



caselet

# problem

As students of the twenty first century our team has observed and experienced heavy reliance on technology, specifically smartphone and other electronic gadgets. With the best public transit systems in Canada, many people depend on handheld electronic devices to pass time and socialize. We identified several issues people encountered while operating their devices. They are categorized as follows:

Inconvenience in operating and storing cell phones on transit vehicles

- Holding phone in hands most of the time
- Taking out the phone and putting the phone in
- Only storing phones in the front pockets of pants
- Takes time to find their phones in their purses

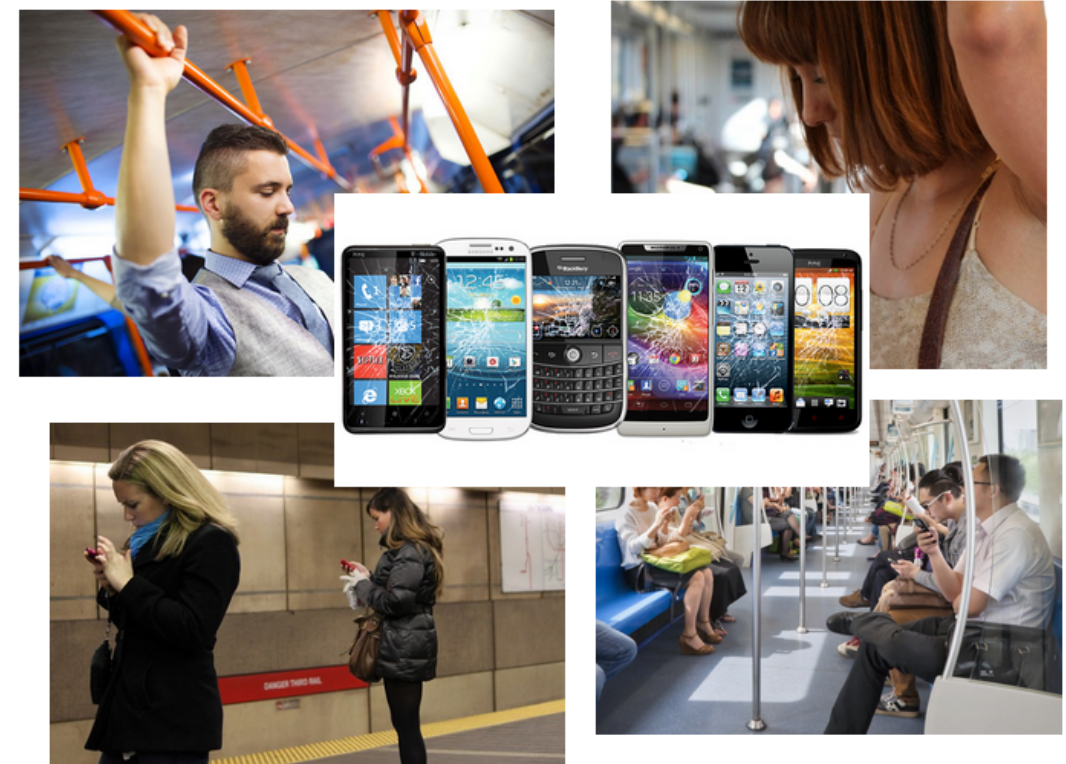
Discomfort

- Holding phones in hands all the time
- Holding phones which are too big
- Phones feel uncomfortable in pockets

Security

- Lost or stolen devices
- Fear of dropping device

The purpose of this project aims to solve the frustrations of using smartphones on public transit and in other occasions with sustainable and environmentally friendly methods. We would like to provide our customers and users with convenient, secure, and comfortable solutions of operating and storing their handheld devices.



# research

We conducted primary researches based on observations and interviews from target audiences, as well as similar products on the market now and in the past. From the interviews and observations, we concluded our target audiences need the feeling of getting connected and updated, ease of operation, prevention of dropping the devices, and easy access to the phone whenever needed. Businesses have been looking for solutions to these problems, such as armbands, chained cases, wristlet, belt cases, etc. However these existing products on the market lack the functionalities our target audiences need mentioned above.





