



Compass Card Interface

Web Design Process

Part One

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Table of Contents

	Page
Executive Summary	1
Stated Goals	2
User Persona - Hugh Mann	3
Empathy Map - Hugh Mann	4
User Persona - Pearl Sun	5
Empathy Map - Pearl Sun	6
User Persona - Bea Ng	7
Empathy Map - Bea Ng	8
Target Audience	9
Quantitative Content Audit	9
Gap and Competitive Analysis	10
Competitive Analysis Chart	11
Site Map	12
User Testing Key Findings	13
Bibliography	14



Executive Summary

Developing a comprehensive content strategy is imperative to the development of any site, but particularly for one as public-facing as Translink's Compass card system.

Public transit remains an integral part of the lives of many Vancouverites. Between 2008 and 2011, Translink saw a 15% increase in total daily trips taken in Metro Vancouver (City of Vancouver, 2015). Transit users span all ages and demographics, highlighting the need for a system that is both inclusive and accessible.

The introduction of the Compass card stands to be one of the most major shifts in how transit users access the system in recent years. With any major shift, a period of adaptation is to be expected as users become acquainted with the functionality of the new system. During this transition time, a comprehensive web strategy can assist in addressing pain-points with the new system and set up Compass card owners for continued success in the future.

An analysis has been completed to understand the various groups that have the highest potential to use the Compass site, including high-frequency users, low-frequency users and casual users. Based on the various needs of these groups, a content strategy has been developed to address the concerns of these groups, both during the transitional period and beyond.

Simplicity and ease-of-use are overarching themes for the new content. Due to the new adaptation period, a heavy focus on teaching, assistance and troubleshooting was included in the development process. Content aimed at those who continue to use the site focused on quick, digestible pieces of information regarding status and card usage.



Stated Goals

The following goals represent the vested interests of both the stakeholders and transit users, as well as the project as a whole. All content developed for this strategy feeds into these goals.

1 Primary Project Goals

- Increase usage of compass card
- Increase accessibility and reduce confusion

2 Secondary Goals

- Value user's time
- Create an informative and efficient platform that affords effortless usage
- Bridge gap between frequent and infrequent users
- Reduce barriers to entry
- Increase prevalence of card ownership

Measures of Success

Increases in:

- Revenue
- Ridership
- Total taps
- Card purchases
- Transition of users to monthly pass owners
- Card purchases
- Transition of users to monthly pass owners
- Bounce rate
- Click paths
- User testing and surveys

3 Stakeholder Goals

Who are our Stakeholders?

- Province of BC
- Metro Vancouver
- Translink

What are their main goals?

- Increase ridership
- Increase revenue
- Create a seamless process for users
- Generate positive publicity
- Reduce operations costs
- Generate user data

Measures of Success

Increased:

- Ridership
- Revenue
- User tapping
- User testing and surveys
- Brand testing
- Balance sheets
- Tapping and website data

4 User Goals

What are our user's main goals?

- Utilize an intuitive system
- Reduce costs
- Use transit quickly while minimizing travel time
- Access information easily
- Effortlessly adapt to new system

Measures of Success

- User testing and surveys
- Tapping and website data
- Average costs per user
 - Ratio of total costs to total trips
- Web analytics
 - Bounce rate
 - Click paths
- Reported issues during transition



User Personas - Hugh Mann

Based on transit data found from Statistics Canada, three user personas were created to represent Translink's ridership base. These personas represent high-frequency users, low-frequency users and casual users. The following analysis sheds insight on the issues they face when using the Compass card system and guide decisions on content development intended for each of these groups.

Three types of users:

- High-Frequency Users (Hugh Mann)
- Low-Frequency Users (Pearl Sun)
- Casual Users (Bea Ng)

1 Hugh Mann

Name: Hugh Mann
Age: 31
Job: Small Business Owner
Currently: Vancouver

Hugh Mann is a 31-year-old small business owner who commutes between his apartment and Gastown office. You can find him rushing to the Skytrain while on his phone, which is a short 5 minute walk from his home. Between brewery tours on weekends and client meetings during the week, Hugh's high frequency transit use warrants a monthly pass to get around town.

Why are you here?

- To load his card with a new monthly pass

What is your goal?

- Load pass quickly due to time crunch

What inspires you to visit?

- Out of necessity for new pass
- Doesn't want to miss seeing friends

What deters you?

- Heavy load time, confusing flow, if website is slower than phone, information overload, non mobile-friendly sites

What is your expectation?

