MORE WOMEN IN BUSINESS

A participatory approach to empower women entrepreneurs

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ABSTRACT

It is no exaggeration to say that we are living in an era of emerging startups. However, although women's presence in business has become more prominent, they still experience systemic discrimination in such areas as access to resources or capital. Statistics demonstrate that only 16% of Canadian small and medium-sized enterprises are owned by women (Grekou, Li, & Liu, 2018). Moreover, women often encounter more obstacles in starting and running businesses compared to their male peers (Guzman & Kacperczyk, 2019). One way of closing this gap is empowering women entrepreneurs and offering them solutions specifically catered to their needs.

This project is a design-led investigation into empowering women entrepreneurs in Canada using participatory design methodologies to identify their major problems in order to generate appropriate solutions. The research explores the following questions: What are the main difficulties for women entrepreneurs before and after launching their businesses? How can women entrepreneurs be empowered to effectively tackle the underlying problems and continue their businesses with fewer obstacles?

In this regard, this research went through needs-finding phases, including resource analysis (articles, interviews, online platforms, podcasts, forums, etc.), deep interviews, and co-creation workshops with generative activities. During the participatory activities, a broad spectrum of people who can be affected by design solutions —women business owners, investors, and mentors— were engaged in order to generate insights on women entrepreneurs' activities, challenges, and achievements.

This project demonstrated that even though women encounter different obstacles due to a variety of factors, accessing mentorship and connection to the right community is a frequent request among women. This can have an enormous impact on the success of their ventures. Furthermore, the investigation revealed that, by and large, entrepreneurs struggle with finding available resources or have no idea what already exists — which consequently imposes financial and time costs.

To discuss the identified needs and offer feasible solutions, ideation sessions were organized with creative thinkers, entrepreneurs, and mentors. Reaching out to the target group for this research was challenging, especially during the COVID-19 pandemic, requiring a tailored strategic approach fitting the new situation.

The research uncovered two potential opportunities. First, a space for women entrepreneurs to connect with other entrepreneurs, share their experiences and ask and answer questions. And second, a space to refer to and share entrepreneurship resources. In this regard, an interactive and collaborative platform is offered to facilitate communications between entrepreneurs along with a library of entrepreneurship resources accessible to beginners and experienced entrepreneurs alike.

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Introduction

1.1 The definition of women entrepreneurs

First, it is necessary to clarify what is considered to be a "woman entrepreneur" for the purposes of this project. In this research, a woman entrepreneur is understood to include any woman who organizes and manages any enterprise, especially a business. Here, the word "woman" is interpreted as anyone who self-defines as "woman" in terms of gender: cis women, trans women, and other women.

Based on the Oxford dictionary definition, "entrepreneur" is any person who undertakes to supply a good or service to the market for profit. An entrepreneur will usually invest capital in the business and take on the risks associated with the investment. Social change can be another aim of the development of services and products. Consequently, entrepreneurship is a process in which all levels of societies — regions, organizations, and individuals — are involved in identifying and exploiting opportunities leading to wealth creation or social change (WEKH, 2020).
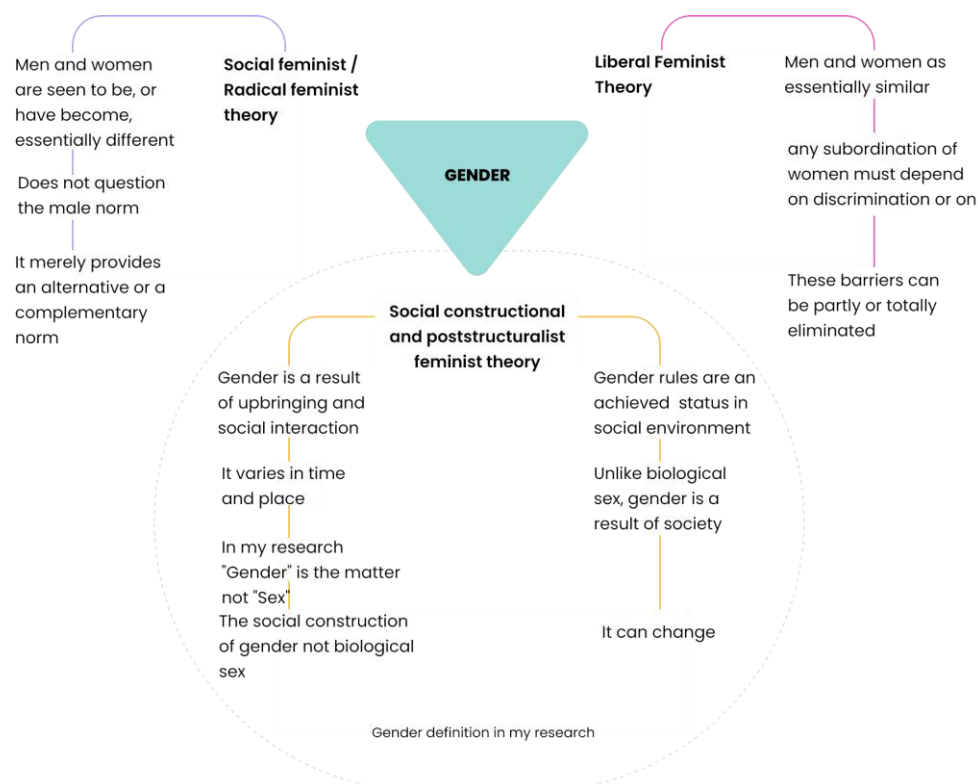
Figure 1. The meaning of gender in my research based on Helene Ahl article (2006).

1.2 Project objectives

o Identify the main challenges for women entrepreneurs in Canada to start and/or continue their businesses by including them in the pre-design phase

o Provide solutions that empower women entrepreneurs to effectively tackle the underlying problems and continue their businesses with fewer obstacles

1.3 Research rationale

I have always been interested in designing for gender parity in business, which stems from my personal experience as an entrepreneur, being a curious observer, and connections with other women. Establishing close relationships with people (men and women) who play different roles in business helped me analyze various factors that women encountered in launching a business.

This research examines the barriers women business owners in Canada face and considers how women could be better empowered. In Canada, both the private and public sectors have been actively involved in building a stronger entrepreneurship ecosystem. Government programs and policies have positively impacted entrepreneurship over the last two decades. Additionally, a substantial number of community and support organizations have been actively helping entrepreneurs to start and expand their businesses. Based on the Women Entrepreneurship Knowledge Hub (WEKH) report (2020), more than 2,550 organizations play a role in developing businesses and supporting entrepreneurs in Canada.

Women in Canada benefit from financial support, mentorship programs, communities, training, and development programs. An example of governmental programs advancing women's economic empowerment is Women Entrepreneurship Strategy (WES) which is seeking to double the number of women-owned businesses by 2025 by investing nearly $5-billion in women-owned ventures.

It is no exaggeration to say that small and medium enterprises (SMEs) are the heart of the economy in Canada as they represent 99.8 percent of all businesses (ISED, 2019). Moreover, SMEs play an essential role in employing Canadians across the country as they employed 89.6 percent (10.67 million) of the private sector workforce. Unfortunately, the number of women-owned SMEs represented 15.6 percent of all SMEs in 2017 (ISED, 2020).

Even though from 2011 to 2017, women's self-employment grew by 10.6 percent compared to 5.4 percent for the overall self-employed population (Statistics Canada, 2018), the number is still low compared to men. Only 16% of Canadian businesses are owned or led by women (GEM, 2019). Despite the efforts across small and larger organizations to support women's entrepreneurship, there still exists considerable fragmentation and a gender gap in business (WEKH, 2020).

While organizations supporting entrepreneurs in Canada have made important strides over the last years, women are currently under-represented in the majority of these programs due to gendered barriers at every step in the process—in entrepreneurship training programs, incubators, and development programs (PWC, 2018).

Enhancing the performance of women-owned enterprises and encouraging women's business ownership would promote gender equality in leadership, financial empowerment of women,

and economic expansion. In a report, McKinsey Global Institute (MGI), shows that by taking steps to tackle this issue, Canada can add $150 billion in incremental GDP by 2026 (Devillard et al., 2019).

In addition to the impact of women's empowerment on a prosperous economy, it leads us a few steps closer to gender parity, women's self-sufficiency, and social development.

Since more women than men see entrepreneurship as a positive career (3.3 times greater, GEM Women's Entrepreneurship Report, 2019), a more inclusive entrepreneurial ecosystem is needed which provides people with equal opportunities to prosper and thrive. It means providing women with answers catered to their needs and gender-specific supports.

1.4 Research framing

This research explores the following questions:

1. What are the main difficulties for women entrepreneurs before and/or after launching their businesses?

2. How can women entrepreneurs be empowered to tackle the underlying problems and continue their businesses with fewer obstacles?

The research for this project is based on data collected from different resources such as podcasts, reports, interviews, forums, and primary resources such as semi-structured deep-interviews with stakeholders of this project (women entrepreneurs, mentors, and investors). I started by focusing on identifying the major challenges women entrepreneurs may face. Different stakeholders shared their individual experiences of starting and growing businesses, mentoring entrepreneurs, investing in startups, coping with challenges, and finding solutions. I benefited from using a generative toolkit to provide a structure for dialogue between myself and the participants.

The qualitative data from these sessions helped me build a better understanding of entrepreneurial activities in Canada and common challenges among women entrepreneurs. It included highly personal and extraordinary experiences that are seldom discussed. I also interviewed men and women mentors and investors. Since they are in touch with great numbers of entrepreneurs and know the ecosystem well, they offered a holistic view with insights on women's entrepreneurial activities, their challenges, and even possible solutions to the issue.

In the next phase, I organized Ideation sessions (online and in-person) with two groups of four creative designers as well as two entrepreneurs and two mentors. I took advantage of Miro – an online collaborative space – to conduct and manage online ideation sessions. Based on the result of the sessions, I have developed a platform for women entrepreneurs to address mentorship needs and access other resources. The idea was tested and critiqued by women entrepreneurs and mentors as the primary stakeholders of the project.

02

SECONDARY RESEARCH

A review of women entrepreneurs' challenges in Canada based on the WESK report (2018)

08

A review of women entrepreneurs' challenges in Canada based on the WESK report (2018)

At the beginning of this project, I went through different resources to gain a better understanding of the status of women entrepreneurship in Canada. I took advantage of articles and reports prepared by individuals and reliable organizations as Global Entrepreneurship Monitor (GEM), BMO Financial Group, Government of Canada, Statistics Canada, Innovation, Science and Economic Development Canada (ISED), OECD, and McKinsey Global Institute.

Even though all these reports and articles were extremely helpful to shape a vivid image of women entrepreneurship in Canada, I found PWC's report to be the most precise and comprehensive. It is a short report prepared for WESK (Women Entrepreneurs Saskatchewan) on women entrepreneurship in Canada, barriers faced by them, and includes relevant case studies. In addition, it discusses potential policy measures that may be effective to meet women's challenges. In the following, four major difficulties for women business owners will be discussed.

The report considers limited access to financing, lack of networks, lack of training and mentorship, and work-life balance as the major barriers on the path of women entrepreneurs in Canada. Regarding financing, the report shows that there are different factors involved in shaping this challenge. For instance, as a result of lending discrimination, women usually need to provide lenders with more documentation to guarantee that they are able to pay back their loans (Jung, 2010). On top of that, the unequal distribution of economic resources across gender leads to lower income for women. Moreover, women mostly prefer internal financial resources such as their own savings to start and continue a business. Consequently, they have less money to invest in their businesses. Moreover, considering venture capital firms as a key recourse of needed capital for aggressive growth, entering the venture market is more challenging for women entrepreneurs. The primary reason mentioned in this report is that there are too few women in venture capital firms and the result is a biased perspective on women's capabilities to grow a high-tech company.

Alongside capital, networks emerge as the most important driver for women's entrepreneurial success. They help women build their reputation and create new channels to access funding. By and large, many investors make their investment decisions based on the information provided by their network. Unfortunately, women are often not welcomed to established networks, incubators, and accelerators. It results in reduced opportunities for promoting their business and obtaining funding (WESK, 2018).

Lack of access to mentorship and business training is another barrier that stops women from scaling their ventures. Based on the report, 27% of women who participated in mentoring programs reported easy access to funding compared to 19% of women entrepreneurs overall.

Generally, nearly half of women entrepreneurs state that a challenge facing their business is the lack of available mentors. (Fetsch, Jackson, & Wiens, 2015). However, women are less likely to have access to training and mentorship programs that are adjusted to their needs. The report suggests customized support programs for businesswomen in Canada as a valuable way of assisting women to start their businesses and pursue growth strategies.

The last major challenge for Canadian women business owners based on the PWC report is work-life balance. Women, in general, may experience additional hurdles to maintain the balance between work and life. They mostly tend to start their entrepreneurial journeys at 25-44 years of age. On the other hand, almost three-quarters of births are delivered by women in their 20's. As a result, women face more difficulties based on parenthood responsibilities causing a lower rate of entrepreneurial participation. Solutions offered for this issue are affordable childcare and a better parental leave policy.

Research shows that women who live in regions that offer better work-life policies tend to build higher impact and more scalable enterprises.

European Commission: connect female angels and venture capitals to female entrepreneurs to facilitate funding

S: better parental leave policy   S: affordable childcare   Additional pressure

I should consider the point that women not only need to be connected to female entrepreneurs communities but also in general need to be connected to the entrepreneur community (men or women does not matter)

Forum for Women Entrepreneurs: educates, mentors, energizes and connects women entrepreneurs

This period has the highest rate of participation in early stage activity

There is less women in VC firms or angels

WEgate-platform was launched in 2016 and is designed as a European network meant to promote women's entrepreneurship.

3/4 of births are delivered between ages 20-30

Investors make their decisions on the basis of the information provided by their network

Giving birth   Build their reputation   Tap funding   Case study

Work-life balance   Network

Women Entrepreneurs Challenges in Canada

Limited access to financing

Loans from family or friends   Their own saving

They preffer internal resources   Demand side of gender differences

supply side of gender differences

Less ambitious   Lack of confidence   Type of business operated by women   Unequal distribution of economic resources across gender

Barriers to venture capital market

Being at a late age   Work-family balance

Service sector

women usually have lower income than men

Too few women on the team of venture capital firms   Work harder/Less investment

Less aggressive growth strategies

Require less capital

Invest less money

Only 45% majority of female owned SMEs requested external financing (53% male)

Lending discrimination

Lack of training and mentorship

Higher interest rate

Entrepreneurial workshops   Support meetings   Less participation in business

Additional gurantees

Greater improvement in access to growth and expansion capital

Less access to role models, mentors, and trainings that are oriented towards women entrepreneurs' needs

Female entrepreneurs have to provide lenders with more documentations

Figure 2. *A review on women entrepreneurs' challenges in Canada based on WESK report prepared by PWC.*

"No single initiative, program or policy will likely level the playing field for high-impact female entrepreneurs; in other words, there is no "silver bullet". Therefore, a holistic approach is needed, with active engagement at all levels: from the government and corporations to the media and individuals."

(WESK, 2018)

03

PRIMARY RESEARCH

3.1 Online conversation analysis

Online conversation analysis puts forward an opportunity for providing insights from entrepreneurs' stories, needs, and concerns. Making use of online resources that reveal the thoughts of stakeholders of this project, such as interviews, podcasts, forums, virtual events, social media posts, etc. was an introduction to the world of entrepreneurs in Canada and to a better understanding of what they are saying and thinking about. It helped me to evaluate the status quo and deepen my understanding of what entrepreneurs are looking for and what they most need.

This analysis of online sources provided a useful background for the in-person interviews. Even though I was aware of the challenge of making assumptions before talking to my target audience, I benefited from this data to better design interview materials and advance the conversation with participants. Moreover, it was immensely helpful in creating a stronger sense of empathy prior to our meeting. I found many similarities between my own entrepreneurial experience in Iran and that of Canadian women.

First, I searched for business forums that are being used by Canadian entrepreneurs. These platforms are developed to be used by people from all over the world but are utilized by Canadians as well. I checked the questions, answers, and how they communicate with each other. I was not only looking for women entrepreneurs but also men for comparison and to identify differences. Examples included *Startup Nation*; a platform to learn about different topics, *Biz Warriors*; a place to get information and chat, *Reddit* and *Quora*; to ask questions and get answers, *The Fast Lane forum*; a forum to share experience, *Clarity*; to chat with experts and ask questions.

By analyzing online conversations, I figured out that challenges for men and women are mostly similar. They usually tend to ask the same questions. In addition, based on the industry that they are active in, their backgrounds, and their experiences, both may face different challenges and look for different solutions. As a result, it was difficult to identify unique challenges for women entrepreneurs based on analyzing forums' conversations. In general, they are more likely to look for education or advice. It may be relevant to the nature of forums where they are places to ask questions and consult.

Podcasts and interviews were other sources where I was able to extract data about women entrepreneurs and analyze them. They were slightly different from forums. I checked some Canadian entrepreneurship podcasts that offered women-related topics or had a woman as their guest in some episodes. My list included: *The Go To, Startup Canada, Uncorked, Every day is new day (Entrepreneur roadmap to success and positive impact), Think Space, Into the wild, Fearless Women podcast*. I read or watched the interviews of mentors and entrepreneurs who I found through podcasts or searching on the internet and LinkedIn.

In general, building the trust of venture capital firms and the mostly invisible presence of women in STEM were prominent topics discussed. I noticed that in podcasts and interviews, questions are usually selected and asked by hosts or interviewers and they often lead conversations. As a result, it is more likely that specific topics were chosen for discussions. So interviewees (women entrepreneurs) have a lower chance of talking about other issues. While hot topics such as fundraising can attract audiences, it may stop interviewers and interviewees from discovering different aspects of women's entrepreneurship.

Although undoubtedly, lack of access to capital and male-dominated STEM startups are two important issues for women entrepreneurs, I decided to investigate major barriers on the path for women business-owners without any specific direction. Helen Ahl, in her article *Why Research on Women Entrepreneurs Needs New Direction* (2006), speaks about this type of assumption under the name of Discursive Practices. These practices stop researchers from studying women's entrepreneurship from different perspectives and realistically. By considering these shortcomings, I decided to identify the women entrepreneurs' main challenges with minimum assumptions.

Figure 3. Forums conversation analysis was a method to gain a better understanding about entrepreneurship in Canada. Different challenges and needs were categorized based on conversation forums.

3.2 Methodology

My project is grounded in a participatory approach including a high level of collaboration with, and engagement of, women entrepreneurs, investors, and mentors through semi-structured deep-interviews, co-creation workshops, and evaluation sessions.

The participatory approach as the cornerstone of my design research helped me to gain an in-depth understanding of my target audience (women entrepreneurs living in Canada).

Sanders and Stappers (2014) talk about user engagement in three phases of the design process: before design (pre-design), during design (ideation and evaluation), and after design (post-design). Pre-design engagement happens in the fuzzy front end of design research (Image 2) when a designer has not begun ideation. In this stage, I engaged my target audience as partners and co-designers, not as a subject of study (Mattelmäki, Brandt, & Vaajakallio, 2011). This allowed me to define my design questions by determining the gaps in the startup ecosystem and understanding the current needs of women entrepreneurs.
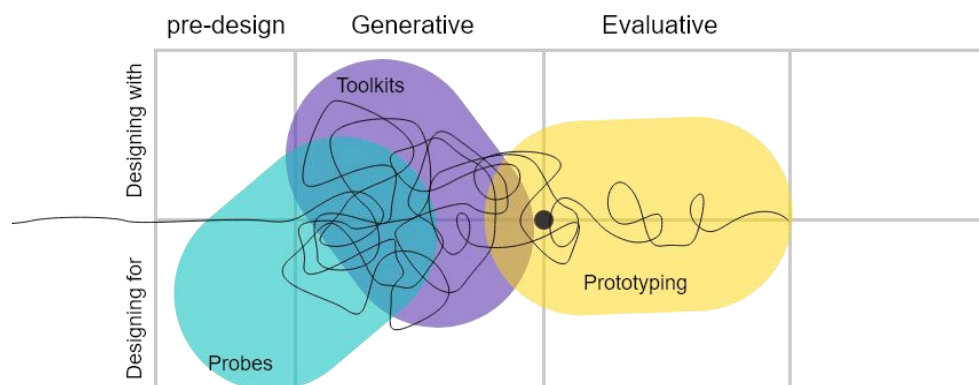
Figure 4. User engagement in different phases of the design process (Sanders & staples, 2014). (Illustration by the author).

I used deep-interviews to capture the challenges, contexts, insights, and needs of women entrepreneurs. A generative toolkit consisting of challenges and skill cards and sticky notes allowed me to encourage participants to dig into the deeper layers of their thoughts and emotions. It helped further build a sense of empathy and shaped dialogues between participants and myself based on the activities. Due to the unpredicted situation caused by COVID-19, I benefited from online platforms such as Miro and Zoom to conduct some of the

collaboration sessions. In section four, I outline the details of co-creation sessions, challenges, and outcomes.

In the design phase, stakeholders of my project and design fellows participated in different ideation sessions to offer different solutions for identified needs. By analyzing the results of deep-interviews, co-creation workshops, and also employing my insights, a platform was designed that addresses some of the major challenges of women entrepreneurs.

In order to evaluate the final design, I took advantage of both online platforms and paper prototypes. During the evaluation sessions, participants discussed different features of the design outcome, its cons and pros, and added or removed some details.

Benefiting from participatory methods and generative tools in different stages of my thesis project helped me to bring stakeholders' insights to the surface by giving them the freedom to depict and share their thoughts, feelings, and dreams that are often so difficult to express in words -the deeper layers of our brain that are not easy to access (Sanders & Stappers, 2014).

Figure 5. My design research overlaid on Sanders's map of design research. I add context and more details to my design research map based on Mattelmäki, Brandt, & Vaajakallio (2011) view about collaborative design.

