Farmlink

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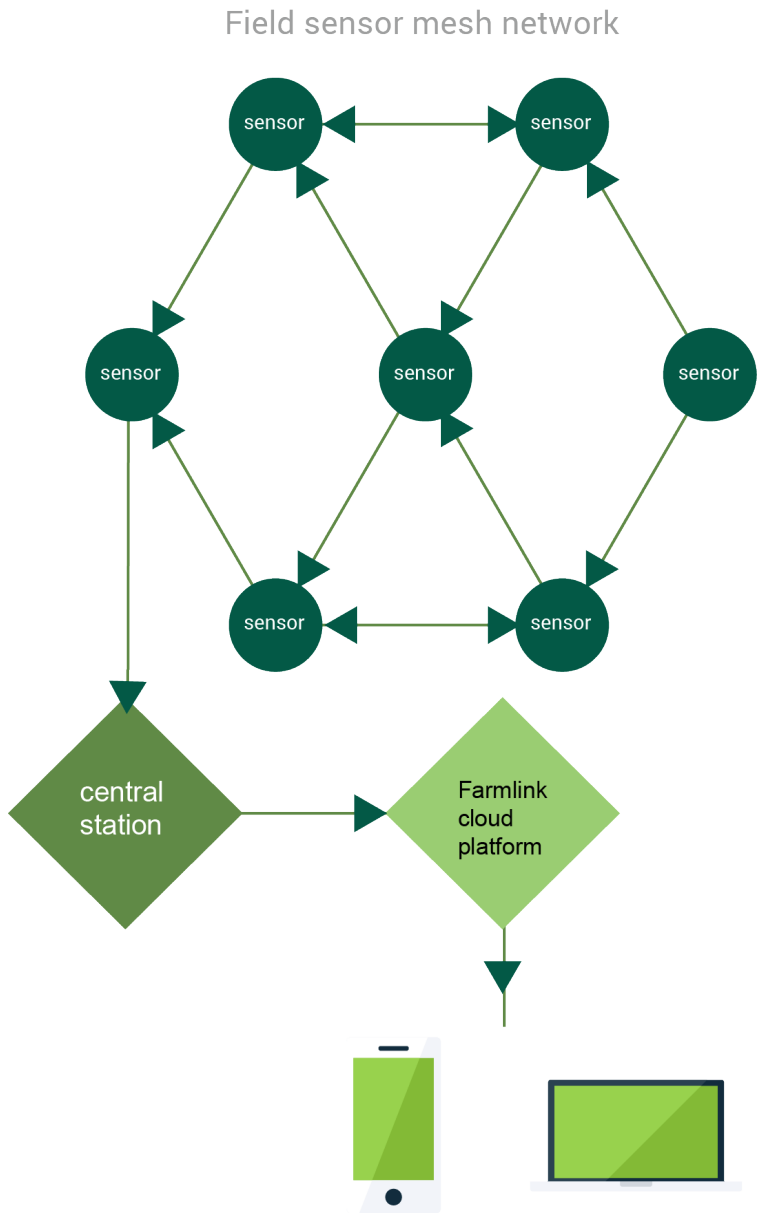
Product Details

- Farmlink is a consumer-facing analytics platform that helps farmers increase yield while reducing inputs
- The key differentiator is our incorporation of phenocycle tracking in our custom insight recommendation algorithm. Phenology carefully tracks growing degree units (a measure of heat) a crop is exposed to and recommends the optimal time to irrigate and fertilize to achieve maximum yields.
- Farmlink relies on data generated from our FarmSense modular sensor system to generate vital performance measures and actionable insights. Designed to integrate with existing farming practices and avoid combines, FarmSense sensors are embedded in the ground year around to generate high resolution data 24/7 during the entire farming season.
- Farmlink and FarmSense uses existing well-established hardware and software technologies, making it wholly feasible and well within reach.



Market Overview

- Farmlink is targeting small (10-100 acres) to medium (100-500 acres) sized farms which accounts for almost 70% of farms in the US by area.
- These small and medium farms are decisively low-tech, with little labor and low cash-flow.
- Their production per acre is lower than that of larger operations who utilize expensive proprietary technologies such as GPS mapping, aerial drones, N-sensor ALS, data management, and analytics out-sourcing.
- We have analyzed the competitive landscape for all farming technologies ranging from fertilizers and GM seeds to lab soil testing to cutting-edge photoispectrometry sensors.
- Within the past 18 months, proliferation of IoT have yielded competitors such as Tule and gThrive We plan to undercut their price point by 30-60% while leveraging our unique phenology based algorithm to create a unique product offering.

Development Plan

Fall 2014	• Market, Tech Research & Conceptualization
Jan 2015	• Hardware component testing, sensor prototyping
Mar 2015	• Algorithm / backend testing, conceptualize front end UX
Apr 2015	• Incorporation of 3rd party data, field testing with alpha prototype
Jun 2015	• Finalization of sensor, alpha-2 testing
Aug 2015	• Finalization of UX, beta rollout testing

Expected development cost break down:

FarmSense Sensor:	$5,400
Backend :	$2,500
Frontend:	$1,900
Central station:	$3,250
Misc:	$2,000
Total:	$15,050

Estimated cost breakdown for products and service rendered for 500 acre farm:

12 FarmSense sensors	$1,200
Main station	$1,300
Annual service charge	$750
Total cost Y1:	$3,250

Team

Diwei Shou is currently finishing her second year in the Integrated Product Design-IPD program. Her professional and academic experiences focuses heavily on product design and visual experience design. Diwei is from Zhuji, China

Role: **User Experience, Visual Experience, Industrial Design**

Edward Wu sub-matriculated into IPD in 2013. His interest lie heavily in consumer-tech and IoT. His expertise lies in business development and user experience design. Edward is from New Orleans, Louisiana.

Role: **Business Development, Industrial Design, Hardware Testing**

Dennis Zdonov sub-matriculated into IPD from M&T undergrad, concentrations in MEAM and Entrepreneurial Management. Currently an indie app developer, in 2010 he had launched a Top 10 iOS app. Dennis is from Omsk, Russia.

Role: **Programming, Backend Integration, Hardware Integration**