- To load new monthly pass before reaching station

Where are you?

- Walking to the skytrain station

What device are you using?

- iPhone 6S plus, unlimited data plan

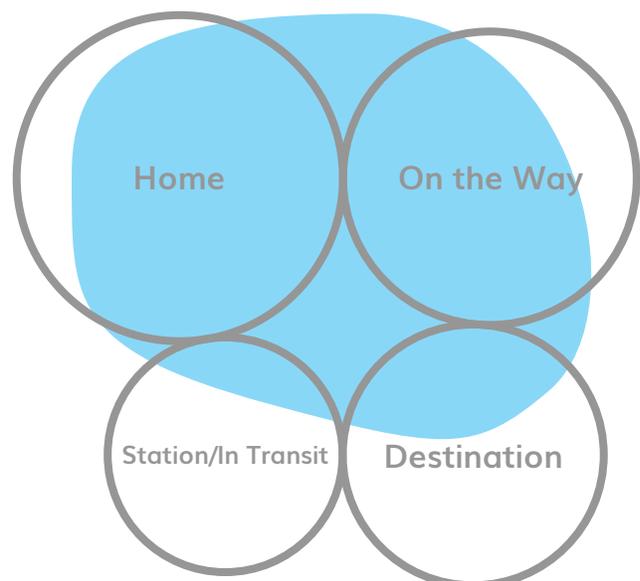
Distractions/Obstacles?

- Friends texting him, slower network speeds in suburbs, trying to use phone while walking, in a hurry

Emotional State?

- Perturbed, frazzled, in a rush

Context Map



Think + Feel

- Doesn't want to spend a lot of time on transit
- It's important to him that he can update his card efficiently
- Wants to see his friends
- Wants important info, quick
- Hopes the process is hassle-free

See

- On his way to, at or on transit
- Sees a ticket machine, tap turnstiles
- Car2Go parked near the station
- With some friends on their way out, or on his way to work



Hear

- Friends and family who also take transit
- Card issues on social media
- Media coverage of system development, any breakdowns
- Co-workers who make similar commutes, reporting issues when they get into work

"It's quicker to take transit than a car, plus it's greener"

"I just want to load my card and go"

"I prefer the new card to the paper passes. Kept forgetting to buy them and it was a pain going to the store."

Say + Do

Gain

- Easier to use system
- Makes transit cheaper and more efficient
- Allows him to automate the process so he doesn't have to worry about losing his card
- Hopes the data will help Translink make better decisions
- Card info online

Pain

- System failures
- Complicated system
- Lost card is easy for someone else to use
- Heavily relies on less-than-optimal system of use
- Might not trust Translink with his credit card info online



User Personas - Pearl Sun

2 Pearl Sun

Name: Pearl Sun
Age: 75
Job: Retired
Currently: Burquitlam

Pearl Sun is a retired 75-year-old living out her golden years in her Burquitlam home. As an active lady in her community, she transits 2-3 days a week with her seniors pass. Although she has a basic smartphone and data plan, her internet surfing is done with her desktop PC.

Why are you here?

- Misplaced card, wants to know where a replacement can be bought
- Learn how to transfer account balance to new card

What is your goal?

- Find purchasing locations and transfer balance quickly and easily

What inspires you to visit?

- Grandson said the website is a good place for information

What deters you?

- Not tech-savvy, poor eyesight

What is your expectation?

- To find the information she needs quickly and easily, will be able to find a new card and update it without issue

What deters you?

- Not tech-savvy, poor eyesight

What is your expectation?

- To load new monthly pass before reaching station

Where are you?

- At home

What device are you using?

- Home PC, basic broadband, older version of IE

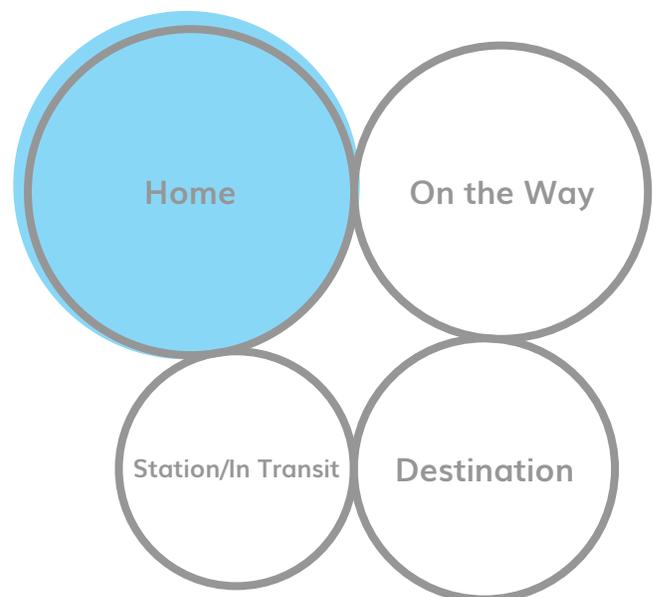
Distractions/Obstacles?

