

HARVEST EFFICIENCY.



A communication and mapping system for harvesting teams to maximize efficiency and minimize confusion

ForaGPS Feasibility Plan

Presented To
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ForaGPS

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Executive Summary

Product Description

The ForaGPS is a software solution for farmers to increase the efficiency of their forage and cash crop harvesting operations. ForaGPS connects every machine and piece of information on one platform during harvest time to make a farm more efficient. With harvest time comes short time windows, unpredictable conditions, and quick pivoting and decision-making for farmers. With ForaGPS, harvest teams can give and receive directions/tasks, receive information at a glance, locate machinery with precise mapping, and waste no time in getting the job done.

Opportunity

Agricultural industries have continued to consolidate into larger farms with more land per operation in order to take advantage of economies of scale and feed large quantities of livestock. As farms continue to grow larger: more machinery, labor, fuel, and a lot of moving parts are required to harvest crops in the same time window as before. The ForaGPS Software System provides a way of sophisticating and organizing harvest into an efficient system where no time, fuel, or crop quality is wasted because of disorganization or confusion. With a connected system of ForaGPS tablets in machinery, any growing farm can increase productivity and upgrade from solely using two-way radios.

Innovative Solution

ForaGPS is a platform available on PC/IOS desktops as well as on IOS mobile devices. The desktop platform will be used administratively to organize teams, track machinery, upload and define field maps, define routes, upload weight, moisture, and yield data, and direct machine operators in fields. The IOS application will be on iPads installed in every machine that is a part of the system. The app will show the current task at hand as well as directions to the location designated by another team member. These iPads will also show the location of any team member that is chosen. This ensures that there is no confusion or time wasted when a task needs to be assigned or completed. Example tasks that would appear on-screen would be: "Weigh load." "Input load weight." "Take an empty weight." "Tighten chopper head." "Move to a new field." "Wait at the dairy." etc. These features/permissions are fully customizable in the desktop platform to best suit the needs of any farm. Daily reports will also be outputted at any given time to give managers a detailed view of the harvest efficiency.

Executive Summary

Value Proposition

The ability to harvest crops in a timely manner is of utmost importance when harvesting forage for ruminant animals as the moisture content of the plant matter affects feed fermentation, nutrition, and ultimately animal health or production of milk. In cash crop production, efficient harvest means crops get off the field faster, in acceptable weather conditions, and without wasting valuable time or resources. A farmer's ability to run a successful business could depend on a successful harvest. The ForaGPS Software System provides a centralized platform for maximized organization and efficiency of a harvesting system that provides immense value and information to farmers who want to optimize their harvest. Farmers will be able to utilize the ForaGPS platform for a per user price of \$500.

Furthermore, silage and other forages are the bedrock of a successful livestock operation. ForaGPS gives farmers the ability to get crops off of the field as soon as they are in the ideal condition, wasting no valuable time. Forage quality means the forage is palatable to livestock (less feed refusal), no dry matter or energy is wasted (adequate moisture), and the forage ferments ideally (maximizing dry matter). These key performance indicators for farms will decrease cost of production for a farm and increase livestock performance just by implementing ForaGPS.

Competitive Advantage

In the market today, there is not any software that focuses on productivity and communication efficiency during harvest. There are data focused farm management softwares that compete with the recording of data during harvest but not any that directly compete with ForaGPS. ForaGPS currently is competing with a farmer's ability to build a system of their own using multiple platforms. A farmer may use Slack or Whatsapp to give directions or use Microsoft Excel for record keeping. What ForaGPS does better than all of those platforms is that it provides information to the people who need it at a glance. If a field is too wet, a team can pivot and head to a new field with a click of a button. The time saved and the efficiency of having an entire harvest operation in one platform puts ForaGPS into a league of its own.

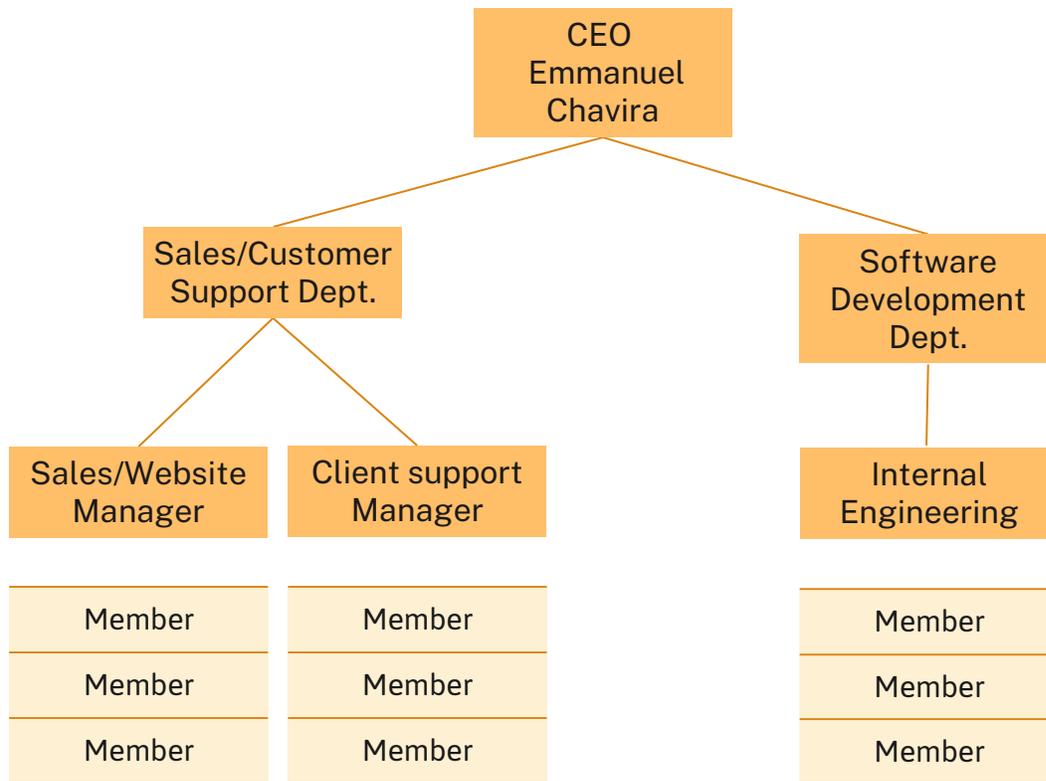
Financial Highlights

ForaGPS is in a concept stage and has not been worked on by any programmers. More research will need to be done in connecting with Apple's Find My API as well as the optimal pricing structure of the software. Building the software would take an estimated one year and testing the software on a farm would take another estimated two years. ForaGPS would take more than three years to be released but a customer base would be established with the testing farm that would lead to a consistent starting revenue once ForaGPS officially launches.

