

Organisers



Platinum Partner



— TEAM —

THE S.P.A.R.K.S.

— COLLEGE —

JSS Academy of Technical Education, NOIDA

— TEAM LEADER —

Rudrakshi

Partners



DEVNET



KPIT

Communication Partner



Media Partner





PROBLEM STATEMENT (DB887).

"At a given time, farmer equipment are idle during non-seasons. A platform that allows farmers to rent farming equipment for less during the off-season. A simple aggregation platform with call center support can function as booking equipment will help farmers make additional income."



Farmer's Average Monthly Income



INR RS 10,218/-

Average Monthly Income
of an Indian Farmer.



INR 954.3 BILLION
The current market value
of Agriculture Equipments.



DEATH BY SUICIDE

2019: 4,057 deaths

2020: 5,098 deaths

2021: 5,579 deaths

Suicide among farm workers rose by 18%



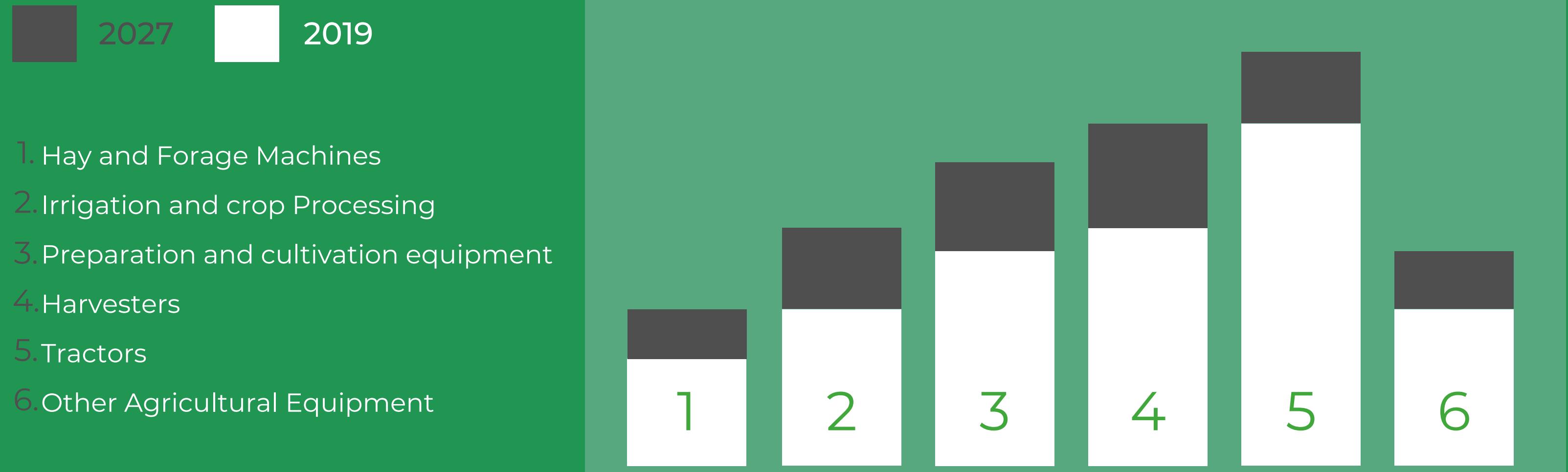
DEATH BY STARVATION

The TRACKS HUNGER at global level has ranked INDIA 94 out of 116 Countries in 2020 itself.

A lack of investment, poor infrastructure to bring food to market, and unfair trade policies result in these Deaths.



Indian Agriculture Equipment Market



Over the last few years, there has been considerable progress in agriculture mechanization. As a result of which, the agricultural equipment market has witnessed strong growth in the past few years.



Indian Agricultural Equipment Market Drivers:

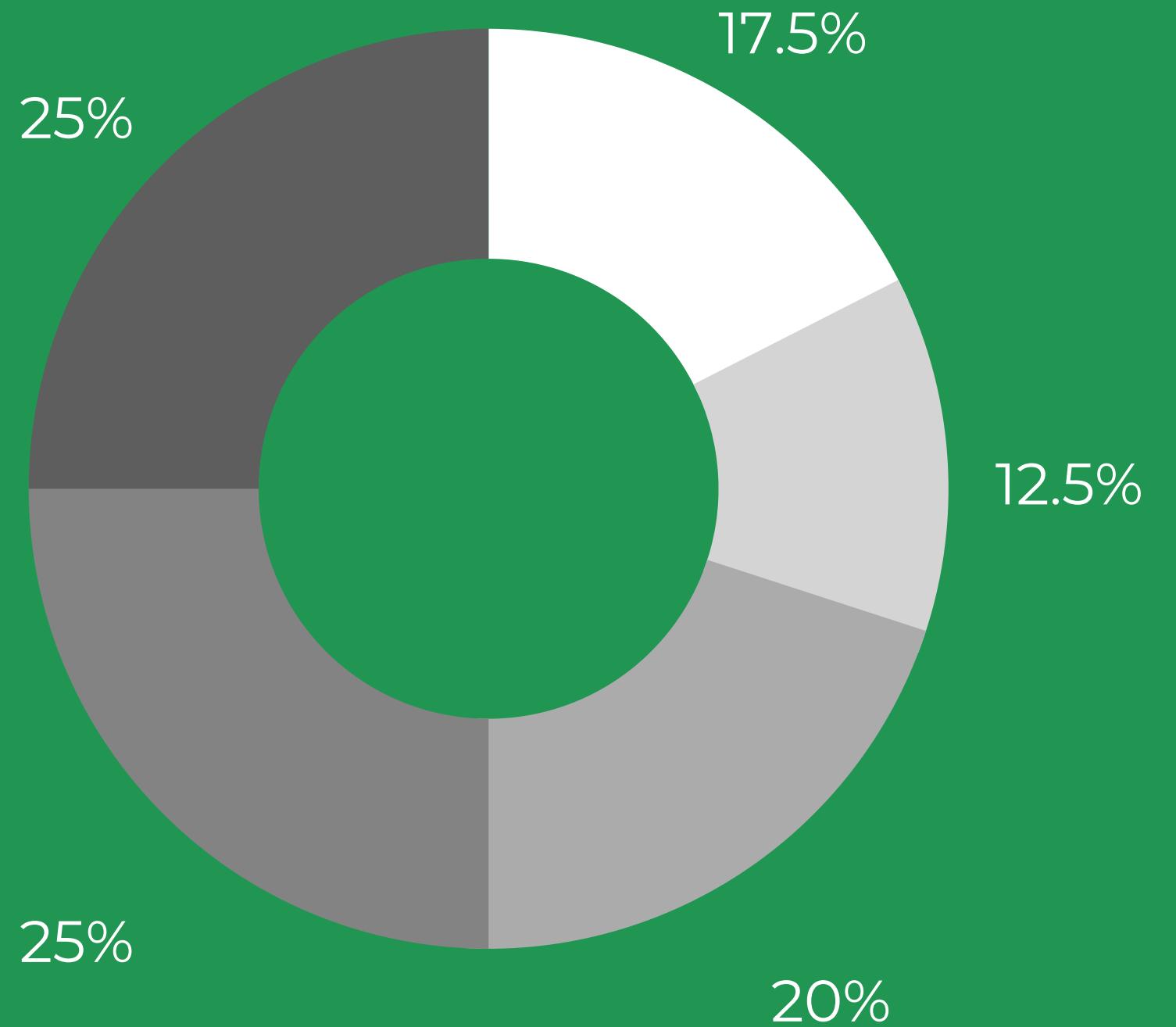
17.5% Labour Shortage

12.5% Ease of Financing

20% Government Incentives

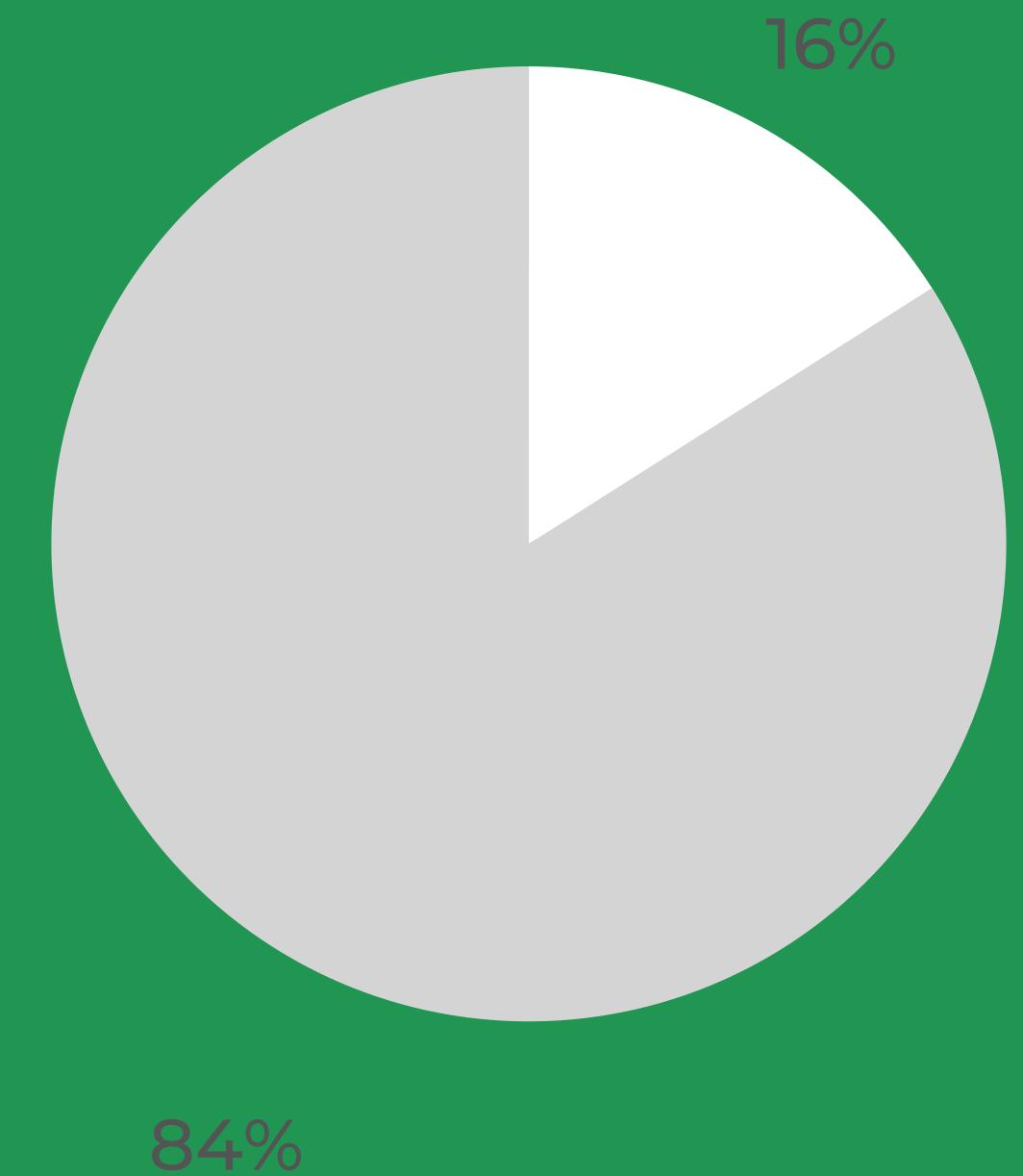
25% Emergence of Contract Farming

25% Large Untapped Market





