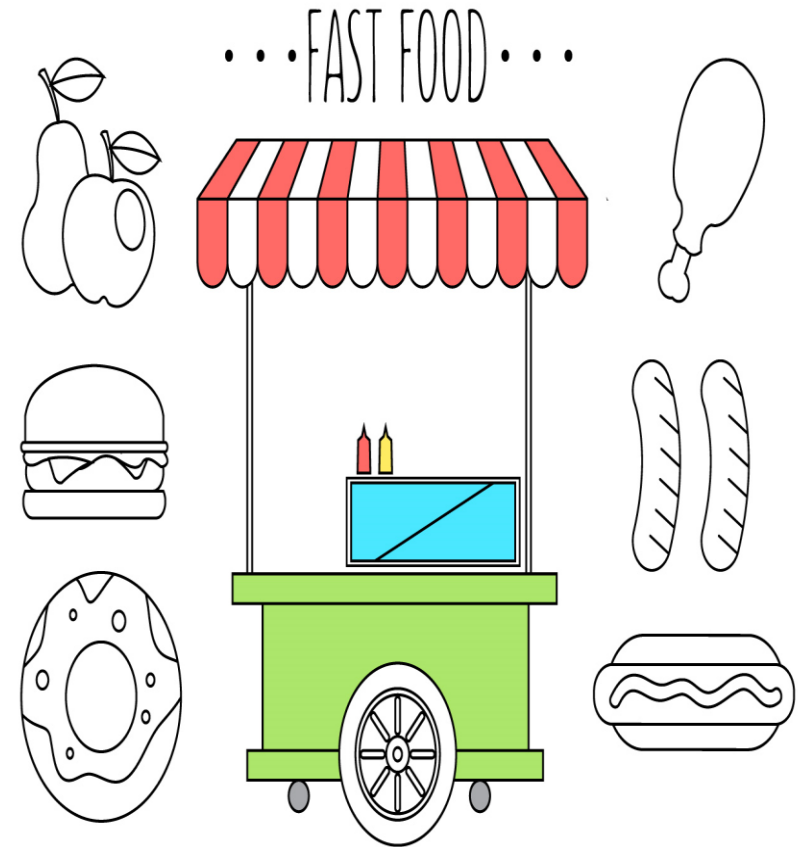
- ➔ **Starting capital (seed money)** - the money you need to start your business
- ➔ **Revenue model** - your plan to make money for your app
- ➔ **Operating costs** - things that you need to pay for to run your business
- ➔ **Profit projection** - the money you have left over after paying bills

Your Revenue Model



Food Cart Business

- ➔ What will you sell
- ➔ Who are your customers
- ➔ How much will they pay
- ➔ How many customers will you have



Pricing your Product

Setting a price for a product is one of the most important decisions your company can make!

Why do so many prices end in 9? Eg. .99c or \$9.99 or \$99



Pricing Apps

➔ One-time download price

- Minecraft



➔ In App purchases

- Pokemon Go



➔ Advertising

- Facebook



➔ Donations

- Share The Meal



ShareTheMeal

Food Cart Example

- ➔ Paid app model - sell each food item for a set price, and decide on the price
- ➔ In-app purchases - give away food, but sell condiments and larger plates at a set price
- ➔ In-app ads - give away free plates of food, but sell advertising space on the plates
- ➔ Donations – give away the food but have a donation jar by the condiments

Pricing Considerations

- ➔ How much is your app worth to your target customer?
- ➔ Will they see enough value to pay when they download?
- ➔ Are there in-app features that users would pay for?
- ➔ How do competitors charge?
- ➔ Who are the potential advertisers?
- ➔ How likely are your users to donate?