The Team

Concept team structure

Map of the ForaGPS Organization



Consumer Concept

ForaGPS

A communication and mapping system for harvesting teams to maximize efficiency and minimize confusion

ForaGPS is the future of harvest by organizing the many moving parts of a forage harvesting operation: tractors, trucks, data points, and short time windows. ForaGPS is an all-in-one software that is available on IOS tablets in every machine and also on any computer on the farm. ForaGPS allows for every piece of machinery to send and receive directions and tasks through the application, see a map of every field, see every machine's location, and see KPIs custom selected by your farm.

ForaGPS eliminates the confusion of trucks not knowing routes, harvesters waiting for carts, carts waiting for trucks, and the silo without a constant flow of ideally chopped forage. These inefficiencies can have serious consequences on a farm's bottom line. Every hour matters in terms of forage quality. Increased efficiency on your farm means forage with maximum dry matter, maximum energy, and optimal nutrition for livestock performance, all within the shortest harvest window which will increase safety, decrease weather hazards, and increase your herd's milk production.

With ForaGPS, you can create a customized system for harvest with the help of our advisors and installation team to make sure your farm gets the highest quality forage in the shortest amount of time. Contact us at 320-287-3270 for a consultation today to harvest efficiency with ForaGPS!

The Consumer

Travis, the Dairy Farmer



Details

- Travis is a third generation crop farmer and a first generation dairy farmer
- Travis has successfully grown his dairy farm, following the industry trend to decrease his cost of production
- Travis partners with other farmers to harvest feed and to pump manure
- Vision is for the farm to survive the consolidation of the dairy industry
- Values relationships with neighboring farmers

Farm Strategy

- Currently requires 100,000 tons of silage and about 50,000 tons of alfalfa haylage for his growing dairy farm
- To decrease commodity market risks of milk prices and feed prices, Travis has focused his farm strategy on increasing efficiency and decreasing cost of production - to have the edge over the competition
 - Feed/forage quality is becoming an increasing priority to increase milk production and decrease waste
 - Needs to have forage harvested, packed, and covered in piles as soon as it is ready to be harvested
- Most farm labor is from H2A visa holders from Mexico
- Does not harvest on Sundays for religious reasons

Challenges

- Poor forage quality leads to more feed refusal and less milk being produced
 - Forage is too wet or too dry
 - The forage pile was not packed down properly
 - Dry matter content suffered because of improper fermentation
 - Has negative effects throughout the whole year
- Language barrier within harvest teams
 - some workers only speak spanish
- The chopper is not always running because it is waiting for carts or trucks
- Neighbors don't like loud machinery driving by their houses throughout the night
 - Trucks and carts may take the wrong routes
- Trucks and carts may not know exactly where the chopper is within the field

The Consumer

Consumer Story

Travis wants to be the best dairy farmer he can be. At the core of this mission is a high-producing dairy herd that is fed the highest quality feed possible.

Because Travis' farm is successful and his herd is growing, the quality of feed is suffering because the greater the amount of forage that needs to be harvested, the higher the risk is of having low quality feed. This is because the crop must be harvested at the ideal moisture (~65%) and harvesting teams may move too slowly and allow the crop to dry out, or may find out that a field is too wet and need to quickly pivot to another field so there is a constant flow of forage going back to the farm.

The solution for Travis is to systematize the harvesting system so that every field that is in ideal conditions can be harvested in the most efficient system possible with ForaGPS. With this software, Travis can assign fields and routes to every machine from a centralized location like his office, or from the seat of a tractor. Travis can make sure the chopper always has trucks and carts available so there is a constant flow of forage coming off the field. This new system will replace two-way radios as there will be no language barrier and a simple screen will give all of the information needed for every machine.

Travis can also see important information about the harvest from any computer or tablet. Travis can see the amount of forage harvested per day, the average moisture, the quality of cut, the average travel time per truck, and the amount of time a machine has spent not moving.

Travis has a short time window to harvest the highest quality feed he can. To achieve his goal of being one of the best dairy producers, he must ensure that his feed is at the upmost quality with maximum efficiency to continue his cost of production mission. ForaGPS will make sure his farm doesn't suffer the growing pains of his successful, expanding farm.

Product

The Forage Quality Problem

The agricultural paradigm has shifted drastically within the last couple generations. Agricultural industries such as poultry, pork, and beef production has shifted from many small farms with small flocks/herds to now few farms with large flocks/herds which take advantage of cost of production and reduce the risks associated with commodity markets.

We are seeing the same trend occur with the dairy industry. Between 2002 and 2019, the number of individual dairy herds fell by more than half. Despite this, milk production has continued to rise. This means that the dairy industry is following the same trend as other industries before it, a consolidation to few, large herds producing the majority of milk for the United States and the world.

This consolidation of dairy presents a unique opportunity for ForaGPS specific to forages and dairy livestock operations. As dairy farms continue to grow larger, they require larger amounts of forage than they had before, within the same time window. Timeliness is important to dairy operations because it affects the quality of the forage which in turn affects the amount of milk produced throughout the year. A high quality forage is one that maintains high energy content with minimal dry matter loss that comes from storing forage that is too dry or too wet. Forage is usually stored in a pile on the farm that is packed down by tractors and covered so that the forage ferments and becomes nutritious feed for dairy cows. For optimal fermentation, forages should be harvested and stored at an average 65% moisture.

