



Manipal Business Solutions

ONDC HACKATHON-2022

Company Name : Manipal Business Solution

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Gururaj Kharvi, Leslie Pinto, Amarjeet Tiwari**

Problem Statement : Easy Framer Experience

Challenges faced by Agri-SHG

Financing & banking, User related challenges

- No easy access to Banks for transacting in terms of distance
- Cumbersome procedure to open account
- Rigid eligibility criteria of banks to give loans
- Document intensive process to avail loans
- Lack of financial & digital literacy
- Fear of implications of non-timely repayments
- Lack of Digital eCommerce Knowledge
- Lack of internet availability

Business related challenges

- Limited avenues to sell products (traditionally being sold locally only)
- Middle –men (retailers, distributors) taking a cut into profits of SHG leaving very thin margins for SHG
- No awareness about access to digital market (low digital literacy)
- Limited capital to scale up business
- No persons available for support

Hackathon problem statement- Challenge

Proposed Solution

Digital AGRI SHG (Agriculture Self help Group)



MBS driving financial inclusion in Bharat

Empowering the unbanked and underserved population through our robust & scalable Tech-platform, Rural Extension Branches, & “Feet on Street” Agents

Hybrid Technology Platform



Feet on Street Agents

Established presence in over 90+ cities
Moving beyond Rural areas, available across Metros & Urban areas



Handheld Integrated Devices



100 Mn+
Transactions
processed

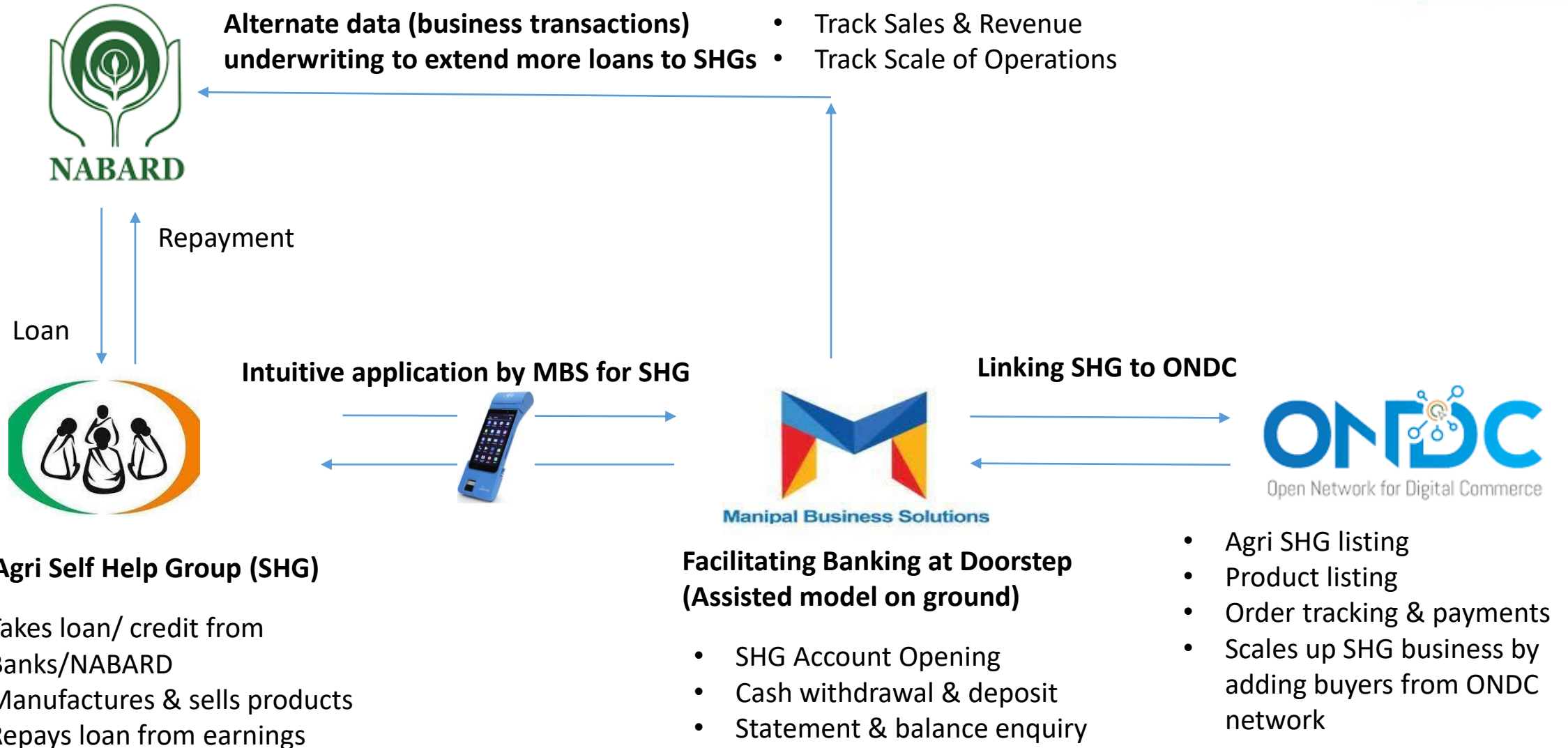
20,400+
Village
presence

9 Mn+
Customers
served

12
Banks and
counting..

7300+
BCs
Network

Ecosystem solution for Digital Agri SHG



Solution Overview



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Taking Bank & ONDC to SHG Members' Home

- Banking at doorstep for easy money transaction and credit facility
- Easy shop registration on ONDC
- Easy listing of product on ONDC
- Order tracking & payments
- Dashboard to depict sales and revenue



