Vyapar Bandhu

A financial literacy application for small business owners

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Feedback Page

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Introduction

In the last few decades, the Indian Govt has introduced several loans to improve the financial situation of the rural people. There have been many improvements in financial aid, but still, there is a lack of financial awareness among rural people. So here comes the question: What is Financial Literacy?

Financial literacy is understanding and effectively using various financial skills, including personal financial management, budgeting, and investing. It is the foundation of a relationship with money and a lifelong learning journey. *Financial Inclusion* is providing access to appropriate banking and financial products & services to vulnerable groups, notably weaker sections & low-income groups, at an affordable cost.

When I started the project during my residential stay, the village Ronchi Bangar falls in Mathura district situated in Uttar Pradesh state, with a population of 14,692. The semi-rural population in Ronchi Bangar is more than 50%, and rural populations also surround the surrounding areas with construction laborers or cultivators. This village has a total of 15 cooperative banks in the area. Over the last few decades, most people in rural India have no access to demand-oriented banking services, which might help them improve their

economic situation. It is especially true of poorer households, smallholder farmers, and women. These people go to local moneylenders to borrow large amounts of money when in need, and in return, they pay a lot of interest (more than 50-60%) to the moneylenders. Based on the research, people are unaware of any loans/schemes that Govt/banks provide to help them despite having a zero balance account. Most people said they do not know where to find this information due to lack of accessibility, and due to lack of education, they find it challenging to approach a bank to open a bank account on their own. Even the bank mitras/ sakhis who are appointed have their targets too, and they mainly focus on people who already have their accounts opened. With new schemes coming up for the people, some have limited periods, which most people miss as they are unaware. People who are aware are getting the advantage, but for uncertain people, it gets complicated.

As the town is small in itself, the primary income of the residents there is mainly from the small business they run. One day our maid was asking us how to open a bank account, as she was having some issues saving money, a week after that conversation, we took her to UCO bank and helped her open her account, but a few weeks later, she told us that it's getting difficult for her to go to the bank as she wasn't educated enough to communicate with bank authorities. Hence, we went ahead and closed her account. Similarly, this kind of problem is faced by semi-literate people who have difficulty communicating with bank authorities as they feel a lack of confidence.

In conclusion, due to a lack of education, some people do not feel confident enough to go and open an account in a bank. People are unaware of govt schemes; they end up investing it in chit funds/ investing it in their shops/borrowing money from money lenders in times of emergency, and paying more interest to the moneylenders. To understand the problem in much deeper context, it was essential to understand the channel of communication in a rural area. Once I understood the channels, I wanted to make more straightforward/more accessible attempts for the users to acquire banking information.

Channel of communication in rural areas:

Govt.Loans—---BanksManagers—------BankMitra-----------People

2. Medium Of Communication in Rural Area

In rural communities, the medium of communication is minimal. Depending on the area, people have found solutions to communicate about finances. The promotion of savings and insurance culture among rural populations is through awareness campaigns, financial education training, or experience/testimony-sharing among insured and uninsured people. The detailed explanation for each of these mediums of communication is as follows:

KIOSKS and Financial Camps: Kiosk is a kind of banking model that provides special banking services in unbanked areas through Common Service Centers (CSC). Bank mitra/ sakhis are appointed with a laptop-based solution to offer special banking services to potential customers.

Word of Mouth: Word of mouth is passing information from person to person, which could be as simple as telling them about something. In rural, the information about loans and schemes is transferred through word of mouth. In this way, critical information on finance is passed among local communities.

Focus groups: In rural areas, the most common way of spreading information is through talking, so in the area, if some people have television or have access to news, they sit in the evening to talk about it.

Newspaper/Campaign poster: Newspaper/ Campaign poster outside banks or CSC points with the necessary information.

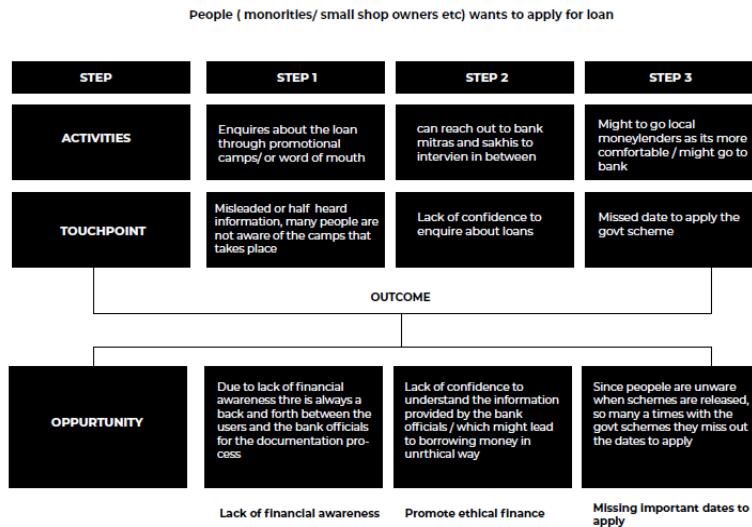*Newspaper Campaign Poster- Aaryavaat Bank*

3. Insights (problems faced by people)

The rural population here has limited or no access to financial services. The branch banking route is not very practical due to the considerable cost of opening the branches, high operations costs, limited banking hours, illiteracy, non-availability of alternate channels in rural centers, etc. Further, it will be wrong to assume that poor people don't save anything. Even if they save 100 Rs at the end of the day, they go and save it. Most people open bank accounts of 10,000 – 20,000 as that's the money they can save, but in some cases, the finance exceeds up to 5 LPA.

Therefore, the banks will have to provide some technology-driven products such as ATMs and internet kiosks to implement financial inclusion successfully, and over time, they did. But the problems people face are due to a lack of understanding and accessibility.

Communication: These loans and schemes is communicated through camps and word of mouth, or in a few cases, there is a gathering in village heads' houses. But only 20-30 people gather to listen to it.
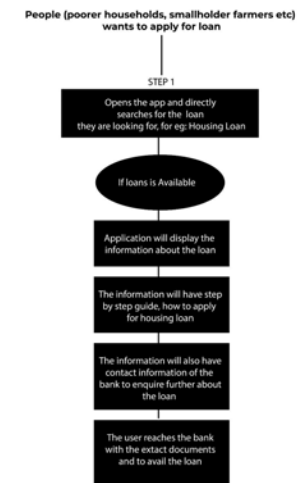
Flow Chart: Current Scenario

People (monorities/ small shop owners etc) wants to apply for loan

STEP	STEP 1	STEP 2	STEP 3
ACTIVITIES	Enquires about the loan through promotional camps/ or word of mouth	can reach out to bank mitras and sakhis to intervien in between	Might to go local moneylenders as its more comfortable / might go to bank
TOUCHPOINT	Misleaded or half heard information, many people are not aware of the camps that takes place	Lack of confidence to enquire about loans	Missed date to apply the govt scheme

OUTCOME

OPPURTUNITY	Due to lack of financial awareness thre is always a back and forth between the users and the bank officials for the documentation process	Lack of confidence to understand the information provided by the bank officials / which might lead to borrowing money in unrthical way	Since peopele are unware when schemes are released, so many a times with the govt schemes they miss out the dates to apply
	Lack of financial awareness	Promote ethical finance	Missing important dates to apply

A flowchart of the current scenario, faced by rural people when they apply for loans

Awareness: The awareness of financial literacy is limited to none. People are unaware of most of the terms on their own; and must go to local CSC points to enquire about them.

Limited time: For a few Govt Schemes, there is a specific time limit, and in such cases, they miss out on these opportunities, and the people miss out on opportunities to apply at the right time.

Lack of confidence: People who are either semi-literate or illiterate have faced confidence issues as they speak to bank authorities. Most of the time, they accompany themselves with another member to help them out with bank-related queries.

Flow Chart: Scenario With Digital Solution

People (poorer households, smallholder farmers etc) wants to apply for loan

STEP 1

Opens the app and directly searches for the loan they are looking for, for eg: Housing Loan

If loans is Available

Application will display the information about the loan

The information will have step by step guide, how to apply for housing loan

The information will also have contact information of the bank to enquire further about the loan

The user reaches the bank with the extact documents and to avail the loan

Flowchart: Scenario with Digital Solution

4. Formulation of Problem Statement

Statement 1: The Indian government has introduced a number of loans for the rural population, but due to limited communication channels, information is not reaching people effectively; as a result, people are unaware of what the government is doing to assist them.

Knowing about loans /schemes is beneficial for all citizens. In rural areas, the awareness of doing ethical finance is minimal, almost negligible. People are not much aware of any financial loans which are released by govt/the bank. The type of communication among these people is usually spread with word of mouth, or camps, or bank mitras, and with such methods, the awareness is not conveyed efficiently. So a proper communication medium is required where people can educate themselves about different types of benefits provided by the government. Furthermore, people should also have access to step-by-step guidance regarding eligibility, documentation, and applying for loans. So that they understand and then can apply for loans that are suitable for their own. They would have the complete details and eligibility when they go to banks.