3.3 Deep interviews

3.3.1 General overview

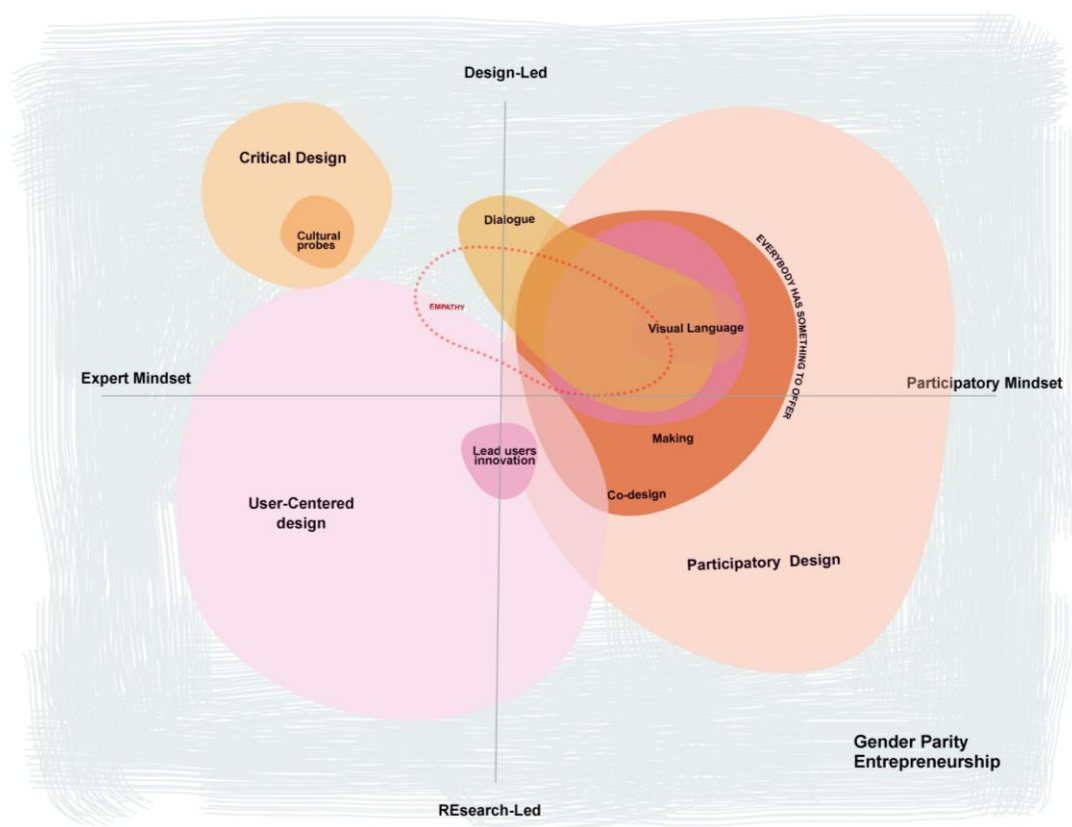The active participation of the target group was prioritized in all stages. For this reason, an interview was preferred to a questionnaire as a source of generating an in-depth understanding of the challenges faced by women entrepreneurs in Canada and in identifying design opportunities. Even though there are some benefits in utilizing surveys, — such as being time-effective and easy to analyze — a large amount of useful information would remain hidden from the researcher. Questionnaires, to a large extent, may guide the researcher in a specific direction due to pre-determined questions and answers, and can prevent the interviewer from discovering new insights. Moreover, one is unable to collect non-verbal information such as the interview subject's facial expression or their struggle to answer some questions that may give researchers a hint to build a deeper conversation around the topic.

Since my goal in this project was to avoid any prejudice, a semi-structured deep interview seemed a great method to collect information. A semi-structured interview guide was devised for the interviews focusing on three main themes: the background and women's intention of entrepreneurial activities (their stories), the challenges faced by them and what caused them, and open conversation about women entrepreneurship in general and their suggestions to address discussed issues.

The interview guide was used flexibly during the interviews to account for the discovery of unanticipated findings. Indeed, a flexible approach was needed to have a dynamic conversation with people who were coming from different backgrounds and had different personalities.

The interviews were originally intended as 30-120 minutes sessions focusing primarily on women-owned businesses and the stories behind them, as well as topics such as the gender gap in business or their field of activity.

Despite my initial plans for the interview, changes were indicated. One of the main reasons to alter the interview plan was the busy schedule of businesswomen with little time for academic research. This was especially evident in only six responses to 38 requests, only four agreeing to be interviewed. The names and information of interviewees were collected through an internet search, watching the videos of their lectures such as TEDx and events' speech, participating in conferences and events related to women entrepreneurs, direct introduction through university professors and friends, and podcasts such as *The Go To*. Of course, the role of the unforeseen conditions of the COVID-19 on businesses and the double occupation of entrepreneurs to protect their business cannot be ignored. In this regard, the process of attracting participants was doubly difficult.

The challenging and time-consuming process of accessing the interviewees and their limited availability prompted me to consider changing the initial structure of the interview to gain more necessary data during a single meeting session. As a result, I combined interview sessions with the first phase of the co-creation workshop, which was going to identify the core challenges of women entrepreneurs. In addition, I reduced the time of the interview to 30 minutes to encourage invitees to participate in the process. In this respect, a well-designed interview session was essential. In the following, I will demonstrate the process of changing my interview not only before starting that but also after beginning it.

3.3.2 Challenging process of interview;
Engagement and strategic approach
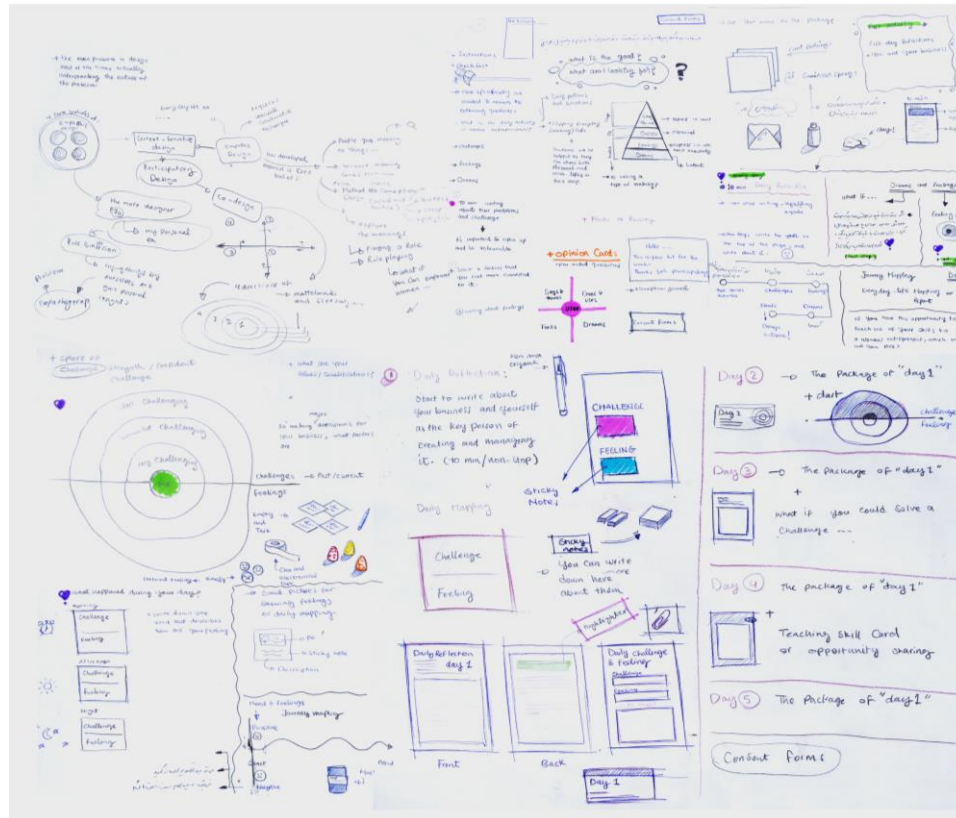
Figure 6. Planning for co-creation sessions and deep interviews

As mentioned, a blend of a deep interview and making activity was considered as a powerful tool to gain an in-depth understanding of women entrepreneurs and their challenges. In this respect, the interview process was a combination of a list of questions and making activities using simple tools such as sticky notes, pen, and paper to engage the user more in the expression of their ideas and feelings. This activity was based on the idea that making, even in the form of writing words or doodling on paper, can bring the deeper layer of people's emotions to the surface and create a context in which the interviewee felt more comfortable in expressing and sharing their thoughts, insights, and feelings.

In addition, I prepared a set of challenge cards. They consisted of a list of common challenges that entrepreneurs usually face during launching a business. The main idea was borrowed from one of my studio activities which was a game board that presented different steps of launching an online business. It aimed to accelerate the conversation and encourage interviewees to participate and think actively while they were visualizing the major challenges.

Figure 7. Designing a generative toolkit for deep interview based on a game board –An introduction to entrepreneurship– from my studio practice.

The interviewees were divided into two groups: 1. women entrepreneurs, 2. experts. Each group required different types of questions. The first was divided into three subgroups: women who have just started their businesses, women with successful businesses in Canada, and women who, despite their efforts, failed to start their businesses due to various obstacles. The focus during the interview with this group was on the individual and their unique stories and challenges. The second group consisted of experts who were in touch with women entrepreneurs, such as investors or mentors. During the meeting with experts, the conversation centered around women's entrepreneurial activities, their challenges, and how to empower them in business.

However, due to COVID-19 and the resultant changes signified by social distancing, these activities were transferred and adjusted to online platforms (Zoom and Miro) and the rest were removed. By changing the interview process and tools, I tried to design a simple making activity.

The interview was focused on identifying the main challenges of women entrepreneurs. Interviewees were engaged in simple activities when they were asked to talk about their challenges and feelings upon starting and running their businesses. In this regard, participants were asked to review the steps that they have taken during kick-starting and growing their businesses and write the challenges that they have faced on sticky notes and put them on a map based on the level of difficulty. After talking about challenges, they indicated their feelings about the challenges on the bottom of the map. What did they experience emotionally and mentally? What did they think about the challenges at that moment? They could connect

emotions and challenges if they wanted by clicking on the sticky notes and using a connection arrow. In the end, the output of the interview was a map of the participants' challenges, feelings, and fears during their entrepreneurial activities.

Based on the information I gained from various articles, books, and the Internet, the interview promised better user engagement that led to valuable results. Since a participatory activity with the help of user-friendly platforms was relatively new in the field of virtual research, I was very excited to be able to provide the interviewees with this new interview experience. All of this made me confident that I would have a pleasant and engaging series of interviews in which participants could be encouraged to participate in the next stage of my research: the ideation phase.
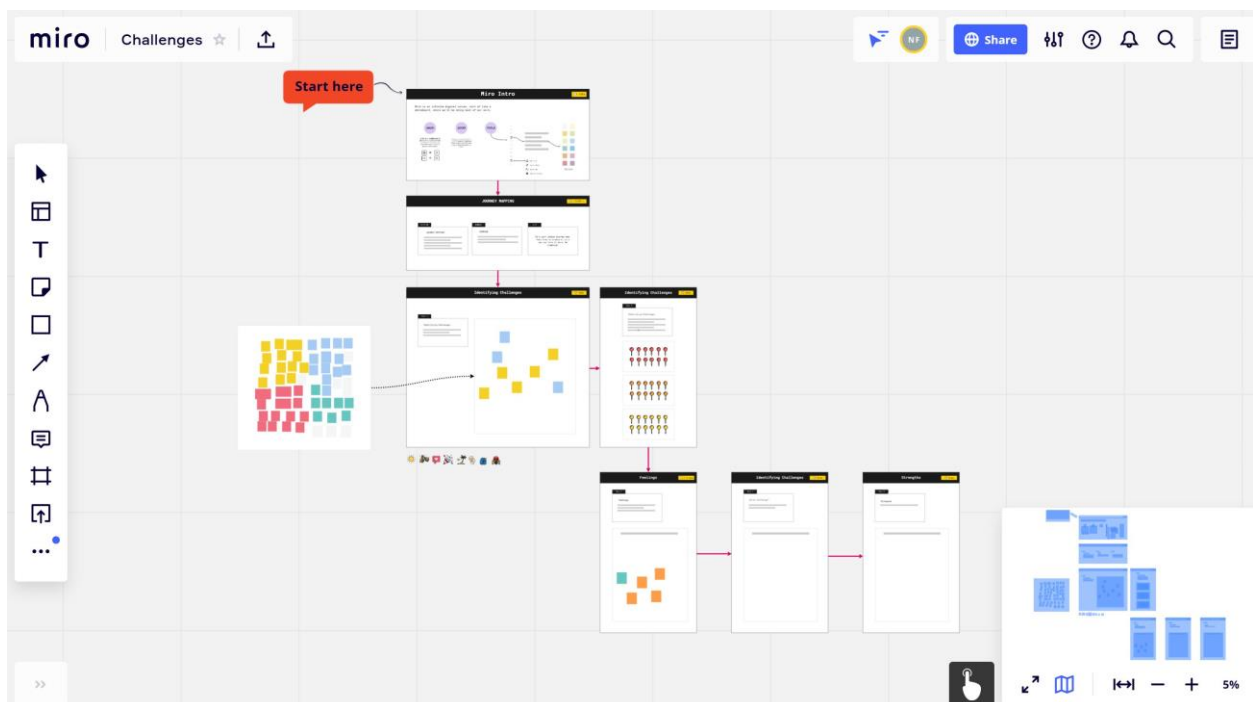
Figure 8. The first collaborative activity designed on Miro. It aimed to understand main challenges of women entrepreneurs, their feelings, fears, and dreams.
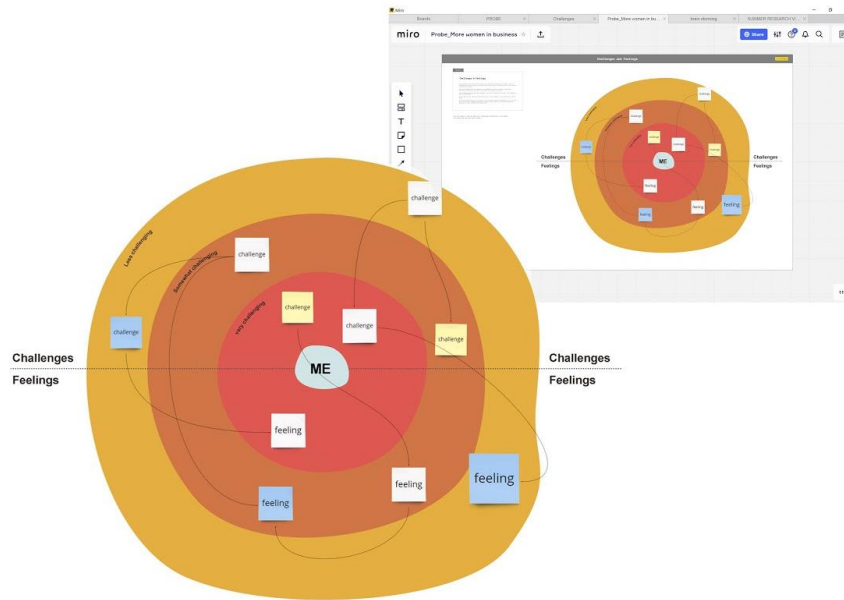
Figure 9. A revised version of collaborative activity on Miro.

However, what happened during the actual interview process revealed that making activities may seem unappealing to the target group of this research. During the interview process, one of the interviewees, after seeing the Miro board and the activity, refused to participate in it and was unwilling to continue the interview. Another interviewee was open only to talking and answering questions and excused herself from participating in side-activities such as Miro card sorting.

Indeed, making and similar activities not only seemed meaningless to some interviewees but also might create the image of a non-professional interview in their minds. Although the use of new and participatory methods can be interesting, this can vary depending on the mental and physical condition of the participants, their readiness for the session, their character type, and even familiarity with such activities in the academic context. The conclusion was that the employment of the same method of interview for all participants of this project was not necessarily the right approach to conducting research.

Therefore, I implemented some changes in the process of my interviews and the applied method. I designed two different strategies. First was a simple and semi-structured interview without any making activities. The second was an interview with a making activity based around challenges and feelings. The first strategy would be changed to the second if the interviewee was ready for making activity.

I learned to consider even more flexibility in my methodology when I worked with people during the pandemic. In the unprecedented time of uncertainty and physical distancing surrounding COVID-19, people's lives have changed significantly. Business owners face many

difficulties to preserve their businesses, as well as the dilution of the work-life boundaries because of working from home and doubled pressure of parenting. It was understandable that participants may not be ready to participate in a new activity or may not be comfortable with a new approach during a short conversation (usually 30 minutes).

In a nutshell, all these activities aim to create a sense of empathy and a correct understanding of stakeholders. While empathy cannot be achieved without engagement (Mattelmäki, Brandt, & Vaajakallio, 2011), one can also argue engagement cannot be achieved without empathy. Paying attention to the feelings of interviewees and the context is key to creating a sense of empathy and communicating well with them which leads to better engagement in the research.

The challenging process of interviewing entrepreneurs revealed that design requires a flexible and strategic approach.

3.3.3 A short report on interviews

In-depth interviews were conducted with 10 participants: five entrepreneurs and five experts. Due to the managerial role in educating and mentoring women in business, one of the experts was in direct and indirect contact with more than hundreds of women entrepreneurs in Canada. As a result, she had in-depth insight into the entrepreneurship ecosystem, women's entrepreneurial activities, and their problems. Moreover, women entrepreneurs came from different backgrounds and were working in diverse fields such as health care and technology, the beverage industry, advertising, architecture, and film and animation industry. This diversity provided me with a chance to hear amazing stories of launching their businesses in different industries and look at their challenges through different lenses. It led me to gain a more realistic understanding of entrepreneurship in Canada.

Three interviews were conducted in person (by maintaining physical distance, sanitizing hands, and wearing face mask), six via zoom call, and one by telephone. The duration of face-to-face interviews was 60-120 minutes and telephone calls were 30 minutes.

During the interviews, I was considering covering all the necessary topics while the conversation flowed freely. As a result, in some interviews, additional qualitative data was obtained. It was enormously helpful to understand women's business activities, their feelings and thoughts, and their needs. Moreover, although interviews and speeches of the interviewees were checked beforehand, during the meetings, more personal information was shared that was immensely useful in creating a sense of empathy.

3.3.4 Main Insights

The interviews provided an excellent opportunity to highlight the needs and challenges of women as well as their achievements in the business world. Interviewing helped me gain insights into women entrepreneurship in Canada, the process of starting and leading a business, barriers on the path of women entrepreneurs, the systematic gender discrimination, the needs and dreams of women in business, and indicated potential design opportunities in this area.

During the card sorting activity and interviews, interviewees were asked to label problems based on how they found them challenging. It was helpful to understand the main challenges and what matters to women entrepreneurs. Some problems were repetitive but their effects on the business were not considerable or women found them less challenging. Based on data collected from interviews, the challenges that were discussed during interviews were labeled. I put them on a map divided into three sections based on the level of intensity: Less challenging, somehow challenging, and very challenging. Table 1 shows how each challenge was weighted based on the level of intensity and how many times they were reported.

Figure 10. Cart sorting activity as a generative tool was employed during deep interview sessions.

Figure 11. Discussed challenges from interviews were mapped based on the level of difficulty.

CHALLENGE	VOTE	TOTAL WEIGHT	
Mentorship	🔴🔴🟠	8	⭐
Introduction and connections	🔴🔴🟠	8	⭐
Education +Finding and using available resources	🔴🔴🟡🟠🟠	11	⭐
Reaching to community	🔴🔴🟠	8	⭐
Work-life balance	🔴🟡	3	
Funding	🔴🟠🟡	5	
Team building	🔴🟠	5	
Business location	🟠	2	
Lack of confidence	🔴🟡	3	
Weight of colors	🔴 3 🟠 2 🟡 1		

Table 1. Each challenge was weighted based on the level of intensity and how many times they were reported.

 After analyzing the result of interviews, although many ideas were discussed, I narrowed them to two general areas including mentorship and community and easy access to available resources. In the following, these major insights will be discussed.

3.3.4.1 Mentorship and community

One of the most repeated demands was accessing mentorship and connection to communities. It was discussed many times as an effective factor in promoting business and facilitating business growth. Having access to a mentor will have an evident impact on reducing decision errors, creating a strategic vision, and confidence. Moreover, because of their experience and connections, mentors can connect entrepreneurs to the right people or resources, which will be a huge driving force to accelerate the growing movement of startups.

Connecting to community and mentorship is critical especially at the beginning of starting a business. One of the founders and leaders in the healthcare field talked about sponsorship (mentorship) as a missing piece of entrepreneurship facilities while she was pointing out that:

> *"It's not just the training, but it's also somebody who opens the door, makes suggestions, and the referral. They can make introductions to people who can introduce you to potential investors. There's too much training, not enough sponsorship!"*
>
> *One of the interviewed entrepreneurs*

3.3.4.2 Easy access to available resources

In parallel with sharing challenges about finding a mentor and connection to the entrepreneurship community, it seemed that some women are unaware of available resources helpful to kick off a business. These resources are not only educational but also can be related to financial grants and loans, legal and paperwork, and making connections. In Canada, there are more than 2000 organizations that directly or indirectly empower entrepreneurs (WEKH, 2020). Finding some of these resources is not easy if one does not spend a great deal of time searching.

In confirmation of this, one of the interviewees initially pointed out that due to the special nature of her field of activity (Working with film production companies in Hollywood) no resource can help her in business. However, while drawing the map of her challenges with cards, she pointed out that she participated in a management course, but still felt the need for a series of training and connections in the field of workforce management, legal

documentation, and also connections with other people active in her field. When the names of some of the organizations and platforms such as FWE were shared with her, she had no idea they existed. At this point, a hidden need was identified: informing women about the existence of such services and resources.

In another interview, the interviewee mentioned that she attended some courses and found some resources after eight months of starting her business. Even though these resources were helpful to scale her business and save money, she was talking about how knowing about all these resources at the beginning will save their business, money, and time. Another participant pointed out that she was lucky enough to work with a VC firm that introduced her to some of these useful resources.

"I believe that we have a lot of resources in the field of women's empowerment. In fact, women are empowered, they just need to have easy access to all these facilities. What they need most is to show them the right way. If a person needs to increase their knowledge in the field of marketing, she should know where to start and not feel lonely and helpless."

An interviewed entrepreneur

"I think a challenge that I've seen for people who are new to a community is that they simply just don't know where to go for some of the resources. And so it can feel both really lonely and really stressful because it feels like you have to figure it out all on your own. So I do think that is a common challenge that I've seen for anyone new to the community is just figuring out kind of where the first place that they can start is and usually if you can get to the first place, hopefully, it's a place that then keeps connecting you to other resources."

An interviewed mentor and CEO

3.4 Personas

To develop solutions for the identified needs, personas were created to encapsulate the needs, behaviours, goals, and traits of the target group. This helped to shape a holistic understanding of users and engender a sense of empathy that informed the scope of the design problem and the framework for design.

Personas were synthesized from data collected from deep interviews and co-creation sessions. Two different personas were described to reflect a picture of individuals dealing with two main challenges; accessing mentorship and community and finding available resources effortlessly.

Eniola

👤 30-20

📍 VANCOUVER-BC

💼 DESIGNER

Photo by Prince Akachi on Unsplash

BIO

Eniola is a passionate designer who has recently settled in Vancouver. Her circle of communication is limited to a few numbers of friends. Even though she is passionate about turning her idea for a smart device into reality, she is afraid of taking the risk as she not only doesn't have a stable financial situation but also does not have any networks and connections. Eniola shared her idea to 3 investors, but they were reluctant to invest. She feels she needs to boost her confidence and knowledge by educating herself about entrepreneurship and how to sell her idea to investors.

PAIN POINT & NEED

Unable to fund her project, Eniola has no idea how to successfully pitch her business to VCs. Eniola is looking for a course or a mentor to learn how to effectively present her business idea to investors, how to write a good business model, and how to build a good team and hire employees. She is also trying to expand her network but finds it frustrating. Since she is new not only to the city but also to the business world, building networks and being connected to the community will be a great help to her.

INTERESTS

Design
Galleries
Reading new books

PERSONALITY

Adventurous
Travel lover
Ability to take risk
Hard-working
Introvert
Idealistic
Curious
Great adaptability
Aspiring

TECHNOLOGY

IT & INTERNET	●●●●○○○
MOBILE APPS.	●●●●●○○
SOCIAL NETWORKS	●●●●●○○
SOFTWARE	●●●●●○○
EARLY ADAPTOR	●●●●○○○

TECH SAVVINESS

Use a lot of digital tools on a daily basis.