- Empowering SHG to manage their **Banking and Business** at their doorstep
- SHG Team Lead is **BC* Sakhi** and trained to operate the device
- **Voice to text** feature in vernacular language and Intuitive interface
- **Feet-on-street Agents & Centralized helpdesk** to support with application & transacting

- Android Device
- Biometric
- Printer
- Camera
- Card reader
- Speaker
- ONDC Access
- Extended to other h/w *
- Quality check

Solution explained



Financing & banking related solution

- Easy to use android device has built in applications which take banking to the doorstep
- One member of each SHG is made the Business correspondent (BC Sakhi) of the Partner Bank & is trained in transacting through the device
- Feet of street (FOS) Agents of MBS onboard the SHGs on the device and train them (Assisted Model)
- SHG BC can easily operate the SHG a/c & carry out banking transactions for e.g. cash withdrawal, cash deposit, balance enquiry.
- Any loans disbursed in the SHG account are easily accessible & repayments can also be made.

Solution to scale up business

- Enabling easy-to-use ONDC seller application for the SHG
- Using this app, SHG can register on the ONDC network, list the products they manufacture and directly sell to the end consumer.
- This does away with Middle –men, increases scale of sales and hence increases earnings for the SHG
- One time registration and training to be assisted by the FOS Agents.
- Flow of transaction- Order receipt, order acceptance is made simple with voice assistance
- Any updates w.r.t products can be made through Whatsapp chat
- With transactional information availability, loans underwriting can be done more effectively to extend loans to SHG

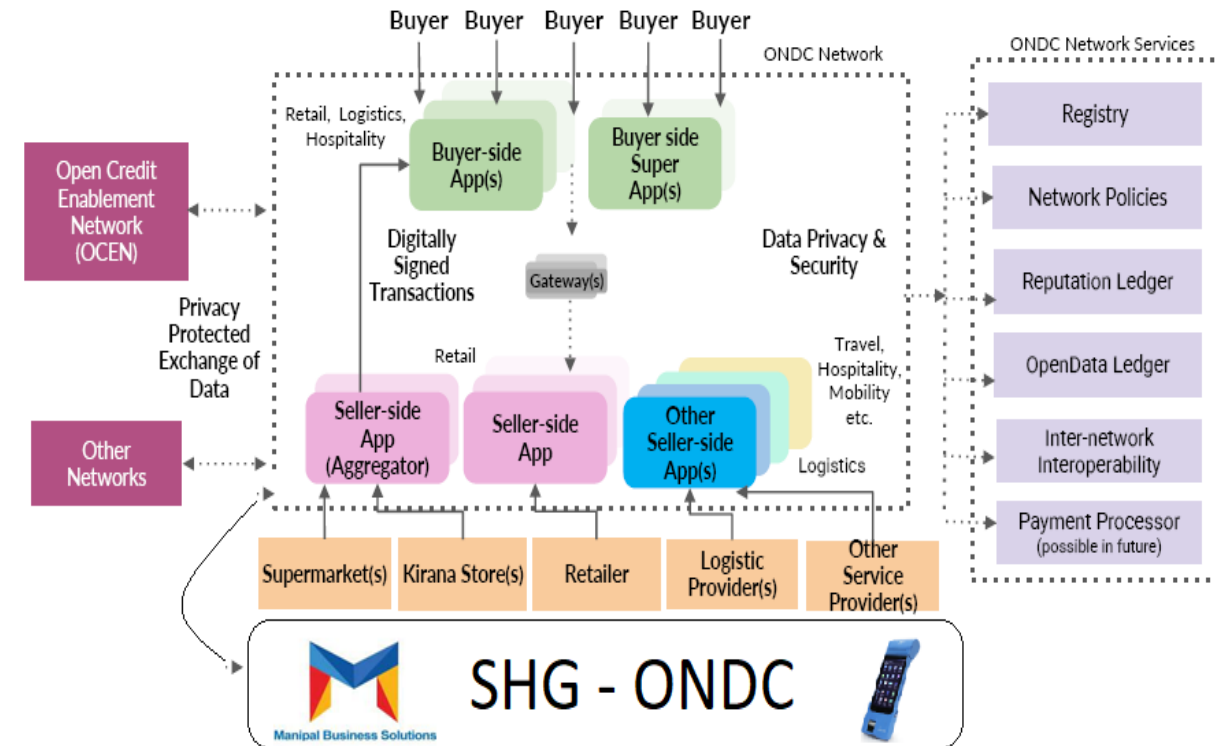
Solution Overview



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Feature of SHG ONDC Assisted eCommerce