Moisture affects fermentation, but also the palatability of the feed to cows. If corn silage is too wet, the chopped corn pieces will not be course enough to stimulate salivation and chewing of the cow's feed.

A speedy harvest also means that the forage pile is filled as fast as possible. If the pile is filled too slowly and is left uncovered, dry matter and energy value of the forage decreases because of the natural respiration of the plant.

ForaGPS Solution

ForaGPS reduces stoppages to the forage harvest to get feed in the pile as fast as possible. Creating the anaerobic condition in the pile with ideal moisture crop will guarantee nutritious and palatable feed for the herd.

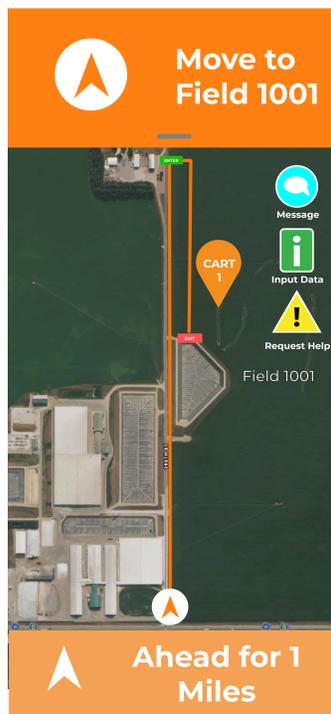
Growing forage harvesting teams is a unique community that ForaGPS is prepared to serve and become the number one solution for the consolidating dairy industry.

Development Stage

ForaGPS is in the concept stage, currently. The solution will be on two platforms: PC & IOS devices. Administrators will be able to organize the harvest system and iPads will be mounted in every machine for the system to operate. The mapping/tracking will be achieved through Apple's Find My API that gives live locations with 20ft accuracy.

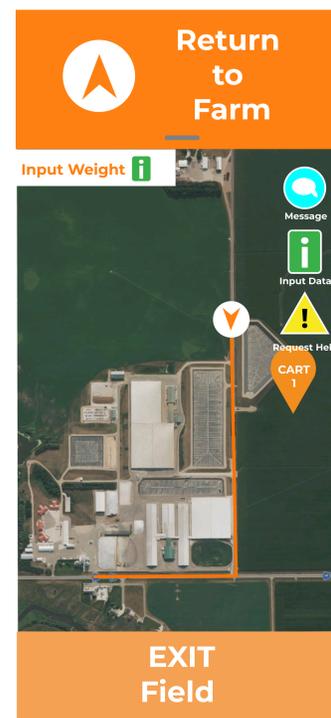
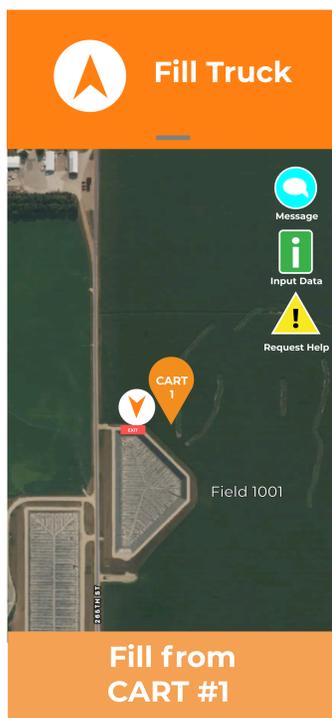
Solution