Familiar with practical and popular software related to her expertise.

Welcome to know more about new technologies.

GOALS

Launch her own business.

Recruit a number of people to build her business while helping them make their livings.

Figure 12. Personas were synthesized from data collected from deep interviews and co-creation sessions.

Amanda

👤 45-35

📍 Misissauga-Ontario

💼 ACCOUNTANTS

Photo by Christina @ wocintechchat.com

TECHNOLOGY

IT & INTERNET	●●●○○○○
MOBILE APPS.	●●●●●○○
SOCIAL NETWORKS	●●●●●○○
SOFTWARE	●●○○○○○
EARLY ADAPTOR	●●○○○○○

BIO

An energetic extroverted mother, Amanda actively participates in social activities and community programs. She is well-known among her friends because of her knowledge about healing herbs and plants and how they can be effective to have a healthier body and beautiful skin. Amanda passed two short courses about home-based businesses last year according to the suggestion of a friend of hers. It encouraged her to start developing her idea of organic skincare products not only as her passion but also to have a more flexible work schedule. Her friends and family contributed their money to fund her business. Now she is ready to release her product in the coming months.

PAIN POINT & NEED

Amanda has spent a year developing an idea around producing and selling organic skincare products. As a woman in her 40's, sometimes people overlook her ability to work and expand her idea as she doesn't have enough experience in the business. She feels unconfident about promoting her product as doesn't know how to market and advertise her idea. She is looking to learn about how to plan for a product launch and build a more strategic mindset. Accordingly, she has started searching for some resources, but gets lost while searching online. She found it confusing and difficult to find reliable resources.

INTERESTS

Socializing
Activity in communities
Online shopping
Herbs and traditional treatments

PERSONALITY

Problem solver
Good communicator
Organizer
She knows well how to spend money (budgeting)

TECH SAVVINESS

Comfortable about using different applications and online platforms.

She knows them by family and friend suggestions.

GOALS

Successful online launch of her unique organic skin care products.

Expand her business knowledge.

Figure 13. Personas were synthesized from data collected from deep interviews and co-creation sessions.

DESIGN
EXPLORATIONS

4.1 Journey map

Journey mapping aimed to explore the problem space, map experiences, and visualize the process that women entrepreneurs go through to answer the two major identified needs: finding available entrepreneurship resources and accessing mentors. The journey maps helped develop these insights further with user thoughts, emotions, and struggles in order to create a visualized narrative.

Deep interviews followed by personas provided an excellent context for user journeys. Two journey maps were made based on the personas' points of view. They demonstrate a clear picture of user pain points and design opportunities. I also leveraged the maps in designing the ideation sessions and what I should discuss with participants during the sessions.

The journey maps indicated a possible connection between mentorship and community. People who access a community have a better chance in benefitting from mentorship and working with mentors will widen entrepreneurs' networks and connect them to the community.

Figure 14. User journey map aimed to explore the problem space, mapping experiences, and visualize the process that women entrepreneurs go through to answer the two major identified needs.

By searching through online resources they may face with new term, problems, etc, she finds a new keyword for her next search

She may do not have any idea about some of her needs. It's common, specially when you are new to the business world (or any other field)

Now and then, she starts searching to learn about a new subject. she doesn't have no specific goal

Finds some good resources 😊 Starts educating herself ✔

Receive responses

No good suggestions 🙁

Finds several forums for asking questions such as Reddit and Quora or some forums for entrepreneurs

Asks about the best available educational resources from people in the forum

does not recieve any answers Tries other ways to find the best educational resources

Check the first results of the search and doesn't pay attention to the rest of results

It is possible that they are unable to find these online communities or institutions

Some resources are really hard to find because of lack of promotion

Lack of search skill

Online searching is usually time consuming

Searches online

Frustrated. she spent lots of time but couldn't find what she was looking for

The loop of searching

Feels tired, exhausted. Stop searching sometimes. disappointed

She wants to educate herself in specific field
(Marketing, Management, Finance, Strategy, etc.) More over, she wants to benefits from the resources that help her to start or continue her business.

Searches for resources

It took me about maybe eight or nine months until I started to even know that these communities and resources existed.

people who are new to a community is that they simply just don't know where to go for some of the resources. And so it can feel both really lonely and really stressful because it feels like you have to figure it out all on your own.

Searches and reads about available resources (books, courses, articles, forums, videos, etc.) to find the best available options

Finds some resources to start with

Online courses Books her name for the course

It has financial cost

Free starts selflearning Learns what she was looking for

Online learning materials such as articles, videos, podcasts, books, etc.

Finds an institution Attends the course

Learns what she needs to learn ✔

Can't learn what she needs to know

Becomes disappointed ✔

Starts searching again 🙁

She saves lots of time. doesn't need to spend lots of time to search

They suggest her some resources 😊

Asks friends and family

They don't have any idea about her need 😫
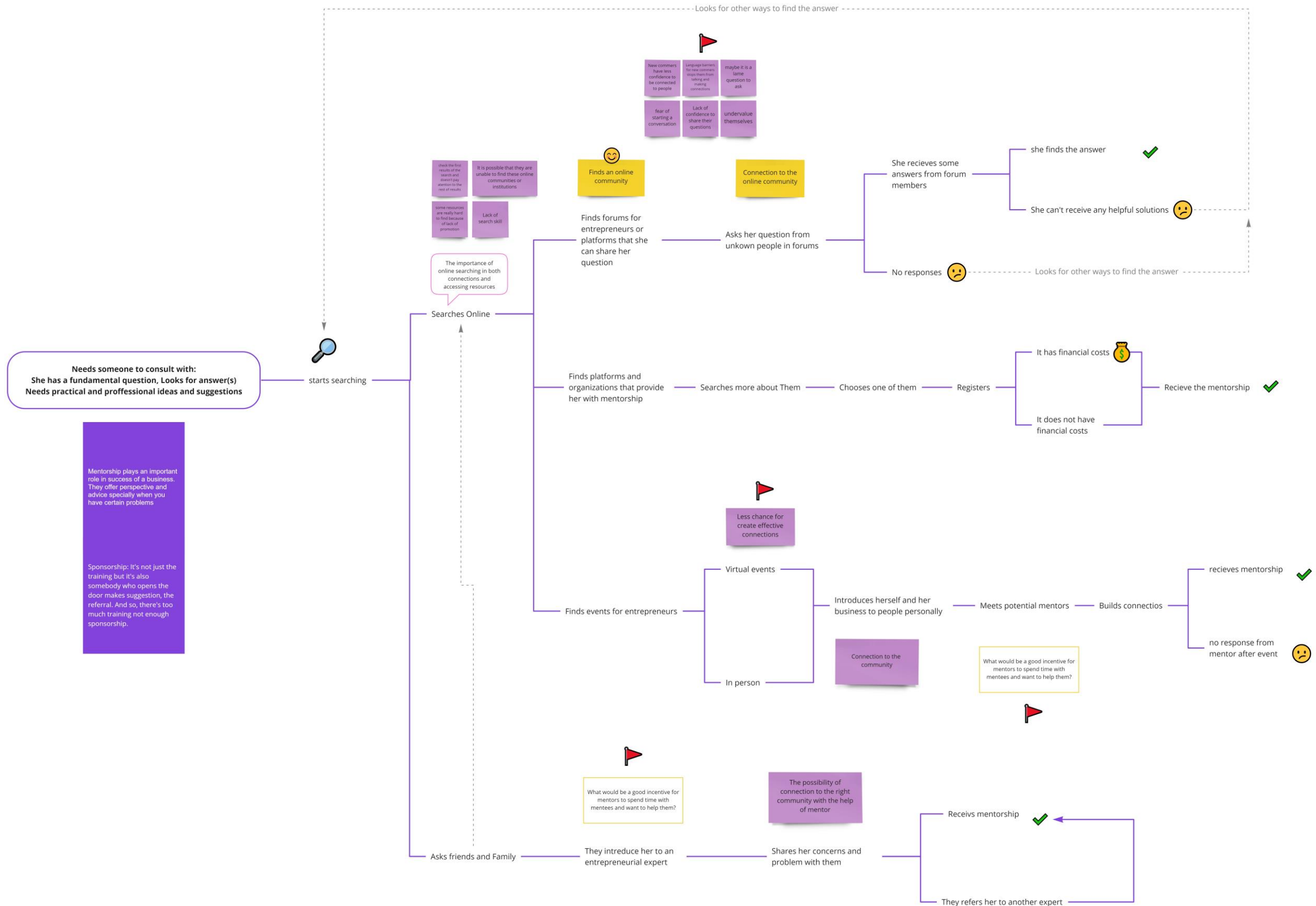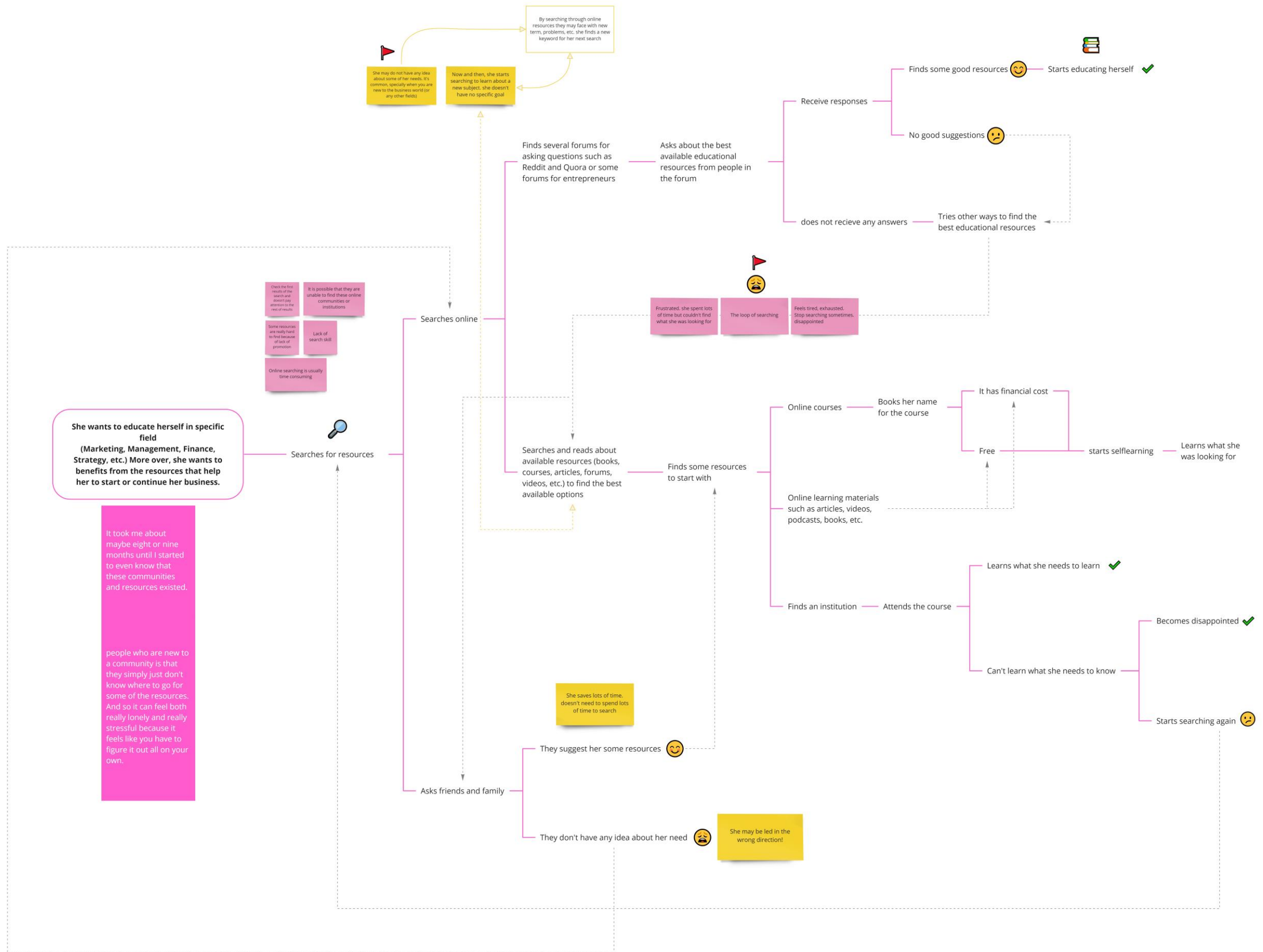
She may be led in the wrong direction!

Figure 15. User journey map aimed to explore the problem space, mapping experiences, and visualize the process that women entrepreneurs go through to answer the two major identified needs.
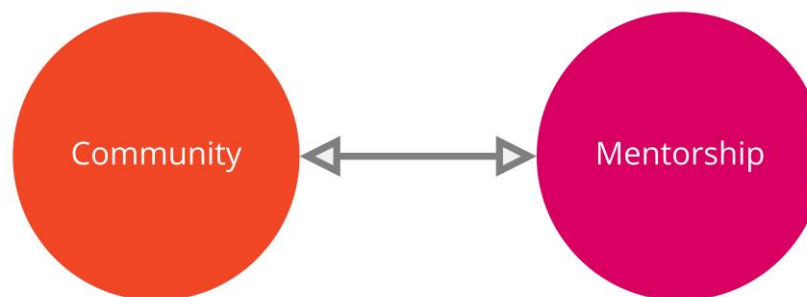
Community ⟷ Mentorship

Figure 16. The journey maps showed that there is a connection between mentorship and community.

Painpoints and needs

- Online searching is usually time consuming
- Lack of search skill
- check the first results of the search and doesn't pay atention to the rest of resources
- It is possible that they are unable to find some good resources
- some resources are really hard to find because of lack of promotion
- The loop of searching
- Frustrated. she spent lots of time but couldn't find what she was looking for
- Feels tired, exhusted.stop searching sometimes. disapointed
- She may do not have any idea about some of her needs. It's common specially when you are new to the business world (or any other fields)
- by searching through online resources they may face with new term, problems, etc. she finds a new keyword for her next search
- Lack of confidence to share their questions
- maybe it is a lame question to ask
- fear of starting a conversation
- Mentors usually don't have enough time to mentor a person
- What would be a good incentive for mentors to spend time with mentees and want to help them?
- Mentors usually avoid mentorship cause they find it really time consuming (based on the article)*
- New commers have less confidence to be connected to people
- Language barriers for new commers stops them from talking and making connections
- undervalue themselves
- She doesn't know where she can find and be connected to mentors

Design opportunities

- How they can find the resources that they are looking for easier?
- Help them to have an effortless search and finding resources
- How they can go through all the resources without any complex process
- Give them a chance to find the best resources even if they are not skilled researchers
- Help them to have an understanding about different steps of running and managing a business
- Maybe a map of entrepreneurship?
- something like a library, how we find books in the library?
- Consider a process that help them to start a conversation easier
- a platform which is known for giving women this courage to start a conversation around their business and experiences
- Designed for fueling conversation
- being announces???
- a person introduces you to the community?
- Short term mentorship, such as asking a question about a specific problem
- Consider different needs of new commers and pay especcific attention to that
- How the problem of lack of confidence, language barriers, and cultural differences can be solved?
- How can their confidence be boosed to be active, ask their questions, share their experiences and answers
- How mentors and mentee can be connected easily?

Should be discussed

- Service design
- How both men and women can be involved in the process of empowering women entrepreneurs?
- A platform which will be created by people but for women. For Women, By entrepreneurs
- How to create a high quality community?
- How will entrepreneurs - especially experienced ones- be engaged in a platform?
- How the fear of asking a quesion and starting a conversation can be reduced?
- What would be a good incentive for mentors to spend time with mentees and want to help them?
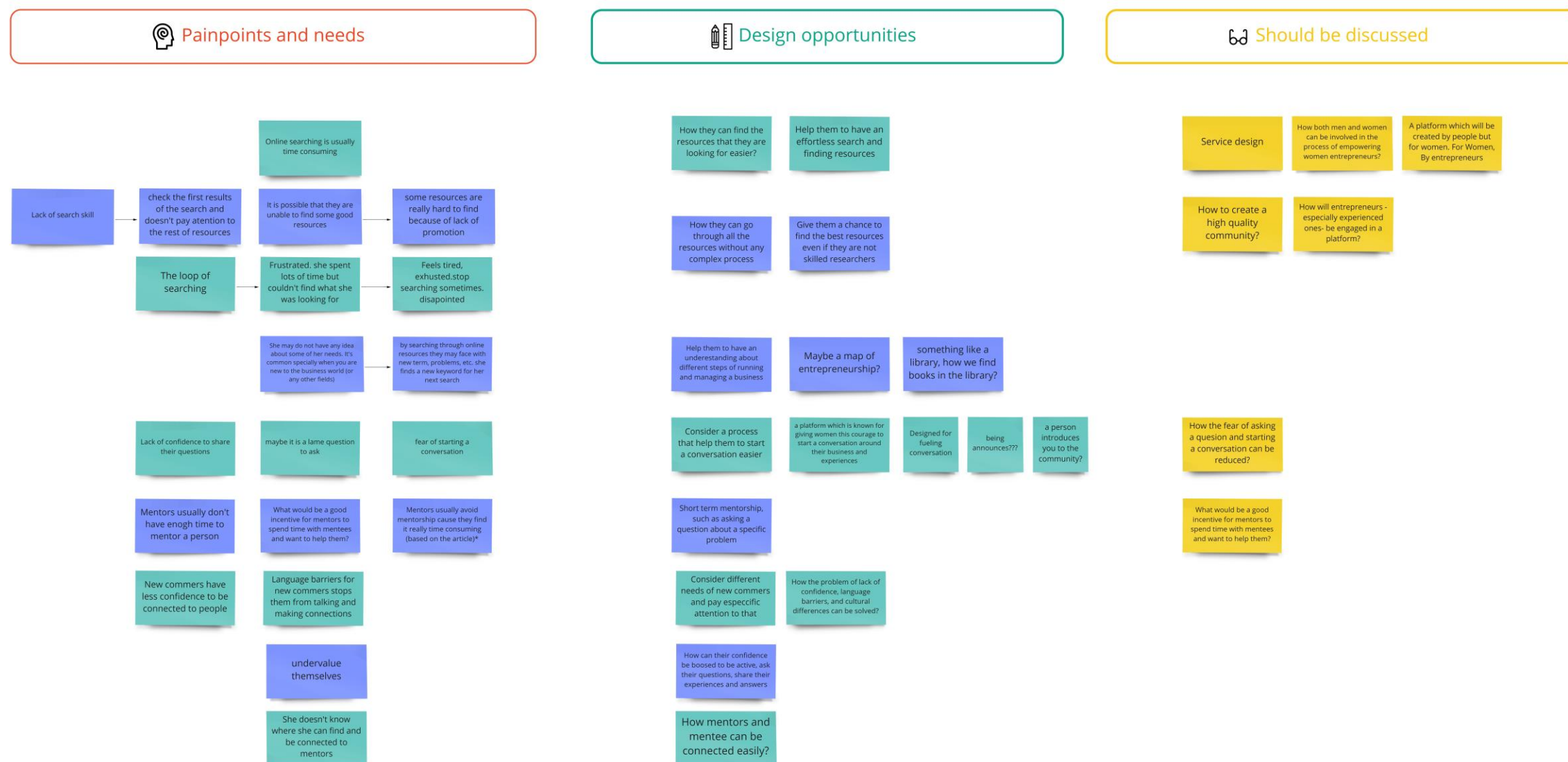
Figure 17. The journey maps revealed the pain points and needs of target group, design opportunities, and what needs to be discussed during ideation sessions.

4.2 Ideation session

By involving the target group at the front end of the design process, current participant needs were identified. In the next step, they were invited into the creative process. The prime objective of ideation sessions was to talk about the problems and also generate and dig into the ideas and their wishes in the face of challenges. Participants included some of the previous interviewees and a new group of participants.

Seven ideation sessions were held: three sessions with mentors, two sessions with entrepreneurs, and two sessions with design students at Emily Carr. Each session began with describing the identified needs, the context, and sharing some stories of women entrepreneurs to create a vivid picture of the problem space in the minds of participants. The duration of sessions varied from 30 to 120 minutes. Due to COVID-19, five sessions were conducted online via Zoom call using Miro board as a medium of collaboration for those participants who were interested in doing so.

Figure 18. Miro was used as a platform for collaboration during ideation sessions.

As well as individual sessions with mentors and entrepreneurs, I organized two different brainstorming sessions with my design peers at Emily Carr. One in-person session with four designers focused on how women entrepreneurs might be connected to the community and mentors. Another online session with my supervisor and three design peers looked at

developing ideas around how women entrepreneurs might find and access the available resources effortlessly.

Figure 19. Brainstorming session with my design peers at Emily Carr.

These brainstorming sessions provided a space for exchange and discussion between participants and myself while they were offering creative solutions to the identified needs. They were asked to not limit their creativity to do-able ideas. As the coordinator of the sessions, I encouraged them to not judge each other's ideas and feel free to share unusual ideas. The aim was to create a comfortable space to inspire creative thinking.

4.2.1 Insights and outcomes:

Quotes from interviews were used as sources of inspiration and innovation. They were the extract of different ideas and dreams shared during those sessions.

> *Sharing various ranges of experience with hashtags that help you to find the right experience can be a good idea. Experiences and sharing them is crucial. Sometimes your question is simple and you don't need to talk to a mentor to find the answer. Just reading the experience of people who walked on that road will be helpful.*
>
> *An entrepreneur*

> *"When someone asks me to be a mentor -- to, like, make it official -- I worry that I can't provide what they need. It feels like a great responsibility, and I fear that, given my schedule, I'm liable to let them down. I know others in my position feel the same way. I'd bet you have as well. That's why we all say no."*
>
> *(Feifer, 2018)*

> *"Trust is extremely important between mentee and mentor. Look for a format that will help to create that trust and connect the right mentee to the right mentor. You need to look at how you can arouse a sense of influence and trust in people. Mentors need a filter, like a short proposal, video, business plan, something that helps them to know the scope and the aim of the mentee's business and their plan for the future. So they can trust better to share their time and knowledge"*
>
> *A mentor and entrepreneur*

> *"There are 2 approaches toward experience. One recorded and another in-person conversation."*
> *"It is wonderful if there was a platform that gathers all diverse resources and put them in one place"*
>
> *An entrepreneur*

As the best designers not only listen to people but also follow their own reasoning and instincts (Verganti, 2009), I used the ideas shared by the participants as sources of design inspiration and innovation. In this regard, I narrowed down the result of ideation sessions into five solutions to answer the target group's needs. These ideas were based on how women entrepreneurs can easily access short term mentorship and educate themselves by having access to all entrepreneurship resources in one place.