- Has family visiting, slow computer needs updating

Emotional State?

- Anxious, reluctant, apprehensive

Context Map



Think + Feel

- Wants to remedy her lost card situation quickly
- Feels concerned she'll miss out on the things she needs to do
- Feeling anxious
- Hopes her card hasn't been used
- Hopes the process isn't complicated

See

- At home, at her computer
- With her family, who is trying to help her replace her card
- Distracted by her visiting family
- Has a car she can use, but prefers not to



Hear

- Family showing her how to use the site
- Other friends who have a seniors bus pass
- Media reports on the TV about system roll-out or problems

"Transit gives me the freedom to get to where I need to be"

"Learning how to use the Compass card was easier than I thought"

"Compass cards make it easy for me to manage my pass and balance"

"I'm upset I've lost my card, I hope no one is using it"

Say + Do

Gain

- Hopes to get a new card quickly and easily
- If someone has been using the card, she hopes to be able to recoup the costs
- The process of registering her new card will be simple and hassle-free

Pain

- Fears someone has been using their card
- The process of getting a new card could be a hassle
- Concerns it will take a long time and she'll be stuck at home



User Personas- Bea Ng

3 Bea Ng

Name: Bea Ng
Age: 19
Job: None (Tourist)
Currently: West End

Bea Ng is a 19-year-old backpacker from Scotland travelling through Canada. She is staying with friends in the West End before journeying on to Whistler. Bea's tech-savvy nature and limited funds drew her to using Compass. She is always looking for the nearest Wi-Fi hotspot to minimize the use of her pay-as-you-go data plan for her unlocked Android.

Why are you here?

- Looking for information on the Compass card:
 - How it works
 - Where to buy
 - How much it costs
 - Time limits
 - Deposit information

What is your goal?

- Figure out system and navigate city as cost-efficiently as possible

What inspires you to visit?

- Googled 'Vancouver public transit' out of necessity

What deters you?

- Limited access to Wi-Fi, slow load times, convoluted process

What is your expectation?

- Instant information, address needs quickly and easily

Where are you?

- At friend's house

What device are you using?

- Unlocked Android phone on friend's mid-range Wi-Fi network

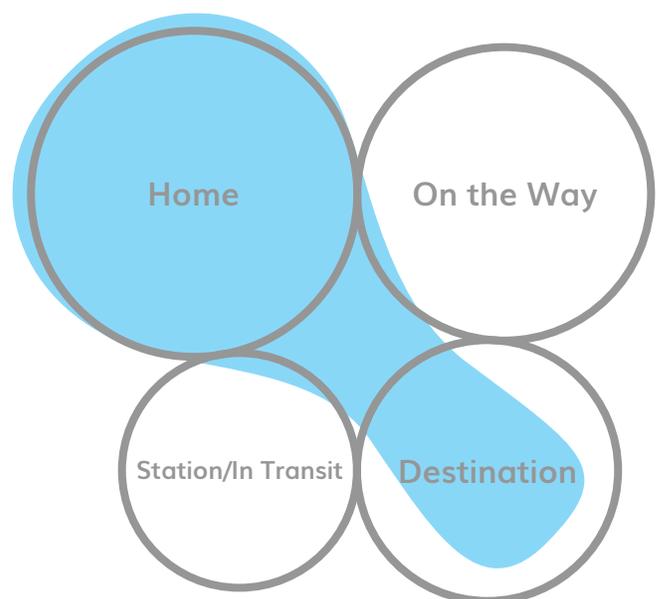
Distractions/Obstacles?

- Slow Wi-Fi, excited to see friend, looking forward to seeing a new city, tired from long flight

Emotional State?