Statement 2: To create a medium of communication where people can educate themselves about Govt loans and schemes and access the information giving equal opportunity to everyone regarding basic banking.

Rural communities are highly underserved, and the medium of communication is also limited. Depending on the area, people have found ways to communicate about financesPromotingof savings and insurance culture among rural populations through awareness campaigns, bank mitras, financial education training, or experience/testimony-sharing among insured and uninsured people. In such cases where the communication is not clear, a medium can be created where the people can share and educate other about finance, and this will not only help people but will also give them the independent power to make their own decisions

Final Problem Statement: The problem that needs to be addressed through this communication project is the awareness of financial literacy and timely updates about ongoing financial loans provided by the bank/ Gov. among the rural population of Uttar Pradesh, since including every user group will make the application heavier, so we focused on one user group to take this project forward

5. Media And Form

The main aim of the communication project is to spread awareness and provide access to information. It must also have an easy reach and high understandability among the target audience groups regarding age, language, literacy, etc. The project targets small shop holders, business owners, etc. To implement this idea, the project needs to utilize a digital platform communication as its crux. In today's times, a little help from technology can go a long way because nowadays, everyone has a primary phone.

1. People can use the product to access information with a click to access all the information. As for the form, a digital application is the best-suited form of communication for the kind of communication that this project demands.

2. The application will use the local language user-friendly text, audio, and video content, enabling people to read and listen to gain appropriate information.

3. All the information regarding financial news, financial literacy/ terms, and the loans which are released can be accessed very quickly, the information can be shared in the local groups as well to spread awareness and information, sending out the correct information at the right time

Access to information: Giving an equal opportunity for everyone to access the information regarding basic banking

Guidance to implementation: Step by Step requirements of the correct documents before applying for a loan.

Confidence in People: Empowering people to take a step and understand finance and spread awareness about ethical finance.

Use voice-based interaction in the native language to improve reach: Empowering people to take a step and understand finance and spread awareness about ethical finance.

6. Research Phase

I.   Field Report 1

a.   Introduction

The field visit aimed to understand the idea of finance from people. The main aim was to understand the channels of communication, how the bank executives operate daily, and how they convey information to the locals.

b.   Initial Observations

During the interview, a few participants were aware of the schemes, but the majority were not; in a few situations, the information is passed on by word of mouth or through financial camps held by local banks regularly so that people are aware of the government's plans. The primary goal was to figure out how people and banks communicate with each other. The bank is taking many initiatives to teach the rural populace about money. People have expressed apprehension when visiting banks because they believe they are not well-educated enough to converse with bank officials. There is a lack of financial awareness, and there is a lack of trust, which goes hand in hand with a lack of financial literacy.

I proceeded with generic questions to the participants as follows:

- Background: Participants; Name, Age, Sex, Occupation
- Are they aware of any schemes released by the Govt
- How many members are there in their family?
- If they are aware of savings, if yes, how do they save?

During the documentation, I jotted down the recordings with the participants I interviewed; the main problem which got identified in the first phase of fieldwork was the information regarding schemes, financial benefits, etc. was not communicated to the people, so in these situations, many people are entirely unaware but few of the people were aware of Govt Schemes. People acknowledged there was a gap in awareness and knowledge of finances. The introduction of loans through Govt/ banks has benefited the lower-income people to a very high level as they have reduced borrowing money from moneylenders or any other unethical finances. So to promote ethical finance, a fair amount of financial literacy is also required to educate people. After this, I conducted a telephonic interview with Bank Mitra to understand the process more clearly.

c. Interview With Rajni (PNB Bank Manager)

Telephonic interview

Rajni works as a bank employee in Punjab National bank. I had a telephonic conversation with her regarding the roles and duties she has towards the bank. The actual process of whenever a scheme is the participant application is submitted in Nagar Nigam (municipal office). The application is attached and sent to the banks of the respective area, where especially there account is maintained, and the accounts are processed through the application. For schemes like Mudra, people usually spread the information through word of mouth, and people come to the bank to enquire about the same. The chances of fraud are also high in rural areas. That is one of the primary reasons people are not comfortable using ATM cards and prefer going to the banks more for withdrawing money; because of lack of education, many people are unable to avail or get accurate information about govt schemes.

Interview With Ram Pathak (Bank Mirta)

Telephonic interview

Ram Pathak has worked as a bank mitra with Gramin bank of Aryavat, for 1.5 years. His main job is to educate the rural population about financial literacy; there is no time limitation but he has to dedicate 3-5 hours in the field every day.

The promotions for loans and schemes by govt or the bank are done by going door to door or set camps in the village where people come and inquire about it. They are allotted in different regions, if people around the area are not aware of schemes, it's then their responsibility to make them aware. There is constant pressure from the Govt/ Bank that the people should avail themselves of the scheme for their benefit in a minimum time, and as they are already working with people, there is a mutual trust between them. As they are mediators between banks and customers, some technological solution (for the Mitras) might help them to do their work more efficiently, they can use technology to create efficient awareness of money, which can also save some time. The schemes have helped the people to overcome their debt, and the Mitras work together to create awareness on ethical savings.

Because promotions differ from bank to bank, the disadvantage is that if a scheme is not communicated to customers promptly, they cannot take advantage of it.

d. Analysis

The majority of bank-customer relationships are built on trust. There is a significant awareness gap; individuals in small towns talk about money via word of mouth; if a person benefits from a scheme, they will tell other people about it, and that is how to scheme information spreads in a rural environment.

II. Field Report 2

a. Introduction

The field visit aimed to understand how a bank operates in a rural area. The bank I visited is Gramin bank of Aryavat, Sonai. I got introduced to Meena Ji (bank manager), who referred me to Raj Kumar Agarwal Sir, who has been working with the bank for 35 years.

b. Initial Observation

When I reached the bank, the whole place had only 5-6 employees; the rest were bank mitras/sakhis working on the field. After 20 minutes of waiting for the bank manager, he referred me to one of the oldest employees who has been associated with the bank for the last 35 years. It was an excellent opportunity for me to talk to one of the most experienced employees as his point of view is extremely important.

I further proceeded with questions like:

- What are the different kinds of loans that bank offers?
- What documents are required to avail of any loans?
- How much money do people generally save?
- What is Kisaan Credir card?
- Which is the most popular loan among the people?
- How do people apply for loans?

Interview With Raj Kumar Agarwal

Mr. Raj Kumar Agarwal has worked with Gramin Bank of Aryavat for the last 35 years; before coming to Sonai Branch, he worked in Hatteras for 32 years. Loan and schemes are communicated through camps or word of mouth, and 20-30 people attend the camps. Mostly the people who avail of loans are shopkeepers, farmers, vendors, etc., and the limit goes up to 5 lakhs, but for most people, the savings are not more than 10,000. People who want to open their accounts need to be introduced by an Introducer (someone who already has an account in the bank). The most popular loans availed by most people are Term loans and Kisan Credit Card (KCC). In most cases, bank loans have helped people escape their bad debts, but some still opt for moneylenders and pay huge interest on the borrowed money. Technology has come a long way and has been a massive help for the people in rural areas, the change is slow, but it has helped many people to opt for a better option that is ethical and has a low interest.

Gramin Bank Of Aaryavaat, Sonai

d. Analysis

These loans and schemes are spread through camps, word of mouth, and, in a few cases, a gathering at the village chief's residence. However, only 20-30 people show up to hear it.

In these places, the bank mitras have an excellent understanding of the people, and the village people rely on them for information. With the help of technology, there have been a lot of positive changes, and people have started reaching out to banks rather than moneylenders and getting a high-interest rate on borrowed money.

III. Field Report 3

a. Introduction

The financial camp aims to raise awareness of new schemes; the camp is conducted to introduce a new scheme for the people, which allows them to waive a part of their previous debt. The people were asked to be registered on the spot in the discussion. The camp was conducted by bank managers, regional managers, and a bank coordinator. They take appointments from the panchayat and conduct the camp in their house/courtyard.

b. Duration

The financial camp lasted at least 5-6 hours, from 12 p.m. to 5 p.m., and each person's issues were discussed personally. Depending on the loans and schemes or any other information they want to convey to people, this type of financial camp is held once a week or four to seven times a month.

c. Participants- numbers/ socio-economic groups

About 10-20 participants from the village, excluding the bank officials.

Financial Camp in Rochi Banger, Mathura

d. Objectives of the camp:

- To raise awareness of an ongoing scheme.
- To address the scheme among the participants, discuss their problems one on one, and find a solution.
- To get the participants to register for the scheme.
- To raise awareness about the DDS- Dairy scheme, about cattle and to give loans to people who require it, how the loan will help the dairy farmers, etc.
- In these camps, the cases are discussed among the people so that the defaulters talk about their problems and they seek direct help, in this way the other can also learn from others
- If other people are interested in the scheme, then the panchayat or participants can pass on the information to other participants.