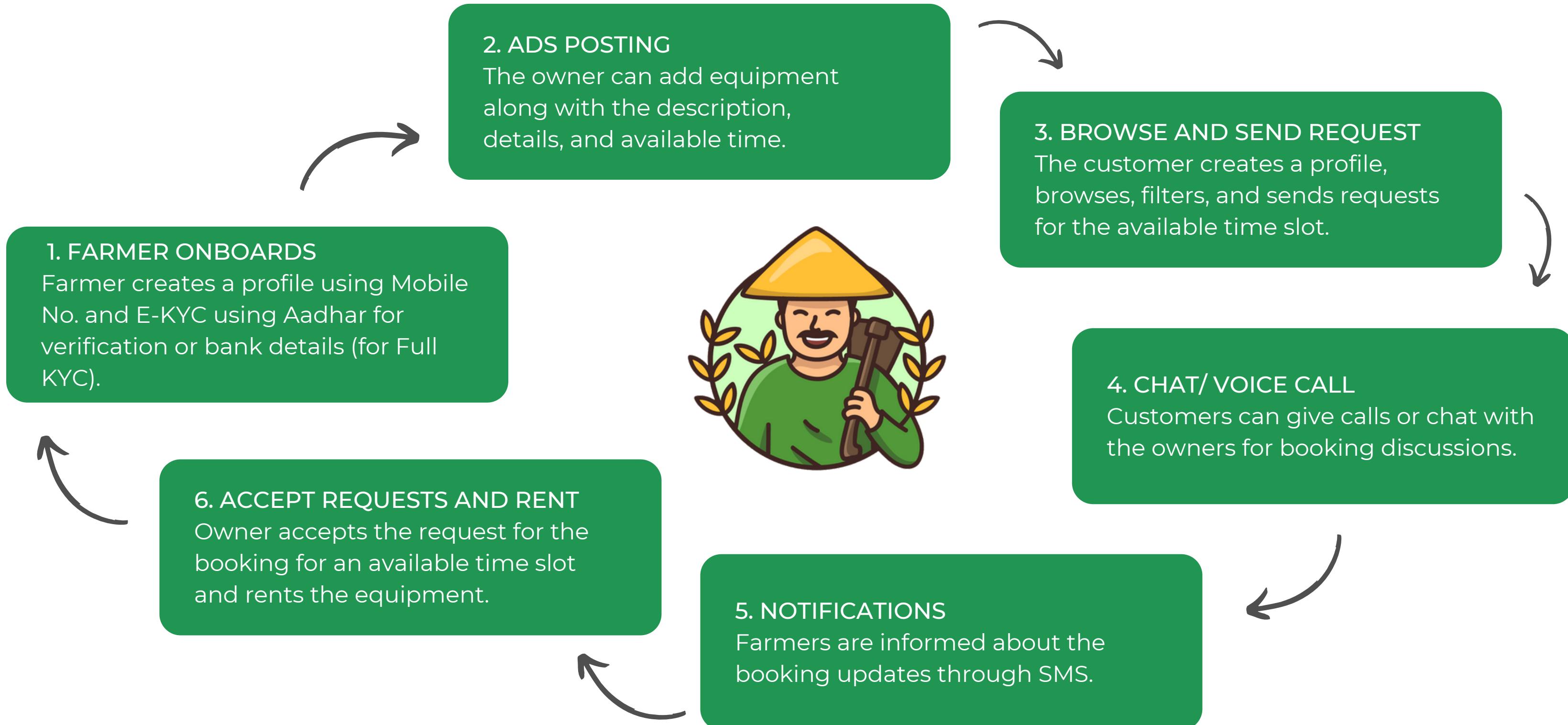
Average Equipment Investments

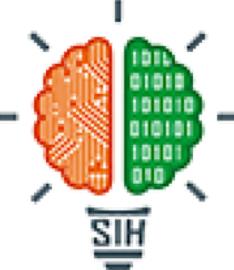


Over the past 45 years, on average, about 16% of crop value ends up as equipment investment out of the all of it.