Semi Truck POV - Mobile Device Mock-ups



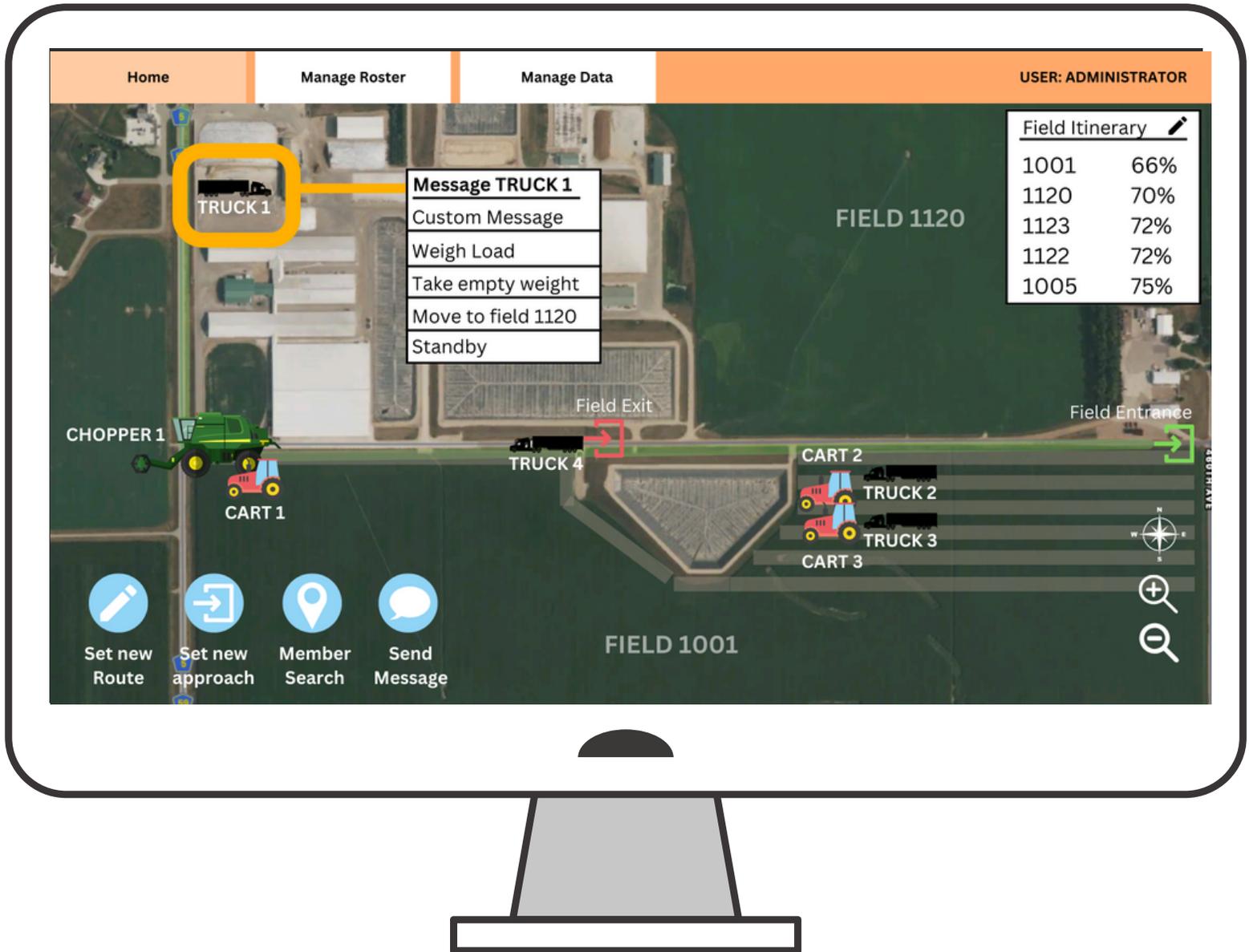
Messages/Notifications

- Follow Route
- Return to farm
- Move to field 0000
- Dump on X side of pile
- Weigh Load
- Input Weight
- Take an empty weight
- Recalibrate Scale
- Tighten chopper head
- Standby at _____



Solution

Administrator POV - PC Mockup



Market Problem

The Market and Trends Today

Agricultural software is a tool that a vast majority of modern dairy farms use. Farms can utilize software on livestock farms to track genetics, breeding, and feed data. Examples of this in the market are Farmbrite, EasyKeeper, Ranch Manager Open, and VAS DairyComp. These programs display data clearly and aid in important farm management activities. ForaGPS is in a submarket of agricultural software: Crop management software. Examples of these programs on the market are Croptracker, Cropio, and QuickTrials.

Currently, 60% of farmers still rely on non-computerized tools, and only 16.5% of farmers use farm management software - approximately 350,000 farmers. The median age of all farmers is 57.5, meaning that sooner or later, the next - more tech savvy- generation will take over the farm. This is an area of opportunity for ForaGPS where this software penetrates the market through these new farmers as well as through larger corporate farms that are looking to further their efficiencies.

The future of ForaGPS is to be the #1 choice for a consolidated dairy industry to optimize forage production and harvest. Without ForaGPS, a bad harvest season could mean surviving the competition in the increasingly competitive dairy industry.

Market Entry

ForaGPS is an differentiator in the market. The way in which ForaGPS improves on the current paradigm of data organization within software,

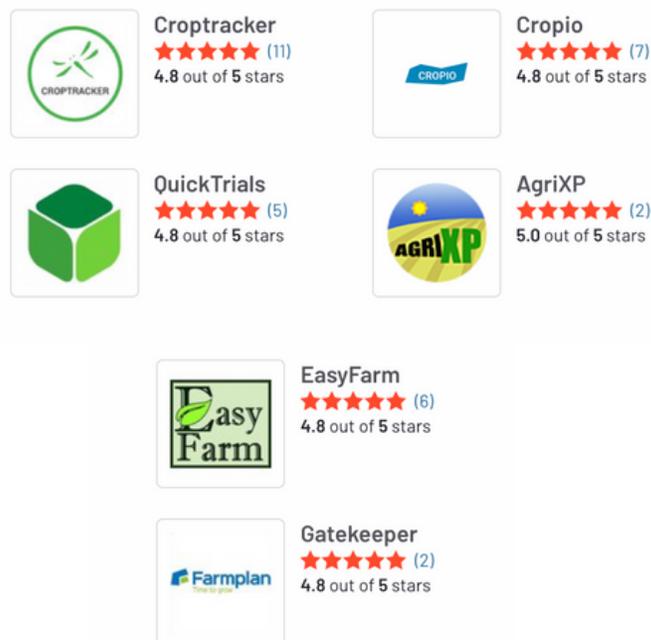
is through the GPS and communication features. The ForaGPS software does track important data and converts them into insights, but the real efficiency is gained through using ForaGPS as a leadership tool that is optimized for a cattle farm specifically.

Competition

Currently in the market there are many farm management software options but none seem to come close to the specificity that ForaGPS provides. Many software choices allow for inputting data points from irrigation, chemicals, seed, labor, but there is no live harvest management platform available in the market.

Crop Management Software

Popular Crop Management products used by Agriculture professionals



Market Problem

Market Size

The ForaGPS software will launch in the United States with future consideration for international launch.

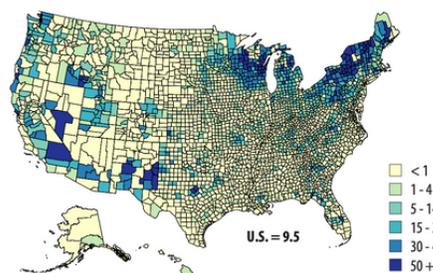
As of 2017, there were 40,336 dairy farms in the United States with a total of 9.5 million milking cows. All of these cows need forage to eat and produce milk. The states with the highest milk production were: California, Wisconsin, New York, and Idaho. These states would be the states in which most likely ForaGPS customers would reside.

The portion of the market that I would be most likely to reach would be the highest earning dairy farming operations as they are more likely to invest in software such as ForaGPS as well as be more likely to have more land to grow their own forage. Farms with annual sales and government payments of over \$500,000 would be the most likely to purchase a ForaGPS license. Dairy farms earning greater than \$500,000 make up 33% of the dairy farms in the United States, so around 13,310 dairy farms.