Potential Revenue

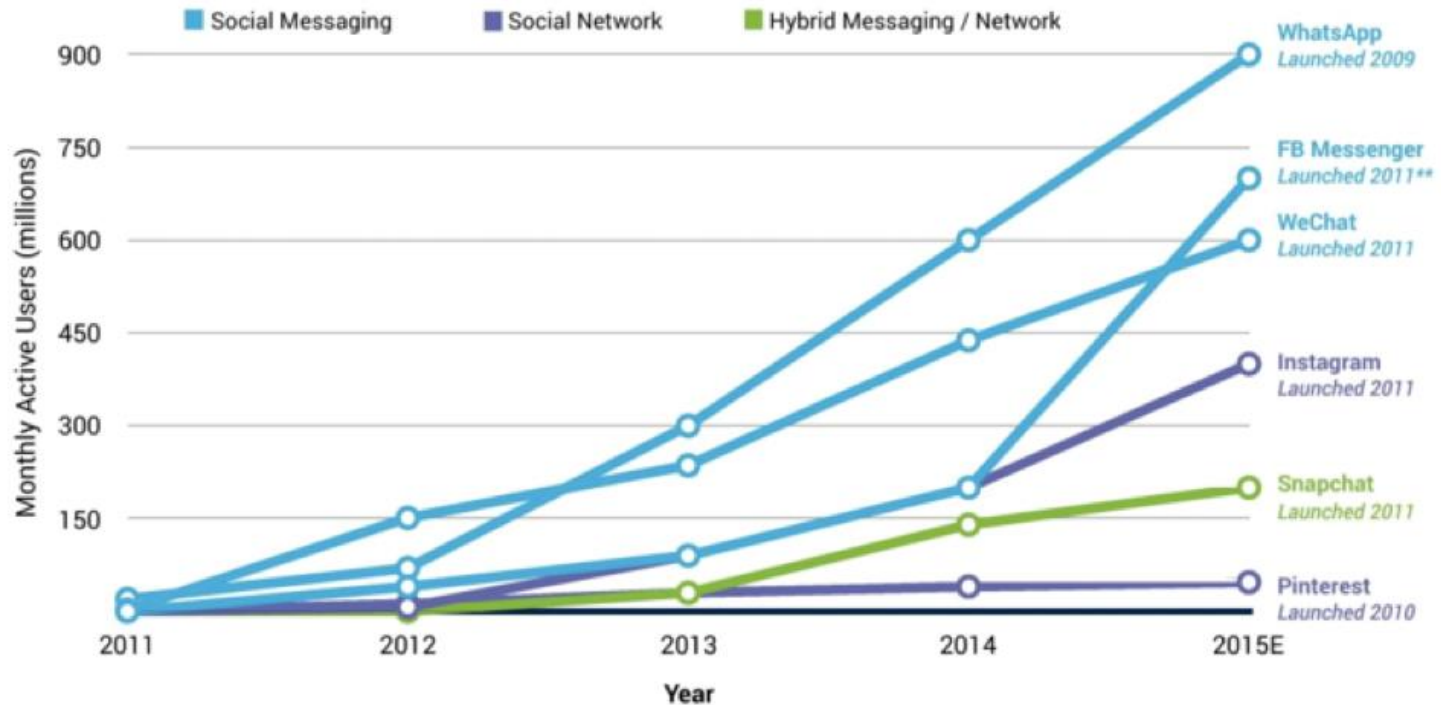
- ➔ Your revenue is a function of your price, your market size and how quickly you will get customers
- ➔ Market size is the number of potential customers
 - Who would buy your app and how many people like that are there?

Calculating Revenue

- ➔ If I can sell a \$1 app to all under 19's in Ottawa
 - $\$1 \times 200,000 = \$200,000$
- ➔ Won't all buy at once!
 - Need to market it
 - How quickly can I reach my customers



Sample: Messaging App Growth



*Messaging defined as communicating primarily in real time with other contacts; social defined as broadcast sharing of status updates, images, videos, or other content. All data measured from Q2/Q3 of each year.