KRISHI SADHAN WORKFLOW

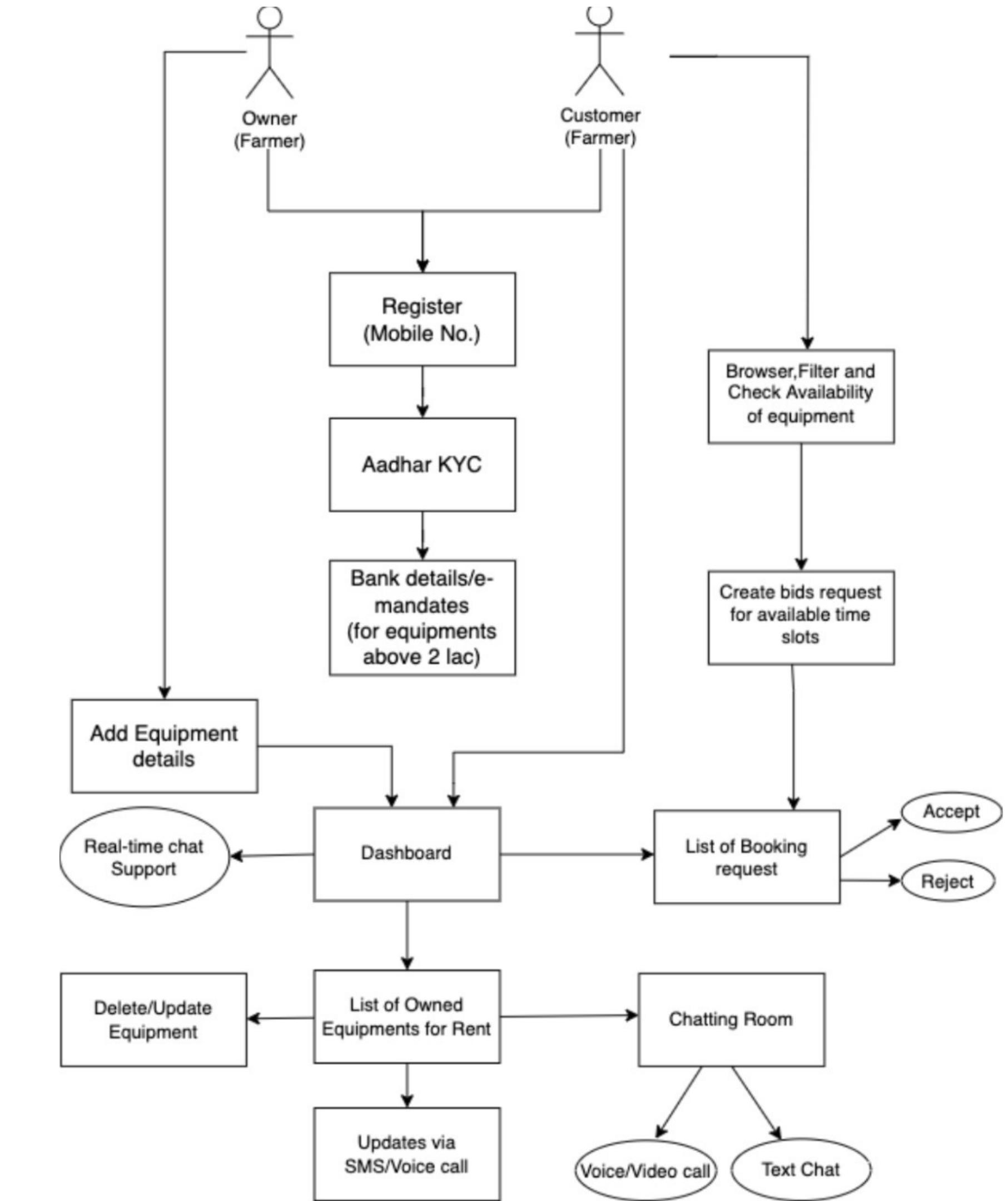


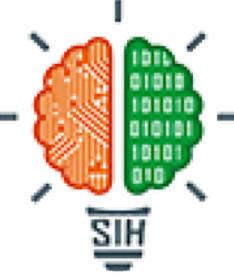


SMART INDIA
HACKATHON
2022



USE CASE DIAGRAM





SMART INDIA
HACKATHON
2022



FEATURES



Owners and Customer profile



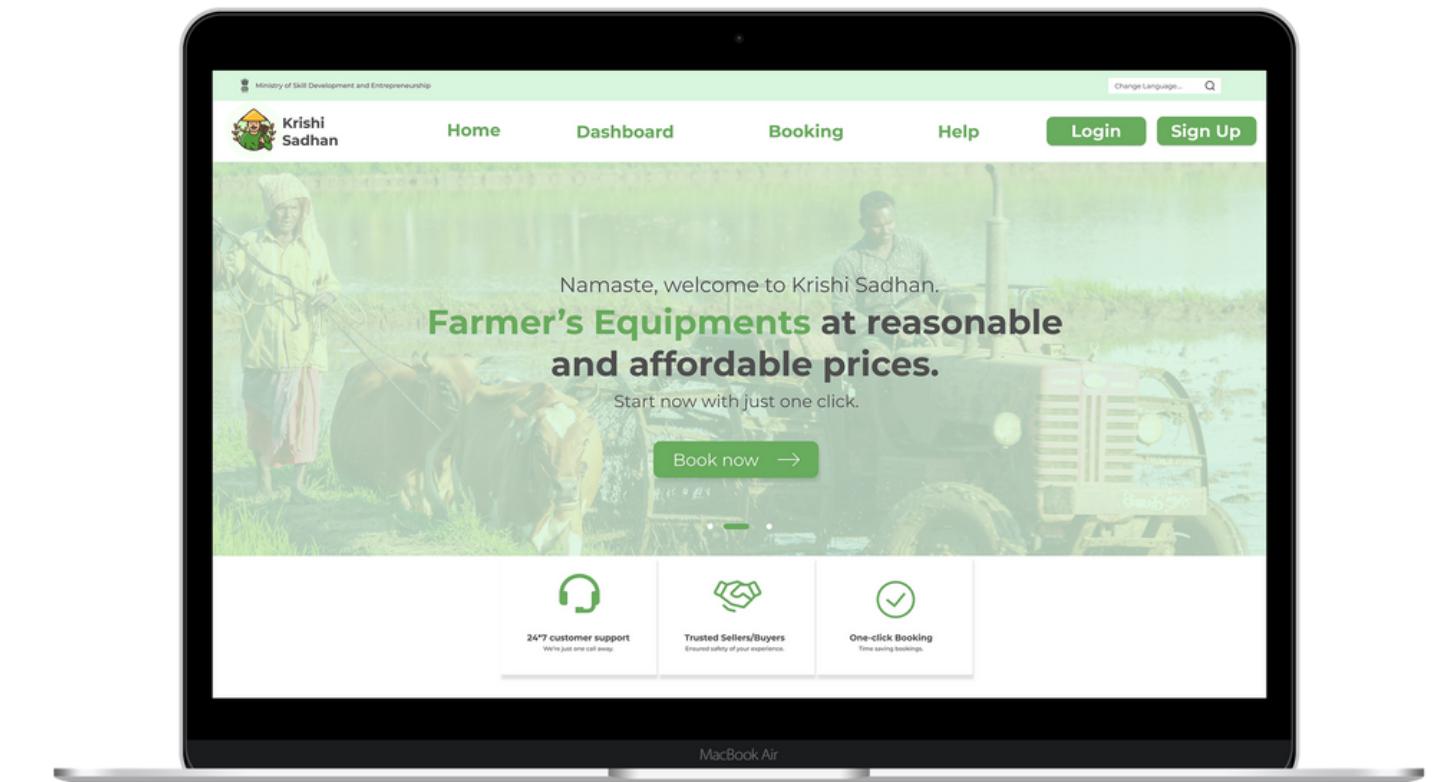
Dashboard for Equipment



