Connected Farming
The platform builder’s perspective
Know my biases
A bit of background

- Farmer’s son
- B. Tech - Agricultural Engineering
- M. Tech - Water Resources
- 3.5 years with a software company
- Ph. D. - Computational Hydraulics
- 7 years with BGI and BlackRock in the city

Started KisanHub with Giles Barker
What is KisanHub?

A cloud based business to business (B2B) software as a service (SaaS) platform for agricultural enterprises providing readily accessible relevant data. Enabling corporate agribusinesses to take more data based decisions. Reducing yield losses, input costs and maximising market opportunities.
The story so far

2012: First line of code.
2013: Joined Cambridge Accelerate. Founding team was formed.
2014: Raised capital (F & F).
2014: First enterprise customer.
2015: Formed wholly owned subsidiary in India.
2015: Second enterprise customer. Formed Strategic Partnership with NIAB.
2016: Raised seed round.
Today: 5 enterprise customers.
2000 Farmers.
Team of 20.
Why we exist

- Pervasive climate change, volatile commodity cycles, shrinking arable land
- Reducing farm yields and rising cost of farm inputs > decreased profits
- Focus on increasing farm yield whilst reducing input cost and consumption
- Farmers increasingly using disparate data sources for critical decisions
- Multiple data formats from various systems generating heterogeneous data sets
- Agri-industry data stored in vertical silos, queering the pitch for meaningful analysis
- Lack of integrated enterprise solution to unlock value in diverse data sets
Who we are

Technologists, agronomists, designers and entrepreneurs

Passionate people blending technology with agriculture

Single-minded and focused team called KisanHub
What we do

Deliver actionable decisions

Evolve insights to cut farm-inputs, boost farm yield and enhance quality

Aggregate and assimilate large data sets from multifarious sources

Design complex data models and run sophisticated analytics

Deploy technology, comprising software, sensors, satellite image processing across farms

Deliver actionable decisions
Clues | Connections | Conviction

- Simulations
- Growth modelling
- Pattern reading
- Trend spotting / Benchmarking
- Recommendation engines

- Sensors-to-satellite data capture
  - Public & private records
  - Unlocking data using horizontal scalable platform

- Actionable insights
- Go/no-go recommendations
- Clear decision points
Key challenges

- Aggregating, processing field-level weather observations and assimilating forecasting models
- Development of pest/disease forecasting models, crop growth models
- Seamless processing of satellite images for hundreds of thousands of hectare
- Farm machinery, sensor and hardware integration
- Fast data processing pipe line across variety of datasets
- Build robust, scalable cloud infrastructure and API ecosystem
- Connect farmers and researchers; bridge yield gap between research plots and farms