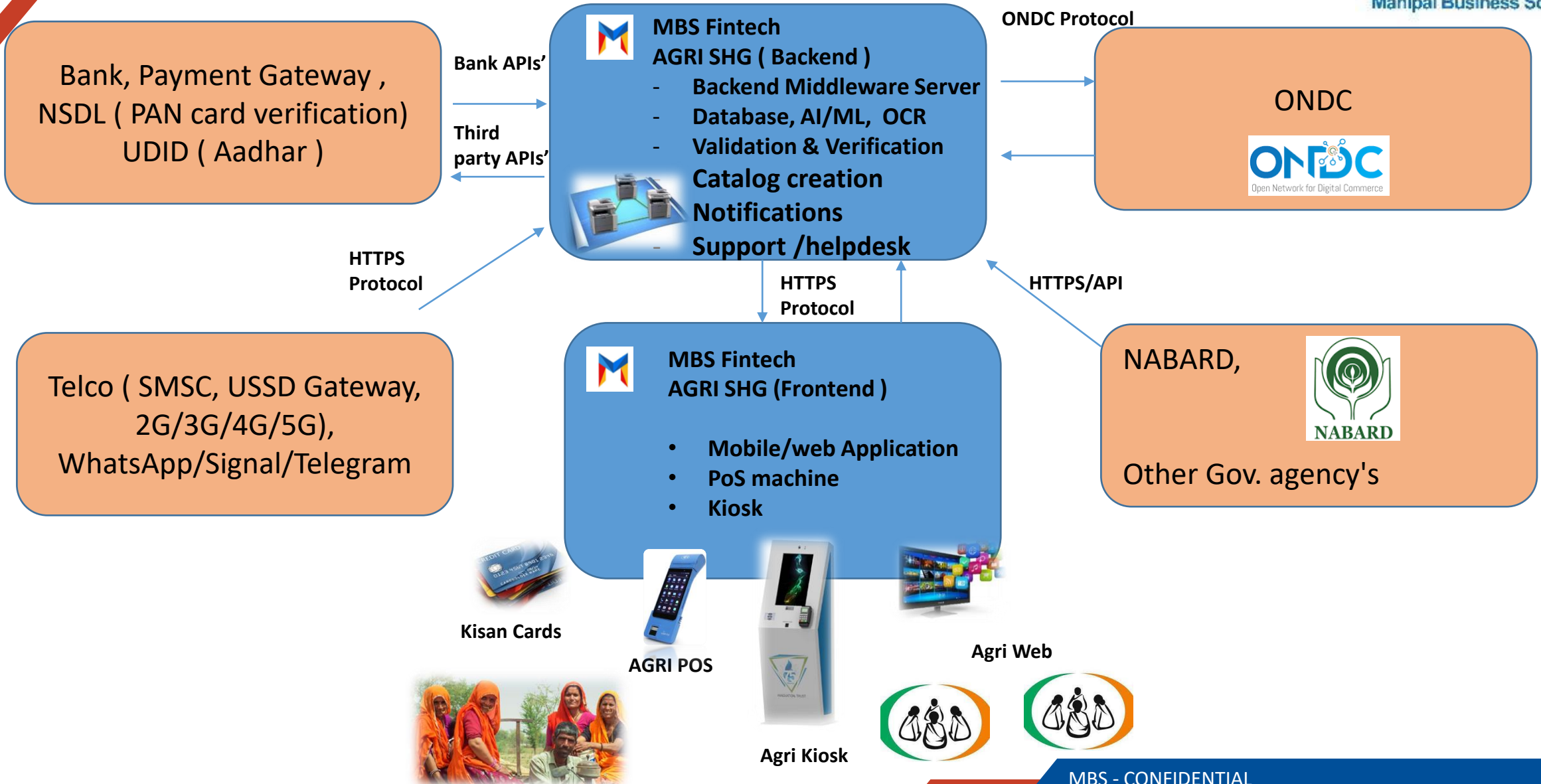
- User Friendly Interface – PoS, App, Tab, Kiosks
- Multiple language support (Hindi, English, one local language (13 local language support)
- End of End Service support
- Support desk (on call support)
- Main Functions
 - Secure –KYC Compliance - Onboarding SHG (Farmers, and other small scale business persons)
 - Product listing (as per ONDC protocol)
 - Dynamic prices (fixed price, market driven)
 - Sale market (local, state, for national/international)
 - Notification of buyer selection
 - Faster logistic (ONDC Logistic partner or MBS BC – SHG agent)
 - Dashboard (passbook details)
 - Settlement – Auto loan re-pay



Digital AGRI SHG Architecture



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AGRI SHG – Solution – Interface



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Registration (KYC) & Issuance

- Paperless registration (KYC)
- The devices available for registration are:
 - Tablet/Mobile App
 - Integrated Digital POS
 - Self servicing Kiosk
- Personalised Financial assistance



Ecommerce Management

- Add product
 - Add catalogue
 - Update pricing and quantity
- SMS, WhatsApp interface support
- MIS , Voice enables Notification System



Centralized Support and prepaid card issuance

- The Solution can be customized as per Gov. agency (NABARD, etc) needs
 - Also offer instant issue of kiosk (AGRI NABARD Card)
 - Centralized support (Voice and WhatsApp bases support available for any query, support, learning

Agri Kiosk



**Hackathon requirement challenge 4 Innovation
Digital AGRI SHG (Agriculture Self Help Group)**

Hackathon Challenge 4 : Easy Farmer Experience

Requirement 1:

Create a prototype that enables the farmer to manage their produce, using an intuitive interface, in a narrowband environment (e.g. 2G) with feature phones or equivalent devices. Farmers should be able to prepare a catalog, add images and product details, update inventory, manage prices with discounts / offers, accept, process & fulfill orders, manage order history;

- Our proposed AGRI SHG Solution works on both self and assisted mode (agent model)
- It can handle 2G, 3G/4G users – Can be used on our 4G enabled android POS device or as an app on any smart phone
- App has features of registration, adding product details with images,
- Voice-based notification, multiple language support (Hindi, English, regional/local language) and assisted SHG BC agent based model makes it extremely user friendly for our rural community.
- Also supports three types of pricing using latest technology of AI/ML : MSP based pricing, self pricing, Suggested (market based pricing)



Hackathon Challenge 4 : Easy Farmer Experience

Requirement 2:

The prototype should have an intuitive interface in the form of a standalone app or integrate with existing visual interfaces such as Whatsapp / Signal / Telegram and / or text interfaces such as SMS;

- Our solution consists of Software components along with latest technology based advance H/W components – Kiosk, Mobile Application, Point of Sales (POS)
- It can be integrated with telcos for SMS, USSD based interface for 2G Subscriber , and mobile application for 3G/4G Subscriber.
- Its enabled with Whatsapp chat solution which provides easy updation of product details.
- Our BC – AGRI SHG Agent – POS machine enables with 4G connection and latest advance components such as Fingerprint scanner, Receipt printer, camera, QR code reader, Card reader (Kisan credit card)



Hackathon Challenge 4 : Easy Farmer Experience

Requirement 3:

Provide a guided UX to a buyer who is not tech savvy so that at any stage of the transaction flow, they're aware of what they have done, what needs to be done next and how.