Book and Rent Equipment



Search and Filter Equipments



Progressive Web App



Track booking requests



Real-time Chat Support



Equipment Recommendations

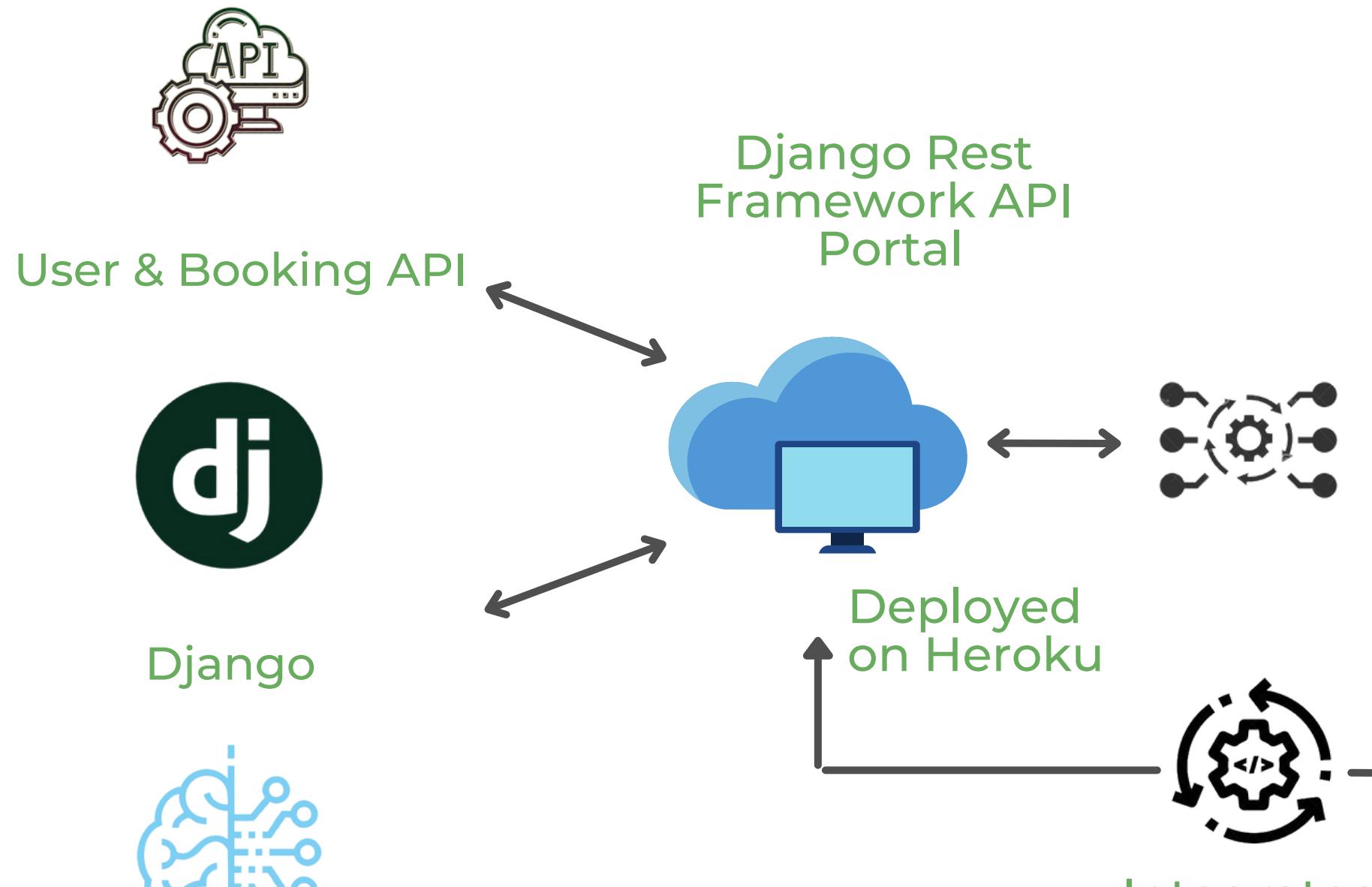


SMART INDIA
HACKATHON
2022



TECHNOLOGY STACK USED

Django and Database



Machine Learning

Features



