Design Document - Team Extracy

DMED 522, Projects III





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In collaboration with:



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1 Overview

1.1 Client

The Law Foundation of British Columbia is a non-profit foundation established in 1969 under the Legal Profession Act. The Foundation funds programs and projects throughout BC that benefit the public in the following areas: legal education, legal research, legal aid, law reform, and law libraries.

Access to Justice BC (A2JBC) is a collaboration of individuals and organizations committed to improving access to justice in British Columbia and chaired by the Chief Justice of BC. A2JBC has come to the realization that the key to improving A2J is shifting to a user-centred approach to the justice system. This includes defining access to justice from the point of view of the people that the justice system is intended to serve.

The Better Justice Lab is an access to justice non-profit seeking to improve access to justice in British Columbia. The Better Justice Lab uses data-driven techniques to identify and solve substantial and novel access to justice problems.

The team worked in direct communication with karima budhwani and Lachlan Caunt.

1.2 Problem Statement

We are solving the problem of the lack of awareness and accessibility in the justice services in British Columbia and strive to utilize the existing data to get a better understanding of advocacy services delivered in BC through the Law Foundation's advocacy network. The sponsor of the project has a large number of data points gathered from community advocates throughout the years about the types of services they provide that can be utilized and visualized to further the awareness of justice services.

1.3 Project Scope

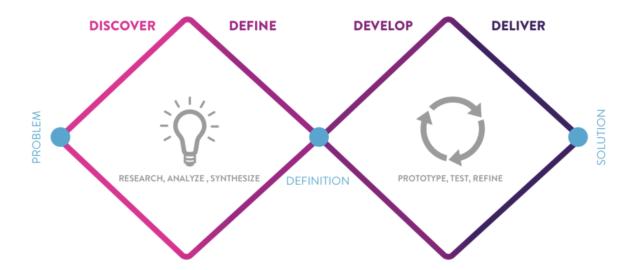
The project has the following core features, which are essential for the platform:

- 1. Built-In form to fill out for community advocates;
- 2. Data dashboard with 2 access privileges:
 - a. Community advocates can see their own data;
 - b. Law Foundation BC can see the whole data;
- 3. Add location and extra data points to improve the quality of information;
- 4. Adapt and optimize existing data points;
- 5. Create secure data protocols and connections between database & front-end;
- 6. Add export to Excel function to the platform;
- 7. Use visualization tools to visualize the data in the form of maps, graphs, and charts;
- 8. Create a responsive interface that updates real-time and showcases historical data.

1.4 Key Features

- View & submit data on a centralized platform;
- Visualize existing & new data to identify hidden patterns;
- Simplify & automate all data processes of the Law Foundation.

1.5 Design Process



The team followed the user-centred design principle. In the discovery phase, we conducted user interviews, competitive analysis, and domain research. In the definition phase, we created personas and user flows to define the problem statement and MVP. In the development phase, we created feature maps, user flows, and mid-fi designs. In the delivery phase, we did user testing, designed hi-fi prototypes, and developed the landing page and two dashboards.

1.6 User Manual

Refer to the user manual to view all of the pages of the Web Portal and detailed descriptions of how to use them:

https://docs.google.com/document/d/18YGd3pyEZnW1MOjHR7jps5p9Vh_hr67--s7bAJmUX4A/edit?usp=sharing

2. User Research

2.1 User Interviews

The team conducted two user interviews sessions with two volunteers from the law area. The sessions were done online using Zoom, and the duration of these interviews was around 20 minutes each. Before the start of the interview, an outline for a list of questions was formed. During the interview, every participant was asked for permission to record the meeting, while one team member participated in taking notes.

Among them, one respondent was Yana, a political science graduate from the University of British Columbia with a journalism background. Another one was Briana, a law school student at the University of Victoria with a focus on business law.

Key Insights:

- 1. Community advocates need to navigate people in trouble through the bureaucracy or professional services;
- 2. The limited amount of social workers and community advocates causes higher working pressure and longer working time;
- 3. The legal resources around the remote areas and indigenous communities are not as easy to access as in major cities;
- 4. There are no suitable tools for advocates to analyze the data.

2.2 User Needs

The Law Foundation:

- 1. View and export the data easily
- 2. Automatically process the data to reduce management processes
- 3. Analyze the data and see data trends through visualizations
- 4. Safety & Confidentiality
- 5. Simple Data Showcase
- 6. Easy Data Management

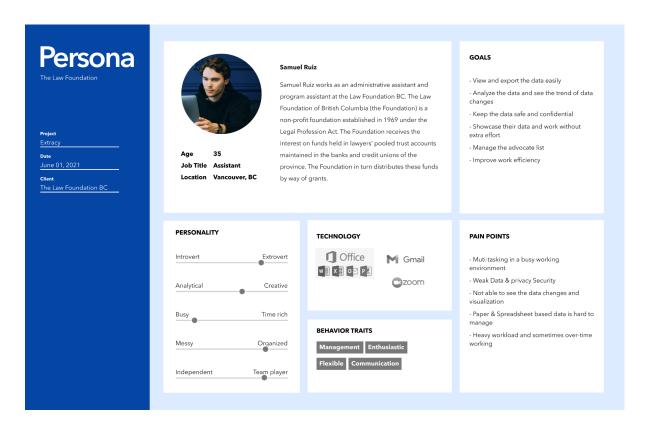
Community Advocates

- 1. Fill out and Send Forms Easily
- 2. Reduce the time they spend sending documents to the Law Foundation
- 3. In the future: automatically transform the data they submit into charts

2.3 Persona & User Journey Maps

The high-quality images are available at these links:

- Persona for the Law Foundation
- User Journey for the Law Foundation
- Persona for Advocates
- <u>User Journey for Advocates</u>





Goals and Expectations

I need to check and organize the data from 120 advocates in BC every month.



Download the Data 1/ Check the emails from the advocates

2/ Download the attachments from all emails one by one

Manage the Data

3/ Save all Excel files locally on the computer

4/ Rename and organize the files manually

Check the Data

5/ Check the forms one by one

6/ Input the data from each advocate into the main

They all come together at the same time every month!



This is so messy. I need to rename some of the files.



This work is so repetitive; I really need a break.

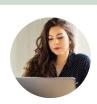


The whole process from downloading to checking the data is boring and tiring.

Opportunity 2

The users are not able to see the big picture of the data.

Persona



Job Title Advocate Location Nelson, BC

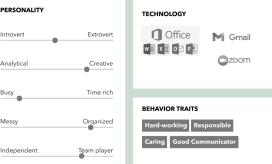
Amy Blaney

Amy Blaney works as an advocate and program manager of the advocacy center at the Nelson CARES society. The Advocacy Centre is a non-profit, community-based organization that provides legal information, education, and problem-solving for low-income residents of the West Kootenays. It also provides specialized victim assistance to victims of relationship violence, sexual assault, and child abuse.