# stakeholders

We consider the following as stakeholders of our product solutions:

- End customers
- Cell phone accessory developers
  - Luxury accessory manufacturers ( channel)
  - Phone manufacturers
  - Case manufacturers
- Retailers

# target audience



iPhone 5

iPhone 4S

iPhone 4



From our interviews and observations, we found that the modern smartphones are now getting bigger and bigger. For example, the iPhone 5 has a 4.05 inch screen. We targeted the busy student who normally uses public transit commuting to school, as they want to be occupied and also stay connected while waiting to get to their destination. As well, transit is sometimes busy and taking the phone in and out of your bag or pocket is troublesome and there may be the chance of it falling out. It makes it more inconvenient when using the phone when standing on transit.



# target audience

## Target Market:

People who use cellphones consistently and/or frequently when commuting and care about the convenience and security of operating and storing their cell phones.

## User Needs:

- Ease of Operations
- Secure location
- Easy access to phone whenever needed



# persona: vicky

Age: 22

Stylish and Connected

- No alternative but to take transit
- Sociable, Cheerful and Outgoing
- Uses iPhone with cute case
- Not tech-savvy

Needs:

- Stylish and Unique
- Easy to use and minimal design
- Protection and Convenience
- Good for the environment

Behaviors on Transit:

- Music, Web, Gaming
- Social Media
- Messaging
- Holds phone in hand or keeps in bag when it is not convenient to take out

Anxieties:

- Afraid of dropping / damaging phone
- Afraid of missing texts and phone calls



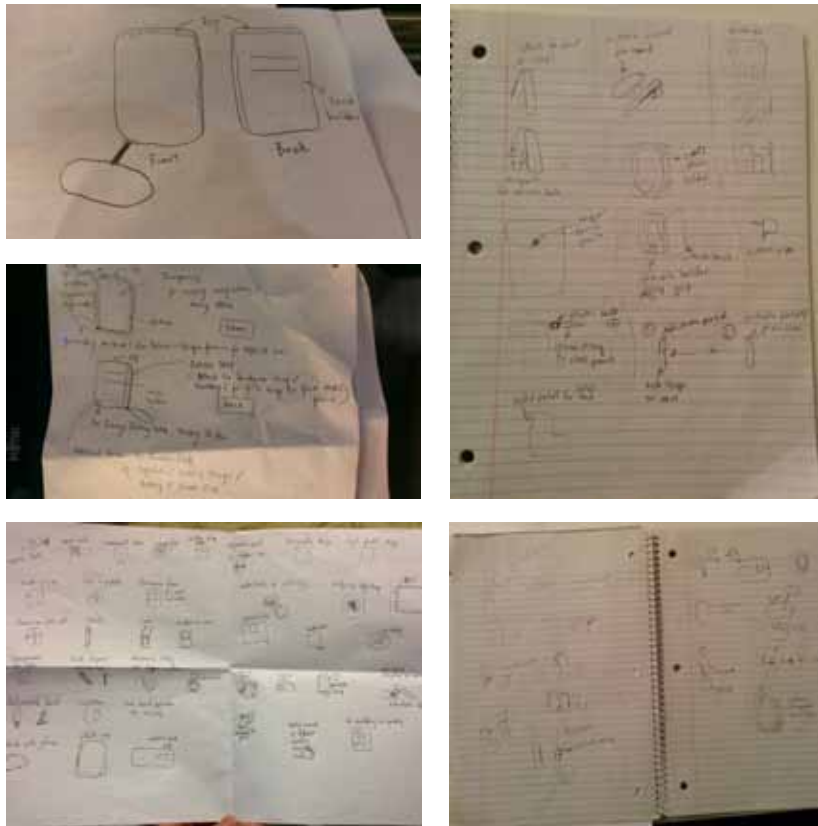
# ideation

After creating the character composite profile to define our user and context of use, we better understood the problem we wanted to solve. We then began the process of ideation and agreed that each member in our group would brainstorm and sketch out around 50 ideas.

After a few days, we discussed each other's best ideas to explore a range of potential solutions. Since managing 200 ideas was too cumbersome, we narrowed down our solutions into two parts:

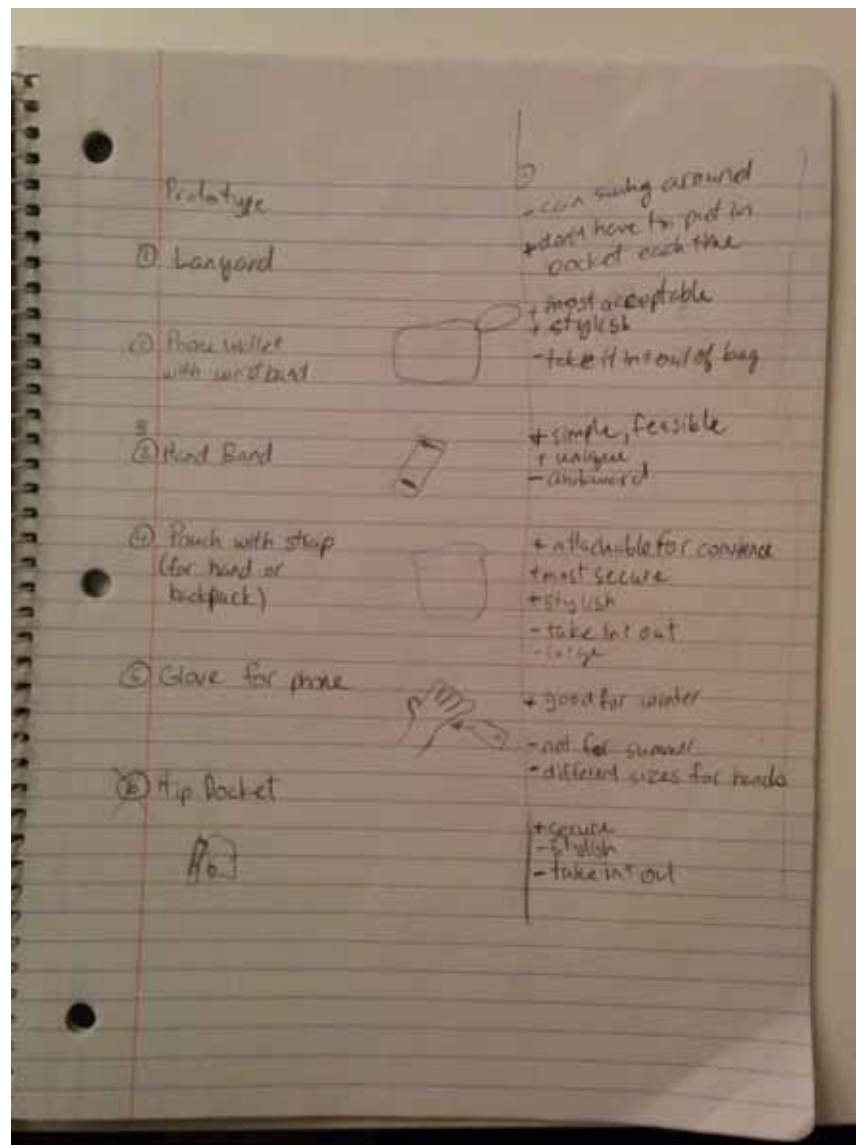
- Where to connect to the body
- How to attach or hold the phone

From there, we discussed the best ways to accomplish each part, while still keeping each solution uniquely different from one another. After much discussion, we were able to create 6 solutions that had their own advantages and disadvantages. Reaching agreement on quantifying these qualities into a scorecard / matrix proved too difficult for our group, so we decided on a qualitative analysis of pros vs cons instead.