Responsive on all devices



Dashboard



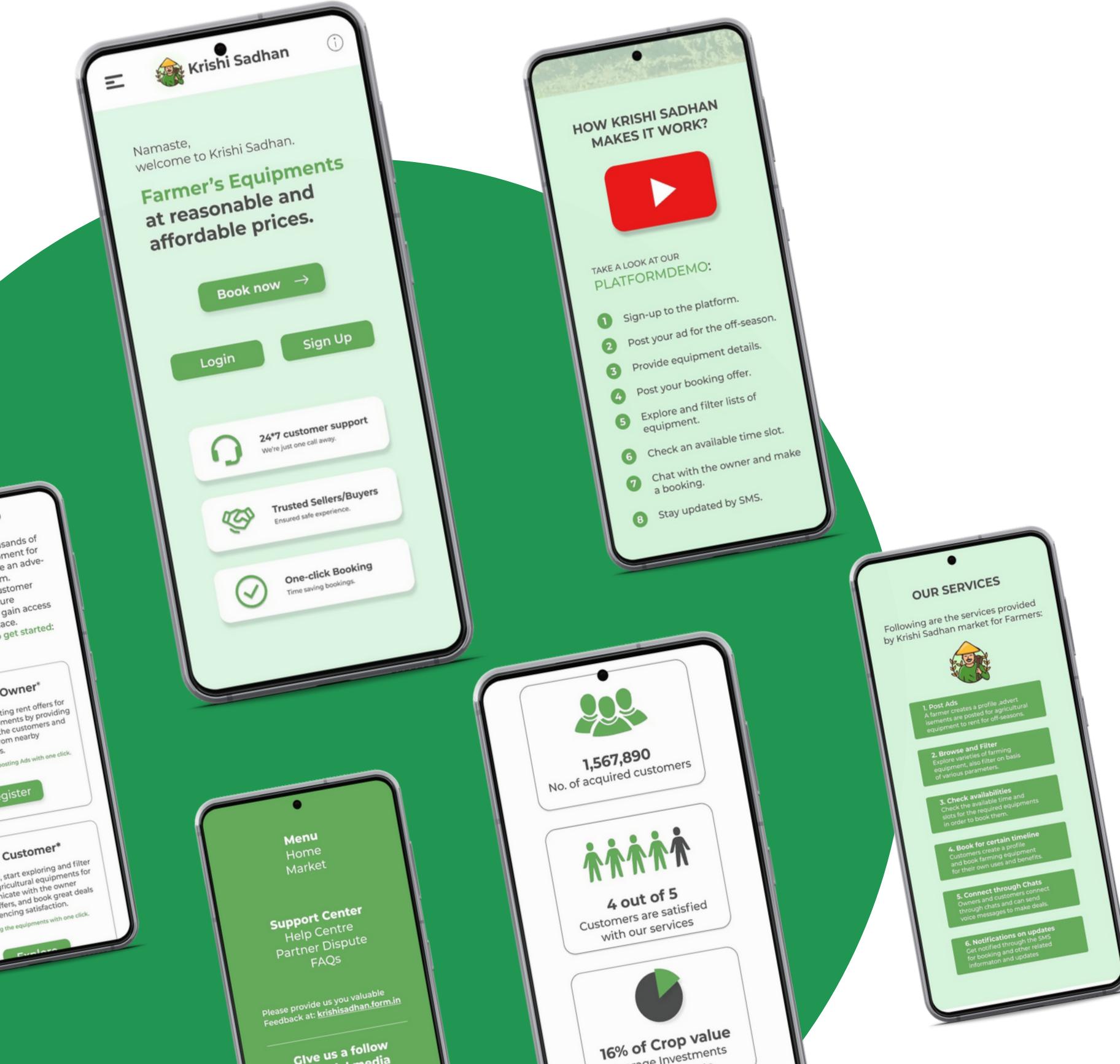
SMS Notifications



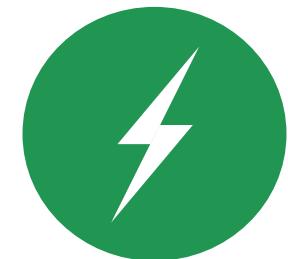
SMART INDIA
HACKATHON
2022



PROGRESSIVE WEB APP



The mobile-first approach
Works offline



2-3x faster loading time
Huge increase in
conversion rates.