GOALS

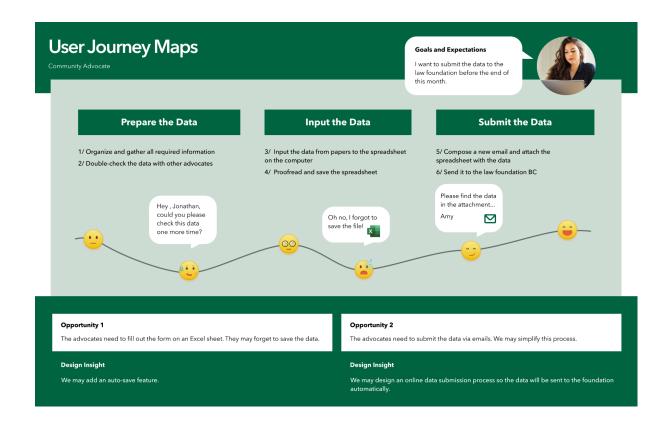
- Fill out and send forms easily
- Keep the data safe and organized
- Manage the data simply
- Showcase their data and work without extra effort - Help more people that need justice
- Navigate people in trouble through the bureaucracy or professional services
- Improve work efficiency





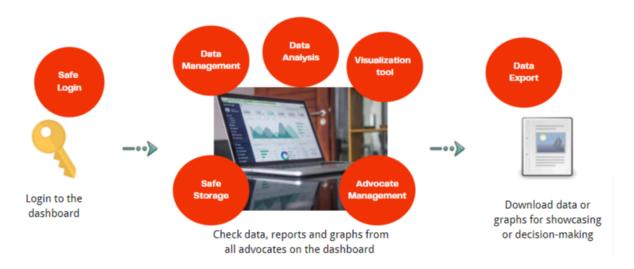
PAIN POINTS

- Tedious paper work
- Weak Data & privacy Security
- Not familiar with complicated database
- Paper & Spreadsheet based data is hard to
- Heavy workload and sometimes over-time
- Clients have issues that community advocates can't address (mental counselling, police & courts)



3. Product Plan & User Experience

3.1 Product Structure

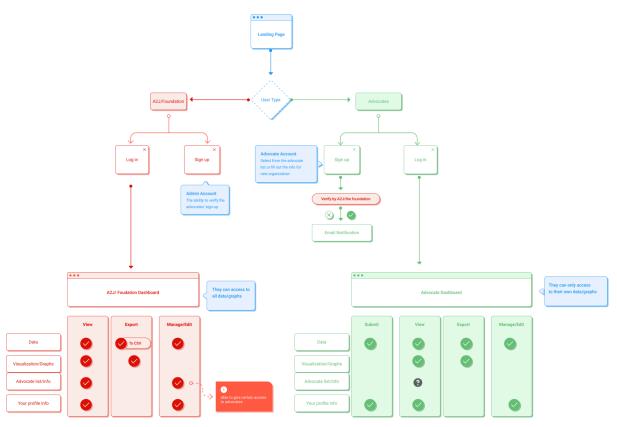


The product structure consists of a front-end landing page and two dashboards, one for the law foundation users, another for the community advocates & excel spreadsheets that work as the backend database.

3.2 Minimum Viable Product

We define the Minimum Viable Product (MVP) as a web portal with a functioning database and front-end, where the user can register; upload the data; the data is input into the database through the built-in form; can be viewed partly by the community advocates and fully by the sponsor; and exported in spreadsheet format. The platform requires 2 security privileges to showcase the information: community advocates and sponsors. The data dashboard of community advocates will be limited by design because they can only view their own data. The sponsor will have a full overview of the data from all community advocates. The server will be running on the CDM hosting for the duration of the project and will be taken down at the end, with the files forwarded to the client. The client has a responsibility to establish their own server with the instructions provided by the team through documentation. The team will support the client during the final week to get the server running. The ownership of the middleware server, where the user data is stored, will be transferred to the client, including the billing information if applicable.

3.3 Feature Map



High-quality image available: here

The feature map breaks down the features individually for two user roles:

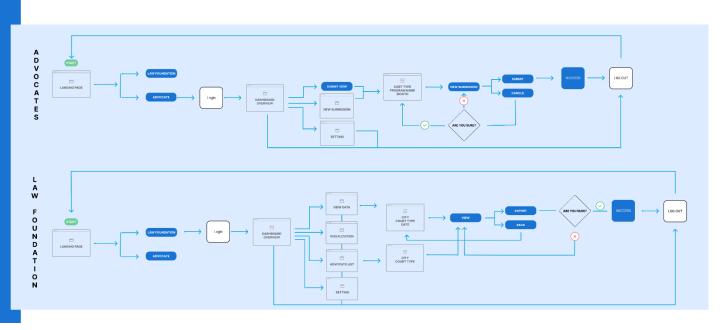
1. Law Foundation (full access)

	View	Export	Manage/Edit
Data	✓	✓ to CSV	<
Visualizations	✓	√ to JPG	✓
Advocate List	✓	✓	✓
Profile Info	✓		✓

2. Community Advocates (limited access)

	Submit	View	Export	Manage
Data	✓	✓		
Visualizations		✓	✓	
Advocate List				
Profile Info		✓	✓	

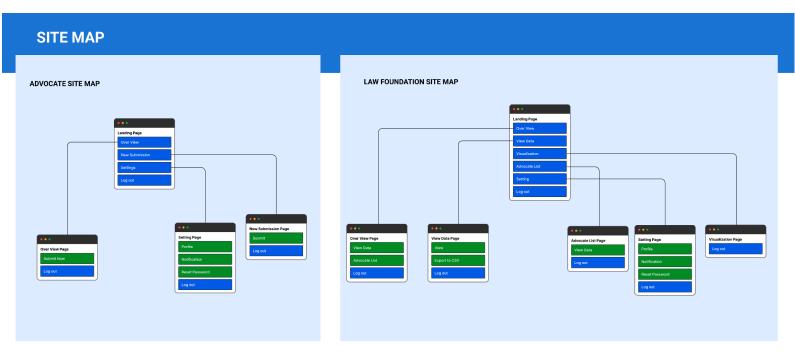
3.4 User Flow & Interaction



The high-quality image is available: here

There are two groups of user flows for two types of target users. The user flow & interaction graph shows the main user tasks and how the users will interact with the extracy web portal (dashboards). Because there are two types of user privileges, the flow for each user is different and the level of access to the data is limited to community advocates. This is the reason why Community Advocates only have access to Overview, New Submission & Settings Pages. With the way the database is built, only the Law Foundation can view the full platform.

3.5 Site Maps



The high-quality image is available: here

The task hierarchy graph (site maps) above provides an overview of all the Web Portal's available features and endpoints. For both advocate and law foundation users, the website starts from the landing page. On the advocate dashboard, they can get access to overview, new submission and settings pages. On the law foundation dashboard, they can get access to overview, view data, visualizations, advocate list and settings pages.