Questions from the participants regarding the scheme:

- How much percentage of interest is being waved off by the bank?
- What are the other benefits of the scheme?
- How can they register, and when can they register?
- What is the documentation process?
- How to pay off the loan?

Analysis

Bank employees organize the camps according to the schemes. They go to the areas and advertise new schemes when they are released because they have strong ties to the villages. They may assist bank officials in determining the best places and locations for a financial camp.

Depending on the number of participants, these camps are held 2-3 times every two weeks. The expected outcomes of such camps are that attendees will come forward and register themselves; if they do not, they will go and tell other participants about it if they are interested. The bank coordinator will be in the village anyway, promoting or discussing loans, so the villagers will rely much more on bank mitras for information.

What can we do?

The application can help provide the people with basic financial information: information about loans, documentation, types of identification, credit score etc . The bank mitras can help the villagers if they wants to enquire further about the loans through the app itself because there is a strong connection of trust between the villagers and the bank coordinators.

The rural population here has limited or no access to financial services. Due to the high cost of opening branches, high operating costs, limited banking hours, illiteracy, and the lack of alternative channels in rural areas, the branch banking approach is not very viable.

People who live in rural areas make up the target audience for this project. They are a combination of semi-literates, illiterates, and literates. Initially, I meant to target farmers, street hawkers, and small business owners as my target audience because the government has made many perks available to them. However, when I considered appealing to a big group of people from various occupations, I realized that the application would have to be customized. We narrowed the target audience down to small business owners because they are unaware of the government's benefits.

7. Target Users

Small, medium and large-scale businesses are all eligible. The government provides opportunities for all, and few business

owners are familiar with the government's loans; in reality, they use and benefit from them throughout the pandemic. I was able to better strategize material for this target group after learning more about their background. They are incredibly involved with a large amount of info from the internet, such as Facebook, news, and so on. This provided a framework for developing a combination of static and dynamic content for users.

a. Brainstorming

Brainstorming is a method used to generate ideas to solve clearly defined design problems. During the brainstorming phase, I initiated the approach with a clear mind and jotted the words I heard from the users multiple times. During the brainstorming session, I tried to jot down as many words as possible so that they would help me in further research. Brainstorming is generally a simple, natural strategy for imagination and problem-solving. Brainstorming is a group activity where participants share their ideas as soon as they come to mind. However, in this case, after the first field visit, I did this brainstorming session for better clarification on the subject.

8. Design Process
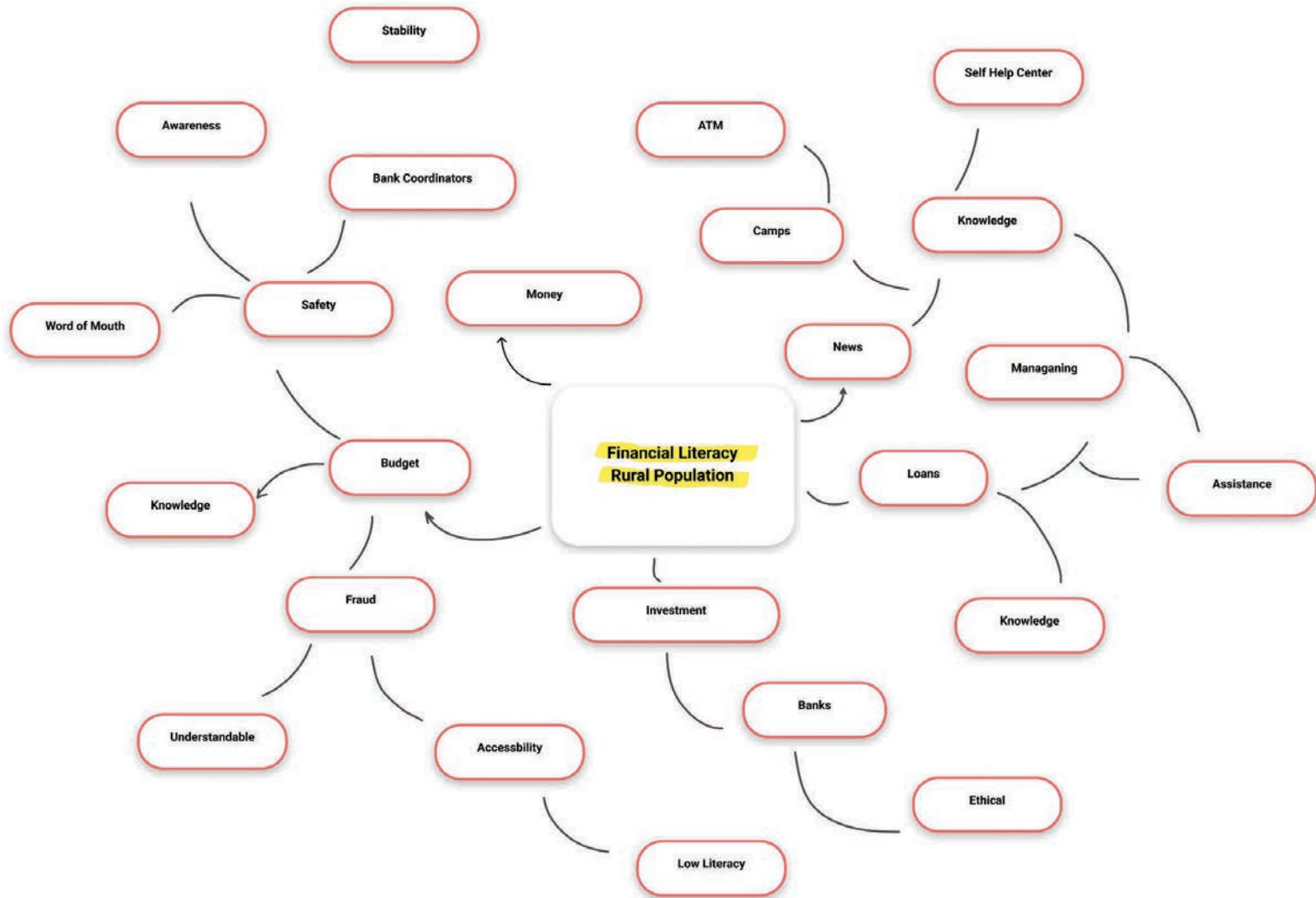
Brainstorming ideas for initial research

b. Survey Finding

Research Goal: The aim is to give accessible information about financial literacy to small business owners. The rural population has limited or no access to financial information released by the govt. Along with the existing methods like financial camps and bank mitras, the app can help give the same information to more significant people.

Goal: To create awareness, promote ethical finance, and update our users on timely financial news to avoid missing out on opportunities and to create a medium where people can educate themselves about business and finance.

Methodology: The research for this project is a combination of surveys and interviews with small shop owners, etc. the questionnaire was distributed among 35-40 participants. All the questions were written in Hindi so that it's easy for people to read, and the results were as such:
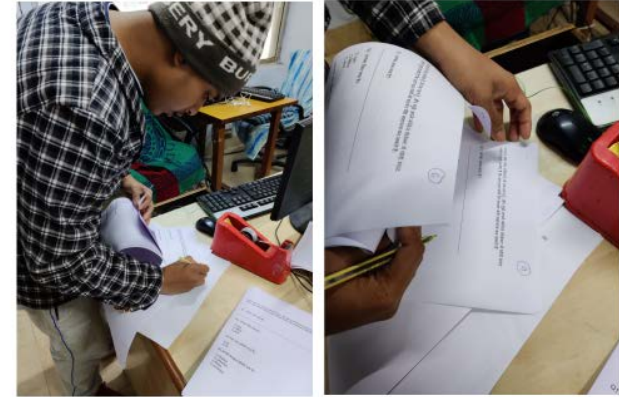
नमस्ते, मेरा नाम अरोमा है, मैं एक छात्र हूँ, और मुझे अपने कॉलेज प्रोजेक्ट में थोड़ी मदद चाहिए। मुझे उम्मीद है कि आप इस फॉर्म को भरकर मेरी सहायता कर सकते हैं:

Q1. आपका नाम क्या है?

_____

Q2. आपका लिंग क्या है?

☐ पुरुष
☐ महिला
☐ अन्य

Q3.क्या आप नौकरि करते है?

☐ हा
☐ ना

Q4.आपकी वैवाहिक स्थिति क्या है?

☐ विवाहित
☐ अविवाहित
☐ विधवा
☐ तलाकशुदा

A survey questionnaire is distributed among the participants.

Q5. क्या आपके बच्चे हैं? यदि हां, तो क्या उनकी आयु 18 वर्ष से अधिक है?

☐ हा
☐ ना

Q6. क्या आपके पास एक बैंक खाता है?

☐ हा
☐ ना
☐ शायद

Q7. क्या आपके पास स्मार्ट फोन है?

☐ हा
☐ ना

Q8. क्या आपने मूल वित्तीय शब्द जैसे क्रेडिट, क्रेडिट स्कोर, डेबिट इत्यादि के बारे में सुना है?