**Became standalone app in 2014

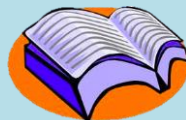
Sources: Business Insider, Fortune, Mashable, Instagram, AppAnnie, AdWeek, Quartz, Yahoo Finance, Experian, TechCrunch, Forbes, Tech in Asia, eMarketer, Compete, Activate analysis

Calculating Revenue

- ➔ App purchase
 - Cost of the app * number of users who pay to download
- ➔ Advertising
 - Cost of an ad * number of users who would see it/click
- ➔ In App purchases
 - Number of downloads * percent who purchase * how much they purchase
- ➔ Donations
 - Number of downloads * percent who donate * size of donation

Next Steps

- ➔ Continue working on your market research and branding
- ➔ Come up with your pricing and revenue model



Use your *workbook*

Using Mobile Features

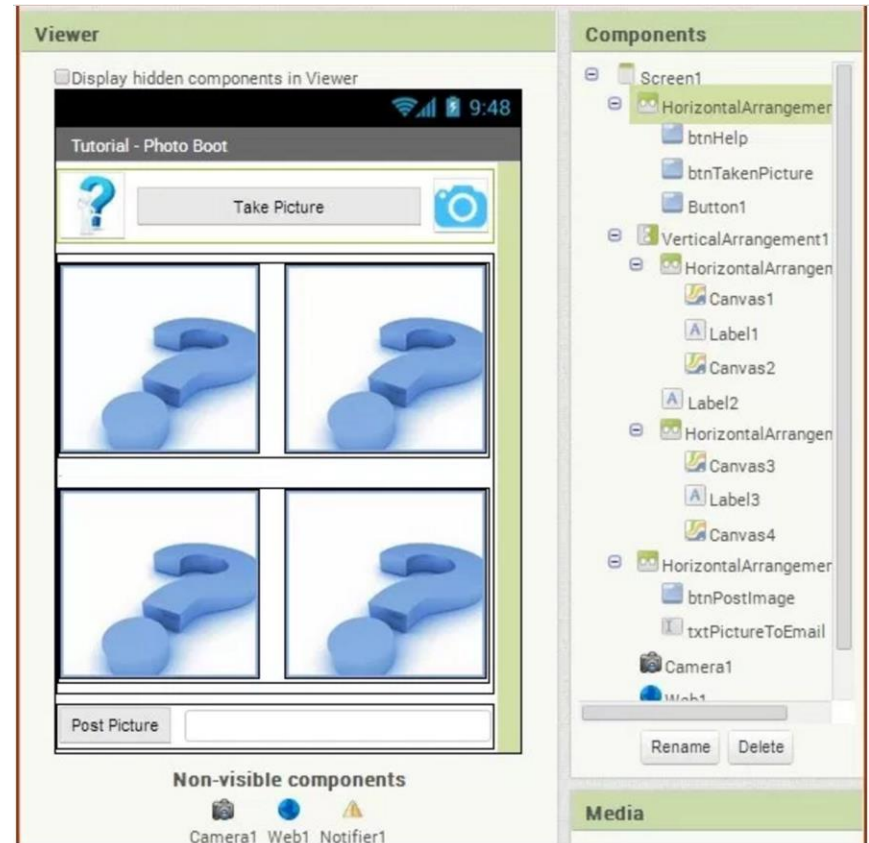
- ➔ Your App will get more points if it calls external features and the web!
 - Media components
 - Sensors
 - Social components
 - Web databases