3.6 User Experience Benchmarking

The team researched a set of user-centred metrics developed by Google to measure and evaluate the quality of the user experience. The Heart Framework is designed to help UX teams focus on specific aspects of the user experience they want to improve, as well as identify concrete goals and user experience metrics to gauge success.

1. **Happiness** - find the app helpful, fun, and easy to use

Customer satisfaction rating for customer support or intercept survey

- 2. Engagement users enjoy app content and keep engaging with it
 - Average session length
 - Goal conversions rate
- 3. **Adoption** new users see the value in the product or new feature
- 4. Retention users keep coming back to the app complete a key action
- 5. Task success users complete their goals quickly and easily
 - Exit Rate to measure which pages have the highest exit and find out why
 - Average time to complete critical tasks

4. User Interface Design

4.1 Design System

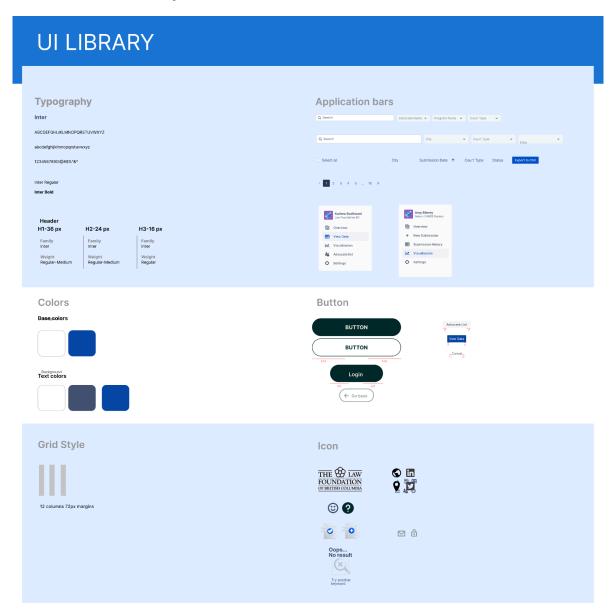
▲ ATLASSIAN Design System

ADS - ATLASSIAN Design System

Extracy design system is developed based on the ATLASSIAN Design System (ADS) and we followed Google Material Design principles. The design strategy is to keep everything simple and user-friendly. For future design changes, you can use these Figma libraries to keep a consistent design style:

Foundations	Components			
This Library contains fonts, colours, icons and more design foundations.	This Library contains all components like buttons, menus, navigation bars and so on.			
https://www.figma.com/community/file/857 042449394640587/ADS-Foundations	https://www.figma.com/community/file/857 042825430121164/ADS-Components			
ADS Foundations © 273 L Duplicate 11.4k Proper Convert ADS Foundations A ATLASSIAN Design System	ADS Components © 055 Duplicate 10.1k			

4.2 UI Library



The high-quality image is available: here

UI Library stores all of the project assets (icons, images, buttons colors, etc.) in one large easily accessible area. If the platform is developed in the future, these assets can be reused to create new pages and update existing pages. The actual elements are available on the Figma Board.

4.3 Showcase Materials





All UI frames are available at <a>@Appendix. The high-quality images are available here:

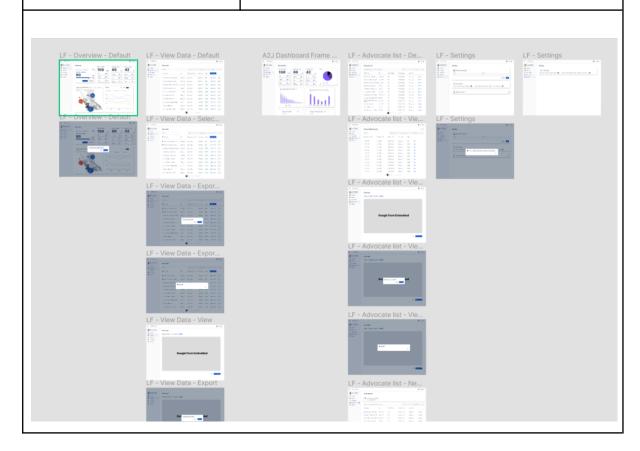
- Showcase Image 1
- Showcase Image 2

5. Prototype

5.1 Figma

View all platform designs on Figma Board:

https://www.figma.com/file/uXgYKTgLpvuBZXii60mi1V/Projects-3-The-law-foundation?node-id=759%3A29868



Prototype of the Web
Portal (a version, where
the user can click through
and complete the full
process):

https://www.figma.com/proto/uXgYKTgLpvuBZXii60mi1V/Projects-3-The-law-foundation?page-id=752%3A29169&node-id=1030%3A35088&viewport=651%2C187%2C0.11177783459424973&scaling=contain&starting-point-node-id=1030%3A35088



5.2 Web Portal

The Web Portal is available at extracy.thecdm.ca and will be disabled upon the completion of the project. Please view the following video at what the platform has to offer:

6. User Testing

A full user test report is available here: Extracy - User Test Report

6.1 Summary

When: July 6, 2021 - July 9, 2021

Where: Zoom

Number of Participants: 6

Overall Feedback:

This product is easy to use and the user flow is clear. Navigating around the website using the navigation bar is also very convenient. Participants feel confident using the product to improve their working efficiency.

6.2 Sessions

How the participants were recruited: We sent out the invitations to people with design or project management backgrounds in our cohort.

Participants: Our participants were all from cohort 15 at the CDM

Session duration: 15 min + 3 min survey

Date: July 6, 2021 - July 9, 2021

Test flow:

1. Connect to Zoom

- 2. Brief introduction of the product
- 3. Run the test
- 4. Ask follow-up questions during the session
- 5. Testing ends, participants take the post-test survey

6.3 User Tasks

Task 1: Assuming you're a community advocate and now you need to submit this month's data for family law, how might you do it?

Task 2: Assuming you're from the law foundation BC, now you want to check the overview of the data, how might you do it?

Task 3: Now you want to view the data, and export the first two new submitted data forms to your computer, how might you do?

Task 4: Now you want to search and view the data from the Migrant Workers' Centre, how might you do?

Task 5: Now you want to check some graphs and charts, how might you do?

Task 6: Now you want to find an advocate from Nelson CARES Society, how might you do? And you want to view and export the data they recently submitted, how might you do it?

Task 7: Now, a new advocate sent the sign-up request, how might you approve their request?

Task 8: Please reset your password and log out.