Reduces server load



Uses headless architecture



SMART INDIA
HACKATHON
2022

Half KYC Aadhar Card Verification

E-KYC



Full KYC UPI E-mandate





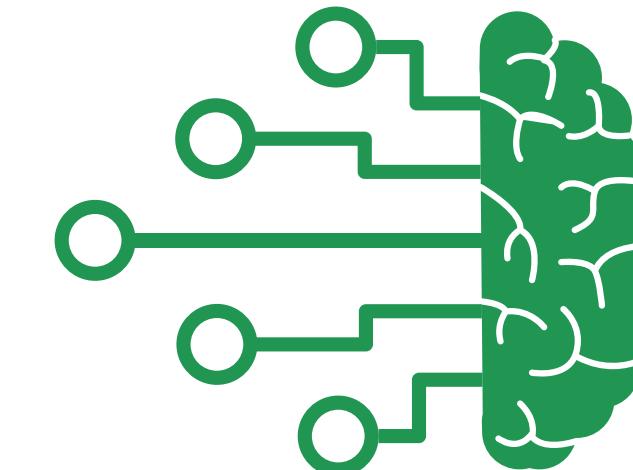
SMART INDIA
HACKATHON
2022



Recommendations using Machine Learning

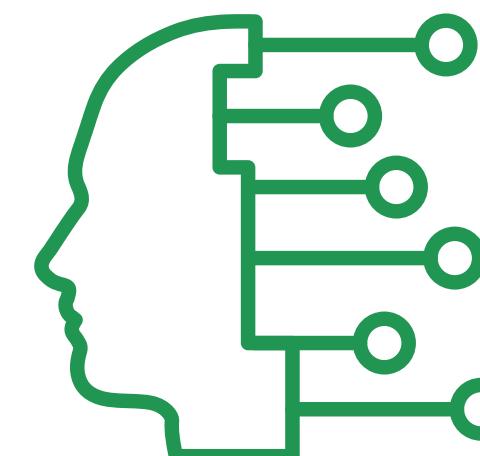
1

Location Based Recommendations
using KNN and Feature Engineering.



2

Recommendations for equipments
using Collaborative filtering.



3

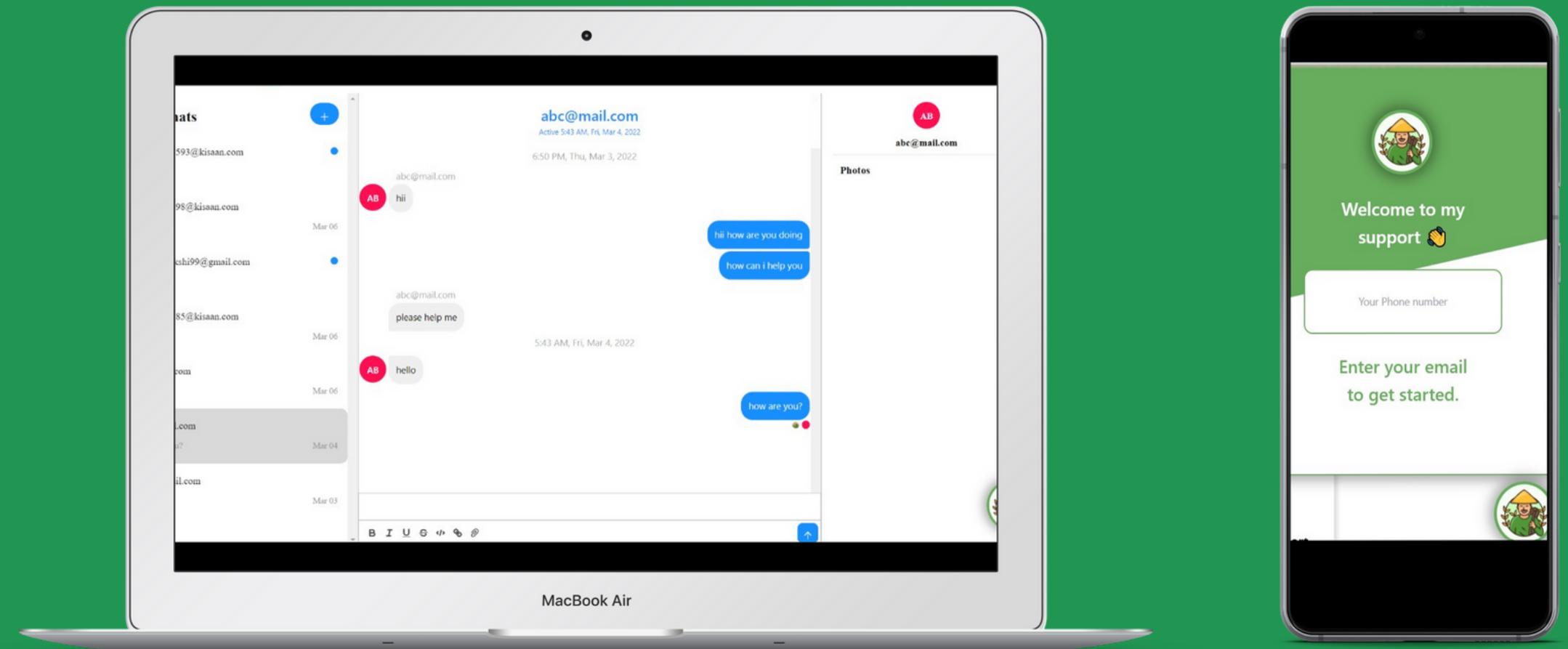
Recommendations for most popular
equipments based on ratings.