☐ हा
☐ ना

Q9. आप महीने में कितनी बार बैंक जाते हैं?

☐ 1-2
☐ 2-3
☐ 3-4

Q. Do you know the difference between savings, investment and insurance?

44% are not aware of the difference between these terms

Q. Where do you get to hear about financial news?

Q. Do you know about basic banking?

38% are not aware of basic banking

Q. Do you have a bank acount?

Insights

After the survey, data is collected, and the responses are converted into statistics. The summary of the responses is as follows:

- 85% of the people have a bank account
- 80% of people use smartphones
- 44% of the people are not aware of any loans by the govt.
- 50% of the people visit banks 2-3 times a month
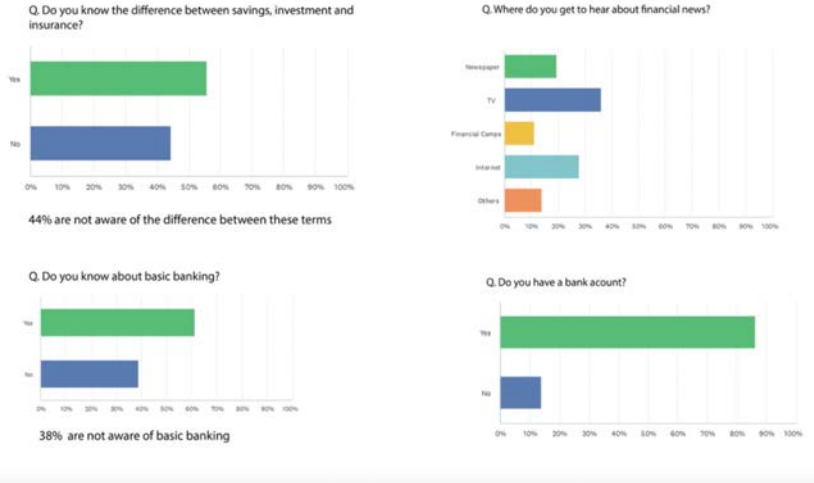
c. User Persona

In user-centered design, user personas are fictional characters built based on user research to represent various user types who would be perfect for the product. These personalities are based on real-world user data. A persona represents your target audience's needs, goals, and observed behavior patterns.

Understanding who will use the product is a critical element of the design process, and knowing the audience will assist us in influencing the product's features.

After speaking with several small business owners of various types, the following personas were developed.

Experienced Sharmaji

Comfortable using smart phone

Literacy
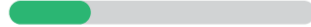
Sharmaji started his small kirana shop, and its been 15 years since he has been taking care of it. He comes early in the morning and sets everythings up, sometimes he is accompanied by his son during busy weekends. He manages to save some money but he invests it back in his shop like buying new things or upgrading it constantly for profits. He has a balance account but he finds trouble in communicating with the bank people as he says he is not educated, because he never went to school, so most of the times he is accompanied by his son for all the bank related work. He is also not aware PMMY or any other schemes, but if he would have been aware of it, he would have seeked help and opened accounts for his family members. He is also not very active in using smart phones, and he seeks help of his children to help him operate the same.

Working Reeta

Comfortable using smart phone

Literacy

She is a working women who has been into business to support her family, she takes care of everything from looking in to the business to accounts and managing her family. She is literate and she is also comfortable using a smart phone to some extent. She likes to keep herself updated with all the news regarding to finance. She is not aware of any Govt loans and schmes, but she is curious to know about it. She is hardworking. She has taken loans for her business but from private institutes. She is aware of all pros and cons of business and she starts her day early in the morning and closes till 9pm. She also has a zero balance account but due to lack of knowledge she is not aware of any govt schemes which is actually usefull for her business. She is also interested in expanding her business to other parts of the town and she is also the sole earner of the family.

Youngpreneur Rohit

Comfortable using smart phone

Literacy

He has a family business which he has to take care of, he grew up seeing his father take care of the business, he accompanies his father every weekend to understand more about the business. His father has taught his all the tips and tricks of business and is also proactive when it comes to benefits provided by the govt. during COVID the govt loan which they took has turned out to be very beneficial for the business, he completed his education till 12 standard and has been working with his father since then . He is proactive when it comes to using a smart phone, he has little difficulty in reading and writing but that has not caused a lot of issues till date. He is aware of PMMY but no other schemes as of yet. He has a saving accounts, but also prefers saving in lockers as personal savings.

d. User Research

To find out how comfortable users are using an app and to see if it is easy for them to navigate any application. It was vital for me to observe how easy or difficult they found to use an application, and I also created a set of questions and approached the users for a conversation based on those questions.

Task 1: To see if the participants understand the visual reference and observe if they can relate to it and note their suggestions/feedback and observations
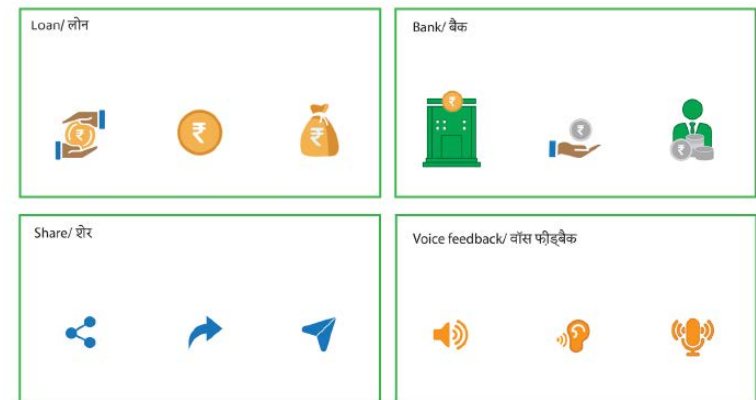
The following are a few snippets from the field, where people chose their visuals and marked them around them.
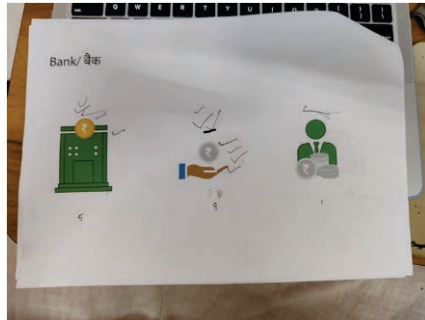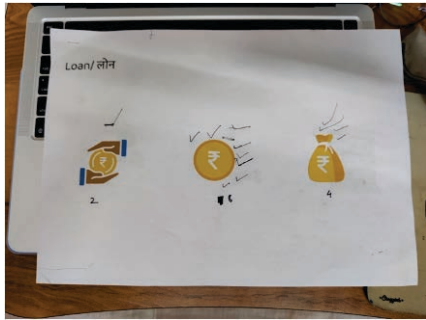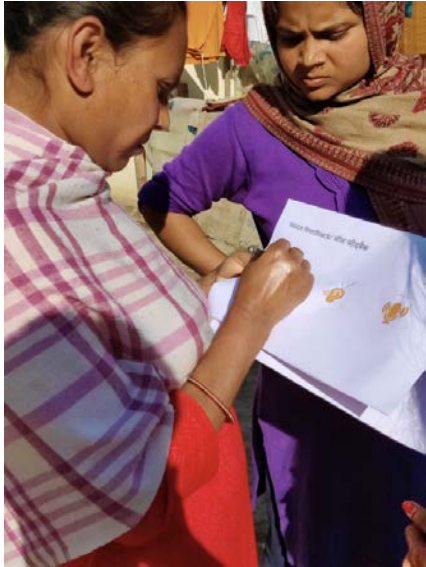
The following are a few snippets from the field, where people chose their visuals and marked around them.

Icon	Subject	No. of Vote	Comments
	Loan	2	
	Loan	8	This looks more familiar
	Loan	4	
	Bank	5	This looks like a house
	Bank	8	It looks like someone is giving money
	Bank	1	
	Share	5	"I use this button in whatsapp"
	Share	7	"I have seen this button in my phone when i use facebook"
	Share	2	
	Voicefeedback	6	"I use this button when i need to hear something"
	Voicefeedback	6	
	Voicefeedback	2	
	Fig 1	8	"He is a farmer and he is rich, he is wearing a turban"
	Fig 2	5	"He looks like a poor farmer to me the thing he is wearing in his head is half and its tied"

A table of responses collected during the research

Insights

- When interviewing the users, they mostly ticked the icons they found very familiar.

- They could resonate more with the icons with a very familiar shape or color, like hands, coins, houses, etc.

- The illustrations of farmers got a very close call vote, as the users were cataloging the farmer into a rich/poor category by looking at his turban.

The insight was beneficial as it helped me design icons for the application which is easy to understand and familiar to users.

Task 2: To take a user through an onboarding journey of a particular app and observe their reactions, take their suggestions and feedback, and note any pain points they face.