6.4 Testing Results

Task Completion Success Rate:

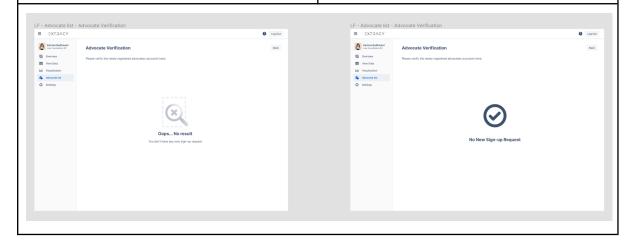
Participant	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8
1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1
5	1	1	1	1	Х	1	1	1
6	1	1	1	1	1	1	1	1
Completion Rates	100%	100%	100%	100%	83.3%	100%	100%	100%

The reason why Participant 5 didn't complete was not relating the word "charts" with "visualization". **Other than that, all user tasks were 100% completed.** It means our main user flows are easy for users to follow.

6.5 Actionable Changes

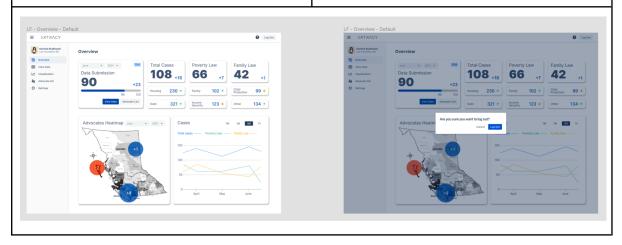
Problem: Users may log out accidentally

Solution: Add a confirmation pop-up when they click on log out



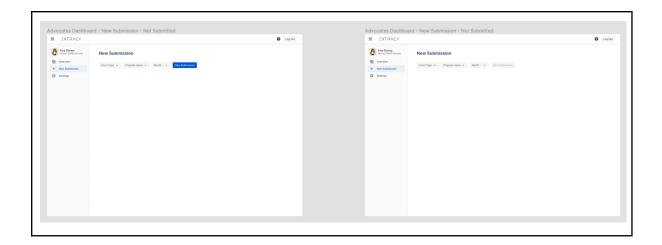
Problem: Users may feel confused when they saw the notification after they verify advocate sign-up request

Solution: Use proper icon and text to help user understand their action succeeded



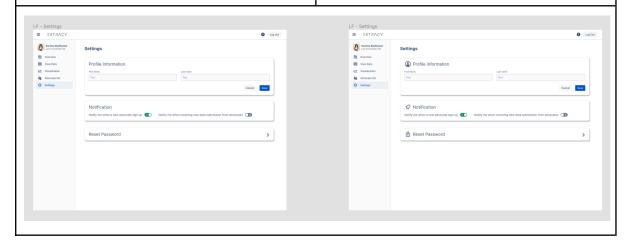
Problem: Users may click on the start submission before they select the court type, program & date

Solution: Make the start submission unclickable unless the users select all information required



Problem: Reset password button seems not clickable for some users

Solution: Add an icon and make this button more visually obvious for users



7. Software

- Brainstorming & Prototyping: Miro & Figma
- User Experience: XD & Figma
- User Testing: PlaybookUX, Dovetail
- Kanban: Miro
- Coding & Sourcing: GitLab
- Database: Sharepoint & Web Excel
- Front-End: React, JavaScript, CSS & HTML
- Back-End: Python & Flask (not used in this project)
- Data Visualization: Excel Charts
- Documentation: Google Docs
- Storage: Sharepoint & GitLab

8. Appendix

8.1 User Test and Survey Results

Questionnaire Result:

- 1. The Average rate of the overall experience using the website is 4.67 out of 5.
- 2. The Average rate for ease of navigating around the dashboard using the left side menu bar is 5 (Very Easy) out of 5.
- 3. The Average rate for ease of searching for an advocate is 4.83 out of 5.
- 4. The Average rate for ease of exporting data is 5 out of 5.
- 5. Users' confidence in improving the efficiency of work and data collection using this website:



6. Clarity of the information on the data visualization page:



- 7. The worst thing about user's experience:
 - "I wasn't able to click on the case names and the View buttons were all the way to the right"
 - "Due to the font size or button size in some important information might be hard to find"
- 8. More feedback from the user test:
 - 'Make case names clickable"
 - "selecting the court type before clicking the new submission. I'm too excited to click on a new submission first before selecting other things."
 - "wider the top bar"
 - "Since it's only a test, more features and buttons can be activated for the next phase"

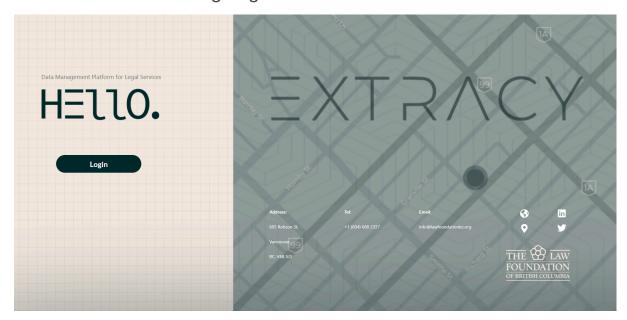
User Feedback & Recommendations

- 1. Log out button can be more obvious
- 2. Should have a confirmation pop-up before logging out
- 3. You can make the organization name text clickable in the table
- 4. Keep the wording all nouns for the left navigation bar
- 5. The icon and text after verifying the sign-up request were confusing
- 6. It would be good to see some charts in the view data
- 7. I wish to see more information when verifying an advocate
- 8. The reset password seemed not clickable for me at first
- 9. The submission button seemed clickable even before I select the court type

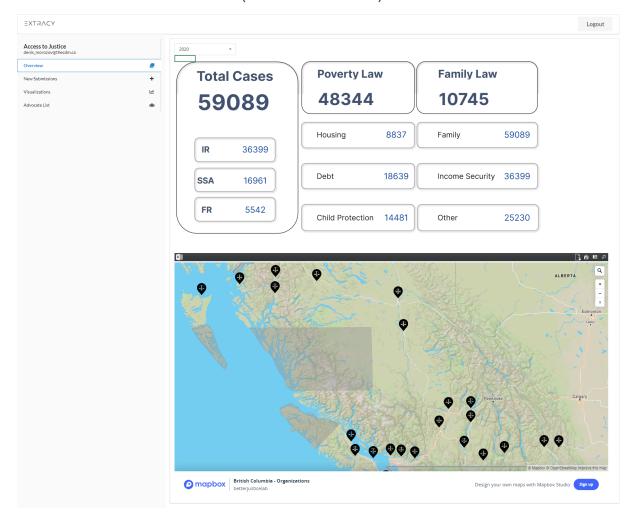
8.2 User Interface - Web Portal

This section consists of all of the screenshots of the platform

8.2.1 Landing Page



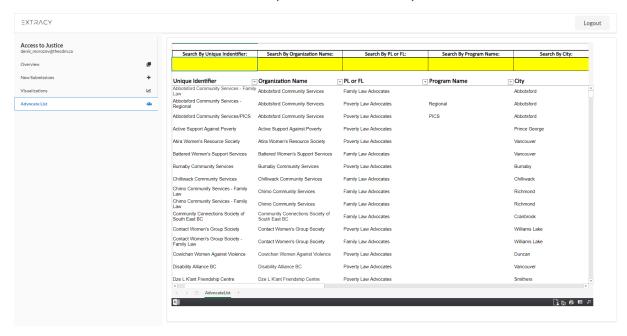
8.2.2 Overview (Law Foundation)