SMART INDIA
HACKATHON
2022



REAL TIME CHAT SUPPORT



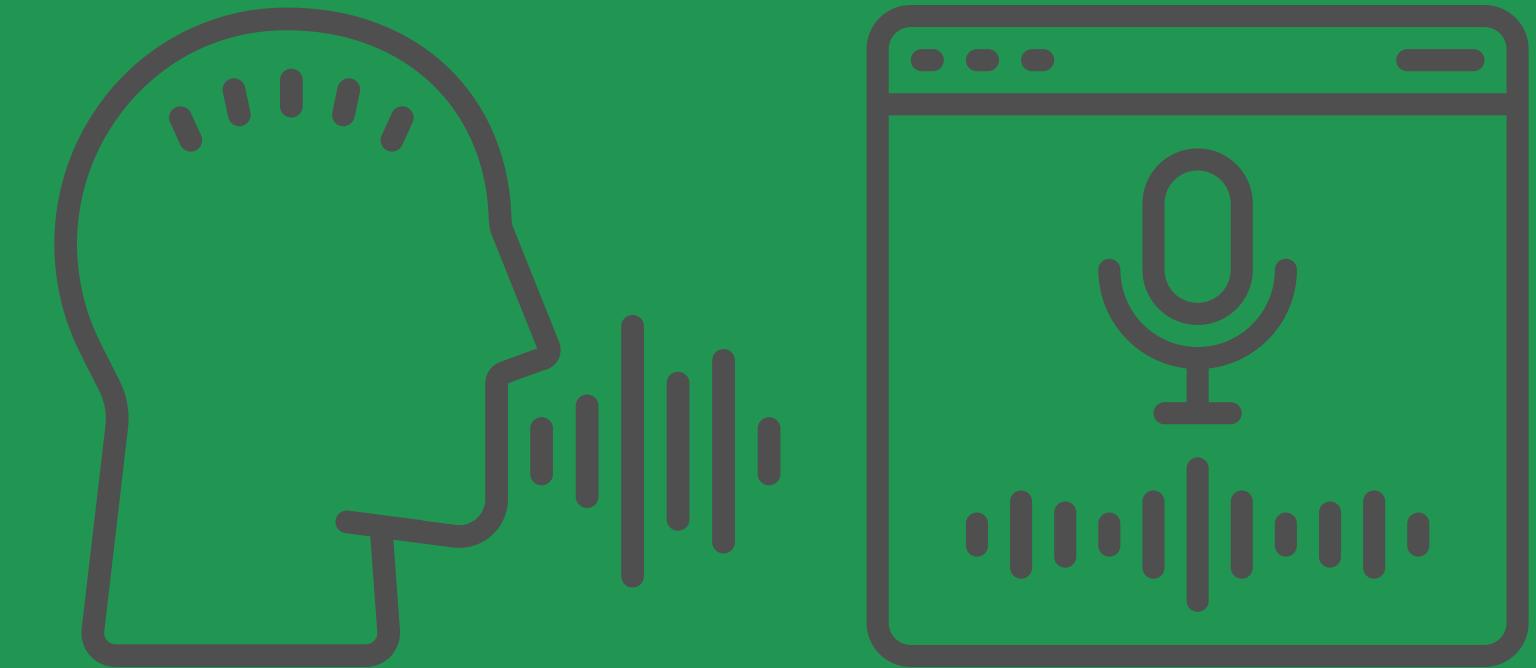
This feature will help the customer to real time chat with our Admin regarding any queries or issues.



SMART INDIA
HACKATHON
2022



VOICE ASSISTANT



Voice Feature to increase the User Experience by searching any equipment they require without hassling through the words or typing .



SMART INDIA
HACKATHON
2022

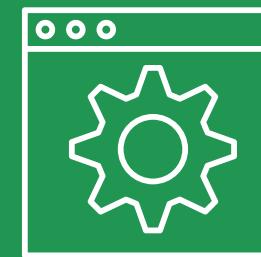


DIRECT LINKS



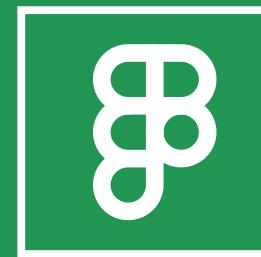
Frontend Link

<https://krishisadhan.netlify.app/>



Backend Link

<https://krishi-sadhan-app.herokuapp.com/>



Figma Link

<https://bit.ly/sparksfigma>



SIH
SMART INDIA
HACKATHON
2022



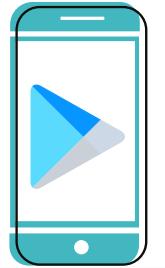
FUTURE ROADMAP

What are the next steps and goals towards building an accurate solution?



Referral, recognition and rewards feature for users to boost growth and engagement

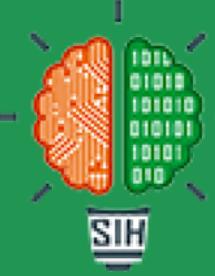
Mobile Application for better user experience



IVR(Interactive voice response) System



Multi-lingual voice Assistance feature



SMART INDIA
HACKATHON
2022



MENTORS



AJEEET KUMAR
Product Designer, Juspay



ARCHIT KAUSHIK
SDE-I, AMAZON

TEAM MEMBERS



RUDRAKSHI
Backend Dev



SARTHAK
Frontend Dev



ANMOL
Backend Dev



SUYASH
Frontend Dev



PARTH
ML Engineer



KUSHAL
UI Designer



SMART INDIA
HACKATHON
2022



THANK YOU

*"If the Farmer is Rich,
then so is the Nation."*