- Our Proposed Solution (AGRI SHG) flow support large icons, and voice enable navigation, voice based inputs, Voice based notification.
- The transaction flow consists of – KYC based onboarding user, Seller App – Catalog update using voice based input, in addition to update of catalog based on Whatapp based interface.

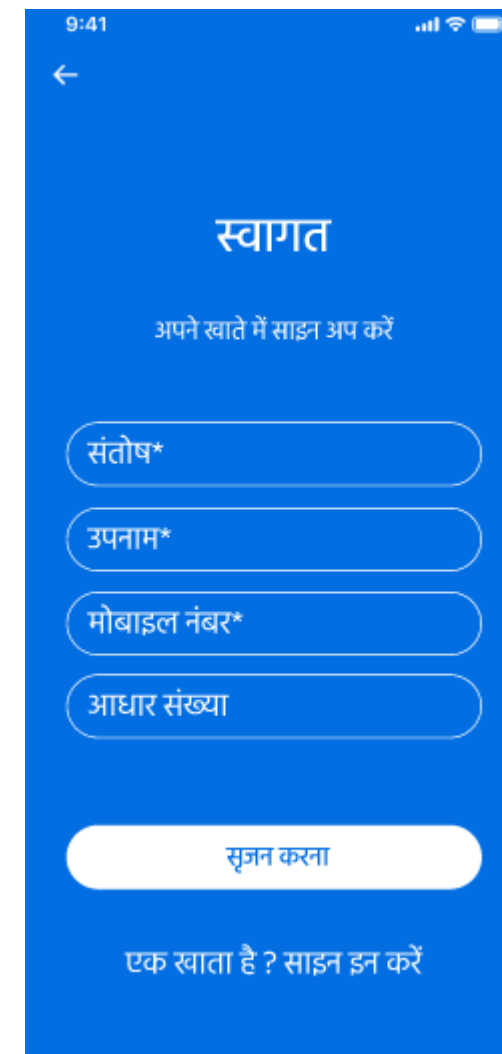
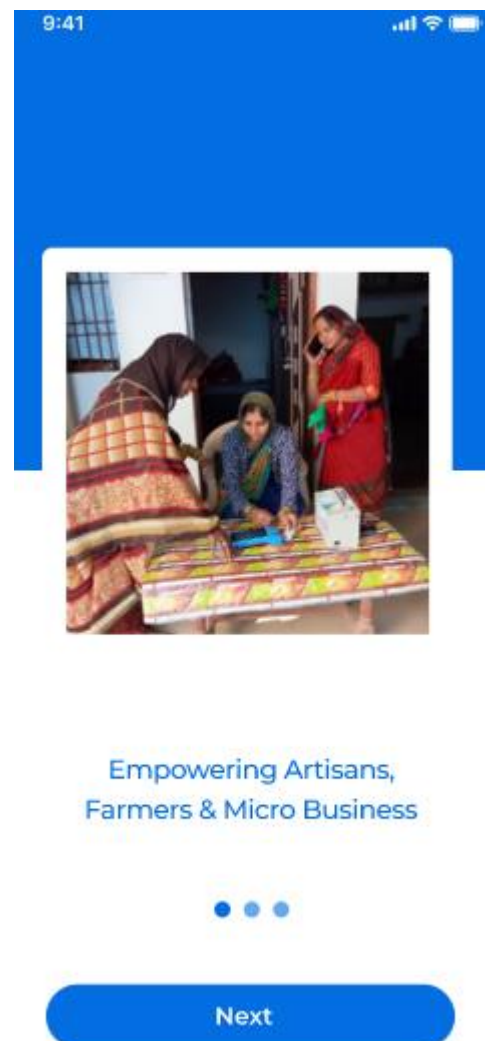
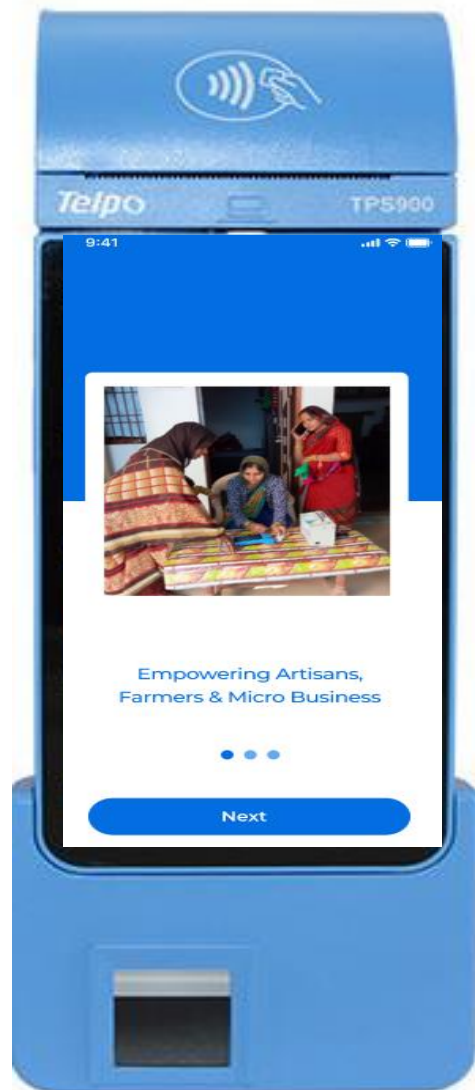