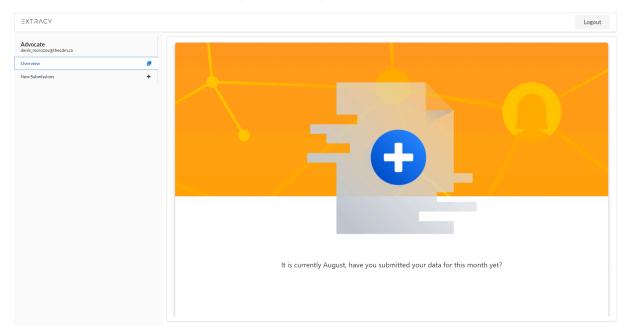
8.2.3 Visualizations (Law Foundation)



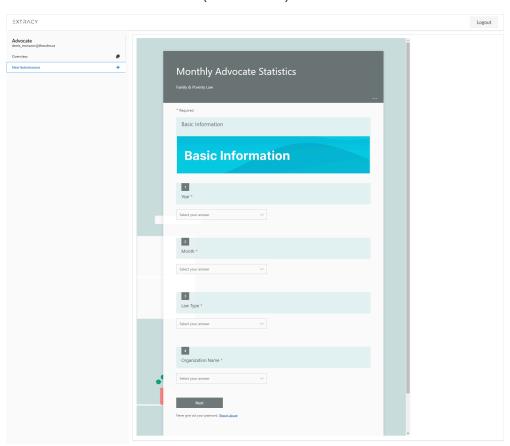
8.2.4 Advocate List (Law Foundation)



8.2.5 Overview (Advocate)



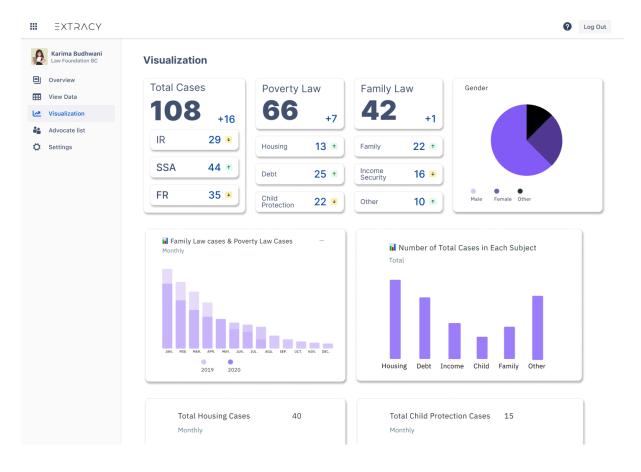
8.2.6 New Submissions (Advocate)