ForaGPS is priced at \$500 per user per season. Assuming each team has 1 harvester, 4 trucks, 2 carts, 1 maintenance vehicle, 1 scale shack/admin. the price per team is an average of \$4,500 per year.

In order to generate \$1,000,000 worth of revenue in one year, over 222 harvest teams would need to purchase the software.

Sales of Milk from Cows as Percent of Agriculture Sales, by County, 2017



| Top States | (\$ bil) |
|--------------|----------|
| California | 6.5 |
| Wisconsin | 5.2 |
| New York | 2.5 |
| Idaho | 2.3 |
| Texas | 2.2 |
| Pennsylvania | 2.0 |
| Michigan | 1.8 |
| Minnesota | 1.7 |
| New Mexico | 1.3 |
| Washington | 1.1 |

Farm Characteristics

Farms specializing in dairy cattle and milk production accounted for 98 percent of U.S. milk sales. Most of these farms (84 percent) had sales and government payments of \$100,000 or more.

| Economic Class (sales and government payments) | Dairy Farms (percent of total) | All Farms |
|---|-----------------------------------|-----------|
| < \$10,000 | 6 | 55 |
| \$10,000 - \$99,999 | 10 | 26 |
| \$100,000 - \$499,999 | 51 | 11 |
| \$500,000 - \$999,999 | 15 | 4 |
| \$1,000,000 + | 18 | 4 |

Feature/Benefit Analysis

ForaGPS Features/Benefits compared to Croptracker

| Feature | Benefit | Included in Croptracker ? |
|---------------------------------|---|---|
| Single Sign-On | Each client can customize the data they want to see |  |
| Map view of all machinery | All members know where they are needed |  |
| Input fields and field routes | Move to fields without wasting unnecessary fuel |  |
| Apple Find My API | Machinery locations are accurate up to 20 ft |  |
| Messaging between team members | At a push of a button members are notified about their next tasks |  |
| Set roles for different users | Leaders can give directions to team members |  |
| Request Help button | Maintenance teams can fix issues as soon as possible |  |
| Data analytics for crop quality | Quick decision making can be achieved by looking at data insights |  |

Business Model Problem

Customer Interaction

The customer interested in the software program will visit the ForaGPS website and request a consultation from one of our consultants. The first consultation meeting will determine whether the farm will work jointly with the ForaGPS system and if it is, how we will continue forward.

Next, one of ForaGPS' customer support representatives will contact the customer again to specify a plan for the software, determining what data points they want to follow and finalize the pricing/payment plan.

Finally, before the harvest season, a ForaGPS employee will visit the farm and install iPads loaded with the ForaGPS software into all machinery as well as give a training to the farm's employees.

After a successful harvest, an invoice for the amount of the software license, iPads, and employee time will be sent to the farmer.

As stated prior, ForaGPS will need to guarantee that a farm can complete the harvest in less days than the prior year (excluding weather), or their money back. This promise must be fulfilled for 223 farms in order to receive \$1,000,000 in revenue.

Why ForaGPS?

Overt Benefit:

Farmers receive a more efficient silage/harvest operation with seamless communication between team members as well as valuable insights into the harvest.

Reason to Believe:

The quality of a dairy farm's feed and overall dairy economics is dependent on a timely forage harvest to maximize animal nutrition and energy content.

Dramatic Difference:

ForaGPS is an all-in-one harvest software that will ensure that the forage pile has ideal moisture feed flowing to it swiftly and seamlessly.

Adoption Hurdles:

There is no need for choppers, carts, or trucks to be waiting when forage harvest is so important for a dairy farm. Move from two-way radios to a safer and faster system for harvesting forage.

Social Sufficiency:

ForaGPS representatives will do all of the heavy lifting when it comes to customizing the software for every farm as well as installing iPads in every machine.

Product offering

The ForaGPS software itself will cost \$500 per device per season. The custom consultation will be free for the first time it is used, but the installation visit and training will cost another flat \$500. There will be two plans offered, the ForaGPS base plan and the ForaGPS enterprise plan which has the main benefit of customizing the insights that a farm can receive (average moisture, yield, completion, kernel count etc).

Business Model Problem

Product offering

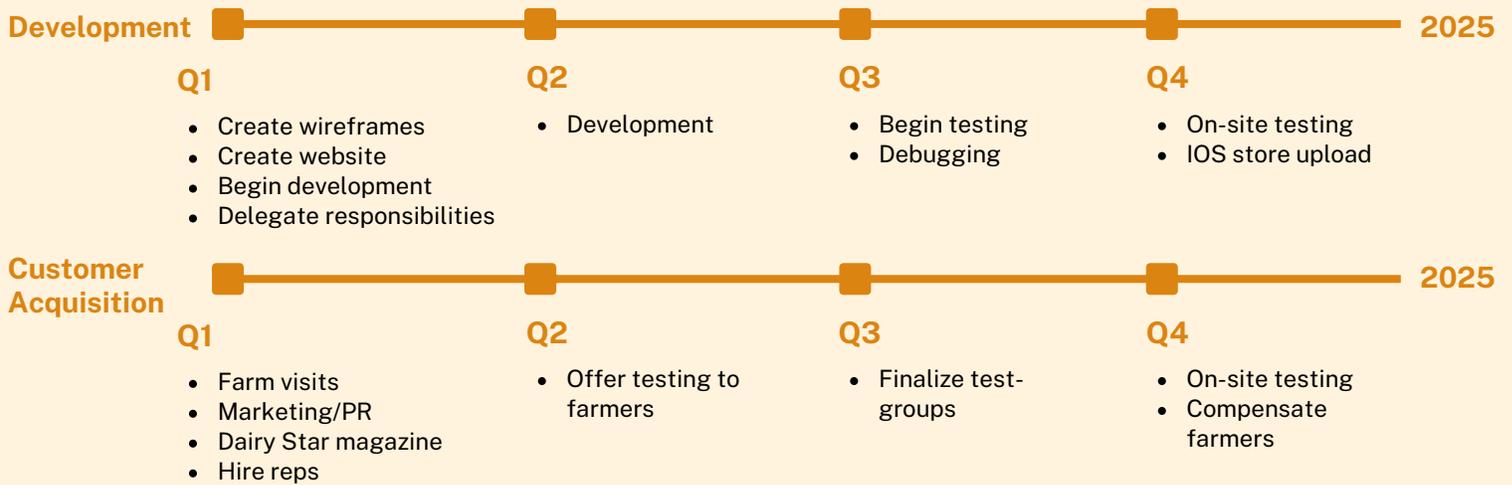
| ForaGPS Base Features | Pricing | ForaGPS Enterprise Features | Pricing |
|------------------------------------|------------------|------------------------------------|------------------|
| License | \$500/ Device | License | \$500/ Device |
| Consultation/ Optional Training | \$500 | Consultation/ Training | \$500 |
| 24/7 Support | - | 24/7 Support | - |
| Default Insights | - | Custom insights | \$1000 |
| | | Custom Branding | - |