Process flow

Farmer/AGRI SHG language Selection



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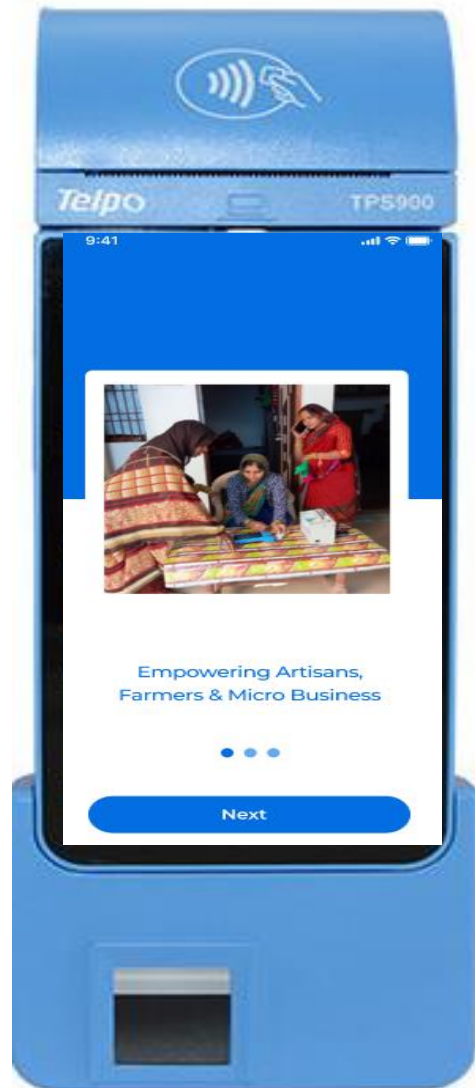


Each Screen Guided with Voice Prompt of Selected language

Onboarding of SGH member Store / Agri Farmer store



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9:41

←

स्वागत

अपने स्वाते में साइन अप करें

Tulasi

Tendon

9876542345

3456 6754 7785 4543

सृजन करना

एक स्वाता है ? साइन इन करें

9:41

←

फ़ोन नंबर सत्यापित करें

अपना ओटीपी कोड यहां दर्ज करें

— — — — —

क्या आपको कोई कोड नहीं मिला?
नया कोड फिर से भेजें

सत्यापित करना

9:41

←

फ़ोन नंबर सत्यापित करें

अपना ओटीपी कोड यहां दर्ज करें

6 2 2 2 2 2

— — — — —

क्या आपको कोई कोड नहीं मिला?
नया कोड फिर से भेजें

सत्यापित करना

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आधार नंबर सत्यापित करें
3456 6754 7785 4543