- Observe how users are using an app
- To see if they can perform a particular action

User 1: Geeta, a domestic helper, and a housemaker, is familiar with the use of smartphones as her daughter is also doing online classes, so she can understand the basics of using a smartphone; she finds it comfortable to read in Hindi.

Application used: Krishify (farmers app)

Activity

- Create an account in the application
- Upload a profile picture

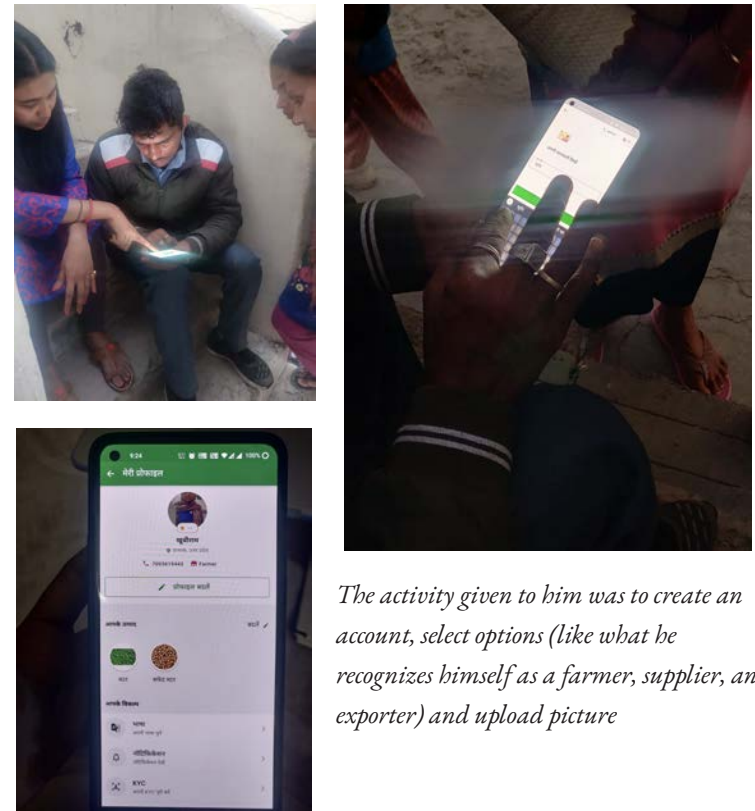*The activity given to her was to create an account and upload her picture.*

Observation: It took 30 minutes for her to complete the task, which she did it successfully, she was very keen, and she read all the steps very carefully before proceeding to any. She constantly asked me questions and was eager to learn if she didn't

understand something.

User 2: Khubiram, a farmer, does have a smartphone, but he doesn't use it much. His phone is primarily used by his kids and is mainly used for entertainment purposes, he is semi-literate, and he was a little nervous when I asked him to open an account.

Application: Bijak (a buying/selling app of seeds for farmers)

The activity given to him was to create an account, select options (like what he recognizes himself as a farmer, supplier, and exporter) and upload picture

Observation: Khudiram was very cautious when being asked to perform the task. He was constantly asking me if he was going in the right direction. He completed the entire task, but he was taking my help from time to time, and he was amazed to see that the application could provide so much information as he is a farmer.

Conclusion:

- Language is one of the main interactions for the rural population; they easily understand Hindi language apps, and if guided step by step, people are keen to use an application for their benefit.

- The other point which stood out was the familiarity, it can be with pictures, icons, the interface of the app, or anything which makes it easier for them to use.

- Many people are adopting smartphone technology, and for them, the interface has to be easy to understand, so features like relatable information, easy account setup, relevant recommendations, and support of text, audio, and image-based information can be appropriate.

e. Information Archeitecture

The following is a structure of information architecture, which shows how the application is structured. From the splash screen to how the user arrived at the home screen and navigated through four main features, the application is structured in static and dynamic kinds of information.

The following is a structure of information architecture, which shows how the application is structured. From the splash screen to how the user arrives at the home screen and navigates through four main features, the application is structured in static and dynamic information.

Dynamic Content: Dynamic content refers to content that changes based on data, behavior, and interests. The dynamic content is what will change every week or in which the users can engage themselves.

Static Content: For the static content, the information is generic and informative for the users to understand the information related to loans/ schemes. This information can be presented with the help of text /images.

Information Archeitecture
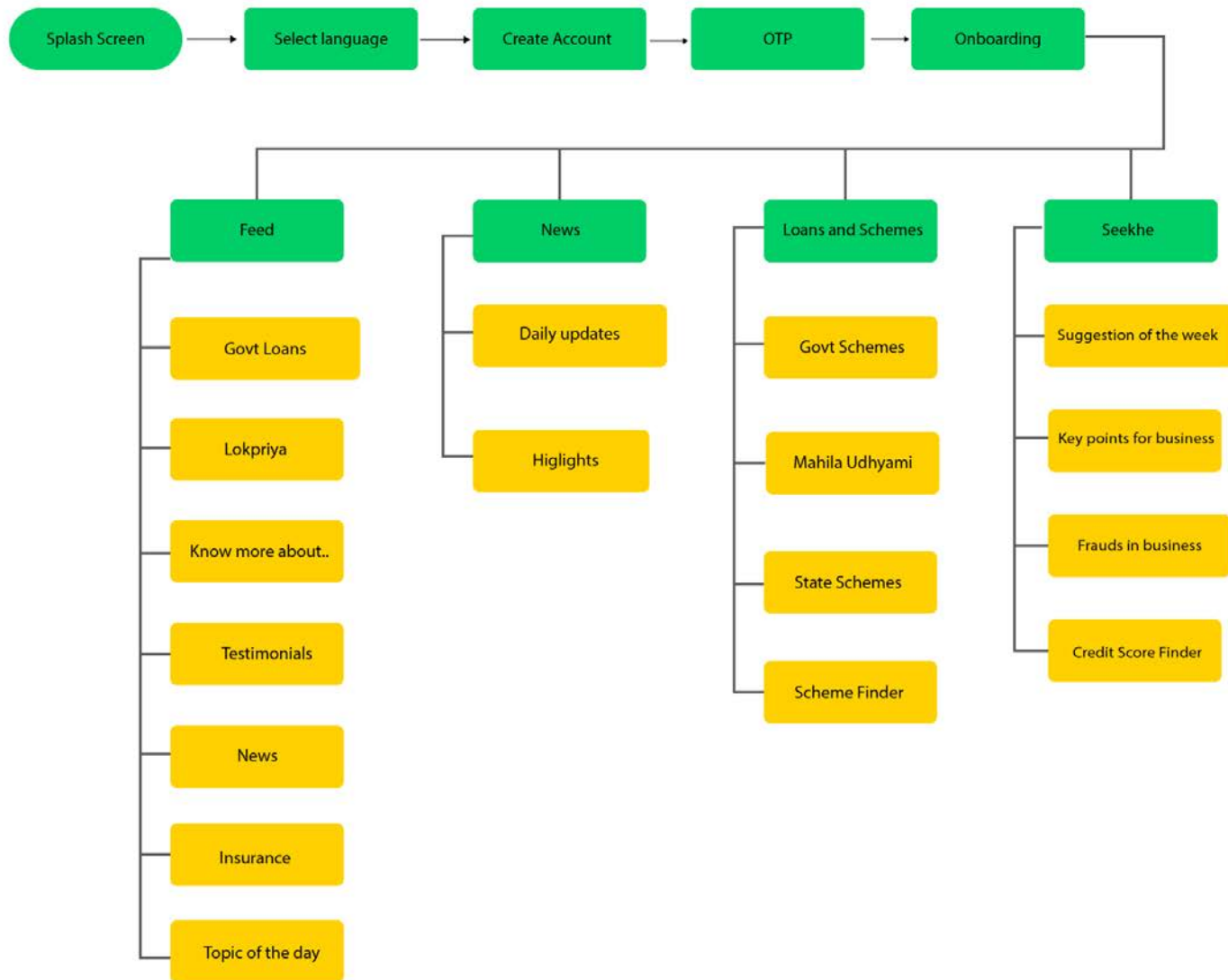
9. Content

The content used in the application is the primary language spoken in Mathura; the idea was to make the application accessible and understandable. So to make it easy for the users, the entire application is designed in Hindi.

Then it was divided into four features:

Feed: Content relevant to small businesses is displayed on the home screen. Users may relate to the navigation because it is packaged with a mix of graphics and icons.

News: This feature allows users to obtain finance-related news; this part will give users financial news.

Yojna: This section contains all of the information about loans and schemes

Seekhe: This part contains all of the information that can be useful to a person.

10. Visual Design

a. Colours

The idea was to represent the element of Trust in the color palette. These colours were chosen inspired by the Indian Currency represent earth uniquely. These colors are bright and pretty prominent from a reading point of view. The contrast ratio is 3.83:1, allowing users to read the large text. The primary is used in the backgrounds, and the accents are used in the foreground.