# ideation

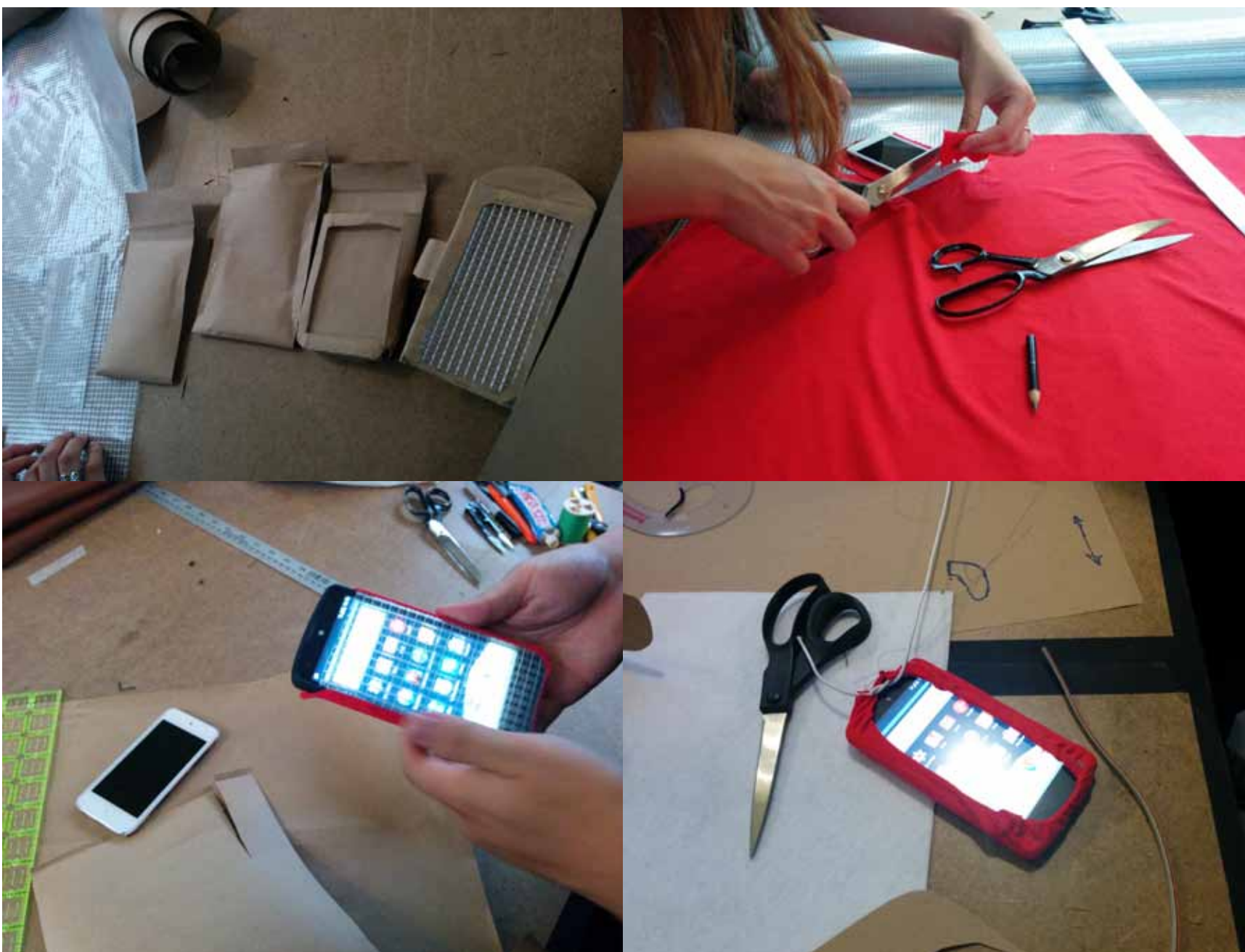


This solution set of 6 was further narrowed into a top three. They included the strap & pouch, phone pocket, and lanyard. In the end, we decided on the lanyard idea because it had the best usability for the problem of dropping your phone / unable to use it while standing on a busy transit bus.

After the pitch, we received feedback that although the lanyard idea was most practical, the fashion component need to be further developed and novelty of the idea considered. The recommendations were to pursue the futuristic option of a pocket on your arm.

From the book *Creative Confidence*, sketching out different ideas from each other's different perspectives was a great way to rapidly prototype designs to see whether they would work or not. In order to learn fast, you have to also fail fast. Even though the sketches may not have been of the highest quality, it allowed us to communicate simple ideas to each other at a time when making a high quality model would have been wasted energy. We were able to dismiss many ideas quickly, leaving the best ones to be dissected further. This range of ideas allowed us to explore designs that we would not have thought of individually, but dealing with the many combinations was complex and difficult constraint. To address this, we broke the problem down into smaller, manageable chunks to narrow the goal.

# prototyping



Based on the drawings from all of our team members, we started with paper prototypes at the Makerlabs. They were great tools to demonstrated how the basic ideas could look like but lacked some traits textile materials would have instead, most significantly flexibility and softness.

We then started the second batch of prototypes using different materials such as pseudo leather, cotton, spandex, and other weird materials from industry waste. All the prototypes were fully functional for normal operations but not commercially viable except for the pocket with clear screen.

# design & launch

The first element to our marketing was to create a name and logo, where we combined the idea of case and bracelet. Since there was limited time to establish our brand, we decided on the name of Caselet, as it allowed us to quickly explain the vision of our product. Our logo was taken from the braid design in our bracelet, and the message we wanted to convey was that this was a differentiated product consisting of fashion and luxury. As a result, the color scheme came from our brown leather material and the gold lettering on our brand name further supported the idea of luxury.