Operations/Commercialization

COGS

| ForaGPS Resources | Quantity | Annual Cost | Notes |
|----------------------------------|----------|------------------|---|
| Development/Internal Engineers | 3 | \$300,000 | Programming team salary, quality assurance, database integration, UI/UX |
| Customer Service Representatives | 6 | \$360,000 | Representatives salary |
| CEO Salary Y1 | | 60,000 | Year 1 salary |
| Customer Success (Retention) | | \$60,000 | Customer Service expenses and travel for reps |
| Hosting Expenses | | \$3,000 | Amazon Web Service |
| Total COGS | | \$783,000 | |

Product Roadmap



Quality Standards

Harvest must be faster than last season - Excluding weather

License distribution is secure

GPS must be accurate within 20ft

Easy to learn: Usable after first lesson

Resource Problem

Resources Needed

In order to get ForaGPS off the ground, many more resources will be needed. I estimated above that the cost of the first year of development will be around \$783,000 based on salaries and development costs. In reality, I am not sure how realistic a one-year timeline will be even with this large amount of money. To begin this project, I would like to consult with a software engineer who has experience in Software as a Service and get insight as to how realistic these figures are.

People: Hiring a development team, a customer support team, and managers for these teams is something I do not have experience with so a mentor in this would be extremely beneficial.

Development: As stated previously, a one year timeline for the initial testing of ForaGPS may be an ambitious goal so I accounted for three software engineers to achieve this. A way to manage the development process is something I would also need assistance with.

Marketing: In order to successfully implement the ForaGPS software into a farm's arsenal, trust must be developed first. I would consider outsourcing the marketing of ForaGPS - especially in its early stages - to a marketing agency specific to agriculture in order to take advantage of those connections. The agency will be tasked with performing sufficient consumer research and narrowing down a client list for testing as well as being continual customers.

Market Forces

A risk that the market could pose on ForaGPS would be already well-known farm management softwares implementing a feature that includes a live map to organize harvest. This would be included in what a farmer is already paying and would remove a reason for farmers to switch to ForaGPS.

listed below are resources that will be needed but are not yet accounted for

| Resource | Cost |
|----------------------------|--------|
| Office space - Twin Cities | 8400 |
| Equipment and supplies | 28,800 |
| Licenses and permits | ? |
| Software Security | ? |
| Accountant | ? |
| Inventory | ? |
| Making a website | ? |
| Advertising and marketing | ? |
| Market research | ? |
| Copyright Lawyer | ? |

Recommendation

GO!

Moving Forward

ForaGPS is a Go. To begin the next steps, funding will need to be received from investors, family, and friends. The amount of funding required for the first year of development and operation will be around 1 million dollars to build a team, develop the product, and acquire customers.

ForaGPS has strong potential to be the go-to software for dairy farms as there continues to be more forage needed for larger herds.

A priority for ForaGPS is to foster a great reputation with farmers to spread word-of-mouth advertising about the product and to have generation-long relationships with producers. ForaGPS must also be able to provide tangible time savings and increased milk-production performance after implementation. It will be more clear as to how the product does this after the first round of testing in 2025.

There is a risk that the ForaGPS system is too complicated for dairy farms today. However, we are seeing the way that the industry is trending and sooner or later, large corporate farming of dairy will be the norm and ForaGPS will be at the forefront of it.



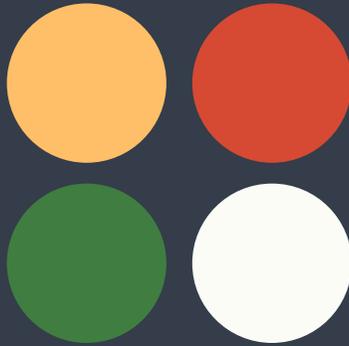
Concept Portfolio

Style Guide

Primary Logo



Color Pallete



Tagline

HARVEST EFFICIENCY.

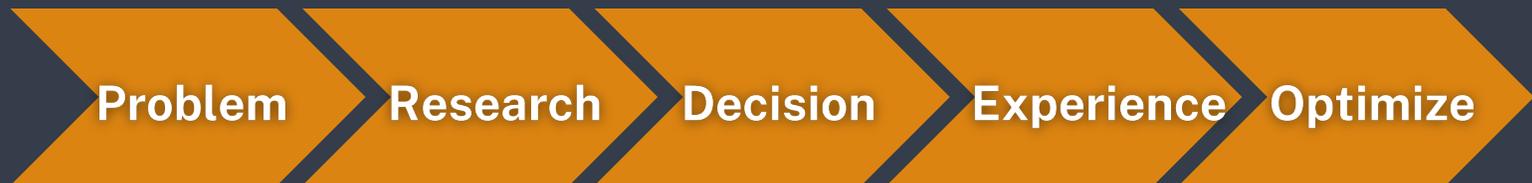


Concept Portfolio

Travis, the Dairy Farmer



Customer Journey



"Last year's silage was too dry, now my milk production is low."