The colour palette has Green, Occur Yellow, Purple, and shades. The colours are inspired by the Indian currency of Rs 2000, 200, & 100. The primary colour green is the main dominant colour in the application, representing Trust & growth.

Primary   *Tints*

Accents
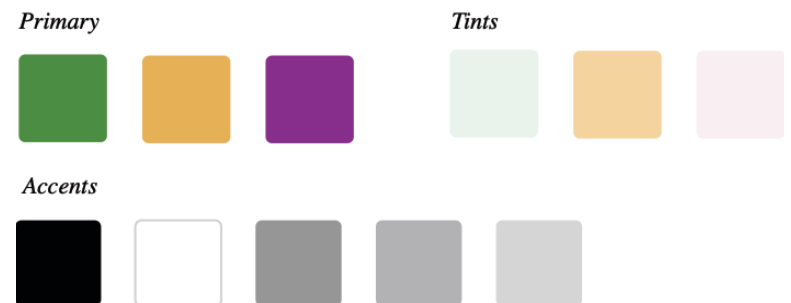
b. Typography

The typography in an application, like all other components like navigation, color palette, and image utilization, plays an essential role in the user experience of a site. However, because the information is in Hindi, it was a little more complicated in this case. As a result, it was challenging to choose the correct font with adequate readability and a wide choice of font families. I chose a Sans font family to make it easier to read on low-resolution devices.

Noto Sans Myanmar font family is taken into consideration because:

1. It is a considerable font family with approximately 9 typefaces of various weights.

2. The font is clear, readable, and easy to understand.

सरकारी योजना- Heading 1- (24)

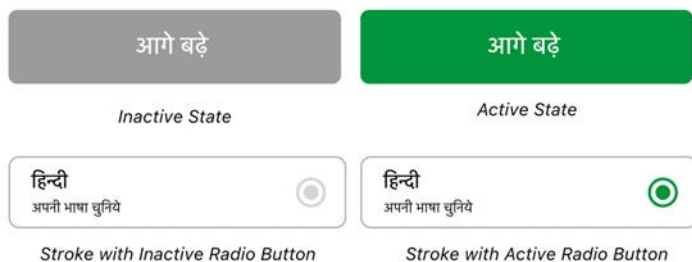सरकारी योजना- Sub Heading 1- (20)

सरकारी योजना- Sub Heading 2- (14)

सरकारी योजना- Body Text- (12)
(Body text) इसके तहत, लोन उन लोगों को दिया जाता है जो अपना व्यवसाय शुरु कर रहे हैं और आर्थिक मदद की तलाश कर रहे हैं।

c. Buttons, Icons & Grid

Button: A button indicates a possible user action. I have used long buttons so that the users find them accessible. A button can be formatted to show different levels of emphasis.


Different types of buttons are used in the application

Icon: A small selectable or nonselectable image is referred to as an icon. A few icons are altered in response to user input. The icons used are filled, simple, and old-fashioned; consumers may easily recognize these symbols because they are used regularly.
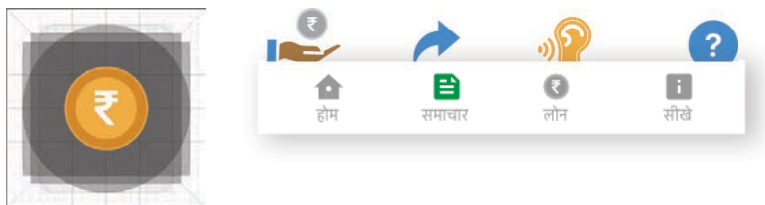
Grid: A small selectable or nonselectable image is referred to as an icon. A few icons are altered in response to user input. The icons used are filled, simple, and old-fashioned; consumers may easily recognize these symbols because they are used regularly.
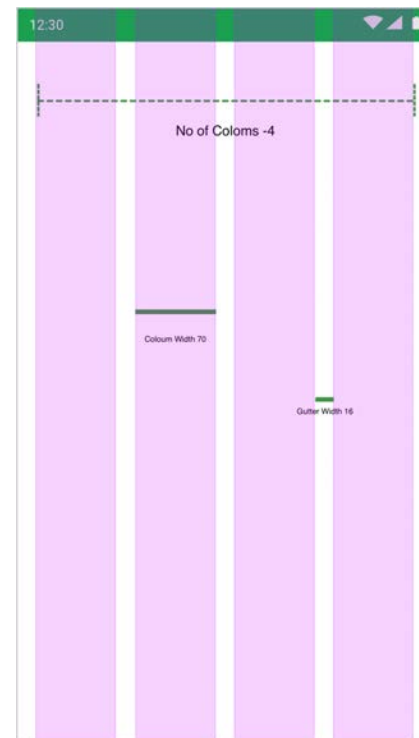
Grid setting

d. Visual Moodboard

Mood boards are physical or digital collages that arrange images, materials, text, and other design elements into a format representative of the design's style. Mood boards can be used to create a product's mood and feel, website designs, and pretty much any other type of design project.

A mix of illustrations and authentic images is considered for the visual part. As asked by the users in one of the user testing sessions, they could relate more to the images as they are very relatable.
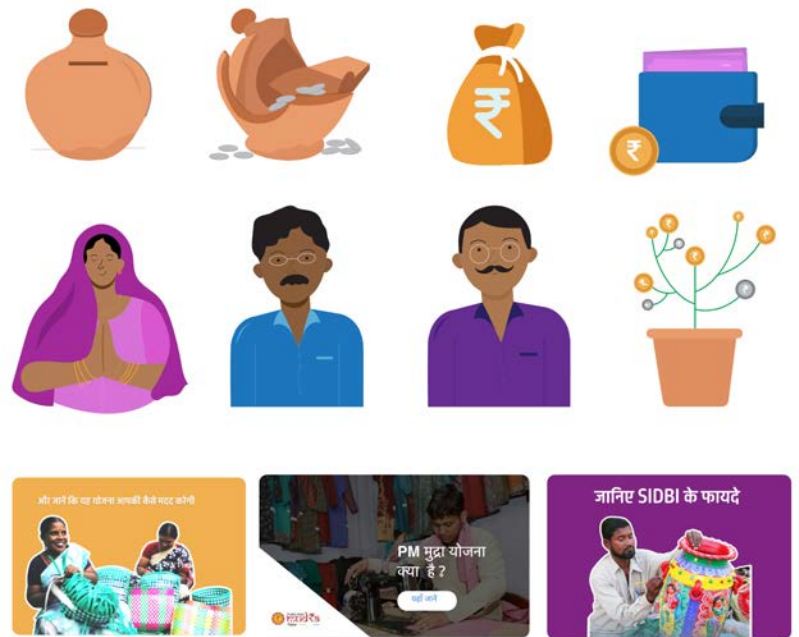
Illustrations and image banners

e. Logo Design

The popular term for the essential ingredient was "Vyapar."
So I wanted to build something similar, given a sense of commerce, and because it's an information-based application, it's there to assist people and communicate accurate information.

As a result, my mentor and I decided to keep the name "Vyapar Bandhu."

An "Rs" symbol denotes the "R" in Vyapar as the cash flow is an essential part of any business.

a. Wireframe

A wireframe is a screen blueprint representing a product's skeletal framework. Wireframes are created to arrange elements to accomplish a particular purpose best. The application had four main features: Feed, Samachar, Loans & Seekhe.

The initial wireframe was designed keeping in mind the content in which the users would be engaged. The four main features have a mix of both Dynamic and Static Content. The application is divided into four sections, making it easy for the users to click with less time. The first few ideas didn't work out from the user's point of view as it was very content and too confusing. After a few attempts, it was easy to construct a proper wireframe where navigation was easy, the actual content was on the top, and it was also a mix of dynamic and static content.

11. Application Design
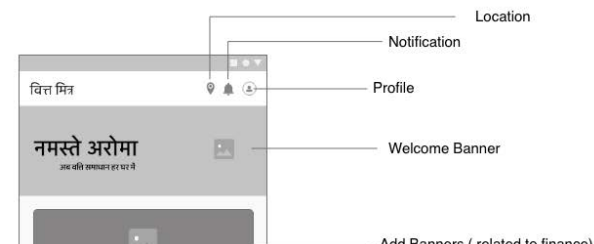
The primary adjustments decided after the alterations are to retain the vital information on top, such as information about "loans"/"popular loans," since the user would land in the app to learn more about these benefits. Scrolling further brings us to the "testimonial" and "news," both of which have dynamic material, and further scrolling takes us to the last section, which includes "insurance" and "business topic of the week." all these adjustments were made considering what would users want to consume in an information-based app, considering they are landing in the application to know the benefits of a govt scheme.