The following graphics (figure 20 to 24) indicate some of the ideas expressed during ideation sessions from number of different participants. These user fellows were helpful to clarify some of the functions in the final design.
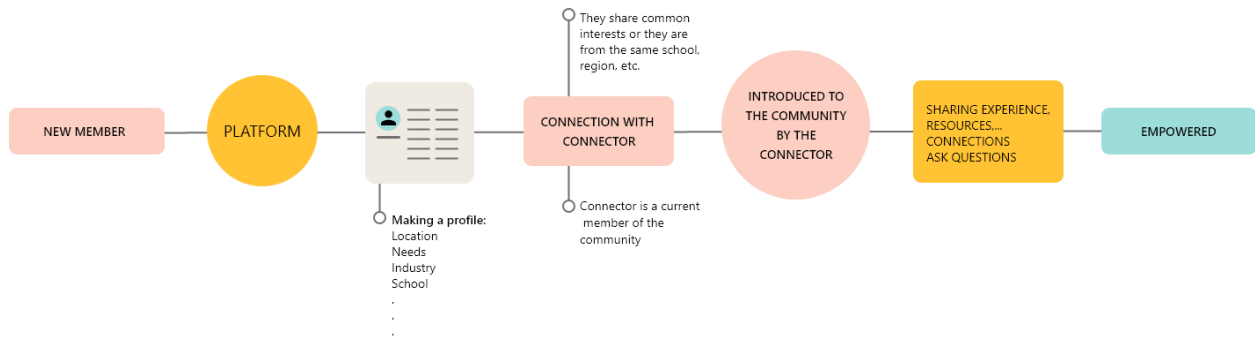
Figure 20. Ideation sessions' outcome. User fellow. Community for entrepreneur. New members will be introduced to the community by connectors. They will help new members to feel confident to ask their questions, share their experiences, resources, and answers..
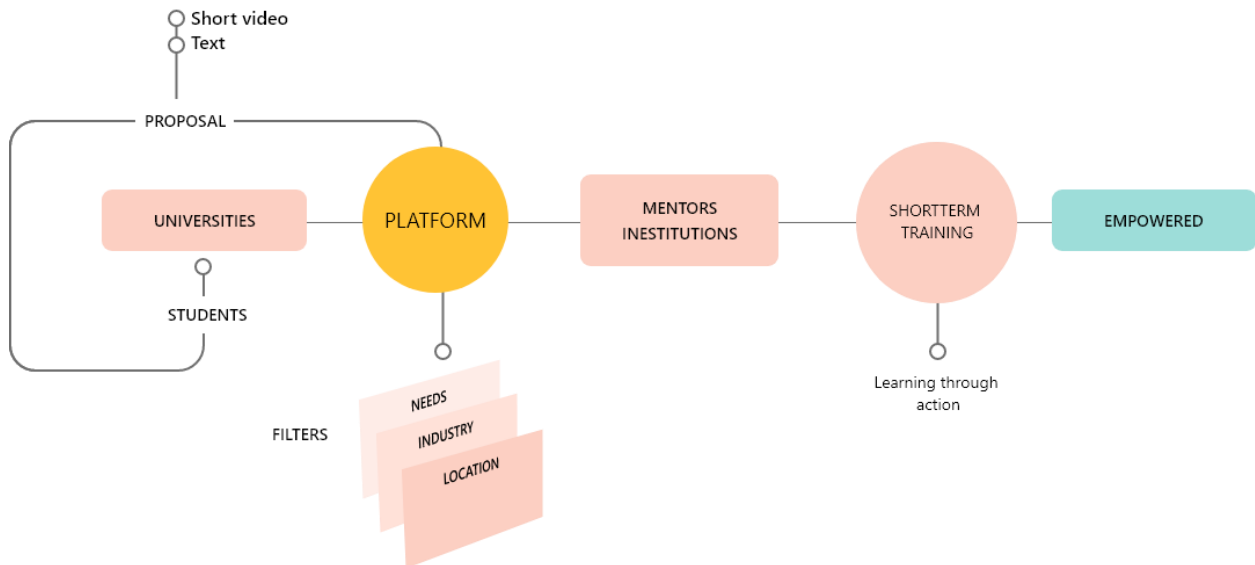

Figure 21. Learning and mentorship through action. Connection between young students and mentors and industries through the platform that encourage short term internship with mentors or companies.
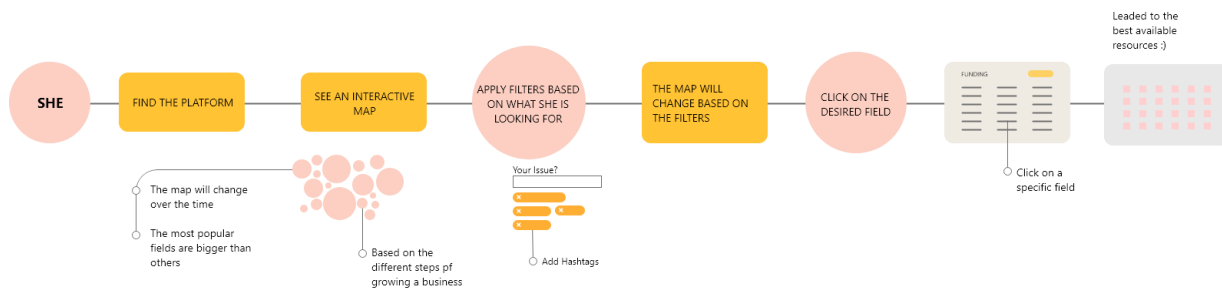

Figure 22. Ideation sessions' outcome. User fellow. An interactive map of resources showing visitors different steps and materials of launching and continuing a business. Filters lead users to the right resource, it can be a book, a course, podcast, article, interview, etc.
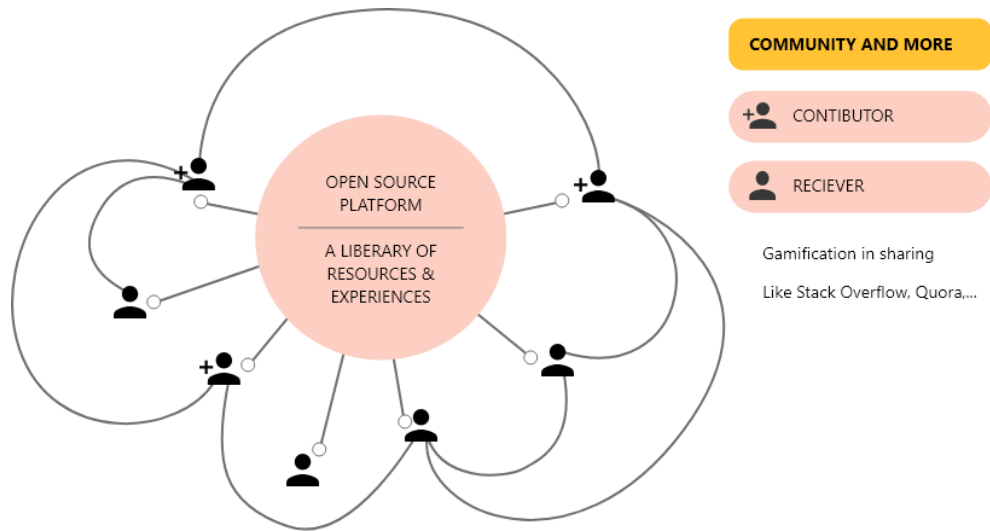
Figure 23. Ideation sessions' outcome. User fellow. An open-source community for entrepreneurs. Consists of two different type of user: contributors and receivers. They share resources, experiences, and answer questions.
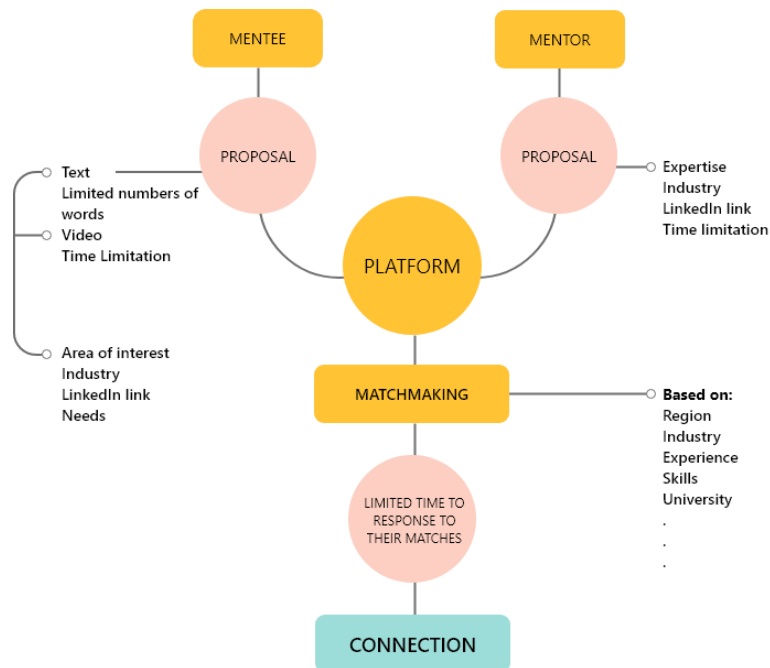

Figure 24. Ideation sessions' outcome. User fellow. A dating app for mentors and mentees. It matches them based of the area of activity, needs, background, location, etc.

DESIGN
OUTCOMES

5.1 Foojan

By reviewing and evaluating five final design solutions and reflecting on the outcomes of ideation sessions, they were merged, erased, and some of their features changed. By considering the value propositions of each idea, cons, and pros, a practical solution was generated. The result was *Foojan*, a platform to empower women entrepreneurs by providing them with a library of resources while they can be a part of an entrepreneurship community. Women entrepreneurs will have this opportunity to ask their questions from other community members while they can share their experiences.
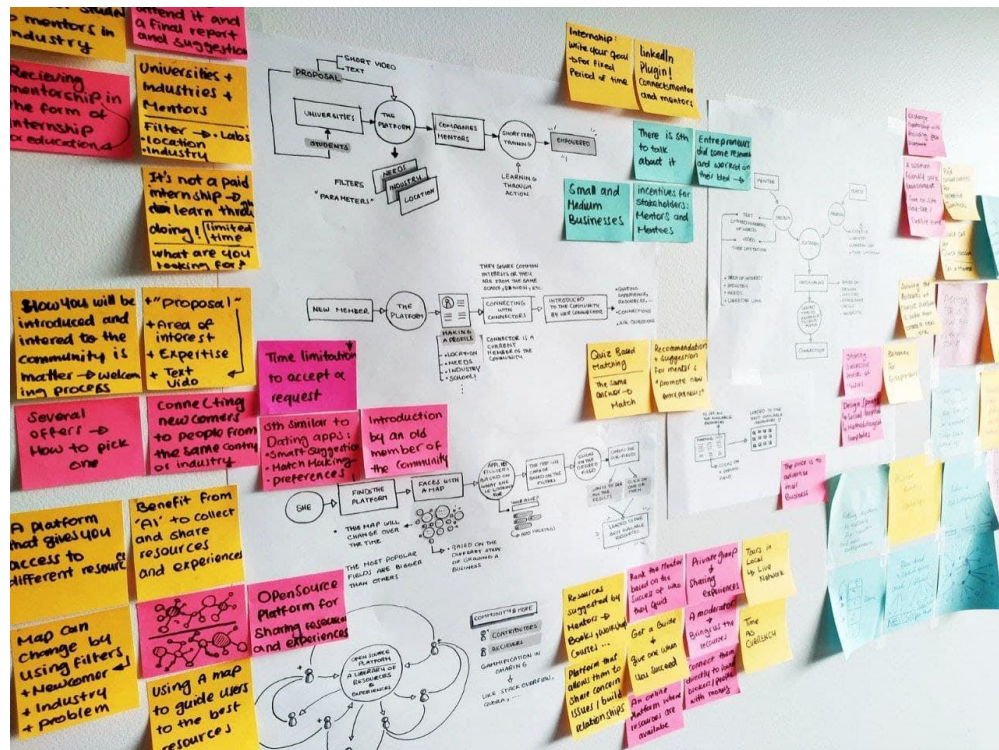

Figure 25. Reflection on and evaluation of the solutions.

It will be a place to share the resources and tools that one finds helpful in the case of running and managing a business. It can be an educational course, a book or an article, a podcast, an interview, or an organization that helps entrepreneurs. Resources will be categorized and presented in a form of an interactive map.

Foojan is a platform for empowering women entrepreneurs by entrepreneurs, a place to give and to receive. So the collaboration of the main stakeholders of this project will continue after the design phase as well. They will shape and grow the community and the library of resources to empower each other (Please find the appendix for more details).

5.2 User testing and feedback

 To evaluate the initial design outcome, a low fidelity prototype was shared with participants – two entrepreneurs and a mentor, and a designer– during collaborative evaluation sessions. These sessions were between 45-60 minutes, focusing on major features of the platform, how it can be more useful and goal-oriented, and how it can be an active entrepreneurship community from mentor and mentees' stand view. One session was held online with the help of video call and screen sharing. The rest was in person, while the paper prototype was a medium to test and talk about the platform. The low fidelity prototype gave freedom to participants to iterate the idea and share their thoughts actively.
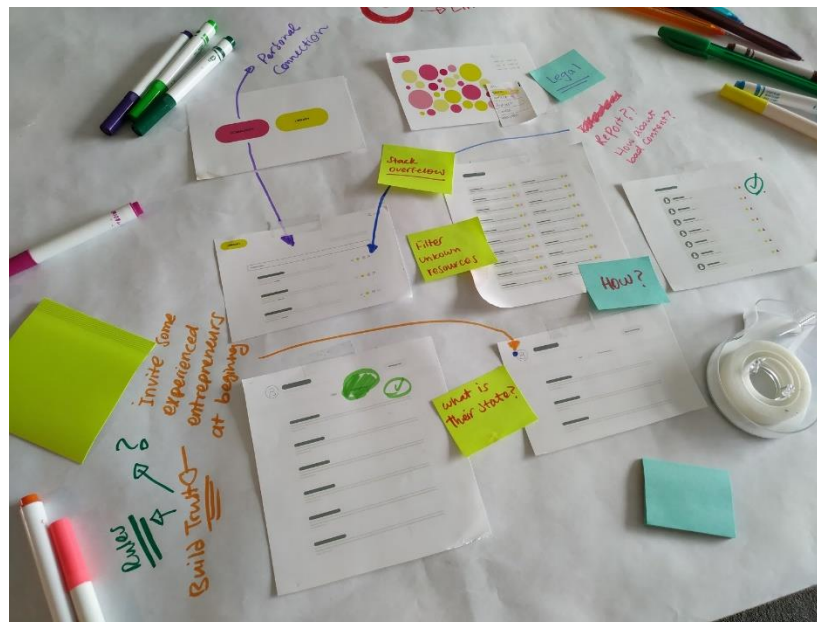

Figure 26. Evaluating the final idea by entrepreneurs and mentors.

5.2.1 Insights

One of the features offered by a participant was the possibility of connection between community members. She said: "Connection with entrepreneurs who are active on the platform will be a brilliant idea. The opportunity to reach and ask them questions directly or make connections is both valuable and helpful." Based on this feedback, I added a button to the user profile for sending a connection request.

The idea of a categorized library and members' contribution to build and grow the library seemed great to one of the participants. She mentioned that one of her major difficulties while launching her business was finding legal papers or being knowledgeable about them. She

suggested adding a specific category in the legal section to learn about the process or find documents. Another participant who was a newcomer pointed out that at the beginning, one of her struggles was becoming familiar with Canada's legal system and what are the steps to apply for a fund, register a company, tax payment, and the law and procedure of hiring workforce. She said gathering all the related resources and categorizing them can help entrepreneurs who are new to the entrepreneurship world.
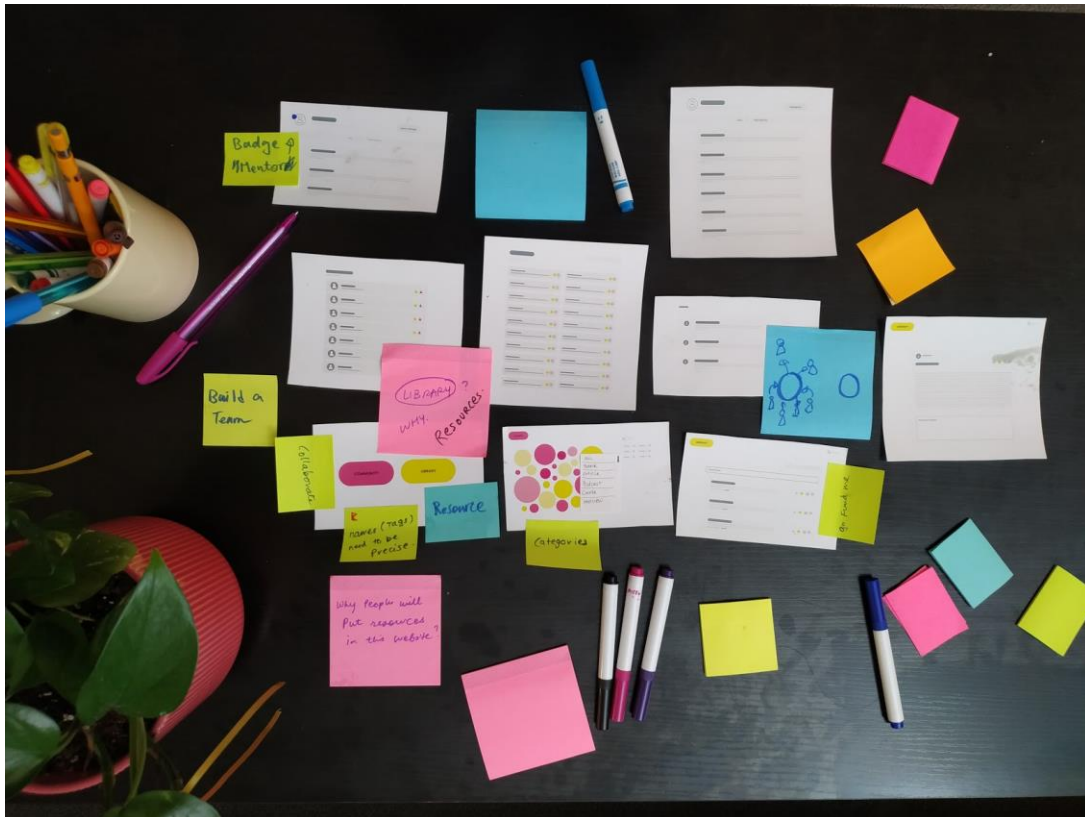

Figure 27. Evaluating the final idea by entrepreneurs and mentors.

One of the most frequent comments was on the role of community in empowering women and why it is valuable to let all people, regardless of gender, participate in empowering women entrepreneurs. One entrepreneur said that including men in the process of empowering women would help to erase gender gaps while they learn about real barriers to women entrepreneurs.

One participant suggested adding a new section to the home page for team building. *"The community has another potential: connections for team building! I will definitely use the platform if I find people who can help me as a business partner or co-founder to build my business"*. She stated that people can use the community as a space to know about people, their background, skill sets, and field of interests. A link to the LinkedIn profile will create a

more trustable atmosphere. Even though this idea can add another value to the design outcome, I was concerned about making the platform too complicated for users. Adding new and more features over time to let users learn about the platform step by step and slowly can solve that issue.

Trust building as an essential component of the active and practical community was discussed. Trust is a critical component to encourage entrepreneurs, especially mentors, to share their knowledge or answer questions. It can be trust between community members or belief in the platform as a professional space for entrepreneurs. Inviting experienced and well-known entrepreneurs to use the platform and setting rules for using the platform were offered solutions to this matter.

Figure 28. Evaluating the final idea by entrepreneurs and mentors.

06

FINAL
MOCKUPS

6.1 System Map

Researcher

Learns about **Foojan** from:
Online searching
Ads
Word of mouth

Comes to the platform and checks the library

Sees an interactive map and different categories

- The map will change over the time
- The most popular fields are bigger than others
- Based on the different steps pf growing a business

Applys filters based on what she is looking for

Your Issue?

Add Hashtags

The map will change based on the filters

Clicks on the desired field

Sees the list of subcategories

Clicks on a specific field or chooses to see all the results

Leaded to the best available resources list :)

Finds the answer and educates herself

Adds the resource to her personal library

FUNDING

FUNDING

Receiver

Learns about **Foojan** from:
Online searching
Ads
Word of mouth

Comes to the platform and checks the community

Searches the keywords of her question

Finds The Answer From Previous Q&A/Experiences

Saves the answer to her personal library

Cannot find similar questions

Makes a profile

Asks Her Questions From Community Members

Adds hashtags to let people see/find her Q

Your question?

Add keywords/ hashtags

Mentors/experienced entrepreneurs answer her Q

Contributor

Knows and checked platform prior as a receiver or researcher or out of curiosity

MAKE A PROFILE

Sees Questions Related To Their Experience And Expertise

Answers The Question

Writes about their experience/ shares a resource/ tool that they used or heard about it

Adds hashtags to make the post researchable

Add keywords/ hashtags

Shares the experience

Shares the resource/tool

It will be added to the Library otomatically

Researcher — Looking for different types of resources

Receiver — Faced with a problem and looking for a piece of advice/solution

Contributor — experienced entrepreneurs, share their knowledge with the community

Figure 29. System map of Foojan, a place for sharing knowledge in different forms and accessing to short term mentorship.

6.2 Site map

Home

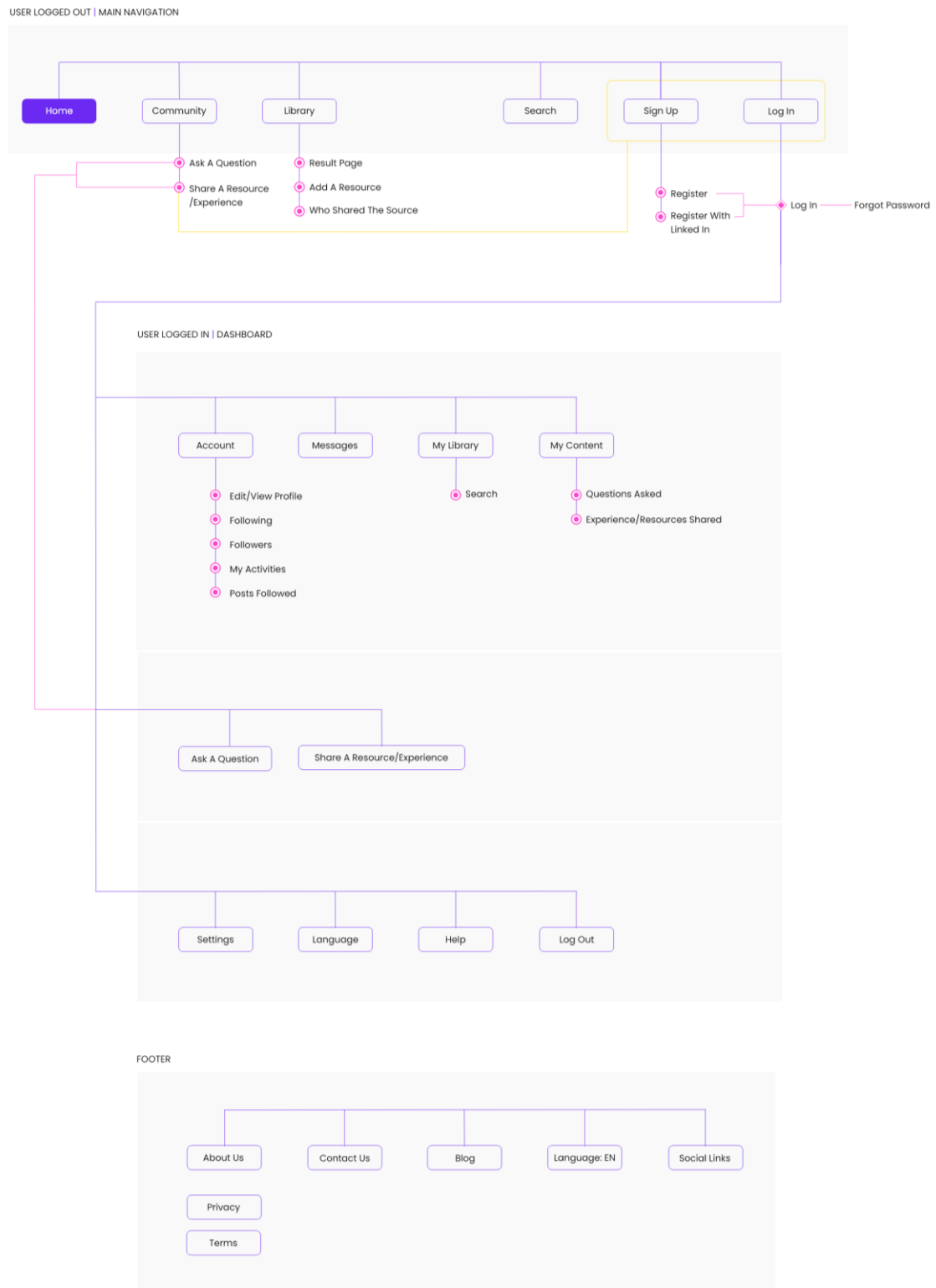Community

Library

Search

Sign Up

Log In

Ask A Question

Share A Resource /Experience

Result Page

Add A Resource

Who Shared The Source

Register

Register With Linked In

Log In

Forgot Password

Account

Messages

My Library

My Content

Edit/View Profile

Following

Followers

My Activities

Posts Followed

Search

Questions Asked

Experience/Resources Shared

Ask A Question

Share A Resource/Experience

Settings

Language

Help

Log Out

About Us

Contact Us

Blog

Language: EN

Social Links

Privacy

Terms

Figure 30. Site map.