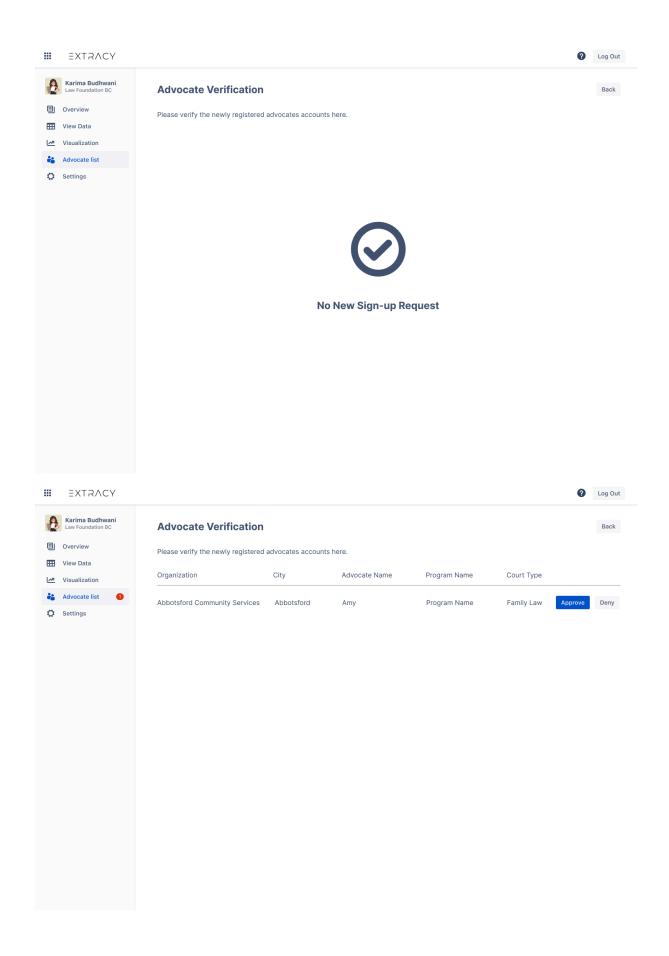


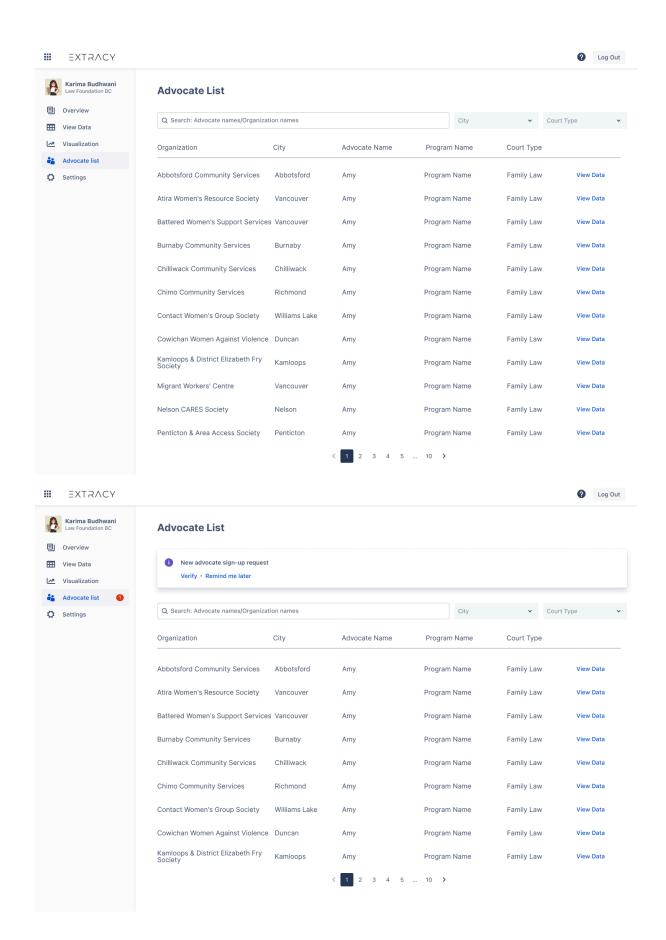
8.3 User Interface - Figma

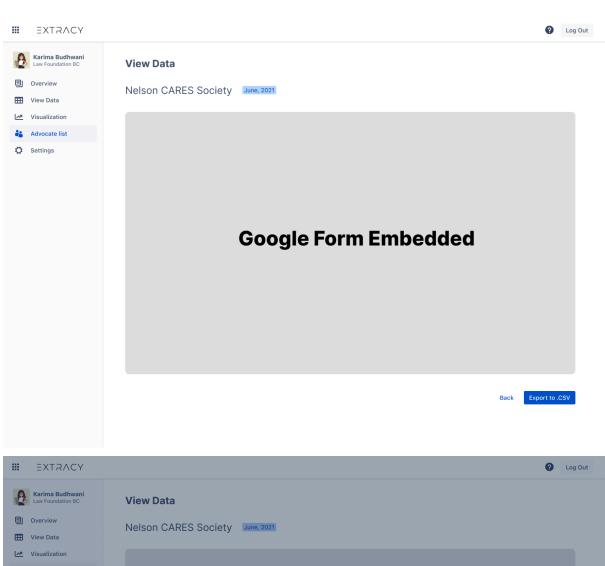
This section consists of all of the screenshots of the platform from the prototype view.