Initial Wireframe

Final Wireframe

Search Bar

Govt. business schemes

[this section allows the users to show the govt schemes related to business]

Trending schemes

[this section allows the users to see popular schemes used by other businesses, including the rate of interest in which they can avail the loan]

Scheme info

[for users who just started their business and is interested in taking loan, this carousal will help them navigate through it which answers basic questions about the loan]

This sections answers questions like:

-What is the the loan eligibility,
-How to apply
etc.
and this information can be supported through text, illustation, video etc]

Profile & Notification

Video

(the user can check videos related to the business sector, the video will redirect them to the youtube channel which they can subscribe for information purpose)

News

(this section features quick highlights, related to the business)

Insurance

[insurance section for the business people, the user can choose and know more about their preffered insurance]

Business Topic of the day

[this section is an informative section, which highlights common topic useful for business owners]

Homescreen: Feed

For semi - literate users, this button will help them access news articles in much easier way
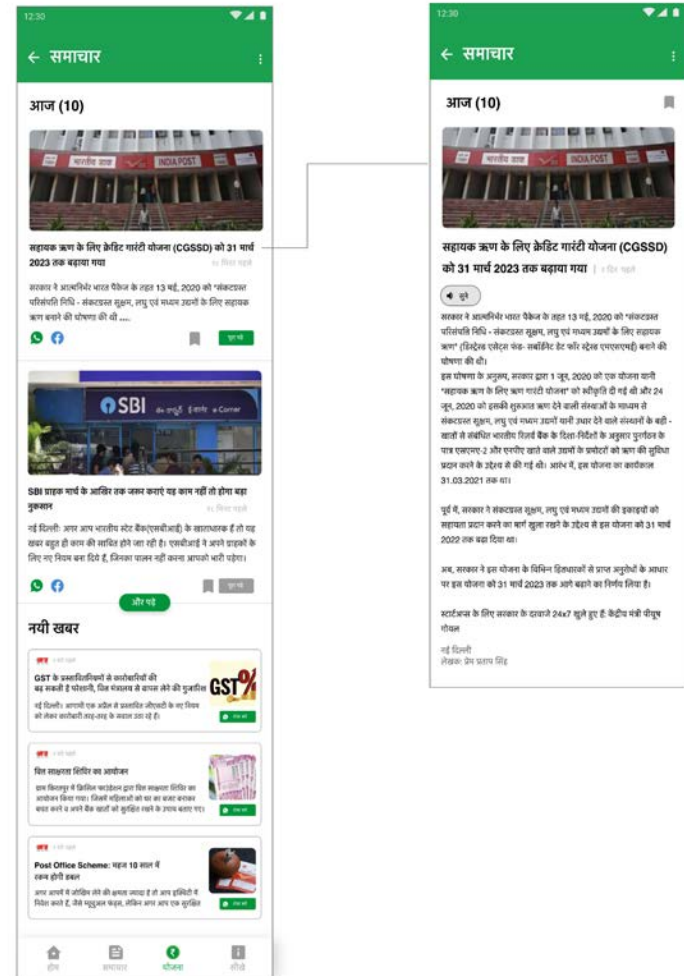
Samachar

Yojna

b. UI Design

Feed: The feed shows content relevant to the small business. The navigation is boxed with a mix of images and icons for the users to relate to.
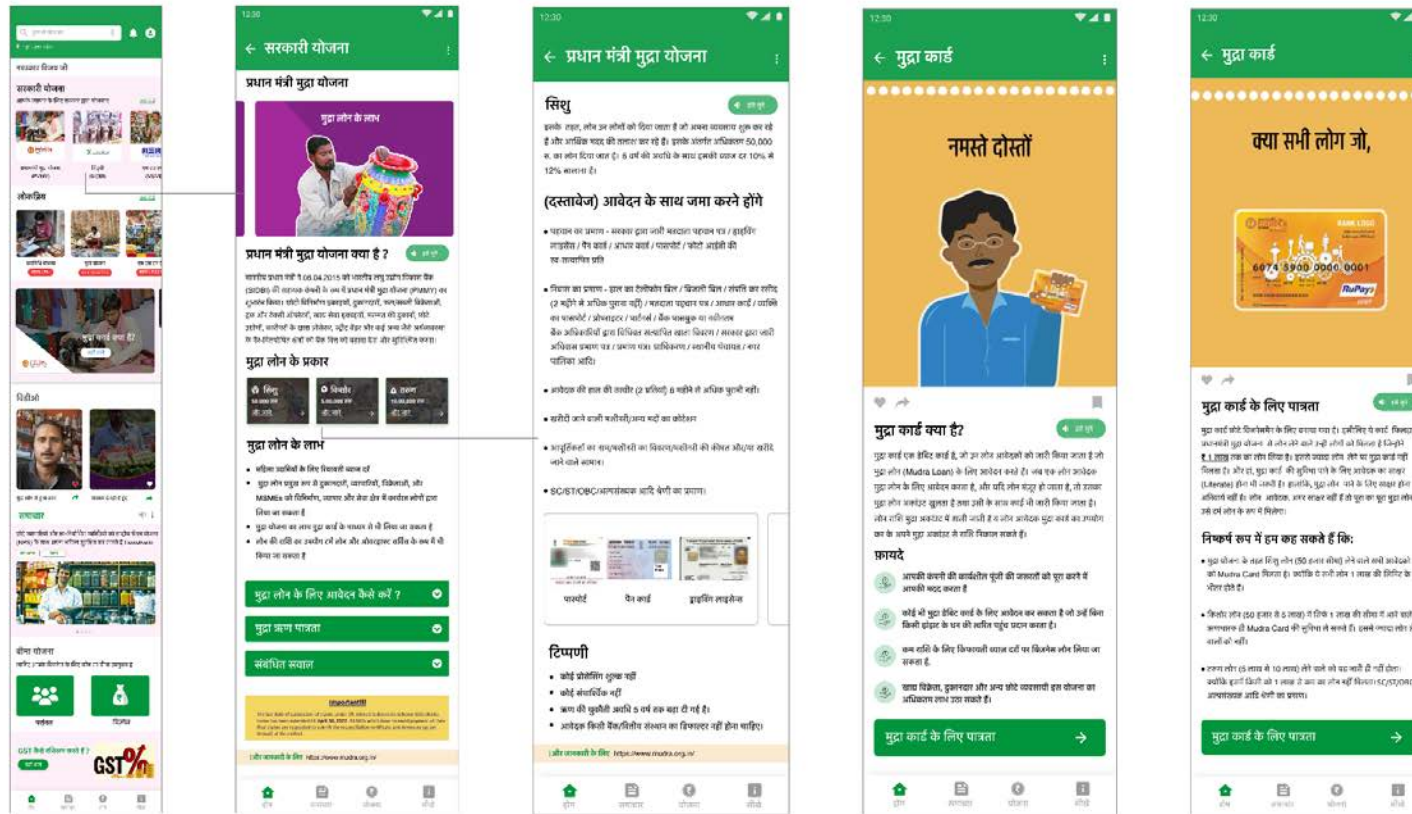
Screen: Feed

Samachar: Users can read the financial news in this part, which can be presented in static and dynamic structures, with weekly updates, trending highlights, and so on. This will assist our users in staying current, allowing them to share the information with their peers.

Screen: Samachar

Yojna: This section will provide the users with information regarding loans and schemes. It will have all the necessary details regarding the subjects, starting from eligibility to the Rate of interest, benefits, and how to apply for the schemes. The information will be supported by illustrations/ audio text, etc.


Screen: Yojna

Seekhe: During the user testing, there was a lot of suggestion from users to add something about business and suggestions regarding business for new business owners. The feature "Seekhe" is based on user suggestions and feedback received during user testing.

In this feature, the users can see the different aspects of business, basic facts, and suggestions about starting a business, learning about factors that lead to fraud and how it can be avoided, which can be helpful to the users to learn. The users suggested a few of these topics. As they were, the information is primarily static structure. The information presented is in the form of text, audio, illustrations, etc.
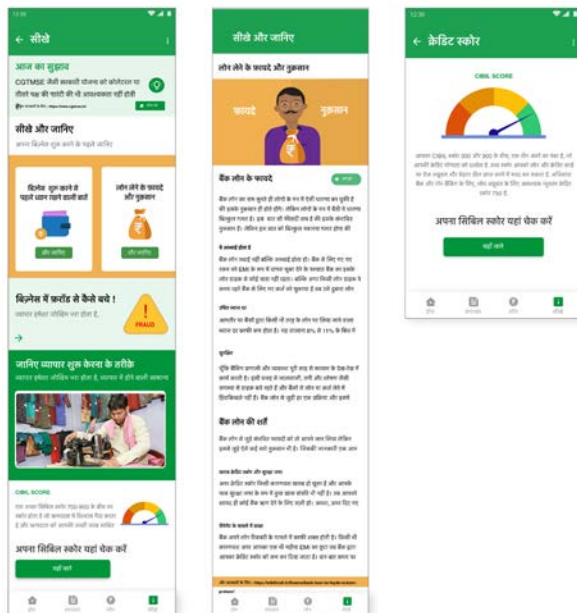
Screens: Seekhe