AI Components

- **User Interface components** - Button, CheckBox, DatePicker, Image, Label, ListPicker, ListView, Notifier, PasswordTextBox, Screen, Slider, Spinner, TextBox, TimePicker, WebView
- **Layout components** - HorizontalArrangement, TableArrangement, VerticalArrangement
- **Media components** - Camcorder, Camera, ImagePicker, Player, Sound, SoundRecorder, SpeechRecognizer, TextToSpeech, VideoPlayer, YandexTranslate
- **Drawing and Animation components** - Ball, Canvas, ImageSprite
- **Sensor components** - AccelerometerSensor, BarcodeScanner, Clock, LocationSensor, NearField, OrientationSensor, ProximitySensor
- **Social components** - ContactPicker, EmailPicker, PhoneCall, PhoneNumberPicker, Sharing, Texting, Twitter
- **Storage components** - File, FusionTablesControl, TinyDB, TinyWebDB
- **Connectivity components** - ActivityStarter, BluetoothClient, BluetoothServer, Web

Media Components

- ➔ Camera
- ➔ Player
- ➔ ImagePicker
- ➔ Sound
- ➔ VideoPlayer
- ➔ SpeechRecognizer
- ➔ TexttoSpeech



Sensor Components

- ➔ Phone sensors can be useful for time, place and activity in your app
 - AccelerometerSensor – shaking or screen orientation
 - BarcodeScanner – useful for shopping apps
 - Clock – useful for alarms or timers
 - LocationSensor – useful for maps or finding businesses
 - Pedometer - fitness

Social Components

- ➔ Social components can help your app interact with phones, text and mail
 - `ContactPicker`
 - `EmailPicker`
 - `PhoneNumberPicker`
 - `PhoneCall`
 - Texting
 - Sharing

Connectivity - calling external apps

- ➔ Using Activity Starter (in this case to map hospitals near my current location)

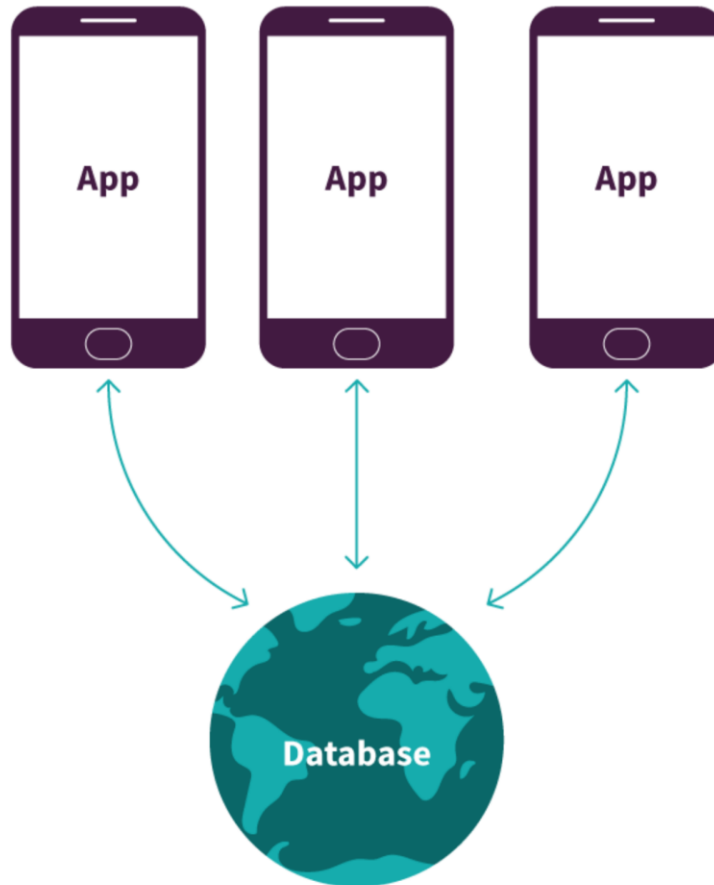
```
to ShowMap Address
do
  set ActivityStarter1 . Action to "android.intent.action.VIEW"
  set ActivityStarter1 . DataUri to join "geo:0,0?types=hospital&q=" get Address
  call ActivityStarter1 .StartActivity
```

```
when MyLocation .Click
do
  call ShowMap
  Address LocationSensor1 . CurrentAddress
```