"After my consultation, I trust that harvest will be as efficient as ever!"

"How can I implement technology to get ahead of my competition?"

"ForaGPS could be tweaked to my farm specifically, I can't wait to try it out again next year!"

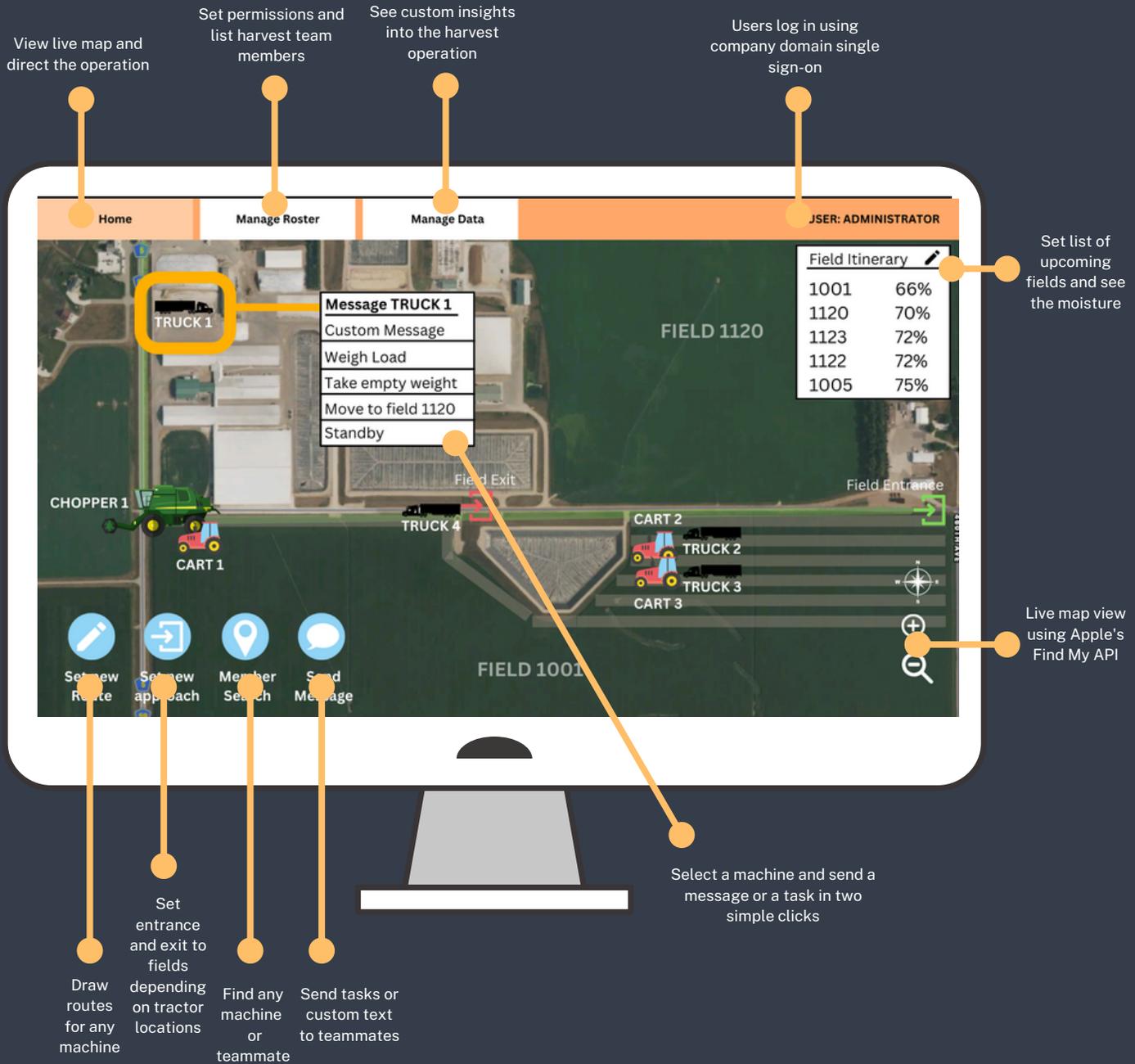
"The farm needs to harvest silage faster so the moisture is consistent"

"My silage pile is at perfect moisture and the cows are refusing less feed than last year!"

"ForaGPS promises to speed up harvest!"

Concept Portfolio

Computer Platform



Concept Portfolio

IOS Mobile Platform - Truck Example

Move to Field 1001

- See the task-at-hand at a glance

Message

- Send tasks to team members - available by admin permission

Input Data

- Input load weight

Request Help

- Request maintenance team or contact emergency services

Field 1001

- All other machines are visible on the live map
- Field approaches are visible - set by admin

Ahead for 1 Miles

- Receive exact directions of a route assigned by admin

Sources

- <http://corn.agronomy.wisc.edu/Silage/S006.aspx>
- <https://www.sciencedirect.com/science/article/pii/S0022030218303291>
- [https://www.journalofdairyscience.org/article/S0022-0302\(88\)79897-5/pdf](https://www.journalofdairyscience.org/article/S0022-0302(88)79897-5/pdf)
- <https://www.linkedin.com/in/mitch-fehr-a1b66496/>
- <https://www.ers.usda.gov/publications/pub-details/?pubid=98900>
- <https://www.g2.com/categories/agriculture>
- [https://www.usda.gov/media/blog/2021/06/16/allure-farming-irresistible#:~:text=The%20average%20age%20of%20a,of%20all%20farmers%20\(57.5\).](https://www.usda.gov/media/blog/2021/06/16/allure-farming-irresistible#:~:text=The%20average%20age%20of%20a,of%20all%20farmers%20(57.5).)

Presented By:
Emmanuel Chavira



APEC 3551

FORAGPS

HARVEST EFFICIENCY.

A communication and mapping system for harvesting teams to maximize efficiency and minimize confusion

Forages

Why are they important?