6.3 Brand identity

6.3.1 Mood board and color palette
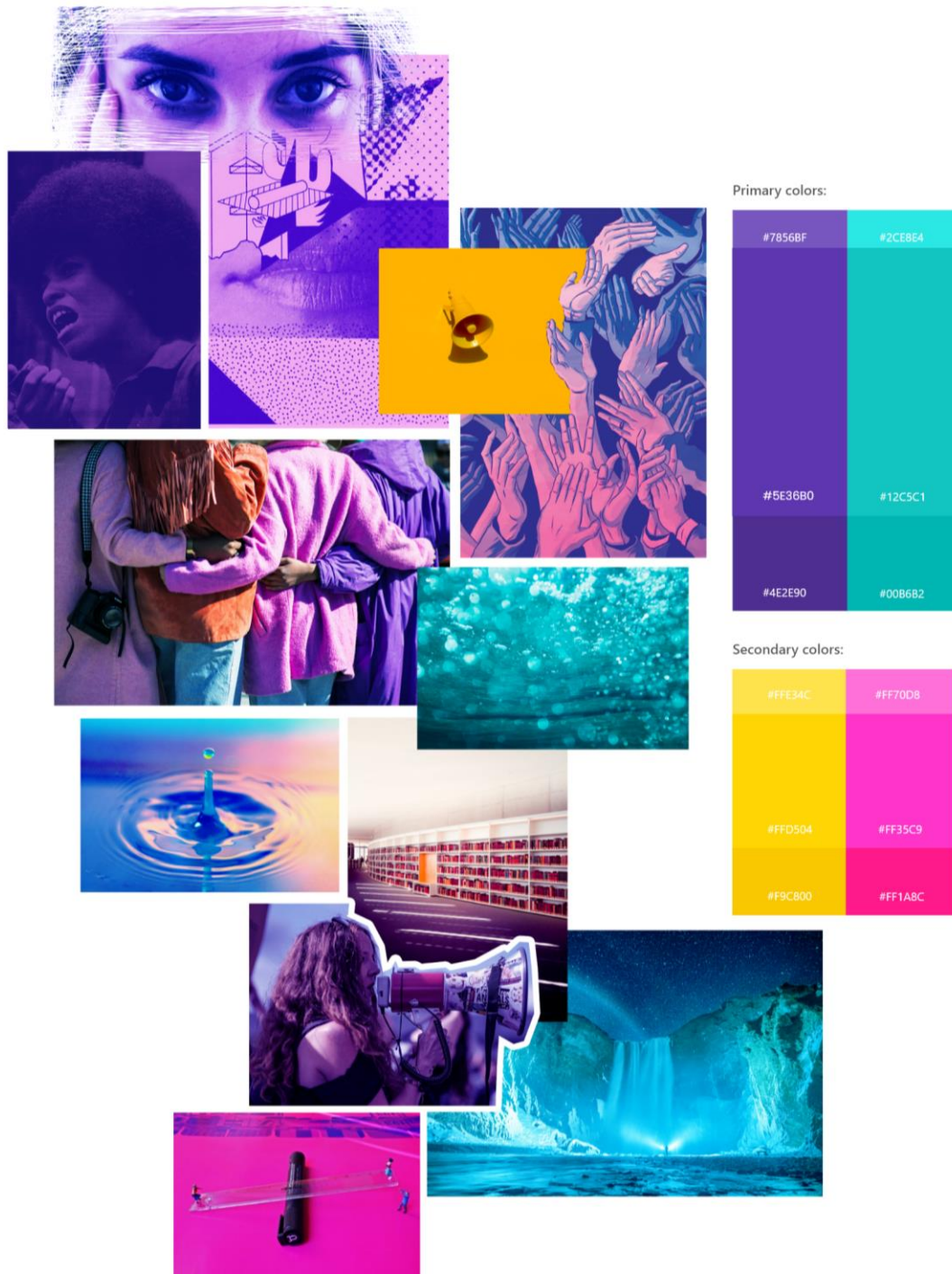
Figure 31. Mood board and color palette.

6.3.2 Logo design

Figure 32. Logo design. Foojan is a Kurdish name that describes a loud voice that everyone can hear. This name is fitting for a platform that listens to women entrepreneurs and provides a space for them to be heard.

Figure 33. Logo design.

6.4 Sketches
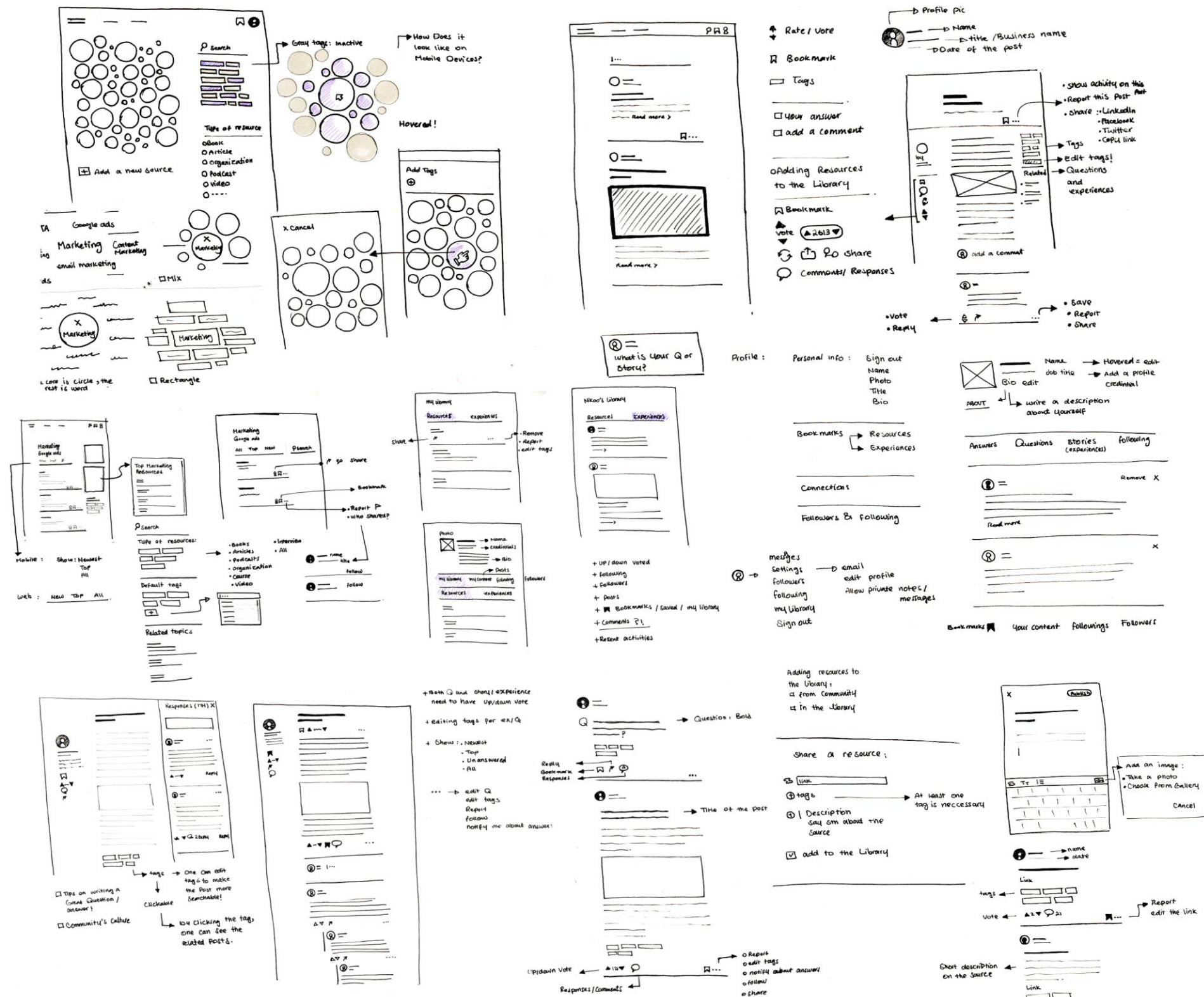
Figure 34. Wire framing-sketches.

6.5 Wireframes
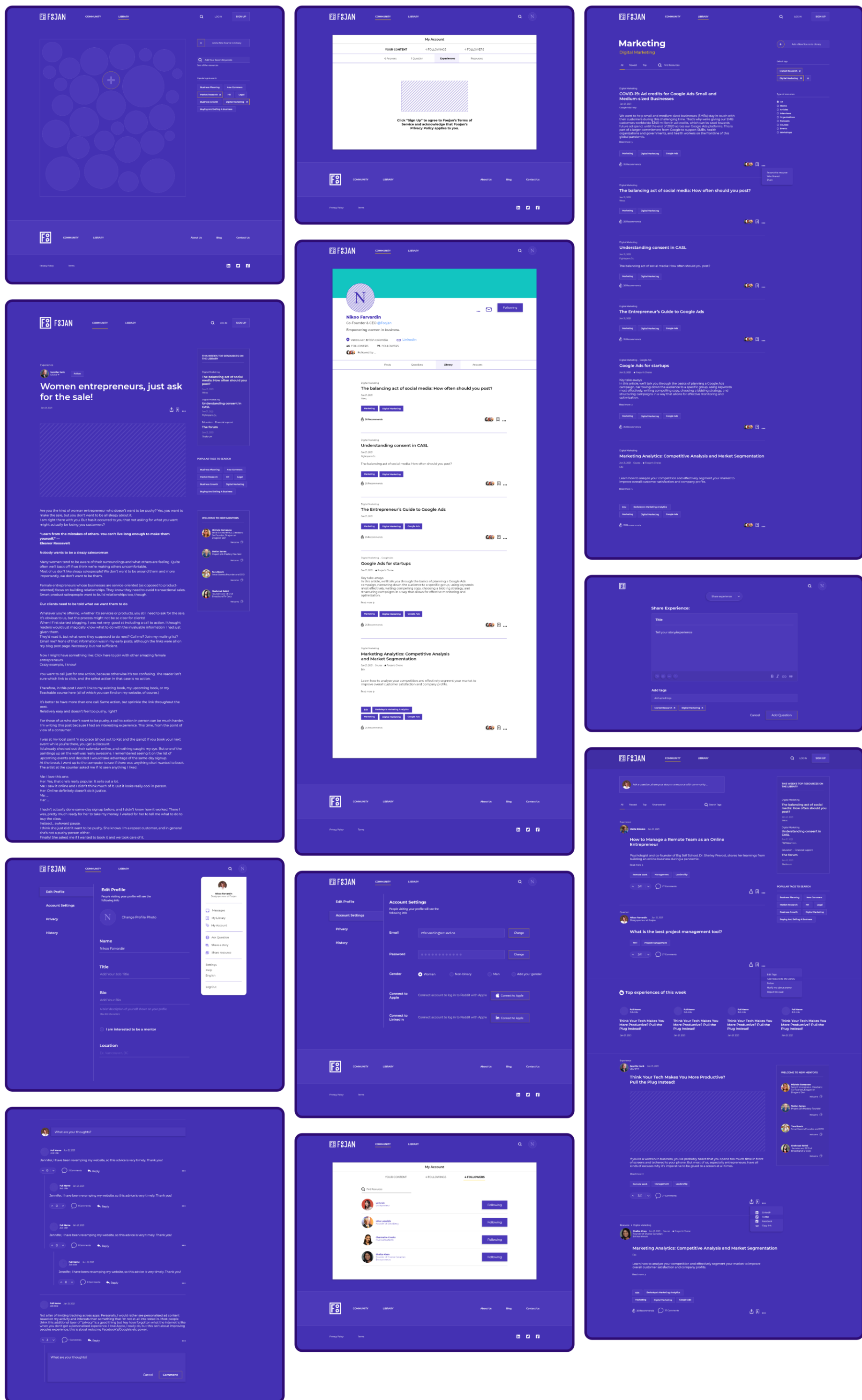
Figure 35. Interactive prototype of platform.

6.5 Foojan prototype screens

The platform consists of 2 main sections: 1.community 2. Library.

Community:

In the Community section, users can share their stories and what they have learned with other women entrepreneurs. It is an opportunity for women entrepreneurs to learn from others' experiences. Moreover, women entrepreneurs can ask questions from community members when they need their help. To make information searchable, questions and stories are required to be tagged. Tags help members find specific resources and answers.
Members are encouraged to give back to the community by answering questions to share their knowledge with others.

A voting system is used to ensure the quality of content. Up-voting helps exceptional content rise to the top and brings awareness to valuable responses (figure 38).
Community members can reach each other to build connections based on their expertise or region (figure 40). If someone is interested in mentoring women entrepreneurs – regardless of their gender - they can indicate that by adding a mentorship tag to their profile (image 42).

Unlike platforms that provide women with long-term mentorship, Foojan encourages mentors to join the community for short-term mentorship. This concept was suggested during interviews when some experts expressed that long-term mentorship is a large responsibility. Conversely, it is more appealing to allocate a short amount of time every week or month to have a quick chat or answer questions and give back to the community. This can help set up a path towards long-term relationships between mentors and entrepreneurs.

Contrary to some multi-purpose platforms such as Facebook, Twitter, or LinkedIn where people usually receive different types of messages, Foojan is specifically designed for entrepreneurs to build connections, ask and answer questions, and educate themselves. This ensures that one feels comfortable reaching others to ask questions and establish connections as it is a professional platform for entrepreneurs.

The platform has been designed to encourage entrepreneurs with different levels of experience to contribute to helping others. For example, a person with two years of experience can play the role of a mentor to a person who is about to start their business. This will encourage higher engagement of entrepreneurs on the platform to answer questions. It means an entrepreneur with a few years of experience can play the role of a mentor while receiving mentorship from an experienced mentor.

Library:

Foojan Library would be an excellent source for entrepreneurs to search the extensive database of resources such as educational courses, organizations, articles, podcasts, events, and interviews. These resources are searchable based on their type or region. Gathering all the available resources in one place will help save time and find different types of resources. In addition, the interactive library map (figure 36) provides users with the chance to see some of the new topics and terms that they might have no idea about. So this gives them a good insight into what they know and what they need to know.

As Foojan's library is community-driven, members can contribute to building it up by sharing reliable resources they are familiar with. Members can also create personal libraries by bookmarking resources, stories, and questions while checking other members' libraries.
As a woman starting a small business, one is able to find resources they might never have come across, make essential connections, and become part of a supportive community. With Foojan, women entrepreneurs will be able to stand on the shoulders of other women while bringing other women up on the way.