Web databases

- ➔ We have used TinyDB but it is only on your phone. WebDB are shared:
 - Requiring login and passwords for users
 - Sharing data from a game, like a high score list
 - Allowing users to share images with each other through a feed
 - Displaying a feed that updates all users see
 - Remembering everything about a user such as their transactions or favourites

Sharing data on the Web



Web Databases

→ TinyWebDB

- Data is stored in tag value pairs
- Great when your data is paired like usernames and passwords, or Fruit and a list of fruit

→ Fusion

- Data is stored in tables
- Good when you have lots of information to store about something

Name	Colour	Size
Brenda	Purple	L
Bob	Green	XL
Cindy	Blue	S

Using Fusion Tables

- ➔ Creating a directory of location centers that are accepting donations.
 - The table entries include latitude and longitude, phone numbers, and items they accept.
- ➔ Storing information to create custom user profiles.
 - Things like user location, username, and favorites
- ➔ Making maps and plotting points on maps
- ➔ Visualizing data in pie charts and graphs
- ➔ Storing users' information
- ➔ Storing posts and comments on a forum

Next Steps for your app

- ➔ What type of data will I need in order for my app to work?
- ➔ Where do I need to get that data from?
- ➔ Choose a mobile component and a web database or external application that would be useful to your app
- ➔ Tutorials are in Code-4 to help you!

Registering for the Competition

- ➔ my.technovationchallenge.org
- ➔ Create your account
- ➔ Check your email for the confirmation from Technovation
- ➔ Click on the confirmation link
- ➔ Select “I am a student” and fill in the form
- ➔ On your dashboard add your parent’s info and your location
- ➔ Create your team, or join it if it is already there

Complete your registration

The screenshot displays the Technovation Student Dashboard with a dark red header. The main content area is divided into several sections:

- Technovation Student:** A circular graphic with a globe in the center, surrounded by concentric circles and stars. Below it, the text reads "Technovation Student" and "View your profile".
- Meet your Regional Ambassador!:** A small image of a white kitten.
- Team invitations:** A white box with a dark red "Form a team" button. Text: "You have no pending invitations. When a team invites you to join, you will see the invitation here."
- Join a team:** A white box with a dark red "Form a team" button and a green "Join a team" button. Text: "Use our team search to find a team and ask to join them!"
- Get your parent or guardian's permission:** A white box with a dark red "Registration" button and a green "Enter parent/guardian name & email" button. Text: "In order to participate in Technovation, you need your parent or guardian's permission. If your parent or guardian does not have an email address, please [contact us for help](#)."
- Register a new team:** A white box with a dark red "Form a team" button. Text: "Create your own team and then invite your other team members, or let team"
- Curriculum:** A section with a dark red "Form a team" button and a green link: "Open the Technovation Curriculum".
- Project Workbook:** A section with a dark red "Form a team" button and a green link: "Get Started on your Workbook".
- Season checklist:** A section with a dark red "Form a team" button and a green link: "Complete your registration". Text: "To be eligible for the competition, please complete your registration."
- Join a team:** A section with a dark red "Form a team" button and a green link: "Join a team". Text: "Your team can have up to five amazing girls. Join a team or register a new one to get started. Use our [guide to team building](#) if you need some help to get started."
- Find a mentor:** A section with a dark red "Form a team" button and a green link: "Find a mentor". Text: "If you join a team that does not have a mentor, find one online or in your community."
- Submit your app:** A section with a dark red "Form a team" button and a green link: "Submit your app". Text: "Before you can start your app submission, you have to:"

The dashboard also features a top navigation bar with "DASHBOARD", "REGISTER", "CREATE A TEAM", "JOIN A TEAM", and "CONTACT US". A prominent banner at the top right states "Submissions due by April 25th". The Windows taskbar at the bottom shows the search bar, task view, and various application icons, along with the system clock displaying "11:37 AM 2018-02-20".