- Tired, excited, zoned-out, jet lagged

Context Map

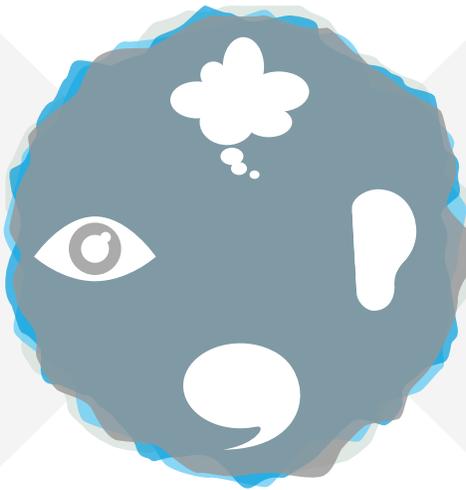


Think + Feel

- Looking forward to exploring Vancouver
- Wants to know how the Compass card works so she can explore the city
- Hopes she is choosing the most budget-friendly option

See

- At her friend's place on her phone
- Her friend is nearby, eager to catch up
- Also looking at websites for local attractions
- Has a trip planning app open as well



Hear

- Her friend is giving tips on getting around Vancouver
- She says Compass card can be useful if she plans on visiting Vancouver
- Listens to anyone recommending places to visit, another reason to use the card

"I'm really excited to get out and see Vancouver"

"I'm on a budget, so this needs to be cheap"

"I'm not afraid to ask for help from friends, bus drivers, or station attendants should I get into trouble"

Say + Do

Gain

- Looking forward to seeing the city cheaply
- Hoping to spend as little time as possible, and the process is simple and hassle-free
- Wants to spend less time figuring out the system and more time hanging out with her friend

Pain

- Worried it will end up being expensive
- Not sure she will get enough use out of the card
- Worried it will be too reliant on the internet if her balance runs low
- Doesn't know the system and worried it will be complicated



Target Audience

- High-frequency users (use transit for work and non-work purposes)
- 18 - 35
- Males and females
- Students and young working professionals
- Those who live within the general vicinity of a skytrain station or major transportation hub
- Own a smartphone

Quantitative Content Audit

The three user personas informed a comprehensive list of content needed for the project to achieve its intended goals. The following content will be developed in keeping with the overall themes of teaching, assistance and troubleshooting as well as providing key, top-level information for consistent users.

The content listed can be grouped into two streams: setup and maintenance. Content related to the setup of a card includes information on purchasing, usage, general contact and questions related to informing, teaching and assisting users. This content will be key as transit users become more comfortable with the new system.

Maintenance related content refers broadly to the profile section of the website. The intent of this content is to act as hub for more frequent card users, providing key information such as card balance, card type and history easily.

For more information, please refer to the Quantitative Content Audit document included in the strategy package.



Gap and Competitive Analysis

The transit card systems of four cities were analyzed in order to ascertain valuable functions needed to heighten Vancouver's Compass card service. The chosen cities are Seattle, San Francisco, Toronto, and Hong Kong. Each city was selected because they mirror aspects of Vancouver such as population, geography, location, and demographics.

Key functions of the systems were documented and categorized in order to discern relevant traits needed for the Compass system. Some systems include stand-out components that would aid the overall Compass experience. For example, Seattle's system allows one account to hold multiple cards for other family members. San Francisco uses a single app that allows people to buy and use tickets as well as plan trips. Toronto's card system can be used when visiting a different jurisdiction, while Hong Kong's system allows people to use their tap card as money at other external vendors. These types of functionality could be beneficial to card users as they become more familiar with the Compass system.

The competitive analysis below compares the various transit systems on a variety of key elements. A gap analysis was also developed to show the pros and cons of each of the system and show what elements Compass may want to focus on in the future. Please refer to the Gap Analysis included in the strategy package.



Gap Analysis

	Card 1	Card 2	Card 3	Card 4	Card 5
Location	Vancouver	Seattle	San Francisco	Toronto	Hong Kong
Name of System	Compass	Orca	MuniMobile	Presto	Octopus
Age of System	under 1 year ('15)	7 years ('09)	under 1 year ('15)	7 years ('09)	19 years ('97)
Transit Website	yes	yes	yes	yes	yes
Transit Mobile App	no	no	yes	no	no
Card Tap System	yes	yes	yes	yes	yes
Card is Transferable	yes	yes	no	no	yes
Multiple Card Management	no	yes	no	no	no
Card Registration	yes	yes	yes	yes	yes
Delay in Registration	up to 24-48 hrs	up to 24-48 hrs	none	up to 24hrs	?
Supports MonthlyPass	yes	yes	yes website, no app	yes	Not applicable
Supports Weekly Pass	no	no	yes	yes	Not applicable
Supports Daily Pass	yes	yes	yes	yes	Not applicable
Supports Auto Load	yes	yes	yes	yes	yes
Combined with Trip Planner	no	no	yes	no	no
Stores Account History	yes	yes	yes	yes	yes
Stores Account Balance	yes	yes	yes	yes	yes
FAQ Section	yes	yes	yes	yes	yes
Help Contact Info	yes	yes	yes	yes	yes
Video Tutorials	yes	yes	yes	yes	no