Prototype: Prototyping of this application is done in Adobe XD. The prototype was then tested on people through XD live preview on android, which helps is previewing the designs in mobile devices
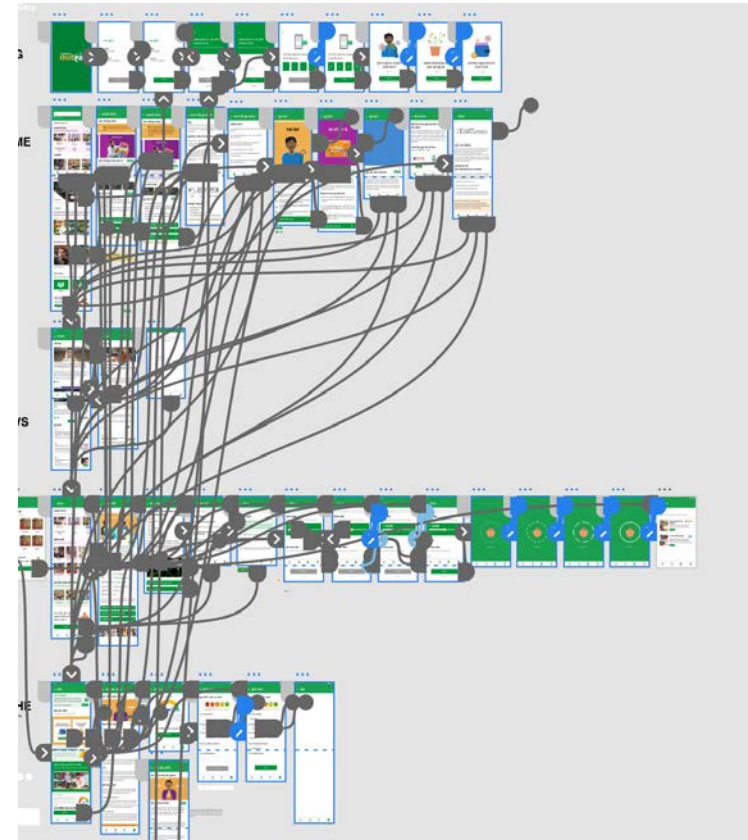
Prototype Links

12. User Testing and Feedback

After completing the application, I went for user testing to see how comfortable the users were with using the application; It included the navigation process, onboarding, and overall how comfortable the users were using the application.

Goals
• Observe how users are using an app
• Observe if they can navigate the application without hesitation
• Taking their suggestions and feedback
• To see if they can relate to the content and find it useful

User 1
Name: Gagan Garg
Business: Cosmetics General Store

Brief: Gagan Ji has operated his beauty & cosmetic business for a long time, he is literate and has taken loans for personal use, he gets to know about schemes through the "net," i.e. (the internet), and he is well versed in the usage of applications in general.

User testing with Gagan Ji

Reaction: He took his time to understand the application independently and was curious to understand more about it. The navigation was perfect for him, and he had no difficulty reading or performing a particular activity in the application. he like the news section and the section which is related to a business topic

Suggestion:

1. He could understand most of the interaction through pictures, so his suggestion was to include more images to make it easy for users like him to understand the content.

2. He also likes the section on GST as he thinks it will help young/new business owners to learn more about the subject, as GST is an essential aspect of any business.

Feedback:

1. Overall now have had positive feedback regarding the application. The usage of pictures and illustrations is helping him understand the app.

2. The icons are easy for him to understand and interact with.

3. The information for a scheme is apt enough for him to read and understand the information.

4. He like the business topic of the day section as it is information for new and old business owners.

User 2

Name: Kuki
Business: Provision Store

Brief: He has run his provision store along with his son for the last 28 years. He is aware of mudra schemes and other govt schemes which govt released to help micro, small and medium business. he uses a smartphone and uses apps in general for awareness

Interview with Kuki Ji

Reaction: He understood the app was talking about govt. schemes related to business and was interested in understanding more features, how it would work, etc. He asked me many questions and helped me understand how small businesses work in general and how schemes helped them during pandemics. As he has been in this field for a long time, he is well experienced in the business. He liked the news and schemes sections, which is very helpful for them to get information about schemes on one platform.

Suggestion:

1. He suggested I add a section of the business's pros/cons/tips and tricks as he thinks it will help the news business owners take some quick tips and apply them to their business.

Feedback:

1. He suggested the language can be slightly easy for users to read, but some words are not understandable, which might create confusion.

2. The font size can be enlarged on a few screens as he had difficulty reading it.

User 3

Name: Rishita & Reeta
Business: Stationery Store

Brief: Mrs. Rita has run her family business stationery for the last ten years. They deal with stationery and schoolbook for kids. Rita's daughter is very much interested in business and wishes to open her own business in the future. They have taken business loans from banks to expand their business but are not aware of govt loans.

Interview with Rishita

Reaction: Reeta initially hesitated, and after a while, she gave the lead to her daughter. She was very enthusiastic and was telling me what she understood in the application; for her, the pictures were also helping her a lot in identifying as she was not aware of govt schemes, Reeta is an avid reader; she likes reading the newspaper a lot and that how she keeps herself updated with business. The navigation worked well for her, and she could read everything correctly.

Suggestion:

1. Add a section on how to start a business, as it can be constructive for new business owners to learn something from it.

2. Can add a section on how to recognize frauds in business, as many people still falling into a lot of fraudulent scams, so this section can help the business people to recognize such cases

3. Can add Feedback and Testimonials, as it will build trust among business people who are reading.

Feedback

1. She suggested I add a few contents that can be helpful to uplift young/ new business owners, especially about how to start a business, different ideas for business, how to recognize fraud in business, etc.

2. She also suggested adding an alert section that can incorporate any scheme's importance.

3. Overall she liked the carousel & news because it is informatic and has static and dynamic information.

Developers Feedback

After the user testing, a point of view from the developer is also needed to see if the product has potential and how will it function in real like scenario:

Name Sashwat Hegde, Software Developer.

Onboarding: The onboarding is easy and short, so it won't be a problem for the users to feed information.

1. Giving an Email id can be an option but is unnecessary.

Feed: For each section, there can be multiple APIs. (API is the acronym for Application Programming Interface) An API is often made up of different parts which act as tools or services that are available to the programmer

News: No changes

Yojna: This section needs to be a bit modified, as it can get a bit picture-heavy,

1. The complete information can be cut short and placed in specific categories so that there are fewer images and it can load faster.

2. Expandable tabs icon needs to be changed to a different icon

3. Using fewer images in this feature will make the application light and take less time to load.

Overall:
 A a. The use of audio, text, video, and pictures will work well on almost all mobile devices, as the videos used in the application are of short time, so it will be easy for the users to consume the content, and it won't be heavy.

b. The application is accessible to the end-users, and it won't be an issue to develop as it is information-based.

13. Offline Poster

I wanted consumers to connect with themselves. The posters' primary purpose is to promote and market the goods offline or online. These posters could be placed in newspapers, printed on a small hoarding outside their store, and so on.

People can use these posters to communicate, announce new loans/schemes, and participate in debates to inform them about finances and share accurate information in their communities. The posters are A2 in size and may be printed and displayed in various locations.

I used Hindi as the primary language, as most people in my location speak Hindi.

Posters Design for Vyapar Bandhu
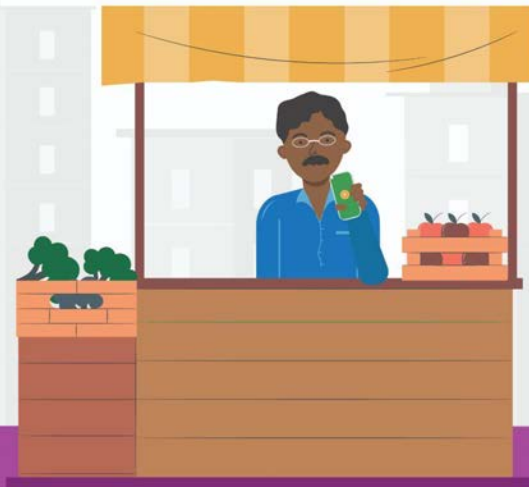
14. Conclusion:

Financial literacy is s a severe issue in rural populations. In rural areas, people suffer a lot due to unethical finance, but over time things have changed for good, and people started adapting to new methods of doing ethical finance; tho loans and schemes have their pros and cons, it is all transparent, and the bank officials provide an honest helping hand to the consumers.

I am glad I had this vision for this project, and im glad I was able to do the project to my best. The problem might lead to a solution if people utilize this application for information purposes and share it with others so that it might also help other people. I m very grateful that I met different people on this journey, I spoke to many people who are not very literate, but they encouraged me and the product I was building.

With this product, I have attempted to empower people with access to the correct information and help themselves at the right time. Access to information is very limited in rural areas, and this product will help them grow their business better.

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and Political Weekly

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Approach Author(s): SUKANYA BOSE and ARVIND SARDANA
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No. 26/27, Supplement: Review of Rural Affairs (JUNE 28-JULY 5, 2014),
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