Leveraging Big Data in Agriculture Production

i Farming – A Lucrative or Ludicrous Journey?

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How this started

I Like Words

Like is a registered Trademark of Facebook
What is Big Data?

Source: Wordpress.com
What is Big Data?

Source: Wordpress.com
Data & technology are transforming virtually every industry

Technology is transforming virtually every business sector.

All the world’s information and media is online.

Mobile devices mean anyone can reach anyone, anywhere, anytime.

Cloud computing puts a supercomputer in your pocket.

Source: *How Google Works* by Eric Schmidt, Google Inc.
Our journey is to demystify the role of data technology in production agriculture
Preliminary conclusion: there is a disconnect

Source: CreoQuality.com
What we have studied / done so far

- Monsanto’s Climate Corp. subsidiary
- Early ad mid-stage startup companies
- Field interviews with crop farmers
The Smart Farming concept makes sense:

- Smart Weather Information
- Data Analytics (yield)
- Weather, Water & Soil Monitoring
- GPS, Telematics
- Cellular / Wireless Connectivity
- Sensing Technologies
- Hardware & Software

Smart Farming
However, several building blocks are missing
These building blocks are prerequisites for finding the Holy Grail (*i.e.*, “Prescriptive” or “Smart” Farming)
In future Ag Tech should generate value by informing:

- What to Plant
- Where to Plant
- When to Plant
- What to Apply

End Result: Higher Profits
Real value will drive user adoption

TECHNOLOGY ADOPTION LIFECYCLE

Innovators

Early Adopters

Early Majority

Late Majority

Laggards

2.5%

13.5%

34%

34%

16%
Who’s Who today in Ag Tech
Who might be coming tomorrow?

IBM Watson?

Source: International Business Machines Corp.
Parting Thoughts

• Innovation in agriculture has been around as long as humans have tilled the earth

• Data technology has the potential to create significant value in farming

• However, the journey will be a long and arduous one, with several alternative routes and courses of action

• What is certain is mankind has a good track record of ascending to new technological heights

• It’s only a matter of time before we “crack the code” on Data Technology and Smart Farming
The Path to Data-Driven Farming
The Path to Data-Driven Farming

Success

Decisions

Data Gathering & Analysis

Connected Hardware & Software (IoT)

Open Architecture

The Journey Begins

YOU ARE HERE
Questions & Answers
Thank you for listening!

Rabobank

The Financial Link in the Global Food Chain