01

MOISTURE

02

THE PILE

03

ENERGY CONTENT

04

LIVESTOCK PERFORMANCE

The Dairy Industry

Consolidation



Less farms - more cows

Between 2002 and 2019, the number of individual dairy herds fell by more than half



New Technology in Ag

Young farmers are taking over and looking to compete

Travis, the Dairy Farmer



Details

- Travis has successfully grown his dairy farm, following the industry trend to decrease his cost of production
- Vision is for the farm to survive the consolidation of the dairy industry
- Farm suffers from low milk production because of last year's bad silage

View live map and direct the operation

Set permissions and list harvest team members

See custom insights into the harvest operation

Users log in using company domain single sign-on

Home Manage Roster Manage Data USER: ADMINISTRATOR

Field Itinerary

| | |
|------|-----|
| 1001 | 66% |
| 1120 | 70% |
| 1123 | 72% |
| 1122 | 72% |
| 1005 | 75% |

Message TRUCK 1

- Custom Message
- Weigh Load
- Take empty weight
- Move to field 1120
- Standby

CHOPPER 1 TRUCK 4 CART 2 TRUCK 2 TRUCK 3 CART 3

FIELD 1120 FIELD 1001

Field Exit Field Entrance

Set new Route Set new approach Member Search Send Message

Set entrance and exit to fields

Draw routes for any machine depending on tractor locations

Find any machine or teammate

Send tasks or custom text to teammates

Select a machine and send a message or a task in two simple clicks

Set list of upcoming fields and see the moisture

Live map view using Apple's Find My API

Move to Field 1001

See the task-at-hand at a glance

Send tasks to team members - available by admin permission

Input load weight

Request maintenance team or contact emergency services

All other machines are visible on the live map

Field approaches are visible - set by admin

Recieve exact directions of a route assigned by admin

Ahead for 1 Miles

Message

Input Data

Request Help

CART 1

Field 1001

ForaGPS - HARVEST EFFICIENCY

Resources

Customer Acquisition

- Marketing - Outsourced
- Customer Success representatives
- Test group
- Educational resources and manuals
- Data building

Development

- Software Engineers
- Apple Find My API
- Hosting
- Website
- Customization for farm
- Copyright
- Apple App store

Operations

- Office space
- Equipment
- Accounting
- System for measuring success

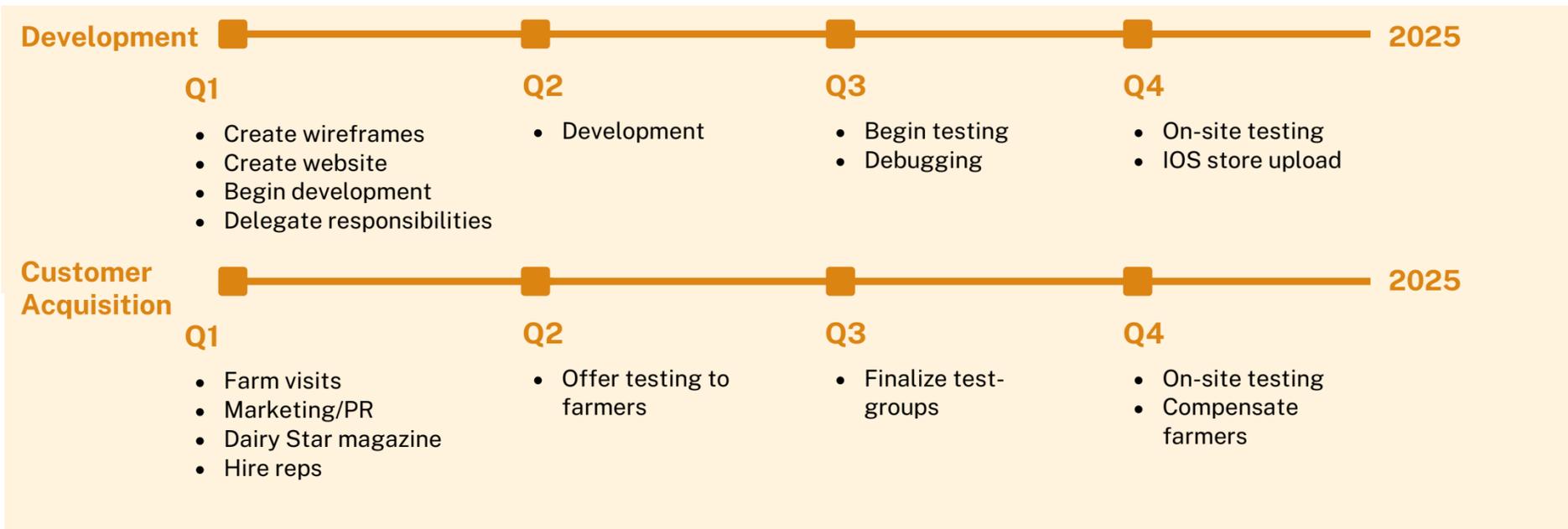
ForaGPS is a GO!



Financial Need: ~1,000,000

| ForaGPS Resources | Quantity | Annual Cost | Notes |
|----------------------------------|----------|------------------|---|
| Development/Internal Engineers | 3 | \$300,000 | Programming team salary, quality assurance, database integration, UI/UX |
| Customer Service Representatives | 6 | \$360,000 | Representatives salary |
| CEO Salary Y1 | | 60,000 | Year 1 salary |
| Customer Success (Retention) | | \$60,000 | Customer Service expenses and travel for reps |
| Hosting Expenses | | \$3,000 | Amazon Web Service |
| Total COGS | | \$783,000 | |

Product Roadmap



THANKS

1. What tech method will you use to track assets - and are these mobile enabled?
2. What is the cost to fit the average farm you target as a main customer with the tech set-up to be trackable by your software?
3. What are some key KPIs your platform can track that can be converted to real economic savings - and what level is required to make a farm owner interested in ForaGPS?