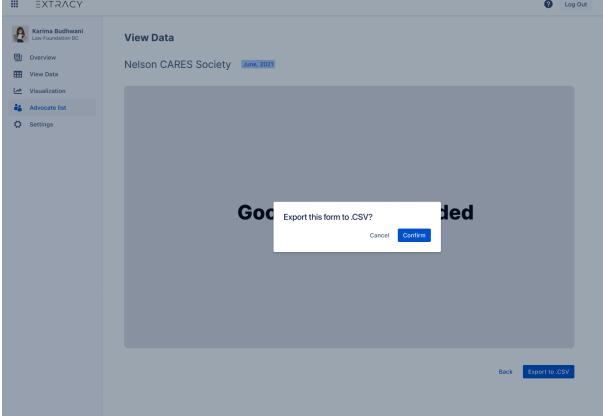
8.3.1 Law Foundation Dashboard

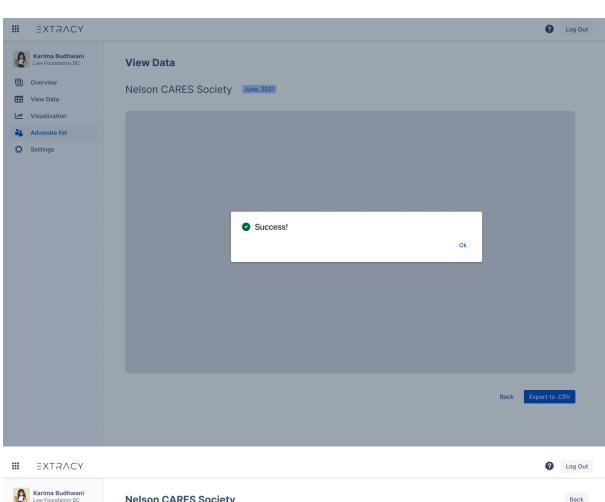


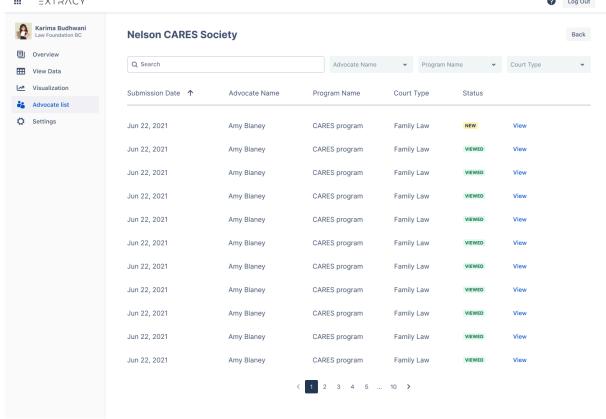


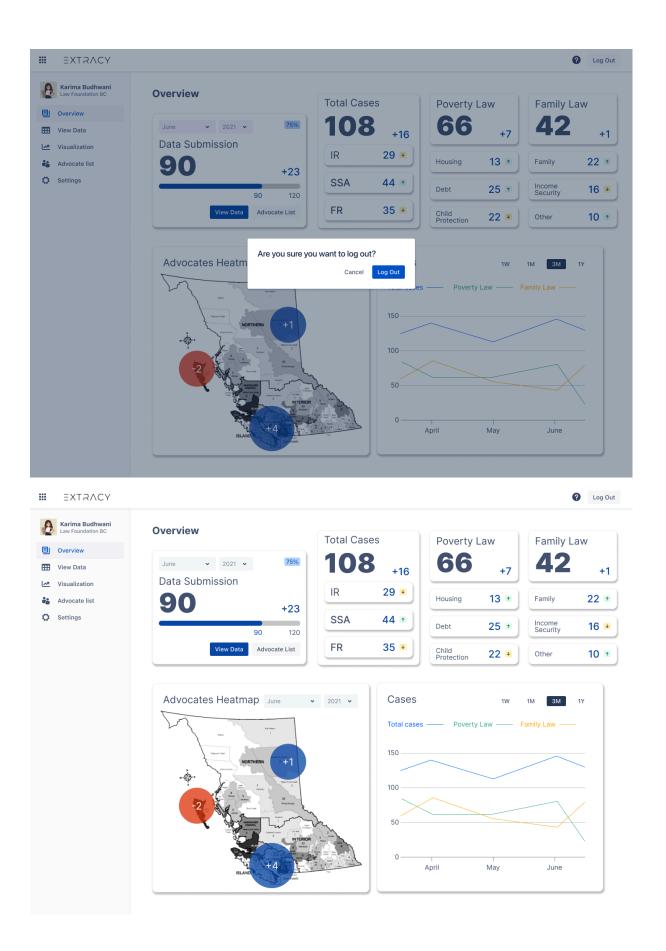


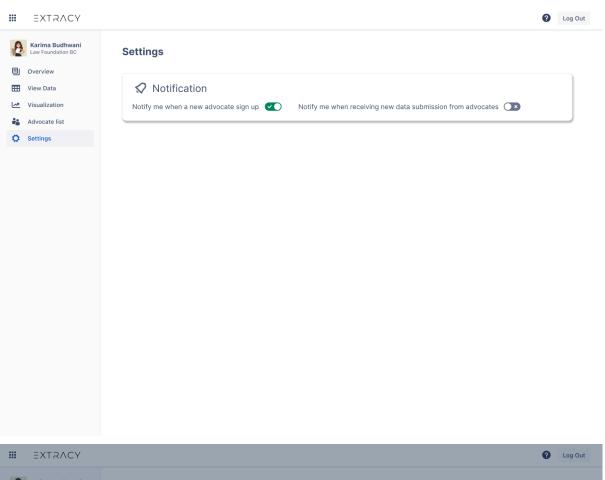


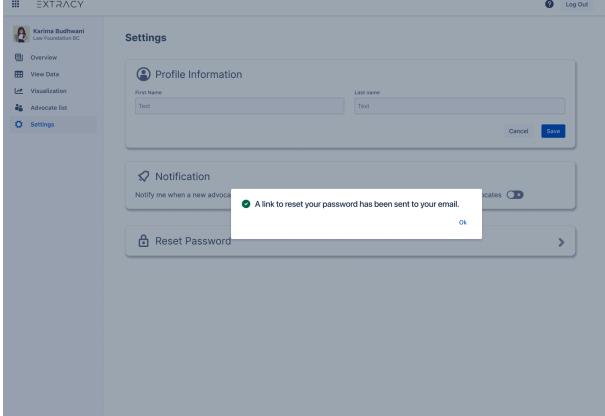