सत्यापित करने के लिए अपना अंगूठा
फिंगरप्रिंट स्कैनर पर रखें

← मेरी दुकान

दुकान विवरण स्थान केवाईसी विवरण



This information is used to set up
your shop

स्टोर नाम*
Tulasi Store

स्टोर विवरण*
Sell Groceries and homeware product

Next

← मेरी दुकान

दुकान विवरण स्थान केवाईसी विवरण



पता*
214/5 kondana. Lucknow

पिन कोड*
576340

डिलिवरी रेंज (किमी में)
10


भौगोलिक स्थान*
132.7890, 123.7894

चिकी क्षेत्र*
Regional x State x National x

Next

← मेरी दुकान

दुकान विवरण स्थान केवाईसी विवरण



पहचान प्रमाण

तस्वीर ले लो

फोटो अपलोड

निवास प्रमाण पत्र

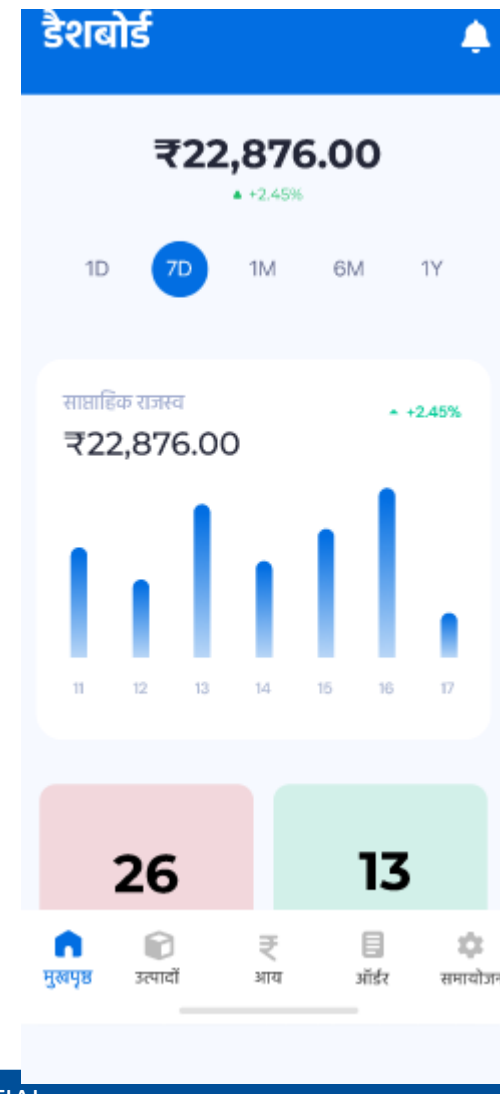
तस्वीर ले लो

फोटो अपलोड

सहेजें

Each Screen Guided with Voice Prompt of Selected language

Onboarding of SGH member Store / Agri Farmer store

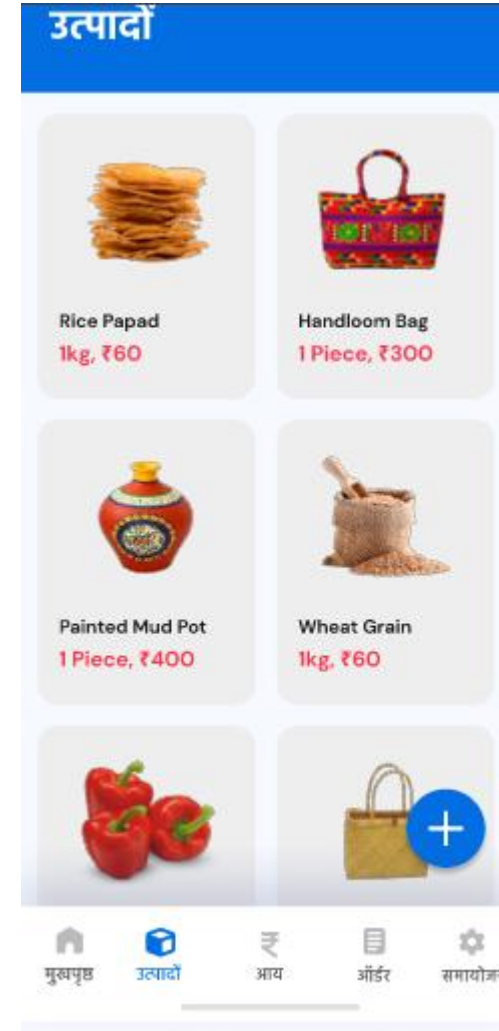
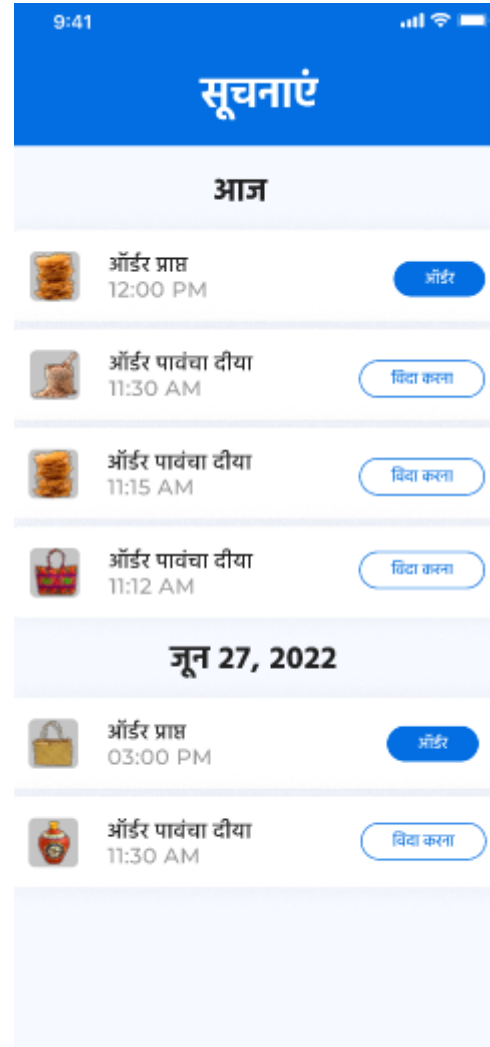


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Onboarding of SGH member Store / Agri Farmer store