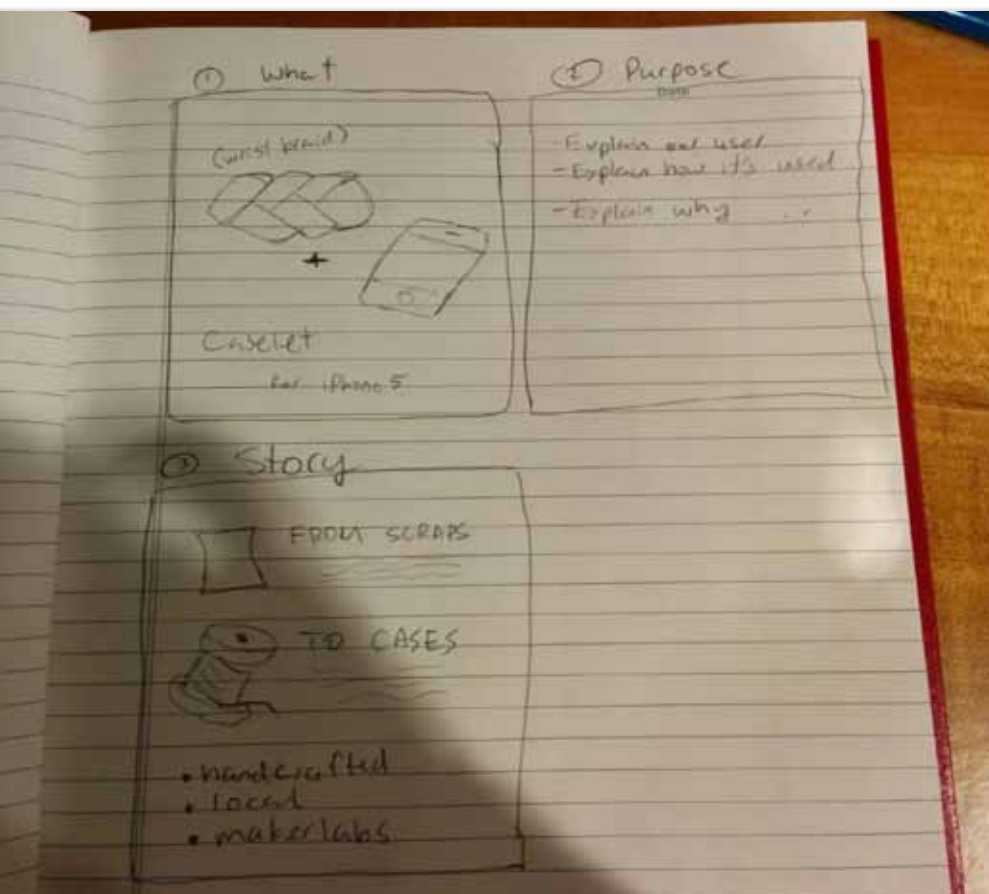


caselet



# design & launch

Because the name and logo alone were not enough to communicate the purpose of our product, we also designed posters for launch day and a Facebook page to explain the problem we were trying to solve and how it solved it. Initially, we wanted clear packaging for customers to carry our product in, but we realized this was inconsistent with the circular economy. As a result, we settled on paper packaging instead.



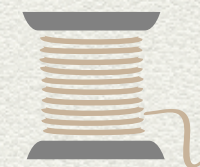
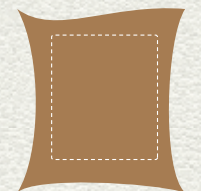
CASE



BRACELET



From Scraps



To Cases



caselet

Fitted for the iPhone 5

Made locally and handcrafted  
@makerlabs







# final product

## Pros:

- Removable bracelets
- Adjustable bracelets
- Free to use both hands
- Acceptable user behaviour
- Stylish
- Secure

## Cons:

- Large on hand
- Expensive
- Heavy

## Material:

- Scrap leather

The braided bracelet design and leather material solves the user's stylish needs. She is free to also use it without the case as it is removeable. The clear screen is also touch sensitive and allows her to stay connected while having her phone protected inside the case. When it is attached to her arm, it relieves her anxieties of dropping or damaging her phone and missing texts or phone calls.

The Caselet supports the circular economy in two ways. First, it makes use of odd-shaped cuts of leather that are hard to use for clothing or upholstery. More importantly, it makes the experience of using transit less troublesome.