In the following, the main pages of the platform are presented (figures 36 to 42).
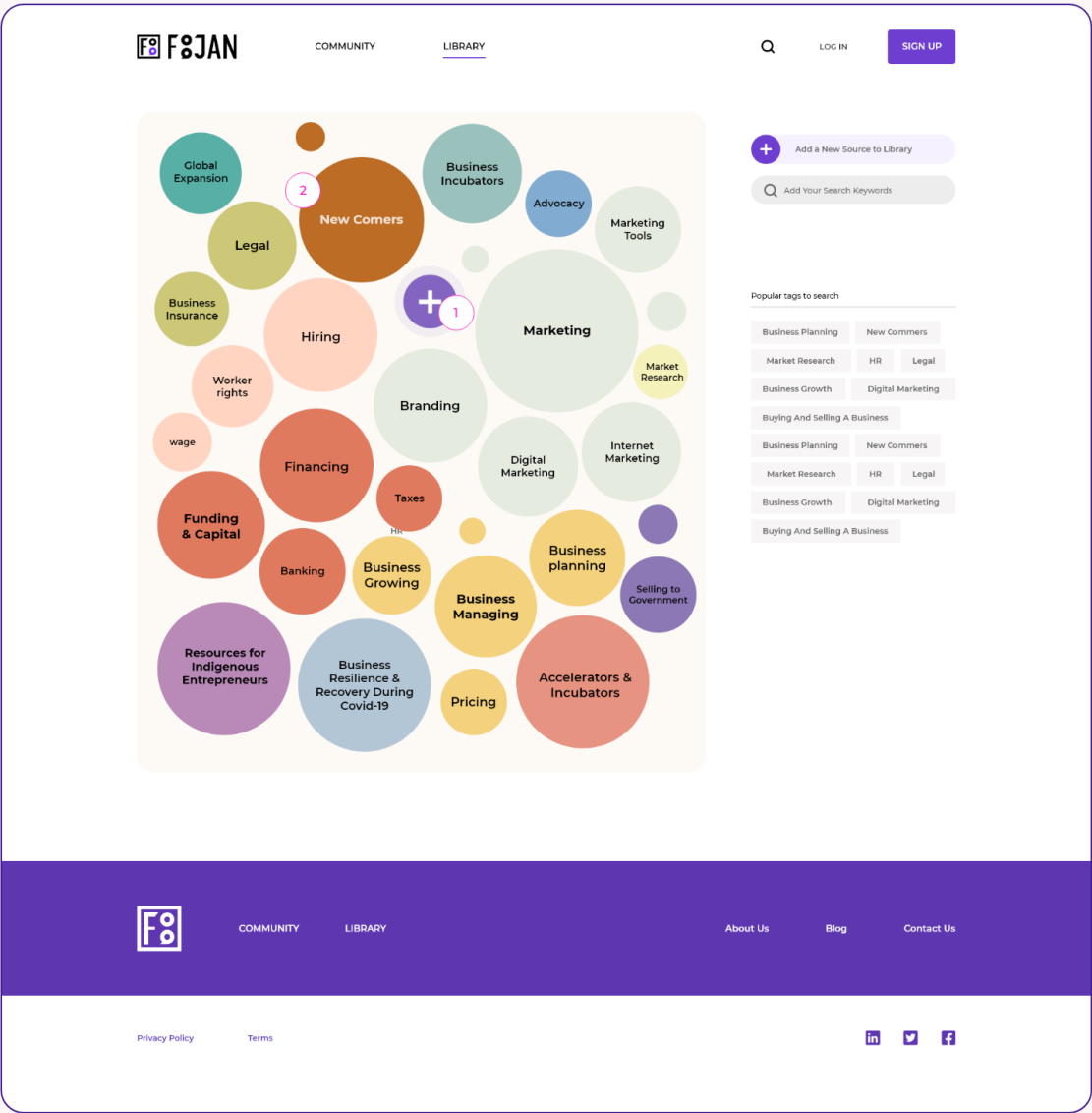
Figure 36. The main page of the Library. Interactive map of different and important topics in business using filters to find the most relevant results that users are looking for. The map will change based on the selected filters. When one clicks on a circle on the map, they can see subcategories.
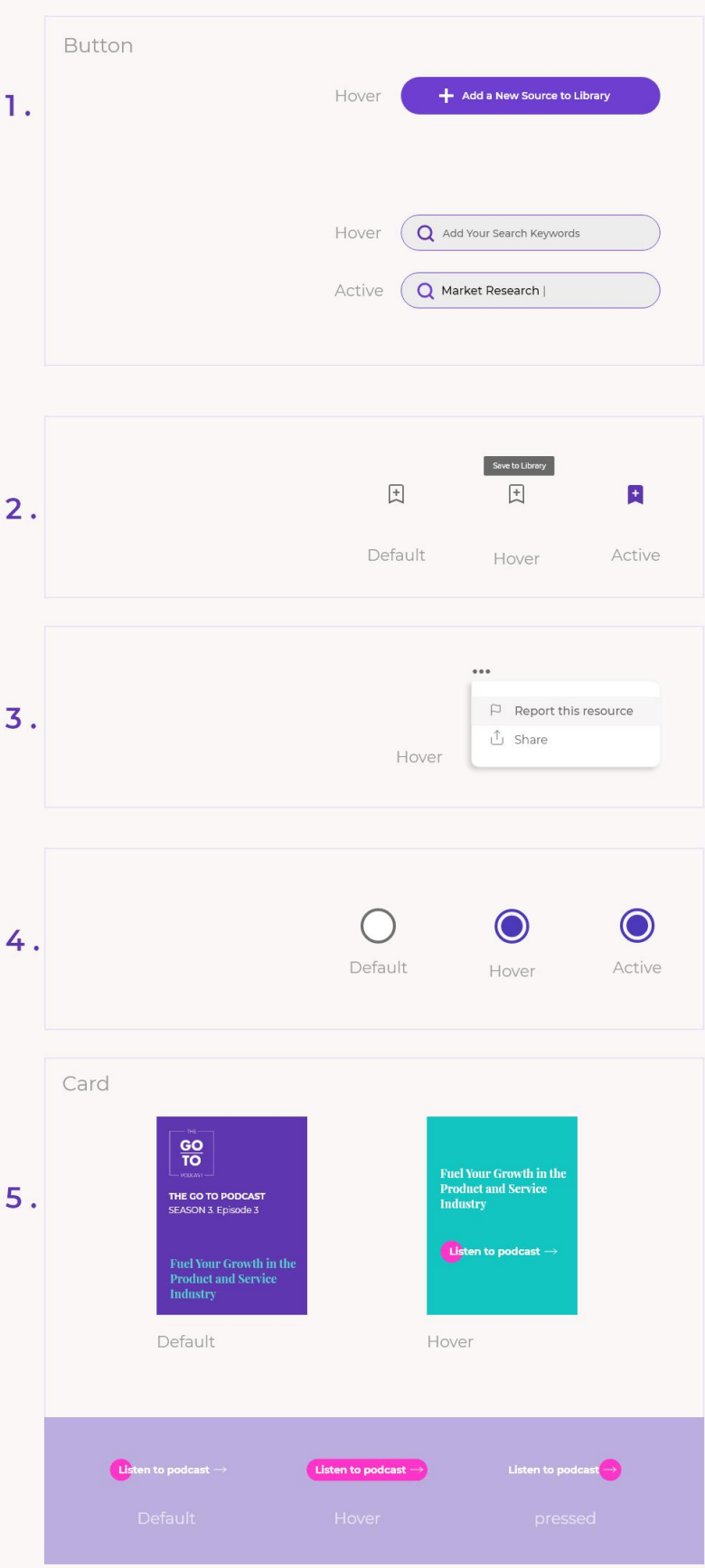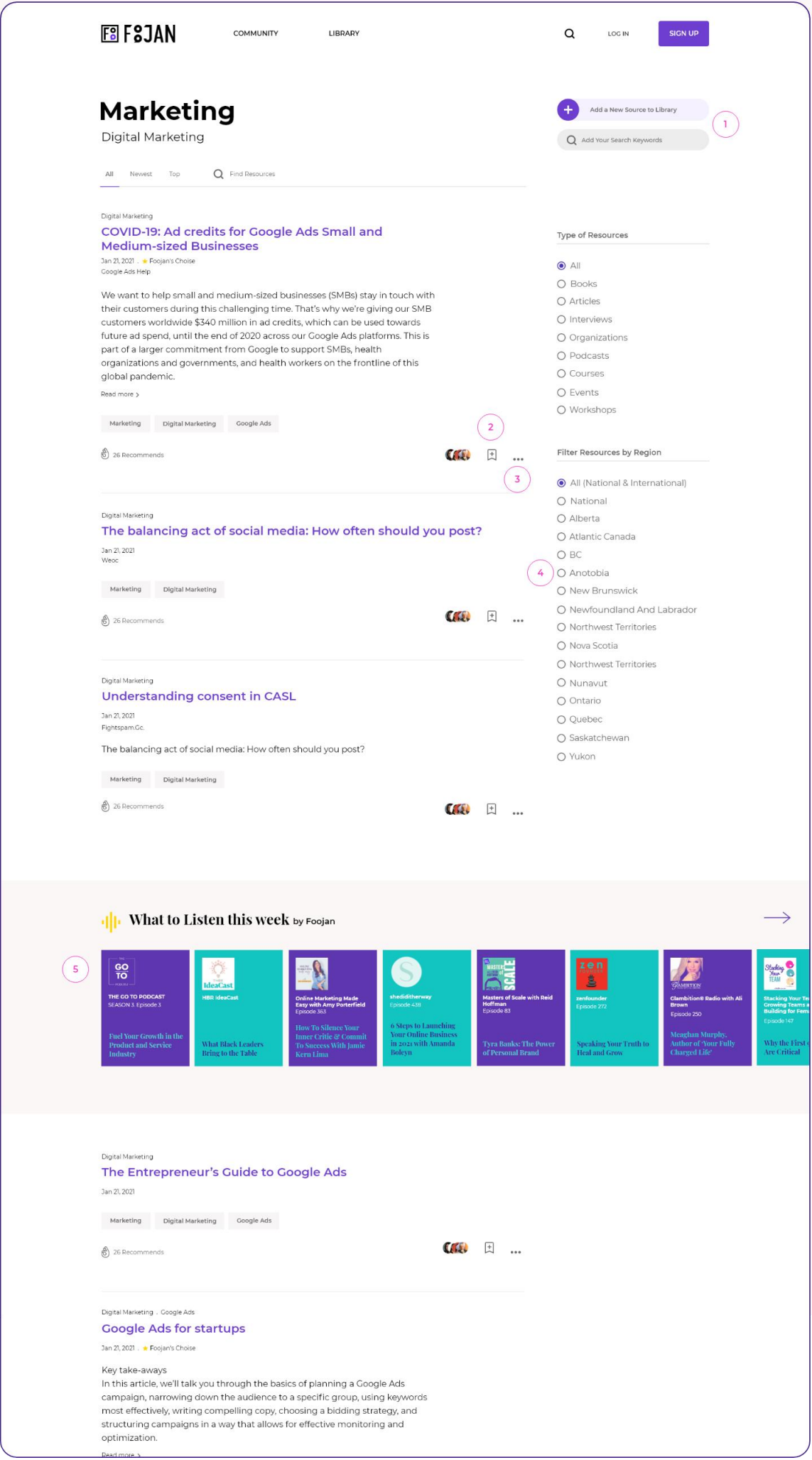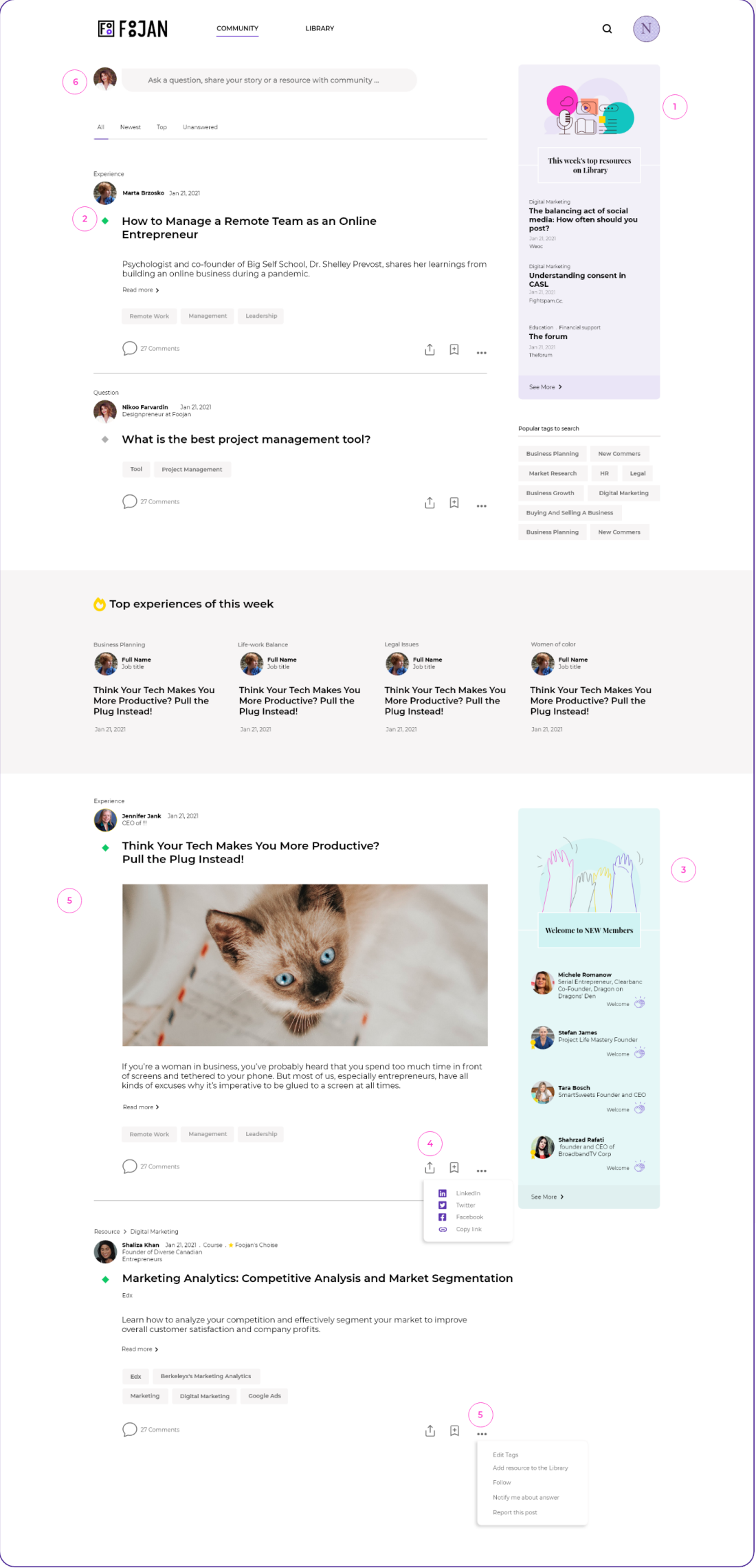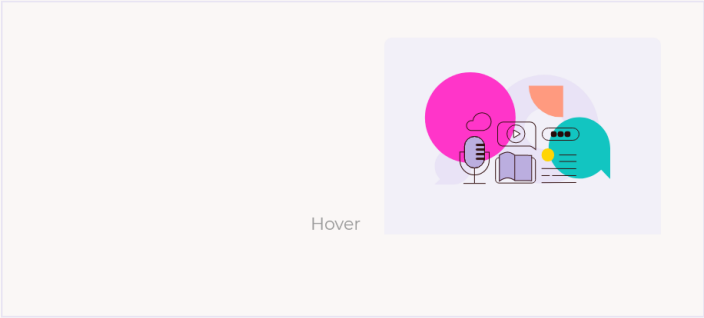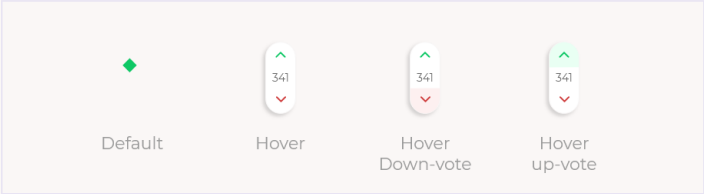
Figure 37. Library's search result page. After collecting a specific category, user can see all the available resources. User can apply filters such as newest and top to search through resources easily. User can add resources to their personal libraries by marking resources.
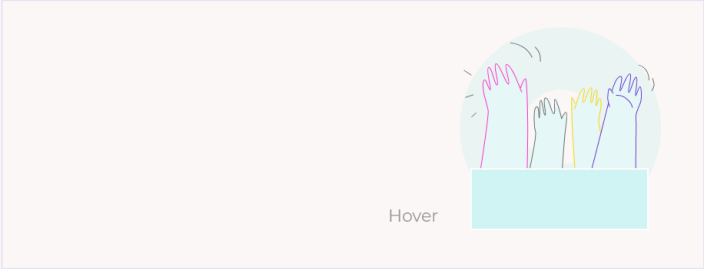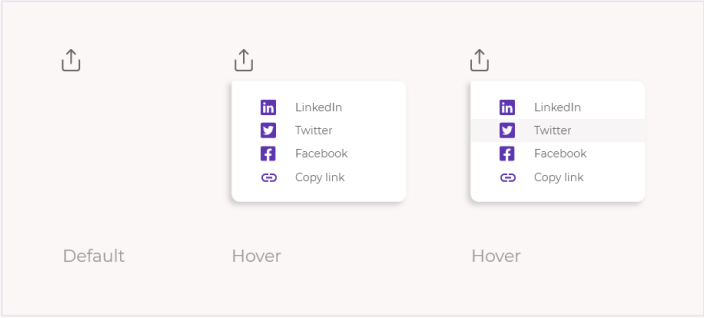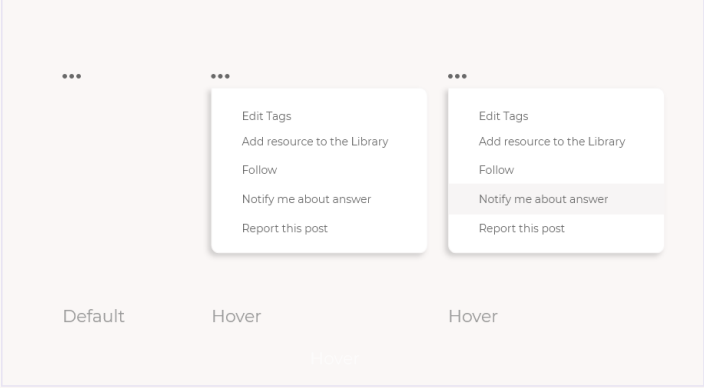
Figure 38. The main page of community. A place to search and read new stories, questions, and resources.
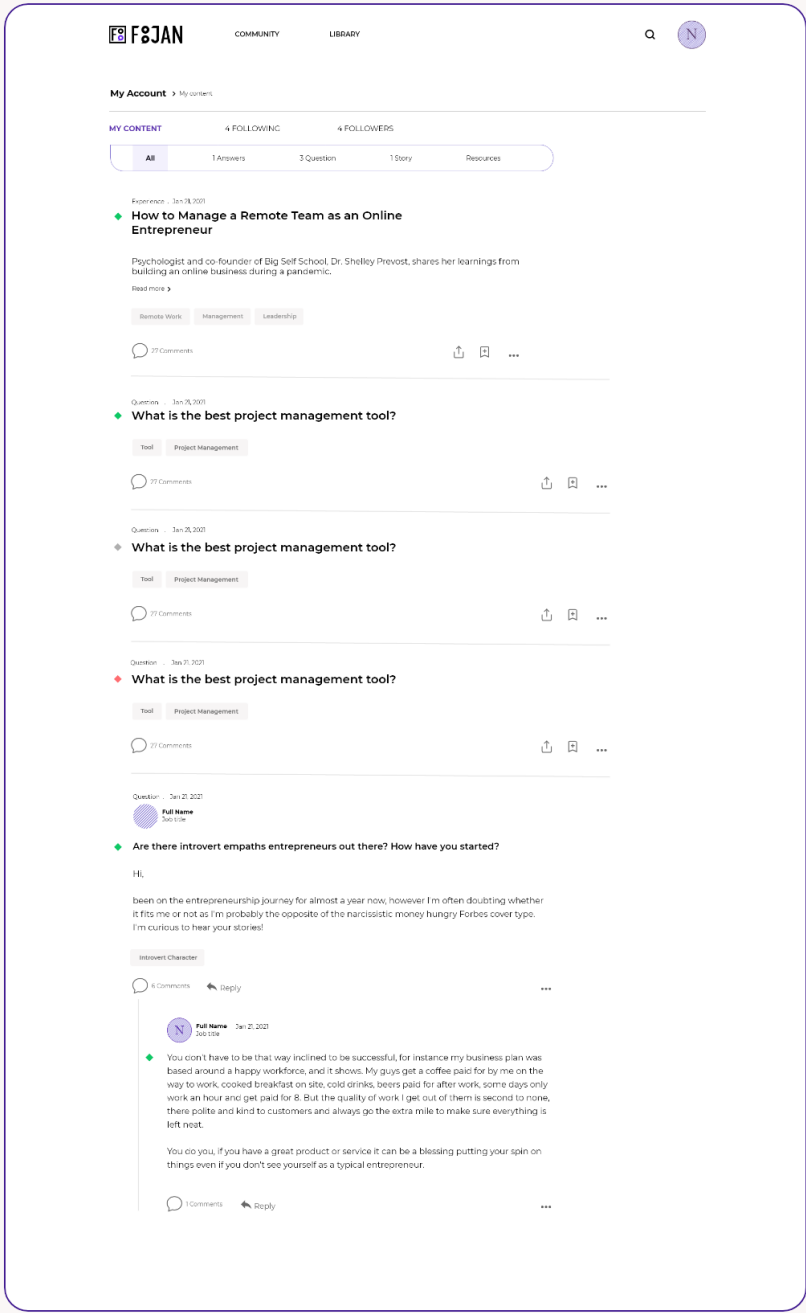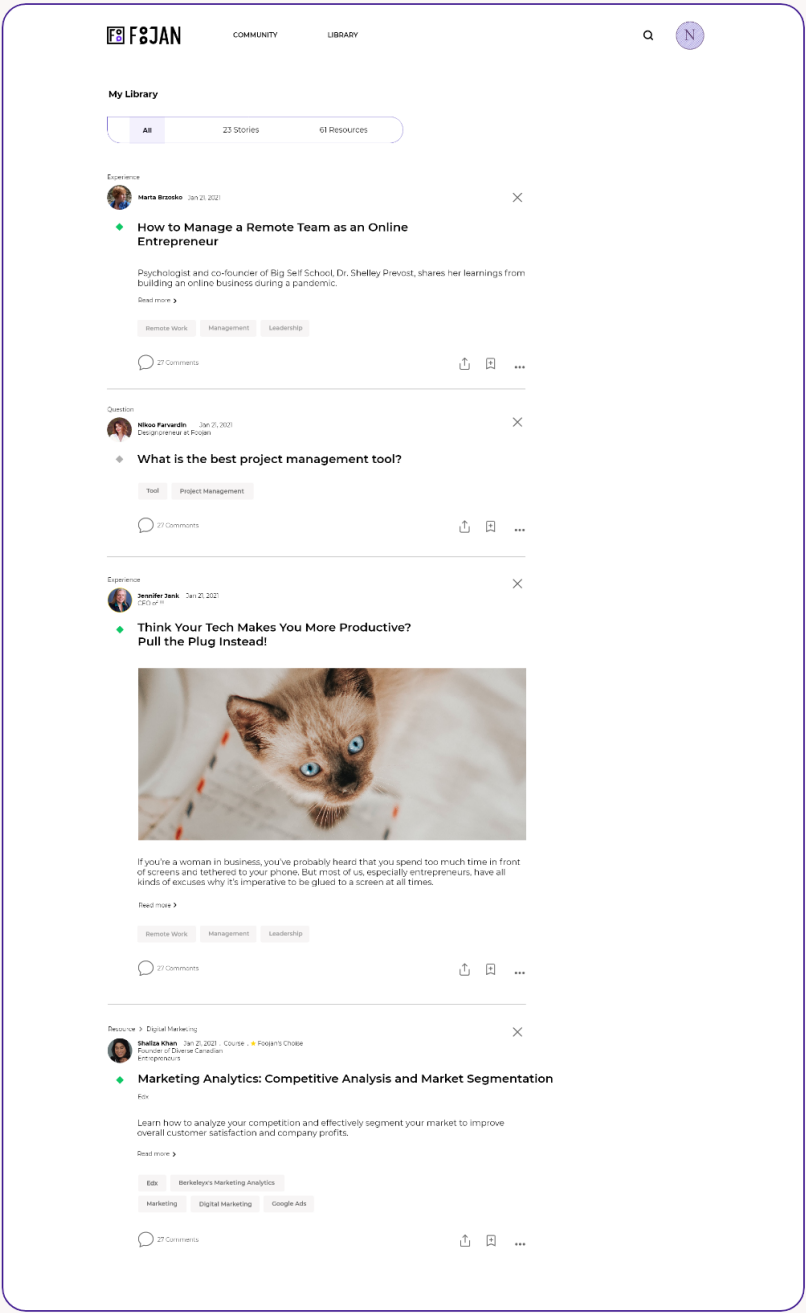
Figure 39. Personal library (left) and my account page (right). Users can create a personal library by bookmarking their favorite resources.

So they can come back and check them whenever they want. And also they can create new connections with other women entrepreneurs.