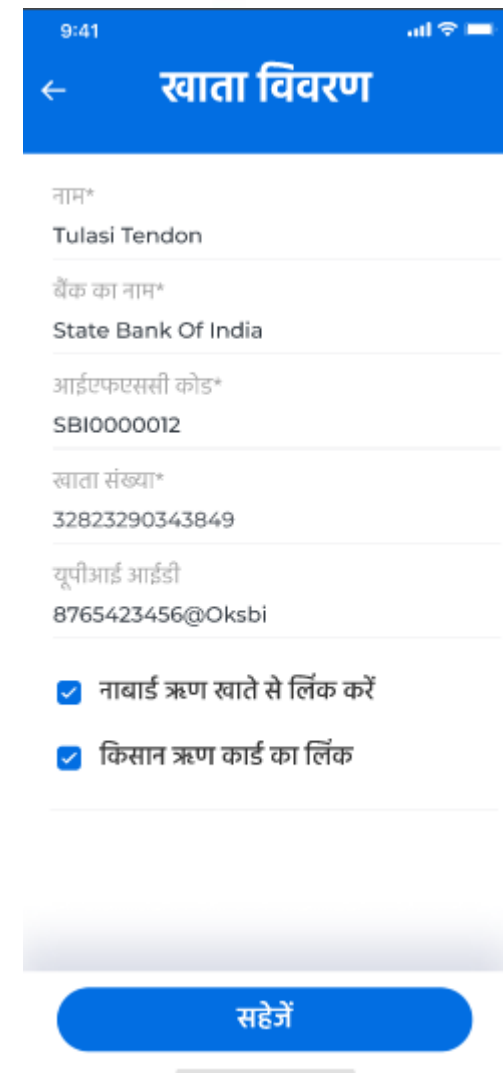
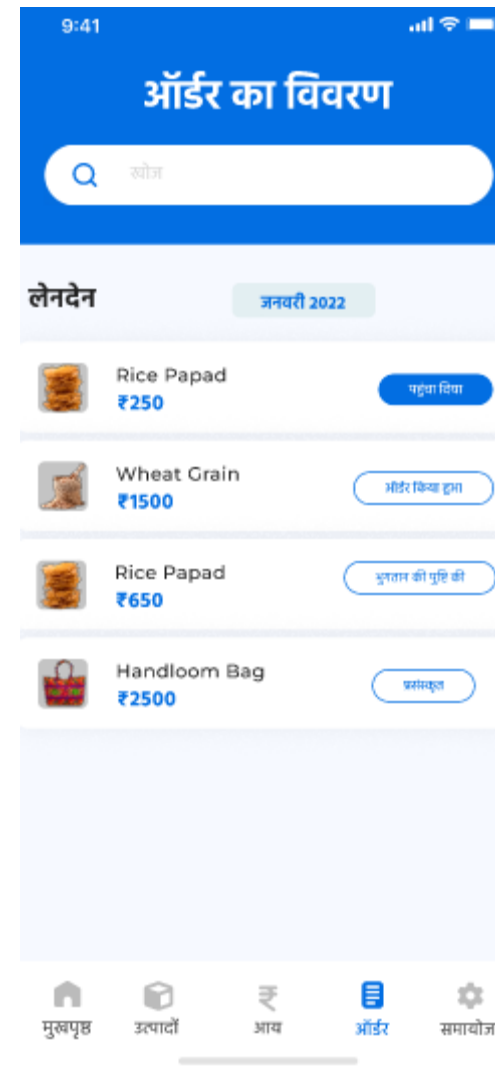
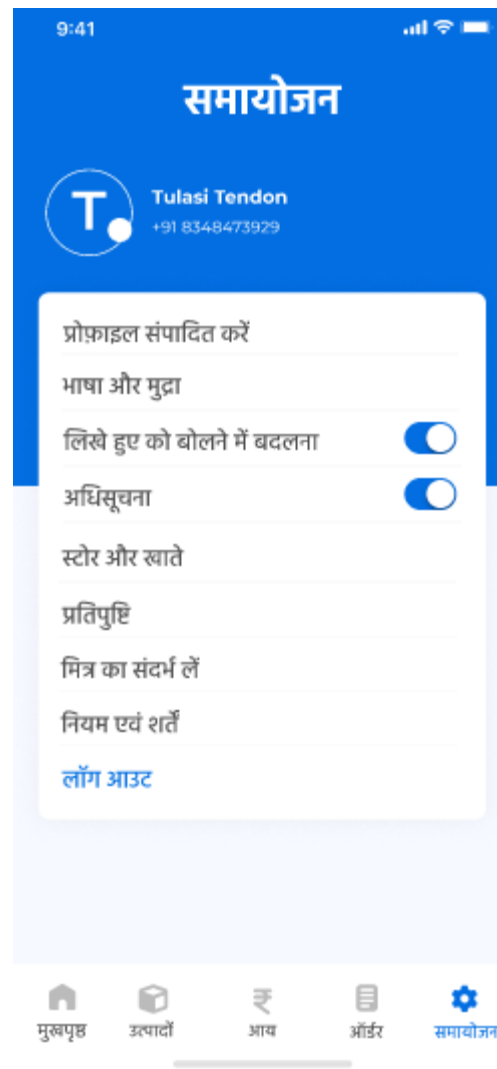
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Onboarding of SGH member Store / Agri Farmer store