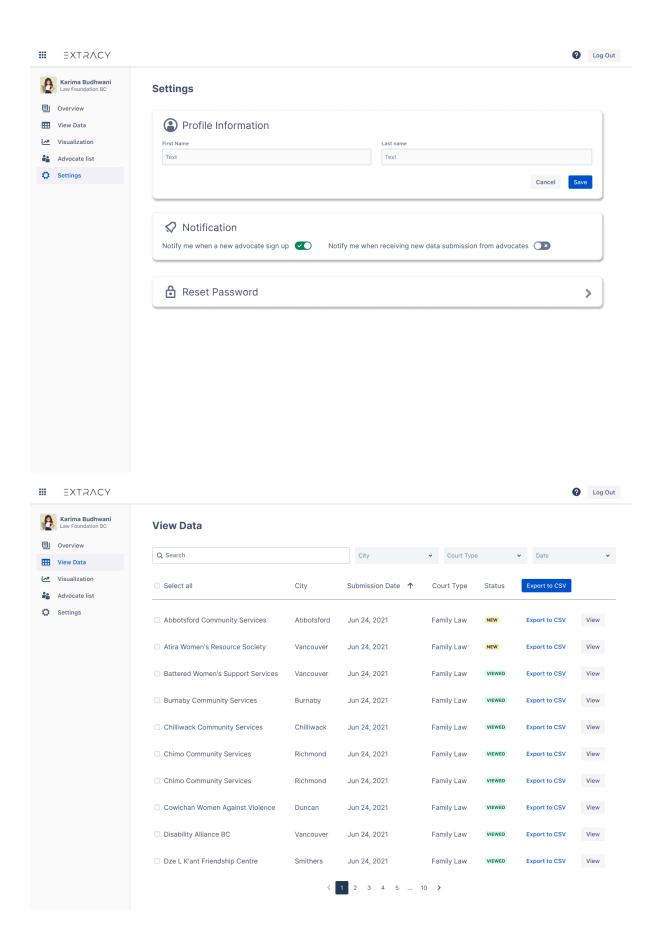


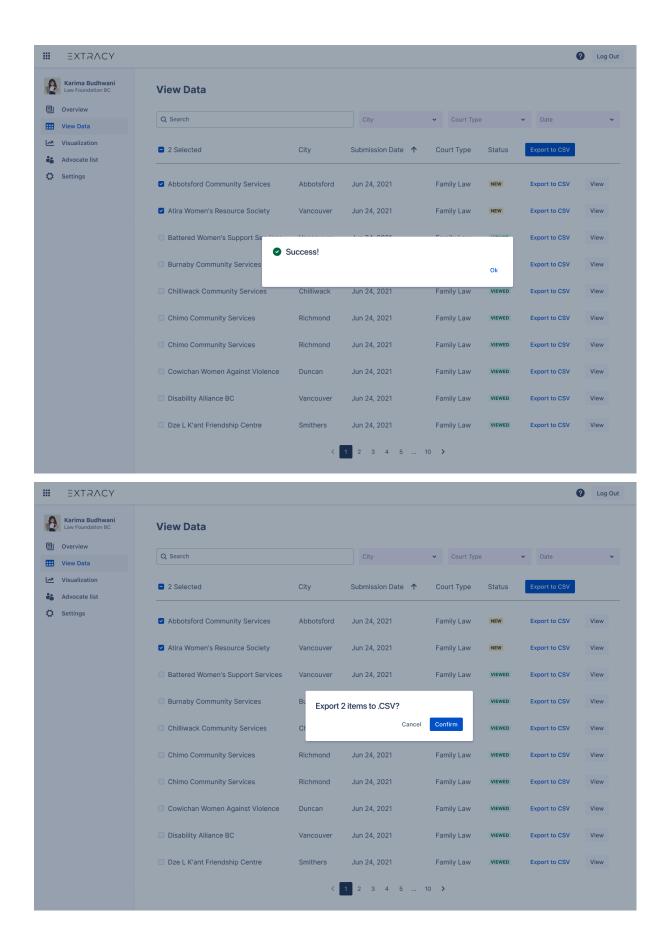


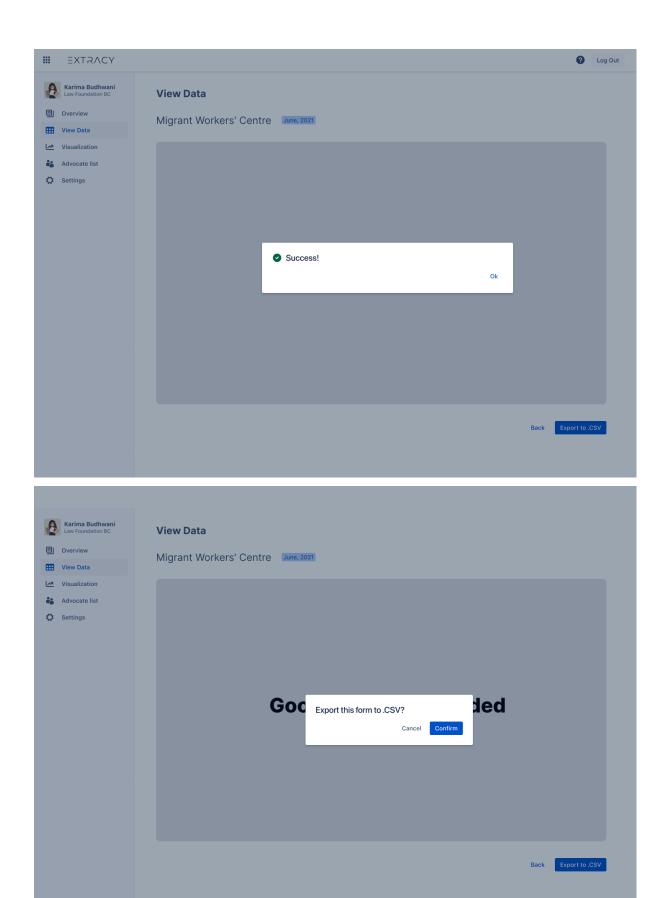


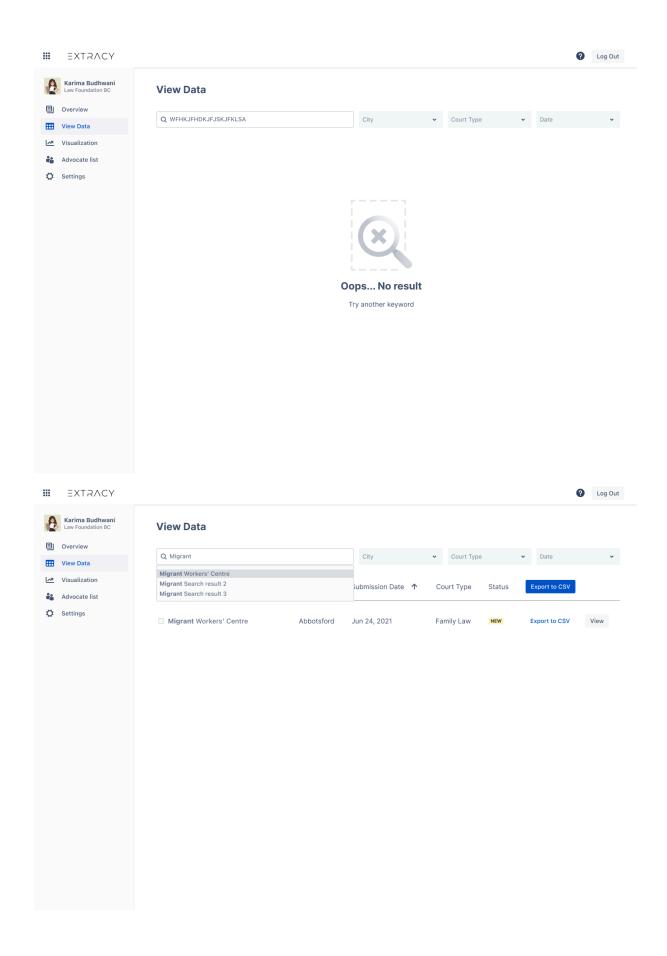


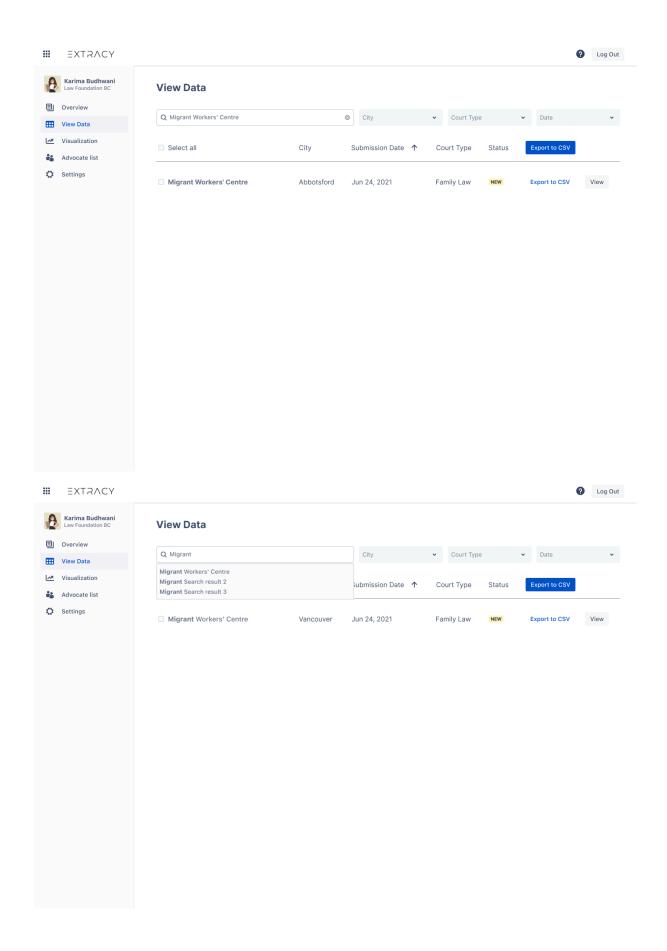


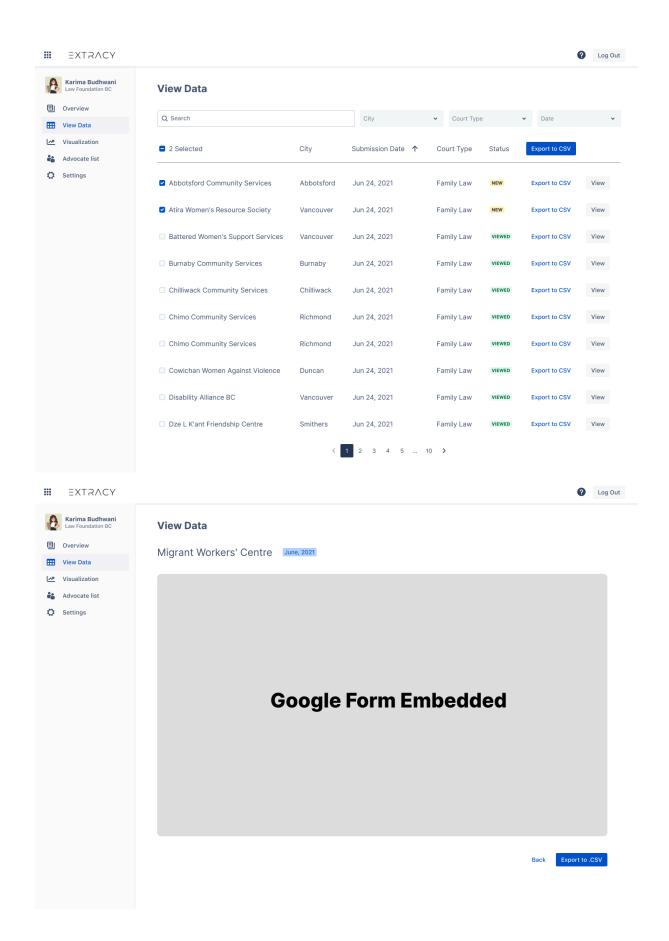












8.3.2 Advocate Dashboard

