Build the Foundation First: Democratizing Analytics for Agriculture

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Historically: Analytics = Consulting
2-minute primer on precision agriculture
Agriculture is becoming more connected

Bayer and John Deere aren’t trying to do everything
Build products not platforms

Total Acres Lost: 6.5
Farmable Acres: 70.0
Choose simple solutions

Nutrient optimization is complex

Optimization of Nutrient Management

Although nutrient management is a complex process, improving our understanding of uptake timing and rates, partitioning, and remobilization of nutrients by corn plants provides opportunities to optimize fertilizer rates, sources, and application timings. Unlike the other nutrients, P, S, and Zn accumulation were greater during grain-fill than vegetative growth; therefore, season-long supply is critical for balanced crop nutrition. Micronutrients demonstrated more narrow periods of nutrient uptake than macronutrients, especially Zn and B. As a percentage of total uptake, P was removed more than any other nutrient. In a corn-soybean rotation, it is commonplace in Illinois to fertilize for both crops in the corn production year. While farmers fertilize, on average, 93 lbs P₂O₅, for corn production (Fertilizer and Chemical Usage, 2011), the 80% of soybean fields receiving no applied P would have only 13 lbs P₂O₅ remaining (Fertilizer, Chemical Usage, and Biotechnology Varieties, 2010). These data suggest a loom-
A simple solution

- Easy to detect
- Possible to fix
- Real economic benefit
- Lots of interested parties
Get feedback

• Lots of possibilities
• Lots of constraints in Agriculture
• Lots of potential customers
• Beware of ‘faster horses’
Play well with others

Open API, standard file formats, on the cloud
Embrace the Change

Few large customers

Complex solutions

Ongoing Projects

Lots of Data