Site Map

LANDING

- Header image
- Load button
- News alerts
- Register button
- Social media stream

The following information architecture shows the relationships between various content models and hierarchy of the website. It anticipates the processes that users will go through when navigating through the website.

ABOUT

- Product info
- Zone map
- Price graph

GETTING STARTED

- How to buy
- 'How to Use' video
- 'How to Use' infographic
- Purchase locations

PROFILE

- Profile overview
 - Name
 - Email
 - Pass type
 - What you're Signed up for
 - Check history
 - Edit profile button
- Registration tutorial

FAQ

- Common questions

CONTACT

- Telephone number
- Contact info
- Telephone
- Email address
- Hours
- Media
- Job opportunities

- Registration tutorial

REGISTRATION

MY CARD

- Registration form
 - Email
 - Password
 - Compass card number
 - Compass card CVC
- Product options
- Product price selection
- Link to CC form

LOAD CARD

LOAD

AUTO LOAD SETTINGS

- Form validation alerts
- Price plans
- Selection button balance
- Notification settings
- Notification options
- Phone number to notify
- Email to notify

PROFILE SETTINGS

- Change Profile settings
 - Change email
 - Change password
 - Change phone
- Credit card form
 - CC info
 - Save CC info

CREDIT CARD SETTINGS

- CC info
- Save CC info

CHECK BALANCE

CHECK HISTORY

Global Navigation

Header

- Logo & title
- Register button
- Sign in
- Log in button
- Search bar
- Profile link

Footer

- User guidelines
- Legal
- Privacy policy
- Lost/stolen card info
- Translink link
- Social media



User Testing Key Findings

A major key finding determined through user testing surrounded the language used in the site, particularly regarding card registration and profile access. Test users found the layout and simplicity helpful, but were led astray by convoluted word choices.

Design of icons may assist in helping reduce confusion, in addition to clear and concise language.

Raw user testing data can be found in the user testing document included in the strategy package.

Points of Confusion

- Many users cited confusion with the language of similarly labeled items
 - Unsure of difference between "Compass card" and "credit card"
 - Confusion between "log-in" and "register card"
 - Unclear if "profile" section is personal or about system, should be switched to "sign-in"
- Placement of items in navigation bars
 - Location of lost card should be featured more prominently, whereas FAQ can be moved to footer navigation
 - "Get started" and "register" are redundant, should be collapsed into one section

Successful Attributes

- Consistent navigation bars
- Similar information was found in the same area on each page
- Allowed users to quickly feel familiar with site
- Clean organization
- Easy to read



Bibliography

Stats Can Public Transit Research Link

<http://www.statcan.gc.ca/pub/16-002-x/2010002/tbl/11283/tbl003-eng.htm>

City of Vancouver - Social Indicators and Trends 2014

<http://vancouver.ca/files/cov/factsheet11-getting-around.PDF>

Translink Planning Ridership Data

<http://www.translink.ca/en/Plans-and-Projects/Planning-Data.aspx>

Presto Card (Toronto)

<https://www.prestocard.ca/en-US/Pages/ContentPages/FAQGeneral.aspx>

https://ttc.ca/Fares_and_passes/Passes/index.jsp

<https://www.prestocard.ca/en-US/Pages/ContentPages/Home.aspx>

<http://www.gotransit.com/public/en/fares/presto.aspx>

Toronto Ridership Data

<http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=a3b-7c87477438310VgnVCM1000003dd60f89RCRD>

Octopus Card (Hong Kong)

<http://www.octopus.com.hk/home/en/index.html>

Orca Card (Seattle)

https://orcacard.com/ERG-Seattle/p1_001.do

<http://m.soundtransit.org/orca>

<http://kingcounty.gov/depts/transportation/metro/fares-orca/orca-cards.aspx>

Seattle Ridership Data

<http://metro.kingcounty.gov/am/reports/monthly-measures/ridership.html>

MuniMobile App (San Francisco)

<https://www.sfmta.com/getting-around/transit/munimobile>