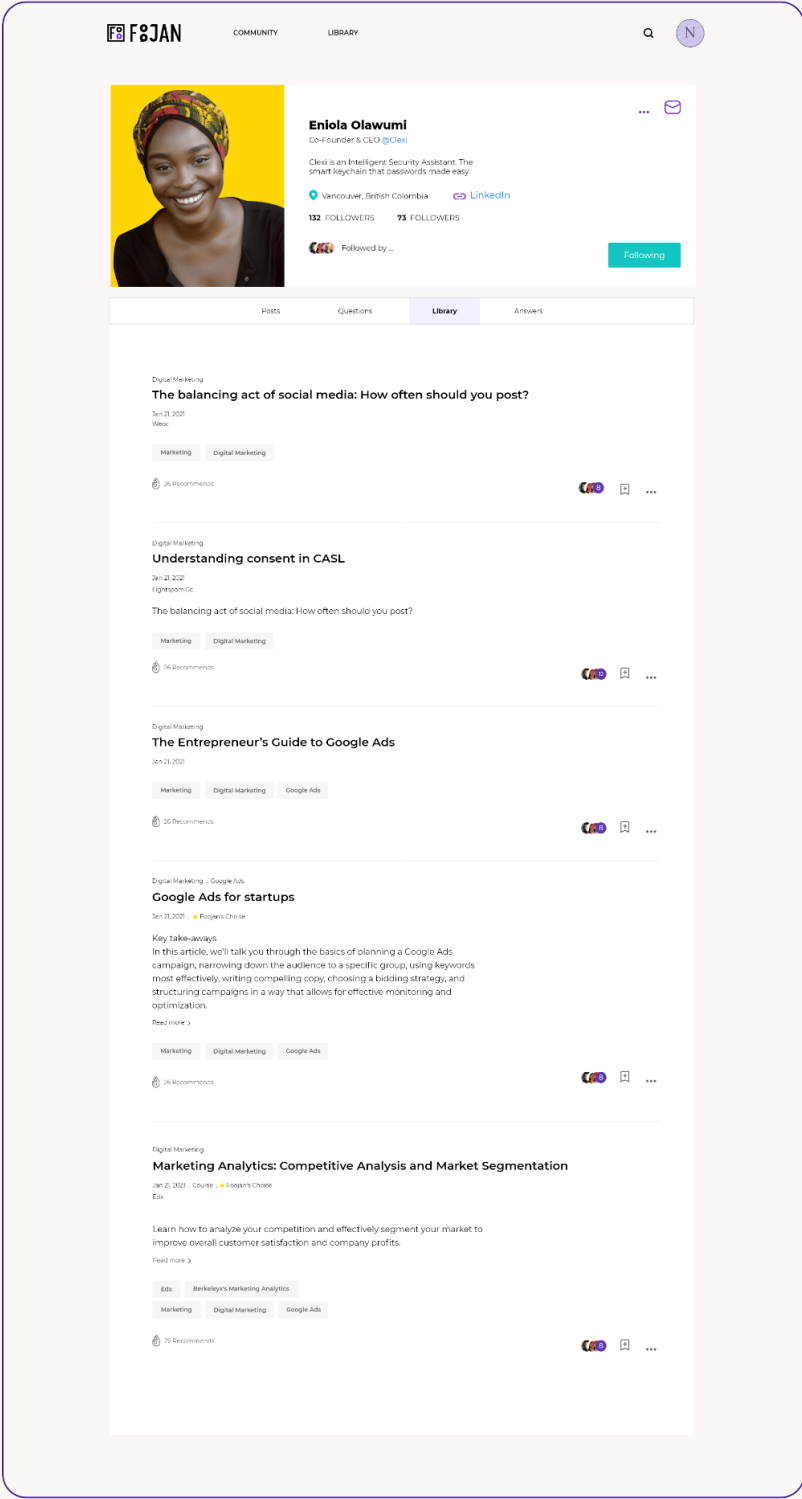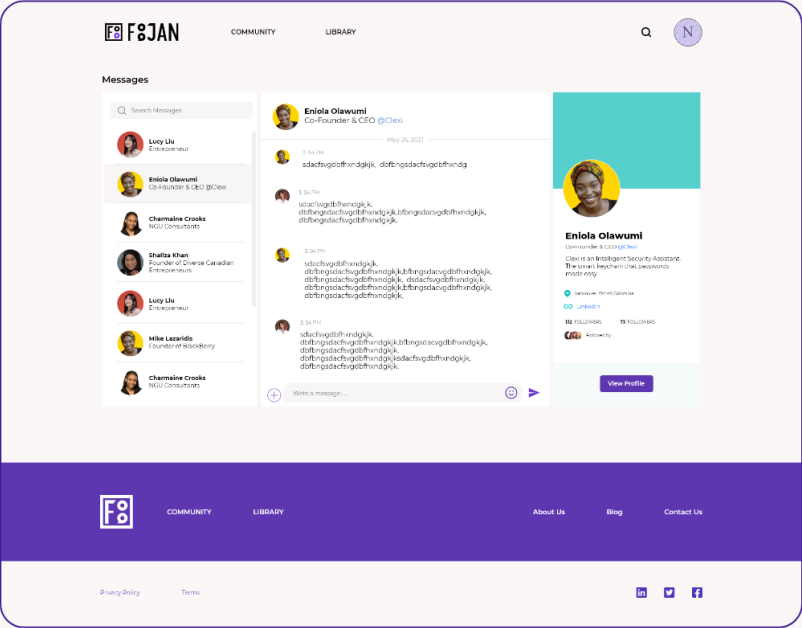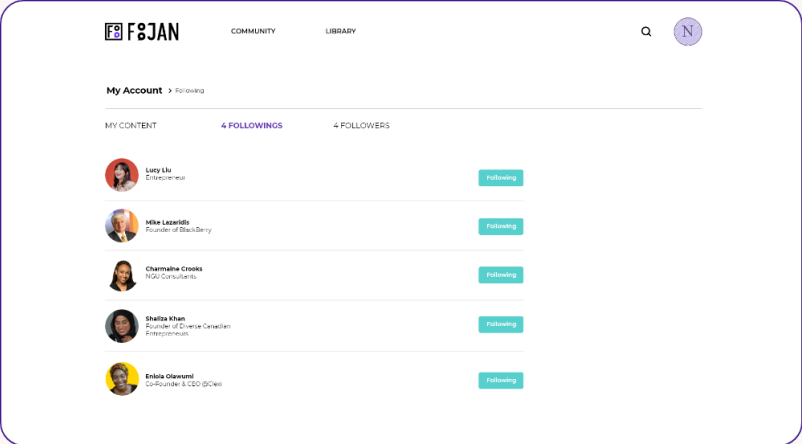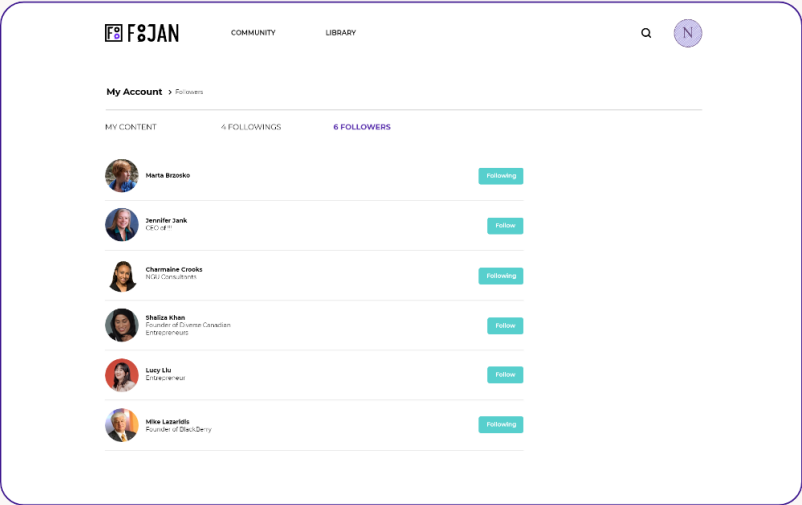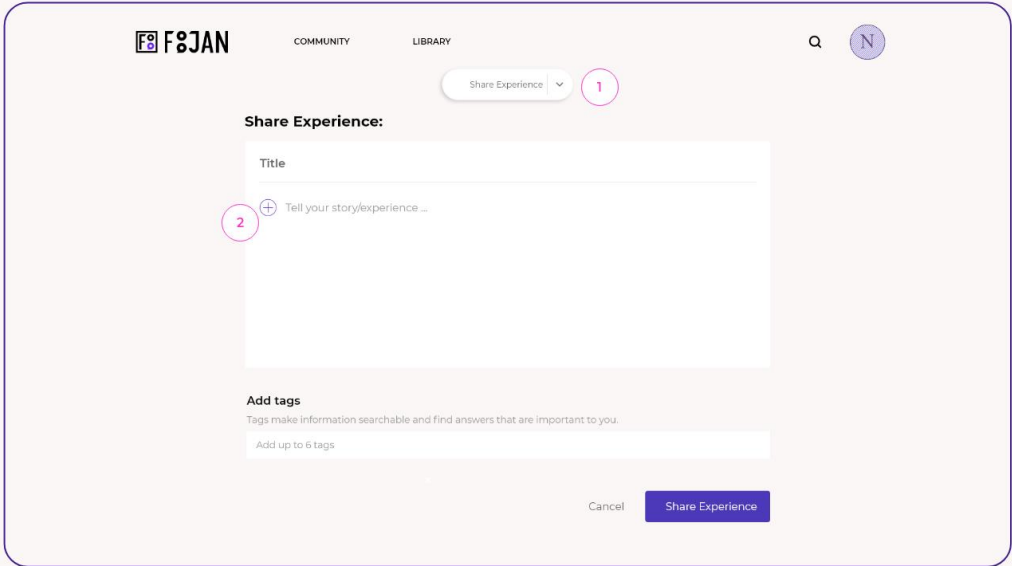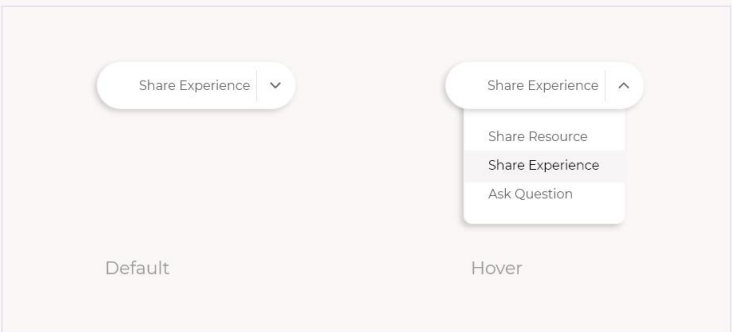*So user can reach them when they need their thoughts and insights.*

Figure 40. Following and followers pages (first and second from left), Member's profile to view (right), and the message page (left, bottom).

Community members can reach each other to build connections based on their expertise or region.
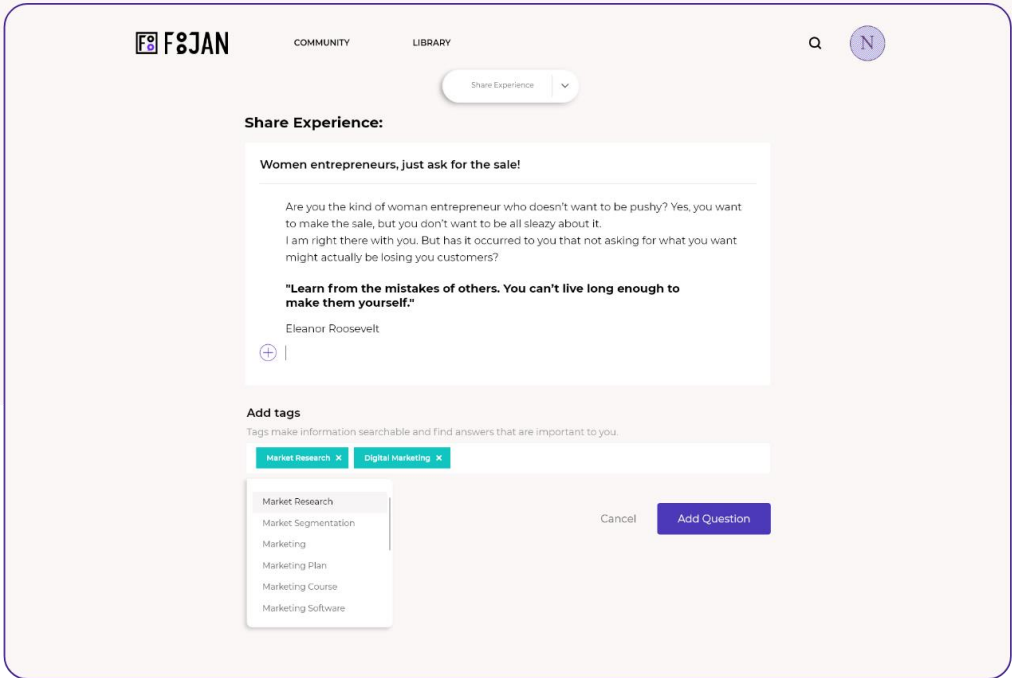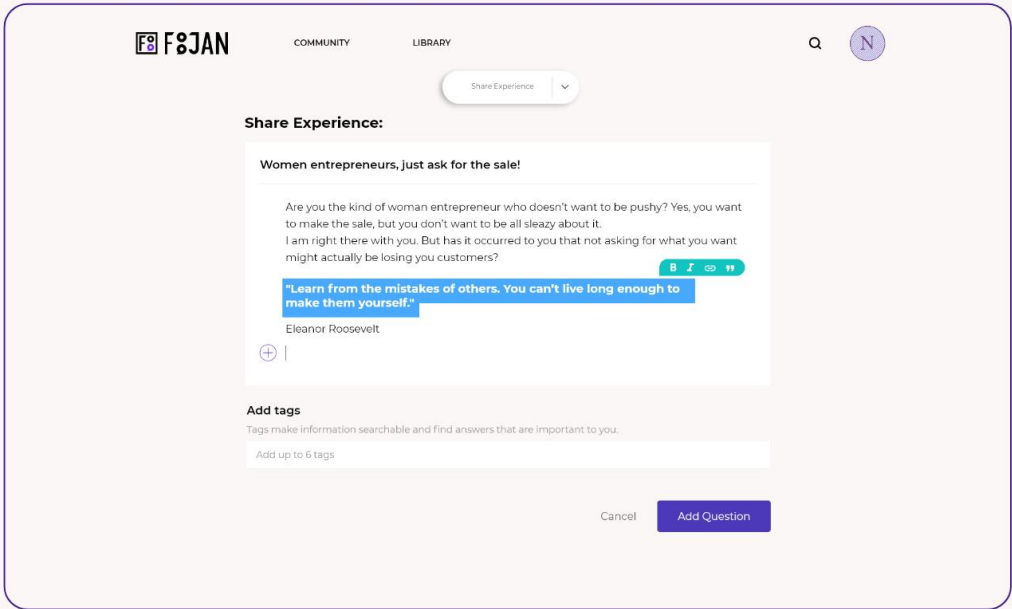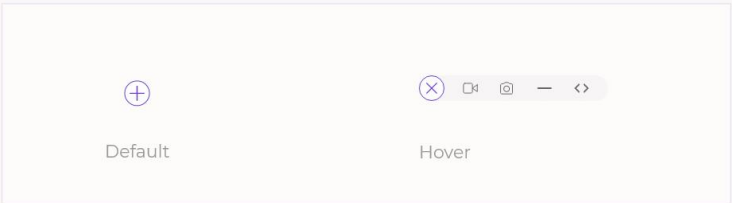
Figure 41. Share experience. With a simple and user-friendly design to write an experience, add video, photo, embedded link, and new sections. The tools on Foojan help users to write in a clear and engaging manner. Each content shared on Foojan needs to be tagged. Tags make information searchable and find answers that are important to you.

Figure 42. Settings. If someone is interested in mentoring women entrepreneurs – regardless of their gender –

they can indicate that by adding a mentorship tag to their profile.

CONCLUSION AND FUTURE DIRECTIONS

This research aimed to identify the significant challenges for women entrepreneurs in small and medium Canadian enterprises and to offer an effective solution. Based on the qualitative analysis of the interviews, it can be concluded that accessing mentorship, connection to the entrepreneurship community and easy access to entrepreneurship resources are frequent requests among women entrepreneurs. In this regard, an interactive and collaborative platform facilitates communication between entrepreneurs. A library of entrepreneurship resources accessible to beginners and experienced entrepreneurs alike offers further support.

The participatory approach helped shape a real and deep understanding of the entrepreneurship ecosystem and a great sense of empathy with women entrepreneurs. Moreover, the target group's participation in the ideation and evaluation phase helped generate a relevant solution. Relevance to users in this case means "useful, usable, and desirable" (Sanders, 2002). The final design outcome was created based on the women entrepreneurs' experiences, feelings, dreams, fears, and aspirations.

However, the challenging and time-consuming process of acquiring participants, their busy schedule, and the particular way of communication and working with entrepreneurs did not let me benefit from a group co-creation session. As a result, all sessions with entrepreneurs and mentors were solo. It deprived me of forming a dialogue between different participants, which would reveal further hidden layers of thoughts and emotions. It should be mentioned that the unusual situation caused by COVID-19 increased the difficulty of acquiring and collaborating with the target group. In the future, I would like to conduct group evaluation sessions to critique and analyze the design outcome precisely.

In general, this project broadened my vision into participatory design where my audiences actively played a role in different phases of my design research — from the fuzzy front end of the design process (predesign) to generative and evaluative phases. This approach and its challenges taught me that design requires a flexible and strategic approach. One cannot pick a solid plan for the entirety of their process if they want to discover the study subject's hidden aspects.

In a nutshell, all the participatory activities in my thesis research aimed to create empathy and a deep understanding of stakeholders. While empathy cannot be achieved without engagement (Mattelmäki, Brandt, & Vaajakallio, 2011), one can also argue engagement cannot be achieved without empathy. Paying attention to interviewees' feelings and the context is key to creating a sense of empathy and communicating well with them, which leads to better engagement in the research.

Moving forward, I would like to see how new technologies like AI and Machine learning can improve the platform's efficiency and create a better user experience. In addition, as indicated previously, one of the features offered during the evaluation session was team building. In any

future iterations of this project, I would discuss this feature with my target group to evaluate its value and potential and how it should be implemented in the current idea.

Moreover, user testing the final design outcome from user experience standpoint will provide the chance of in-depth UX study of the platform, yielding further validation of the concept and usability of such a service. So I am hopeful to be able to test the interactive mockups with the target audience while we can walk through the platform step by step. It can be held as a virtual session while users have access to the high-fidelity interactive prototype and video call or in-person sessions.

CITATIONS

Ahl, H. (2006). Why research on women entrepreneurs needs new directions. Entrepreneurship theory and practice, 30(5), 595-621.

Baur, A. A. B. (2019). Women-owned Exporting Small and Medium Enterprises.

Beckton et al., The Beacon Agency, Carleton University, BMO Financial Group and the Government of Canada, Everywhere, Every Day Innovation. Women Entrepreneurs and Innovation, February 2018.

Biz Warriors. (n.d.). Retrieved May, 2020, from https://bizwarriors.com/forum/.

Butler, J. (2011). Bodies that matter: On the discursive limits of sex. Taylor & Francis.

Clarity. (n.d.). Retrieved June, 2020, from https://clarity.fm/.

Cnet. (n.d.). Retrieved June, 2020, from https://www.cnet.com/forums/small-business-startups/.

Devillard, S., Vogel, T., & Pickersgill, A. (2017). Power of Parity: Advancing Women's Equality in Canada. McKinsey Global Institute.

Elam, A. B., Brush, C. G., Greene, P. G., Baumer, B., Dean, M., & Heavlow, R. (2019). GEM Women's Entrepreneurship Report 2018/2019. Global Entrepreneurship Research Association.

Feifer, J. (2018, July 09). The Secret to Finding a Great Mentor: Don't Ask to Be Mentored. Retrieved October, 2020, from https://www.entrepreneur.com/article/315132.

Fetsch, E., Jackson, C., & Wiens, J. (2015, July 17). Women Entrepreneurs are Key to Accelerating Growth. Retrieved Spring, 2020, from https://www.kauffman.org/resources/entrepreneurship-policy-digest/women-entrepreneurs-are-key-to-accelerating-growth/.

Forum for Women Entrepreneurs (FEW). (n.d.). Retrieved 2020, from https://fwe.ca/?gclid=CjwKCAiAi_D_BRApEiwASslbJ7v_IAtbasFgJYecp0mBwkzs3fKOQlTDX5nJjfJhBJZ475ycUZ9oLBoCRV4QAvD_BwE.

Grekou, D., Li, J., & Liu, H. (2018). Women-owned Enterprises in Canada. Retrieved June 24, 2020, from https://www150.statcan.gc.ca/n1/pub/11-626-x/11-626-x2018083-eng.htm.

Guzman, J., & Kacperczyk, A. O. (2019). Gender gap in entrepreneurship. Research Policy, 48(7), 1666-1680.Grekou, D., Li, J., & Liu, H. (2018, September 24).

Hecht, J. (2018). You Need a Mentor. Here's Where to Find One for Free. Retrieved November 02, 2020, from https://www.entrepreneur.com/article/318024.

Hughes, K., Global Entrepreneurship Monitor, GEM Canada Report on 2015/16 Women's Entrepreneurship, November 2017.

Innovation, Science and Economic Development Canada (ISED), Small Business Branch, Key Small Business Statistics – January 2019, 2019.

Innovation, Science and Economic Development Canada (ISED) ,(2020, January 20). SME Profile: Ownership demographics statistics. Retrieved September 27, 2020, from https://www.ic.gc.ca/eic/site/061.nsf/eng/h_03115.html.

Innovation, Science and Economic Development Canada (ISED) (2015), Majority Female-Owned Small and Medium-Sized Enterprises: Special Edition of Key Small Business Statistics, www.ic.gc.ca/eic/site/061.nsf/vwapj/MFOSMEs_KSBS-PMEDMF_PSRPE_2015-05_eng.pdf/$FILE/MFOSMEs_KSBS-PMEDMF_PSRPE_2015-05_eng.pdf.

Lawson, B. (2006). How designers think: The design process demystified. Routledge.

Mattelmäki, T., Brandt, E., & Vaajakallio, K. (2011). On designing open-ended interpretations for collaborative design exploration. CoDesign, 7(2), 79-93.

Mattelmäki, T., Vaajakallio, K., & Koskinen, I. (2014). What happened to empathic design?. Design issues, 30(1), 67-77.

Manzini, E. (2015). Design, when everybody designs: An introduction to design for social innovation. MIT Press.

OECD (2017), SME and Entrepreneurship Policy in Canada, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/9789264273467-en.

Oxford Reference. (n.d.). Retrieved March, 2020, from https://www.oxfordreference.com/view/10.1093/oi/authority.20110803095753147.

PwC (2018). Women Entrepreneurship in Canada: Report Prepared for WESK by PwC. https://wesk.ca/wpcontent/uploads/2018/10/WESK-Report-Oct.-15-2018-PwC-1.pdf.

Quora. (n.d.). Retrieved May/June, 2020, from https://www.quora.com/.

Reddit. (n.d.). Retrieved June, 2020, from https://www.reddit.com/.

Sanders, E. B. N., & Stappers, P. J. (2014). Probes, toolkits and prototypes: three approaches to making in codesigning. CoDesign, 10(1), 5-14.

Sanders, E. B. N. (2002). From user-centered to participatory design approaches. In Design and the social sciences (pp. 18-25). CRC Press.

Soundmaxx. (n.d.). Retrieved June/July, 2020, from
Subašić, E., Hardacre, S., Elton, B., Branscombe, N. R., Ryan, M. K., & Reynolds, K. J. (2018). "We for She": Mobilising men and women to act in solidarity for gender equality. Group Processes & Intergroup Relations, 21(5), 707-724.

Startup Nation. (n.d.). Retrieved May, 2020, from https://community.startupnation.com/.

Storni, C. (2015). A personal perspective on research through design. interactions, 22(4), 74-76.

Statistics Canada (2018). SURVEY ON FINANCING AND GROWTH OF SMALL AND MEDIUM ENTERPRISES 2017, Retrieved November 01, 2020, from https://www.ic.gc.ca/eic/site/061.nsf/vwapj/SFGSME-EFCPME_2017_eng_public.pdf/$file/SFGSME-EFCPME_2017_eng_public.pdf.

Van Boeijen, A., Daalhuizen, J., van der Schoor, R., & Zijlstra, J. (2014). Delft design guide: Design strategies and methods. BIS Publishers.

Verganti, R. (2009). Design driven innovation: changing the rules of competition by radically innovating what things mean. Harvard Business Press.

Women Entrepreneurship Knowledge Hub (2020). The State of Women's Entrepreneurship in Canada 2020. Toronto: Diversity Institute, Ryerson University.

Women's Enterprise Centre. (n.d.). Retrieved 2020, from https://www.womensenterprise.ca/.

Women-owned Enterprises in Canada. Retrieved September 19, 2020, from https://www150.statcan.gc.ca/n1/pub/11-626-x/11-626-x2018083-eng.htm.

APPENDIX

Emily Carr University Research Ethics Board (ECU-REB)
Research + Industry Office
520 East 1st Avenue
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ethics@ecuad.ca

CERTIFICATE OF RESEARCH ETHICS APPROVAL

The Emily Carr University Research Ethics Board approves the following project:

File #	Title	Principal Investigator:	Other Investigators
100381	More women in business; a participatory approach to empower female entrepreneurs	Jonathan Aitken	Nikoo Farvardin

The current approval dates are:

Approval Date	Expiration Date
April 30, 2020	April 30, 2021

The nature of the approval is as follows:

Type of Event	Type of Review	Approved Documents
New Approval Process	Delegated Review	Consent forms co-creation and interview/Media Release/

Figure 43. Research ethics approval.

Very Challenging

Somewhat Challenging

Less Challenging

Solution

ACCOUNTABILITY GROUPS:

They force you to work on your busines and on yourself rather than in the businessand on the projects

It took me about maybe eight or nine months until I started to even know that these communities existed.