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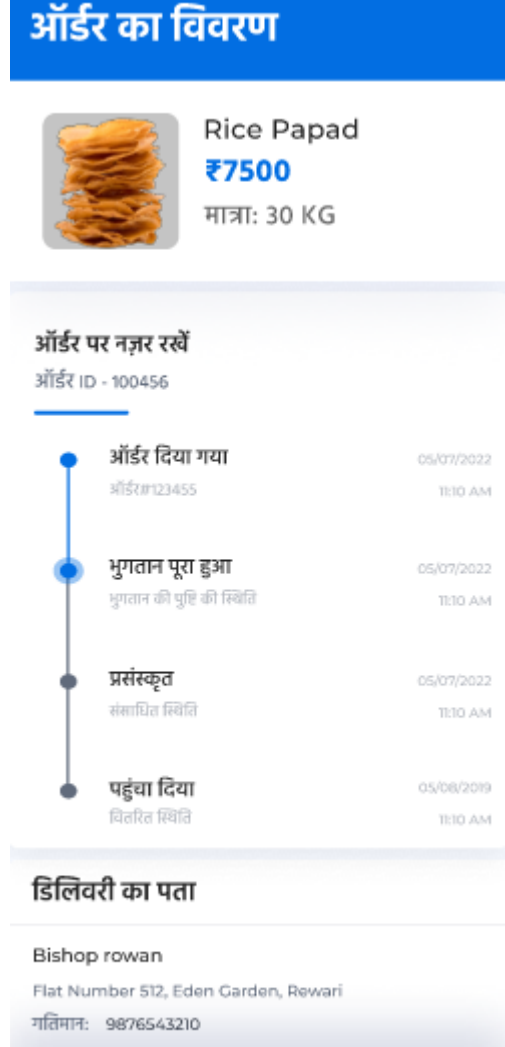
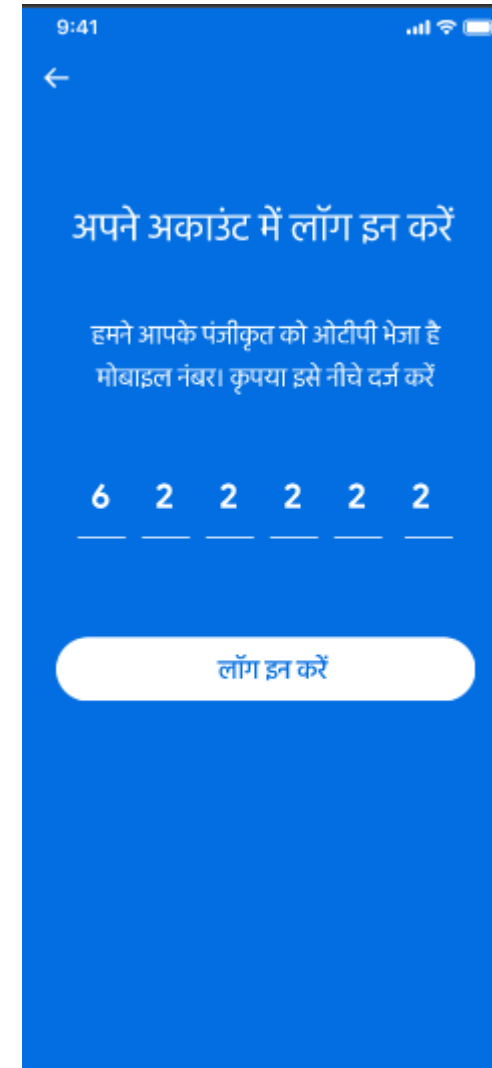
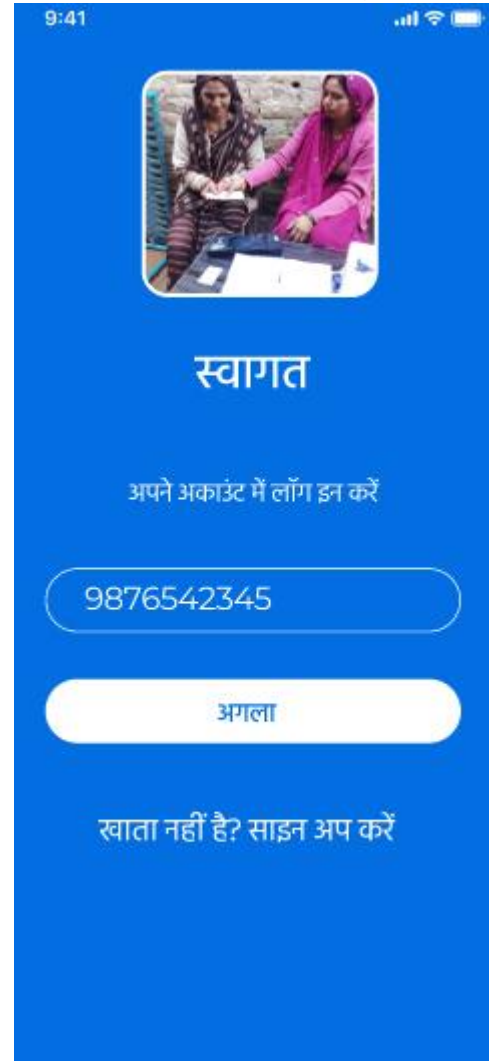


Voice enable App based Notification Screen Flow



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New buyer Notification enable with Voice, also SMS sent to mobile



Each Screen Guided with Voice Prompt of Selected language

WhatsApp AGRI SHG interface flow



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← Agri SGH

Welcome to Agri SHG!! Select language

English

Hindi

Kannada

Welcome to Agri SHG!! Select from below options

Add new product

Update product details

Check orders received

Please Enter Product Name

Please Enter Product Name

Rice Papad

Please Enter Price (per Kg)

200

Please Enter Description

Lorem ipsum sit. Lorem ipsum sit. Lorem ipsum sit. Lorem ipsum sit. Lorem ipsum sit.

Enter No. of Stocks

10

Welcome to Agri SHG!! Select from below options

Add new product

Update product details

Check orders received

Enter Product Name / ID

1025672

Enter Price

300

Enter No of Stock

Product details are updated

Enter Price

300

Enter No of Stock

Product details are updated

Welcome to Agri SHG!! Select from below options

Add new product

Update product details

Check orders received

Recieved Orders:

1904837

1904838

1904839

1904840

Type a message

Additional Benefits

Additional Benefits of AGRI SHG Solution



ADMINISTRATIVE

- All Government schemes can be directly communicated with Farmers
- Department(NABARD) can play a role of marketplace for supplying farm inputs
- Solution can be linked to DBT and closed loop payment system, financial management made easy

QUALITY

- Improved farm products availability
- Elimination of middle men from the system
- Government can bring all farmer under one platform helps in monitor agricultural activity

PROMOTION

- Govt scheme advertisement
- Showcase Govt achievement
- Videos related to farming or state/central schemes can be played on loop on the kiosk.

Additional Benefits of AGRI SHG Solution



INFORMATION

- All information about crops, farms equipment can be displayed
- Farmers are empowered with all information required for farming.
- Minimum Support price for all the crops is displayed

QUALITY

- Farmers can get multi brand quality agricultural product
- Farm input can be directly procured from Govt. authorized distributor or from Govt. directly by placing order through kiosk.

OTHER USAGE

- Accurate information on weather helps farmers to be prepared
- Elimination of middlemen in availing Govt. schemes by farmers
- Various Insurance and Govt. schemes can be directly conveyed to farmers using solution

THANK YOU

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