Offering perspective and advice specially when you have certain problems

BC FOOD PROCESSOR

EO ACCELERATOR

FWE

MENTORSHIP

CONNECTIONS

Being connector and make connections

Undervaluing yourself
Self doubt
Underselling yourself

LACK OF CONFIDENCE

Imposter syndrom:
I am not qualified to be here/ insecure feeling

INVESTORS

Recieving support from investors

TEAM BUILDING

LACK OF CAPITAL

We wanted to hire based on skill set and then we started to feel like we had to hire based on personality type, it was very important for us. It's a small team and so they need to be somebody that's very excited about wearing multiple hats and being very heavily involved.
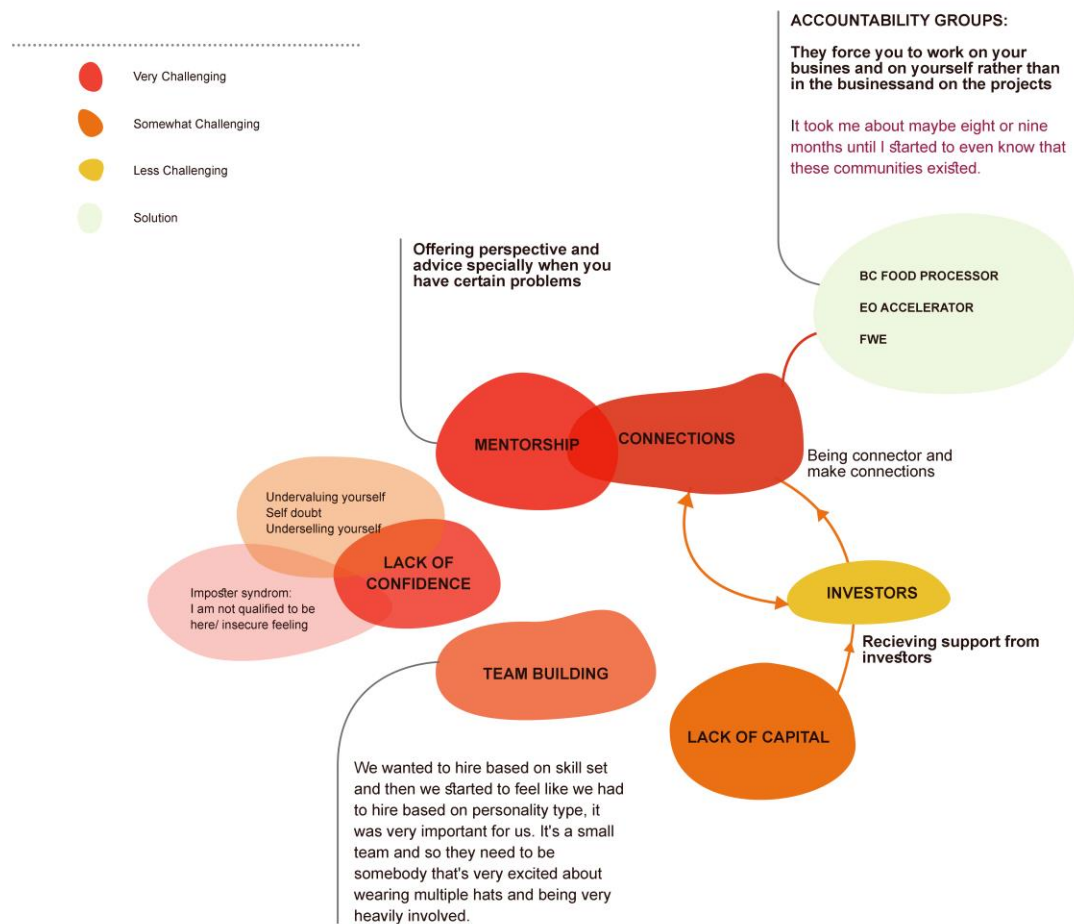
Figure 44. Visualizing the important results of interview # 1 & 2.
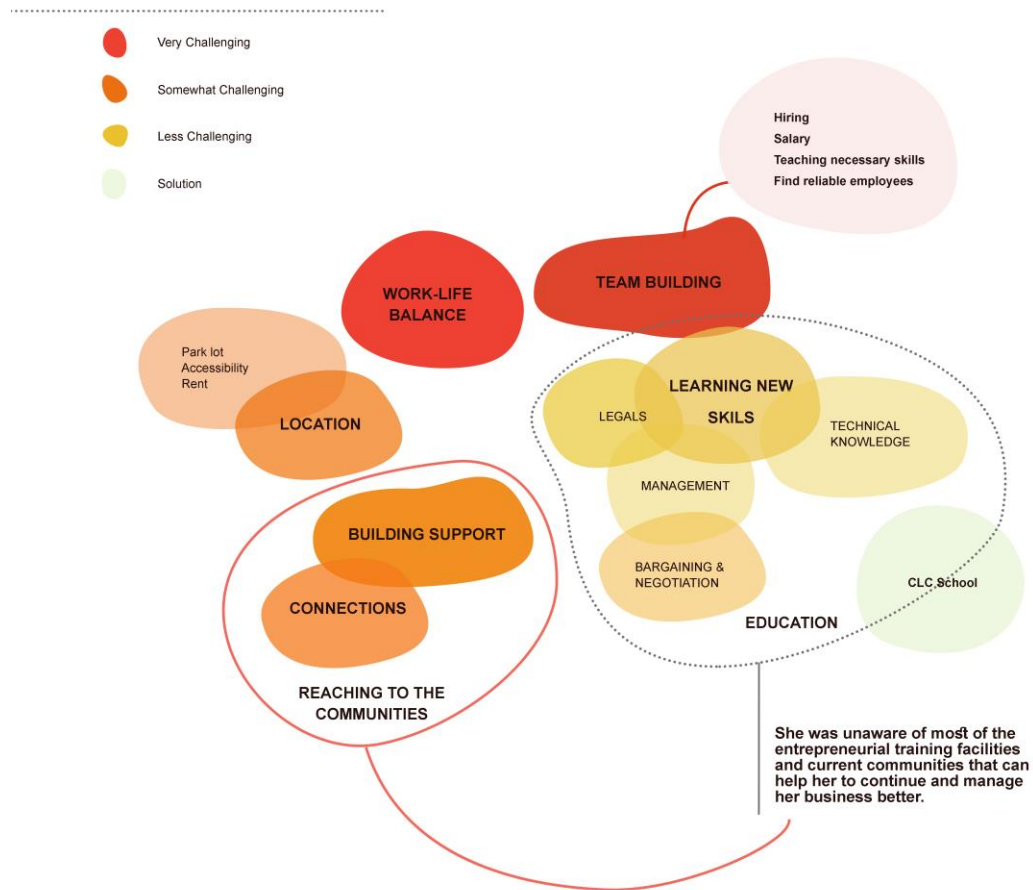
Figure 45. Visualizing the important results of interview # 3 & 4.

I think a challenge that I've seen for
people who are new to a community is
that **they simply just don't know where
to go for some of the resources**. And so
it can feel both really lonely and really
stressful because it feels like you have to
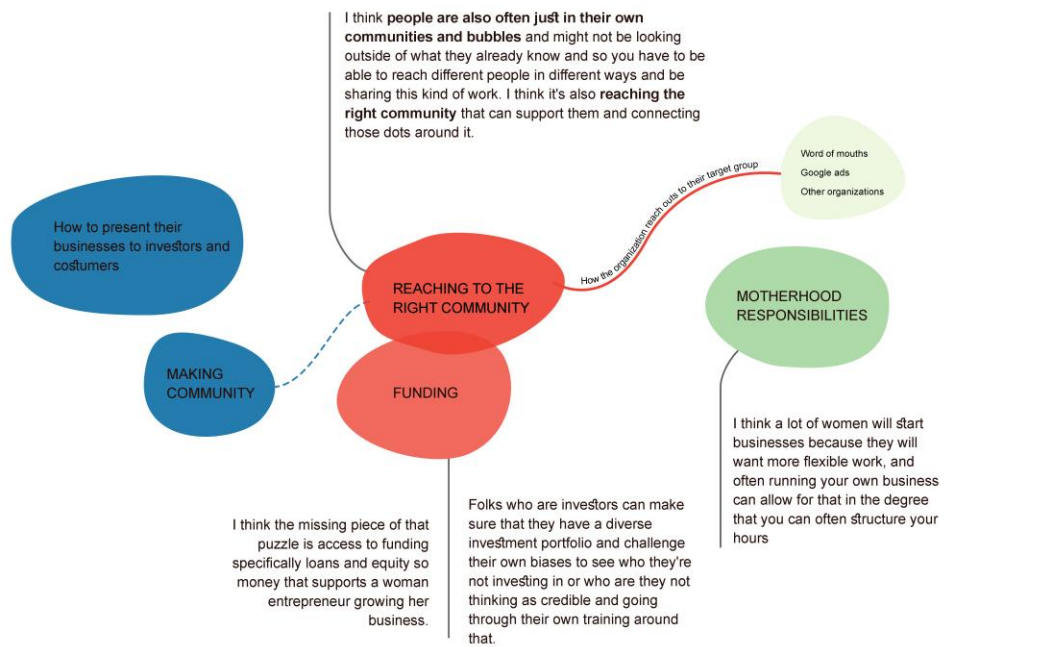figure it out all on your own.

Challengies

The skill she would like to
teach to other entrepreneurs

Benefits of being the business
owner for women

Solution

I think **people are also often just in their own
communities and bubbles** and might not be looking
outside of what they already know and so you have to be
able to reach different people in different ways and be
sharing this kind of work. I think it's also **reaching the
right community** that can support them and connecting
those dots around it.

Word of mouths
Google ads
Other organizations

How to present their
businesses to investors and
costumers

How the organization reach outs to their target group

REACHING TO THE
RIGHT COMMUNITY

MOTHERHOOD
RESPONSIBILITIES

MAKING
COMMUNITY

FUNDING

I think a lot of women will start
businesses because they will
want more flexible work, and
often running your own business
can allow for that in the degree
that you can often structure your
hours

I think the missing piece of that
puzzle is access to funding
specifically loans and equity so
money that supports a woman
entrepreneur growing her
business.

Folks who are investors can make
sure that they have a diverse
investment portfolio and challenge
their own biases to see who they're
not investing in or who are they not
thinking as credible and going
through their own training around
that.

Figure 46. Visualizing the important results of interview # 5 & 6.

Actions that you take and where they take you to the long term, and how can you make that experience easier by choosing where do you start, where do you want to go, and who's going to help you.

Sponsorship: It's not just the training but it's also somebody who opens the door makes suggestion, the referral. And so, there's too much training not enough sponsorship.

Very Challenging

Somewhat Challenging

Less Challenging

The skill she would like to teach to other entrepreneurs

Benefits of being the business owner for women

STRATEGY

Missing Pieces

SUGGESTIONS

MENTORSHIP

I really think that you need to take an organization like FWE and make it much more available, because they're the only ones in that spectrum of organizations, who's actually providing, not just education but **introductions and connections**, and encouraging women to stop working in the business but working on the business.

What is needed more to impower women:

SPONSERSHIP

INTRODUCTIONS & CONNECTIONS

EDUCATION

Community

You become more flexible when you are an entrepreneur so it makes parenthood easier in some ways!

FLEXIBLE SCHEDULE

Figure 47. Visualizing the important results of interview # 7 & 8.

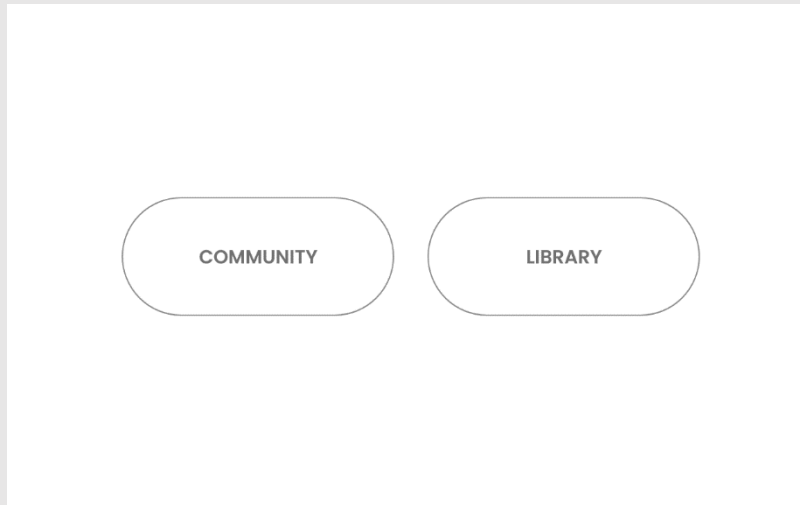*Figure 48. Mind mapping after user interview and secondary research.*

Figure 49. Landing page.

The platform consists of 2 main sections:

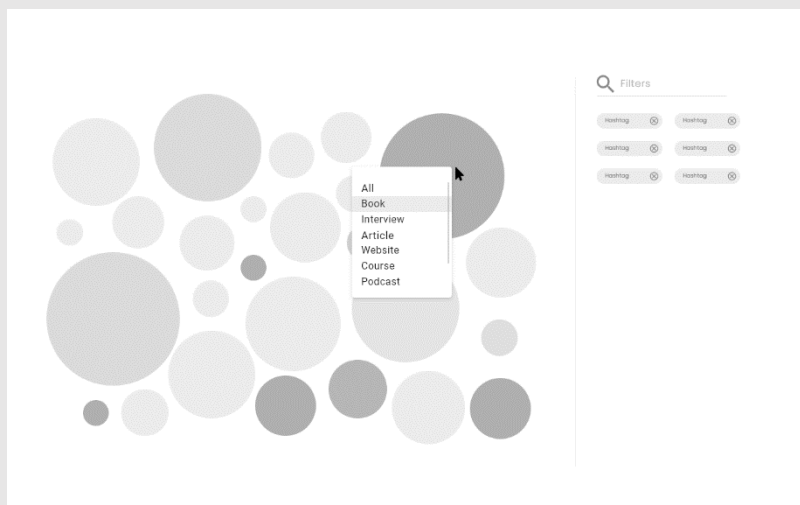1- Library

2- Community

Figure 50. Interactive Library resources' map.

- Interactive map of different and important topics in business
- Using filters to find the most relevant results that users are looking for
- The map will change based on the selected filters
- The hover mood of the map shows different types of resources such as books, podcasts, courses, and ...
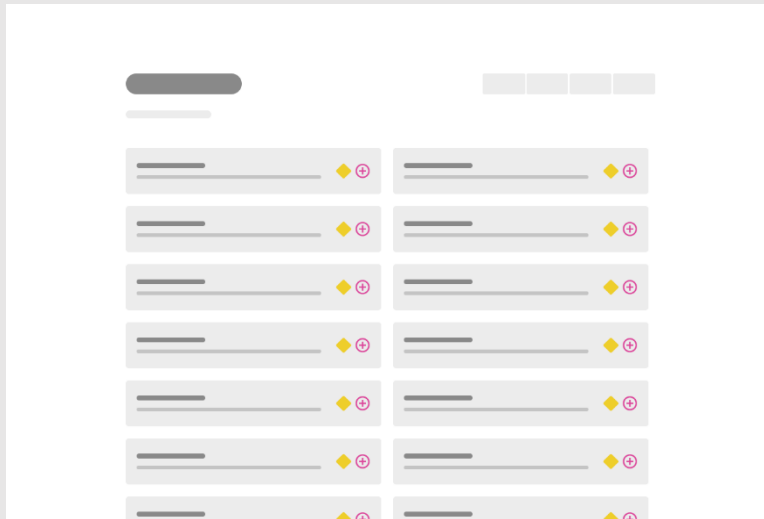
Figure 51. List of available resources after applying filters.

- After collecting a specific category, user can see all the available resources
- User can apply filters such as the most checked, new, the most recommended, and etc. to search through resources easily
- User can mark the resources to check them later
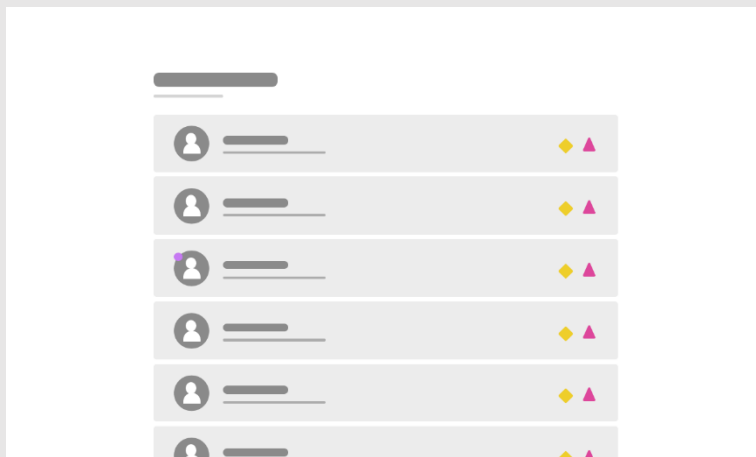
Figure 52. User can see who share the resources on Library.
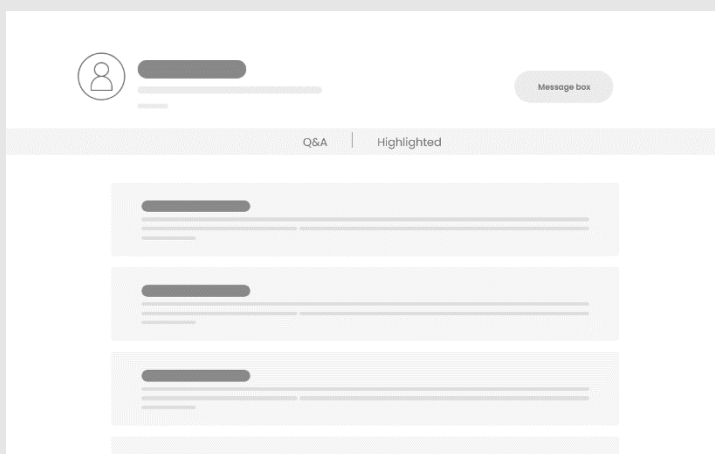
- User can see who shares the resources (contributors)

Figure 53. Users can make a personal Library for themselves.

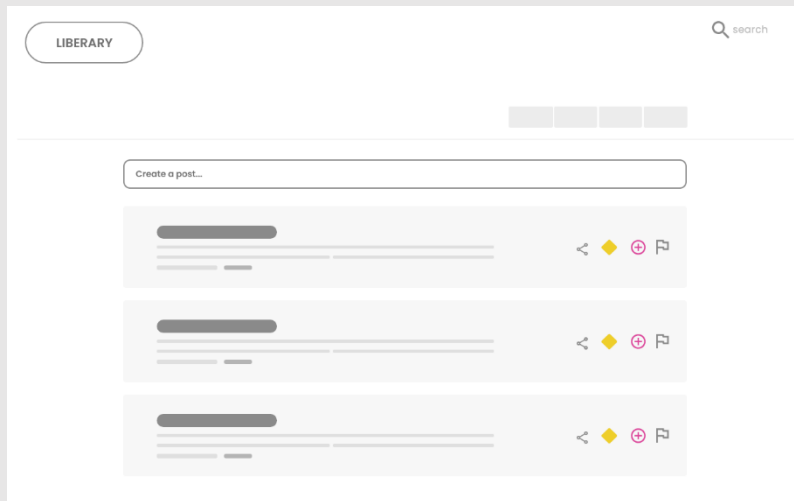- User will make a personal Library base of what they highlighted and saved

Figure 54. Community main page.

- A place to share knowledge, experience, and questions
- People who share knowledge and experience don't have to be women necessarily. The community invites all people to empower women regardless of their gender
- User can apply filters such as the most checked, new, the most recommended, etc. to search through resources easily
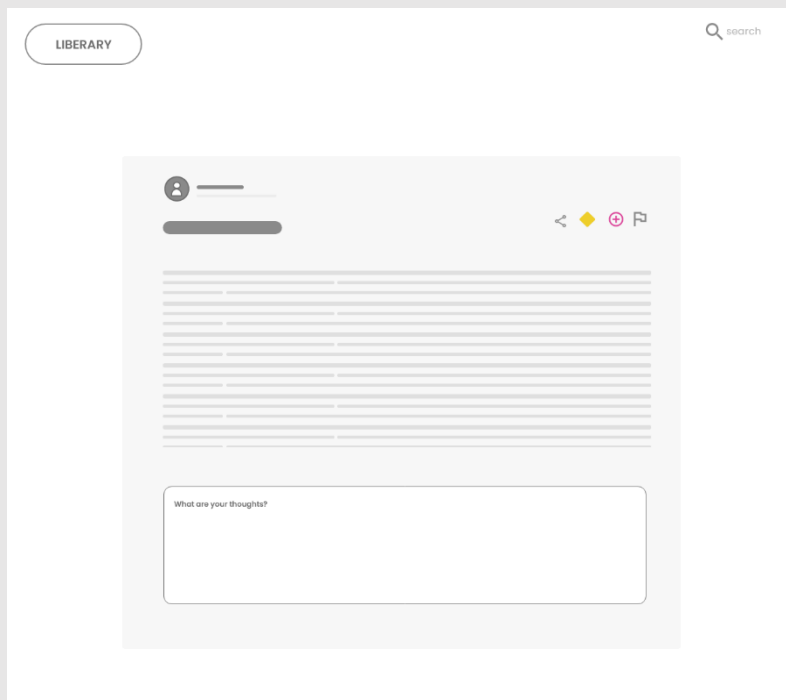- One needs to have a profile to be able to post on the community page

Figure 55. Writing a post.

- User can see who wrote the article or share the resource or ask question
- Each post can be a place to talk about the topic and be connected to other entrepreneurs
- One needs to have a verified profile to be able to participate in the conversation and reply to the community members
- The posts can be shared, reported, saved
- The contributors should use hashtags to help other people to find their post
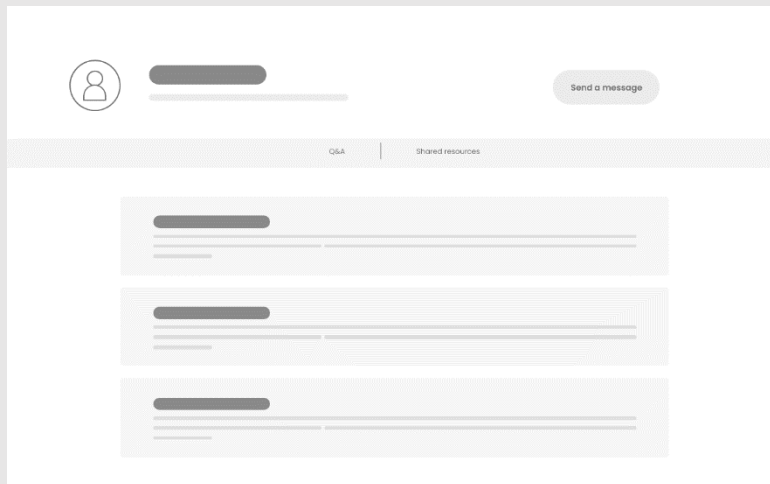- The resources shared in the community can be added to the library by the admin or members

Figure 56. User can check the profile of contributors.

- User can check the profile of contributors to see what they shared and what they wrote about
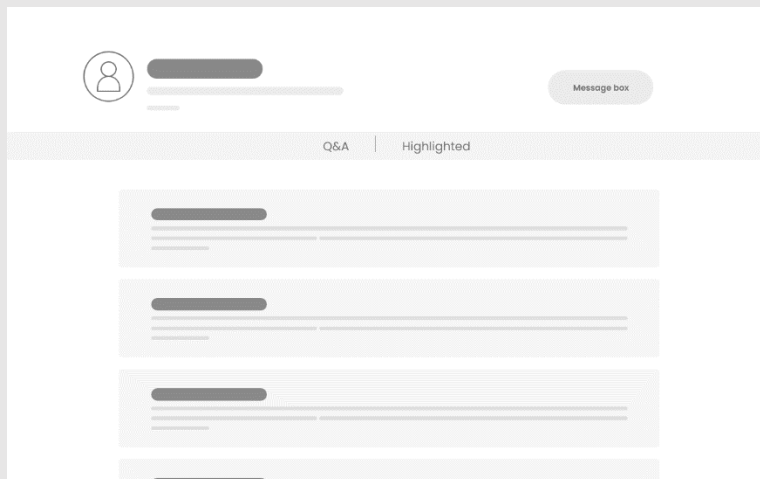

Figure 57. Each community member needs a profile to be able to post on the Community.

- Each community member needs a profile to be able to post on the Community
- Users can use the library resources without any profile