

# TRANSFORMATIVE TECHNOLOGIES



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# TRANSFORMATIVE TECHNOLOGIES

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- Drone Technology
  - Satellite Imagery
  - Remote Sensing
  - More Advanced Field Computer
  - Higher Accuracy GPS Equipment
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- All of these new technologies leads to more data being collected that will need to be managed!

# TRANSFORMATIVE TECHNOLOGIES

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- 4G LTE Internet in Rural America
- “Cloud Computing”
- Wireless Data Transfer
- Mobile App’s for Agriculture

# 4G LTE INTERNET IN RURAL AMERICA

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- Today I have faster Internet on my Cellular Phone than in my house on a cable DSL
- As 4G modem are installed in Farm Equipment, the Internet access will allow for advanced function
- This will change how data is moved and even GPS correction is delivered

# “CLOUD COMPUTING”

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## ➤ What is Cloud Computing:

+ According to Wikipedia “Cloud computing is an expression used to describe a variety of computing concepts that involve a large number of computers connected through a real-time communication network such as the Internet. The phrase also more commonly refers to network-based services, which appear to be provided by real server hardware, and are in fact served up by virtual hardware, simulated by software running on one or more real machines.”

# “CLOUD COMPUTING”

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- What does this mean for Agriculture
  - + Today computer equipment is relatively inexpensive but the processing power need to process larger data sets are still very expensive
  - + Using these “virtual” servers to process large data sets, keeps the cost to process the data competitive
  - + Grower now have access to analytic tools to make better agronomic decisions

# “CLOUD COMPUTING”

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- How secure is my data in the “Cloud”
  - + Cloud based service providers can provide you with security audit documentation upon request
  - + Cloud can also provide you with documentation of where your data is physical housed
  - + Just like server based solutions, you must trust the people you empower to handle your data

# “CLOUD COMPUTING”

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- Questions you should consider when using or building your Cloud based application
  - + Is my data stored within North America?
  - + Can I have a copy of your security audit?
  - + Where does my data go if you exit the business or sell to someone else?
- The “Cloud” is not a scary place!
- Do your Homework before you buy or subscribe!



# WIRELESS DATA TRANSFER

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## ➤ Examples

- + Trimble Connected Farm
- + Raven Slingshot
- + MyJohnDeere.com
- + AGCO AgCommand
- + AgLeader AgFiniti

# WIRELESS DATA TRANSFER

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- What is the value of these tools to a grower
  - + Your important operational data can get to Trusted Service Provider quicker
  - + When using Yield Data in Variable Rate Application, maps can be created more timely
  - + Provides a backup of your important agronomic data in case a field computer crashes

# WIRELESS DATA TRANSFER

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- Things to consider
  - + Who owns the data after data is transferred to your provider
  - + What will the service provider be doing with the data once it is transferred from the cab?
  - + How long can my data be stored on the service providers systems

# MOBILE APP'S FOR AGRICULTURE

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- SST SIRRUS
- Ag Integrated On-Site
- Trimble Connected Farm App
- iCroptrak
- DTN Ag Weather Tools

# SST SOFTWARE SIRRUS

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- [www.sstsoftware.com/products-services/sirrus](http://www.sstsoftware.com/products-services/sirrus)
- Native iPad App or available in Web Browser
  - + Collect field boundaries
  - + Collect Soil Sample
  - + Weather data on field by field basis
  - + Secure data backup
  - + Allows you to share data

# AG INTEGRATED ON-SITE

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- [www.onsiteag.com](http://www.onsiteag.com)
- Native iOS and Android App or Web Browser
  - + Sync data with the Relay to move data from a field computer to mobile device
  - + Provides a secure back up of all your agronomic data
  - + Has several industry partners to move into there data management software packages
  - + Location services

# TRIMBLE CONNECTED FARM

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- <http://www.connectedfarm.com/>
- Native iOS and Android App or Web Browser
  - + Dashboard for many different data sources
  - + Irrigation Management tools
  - + Logistics tools
  - + Fleet management
  - + Operational data transfer

# ICROPTRAK

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- <http://www.icroptrak.com/>
- Native iPad App
  - + Supports shape file imports of agronomic data
  - + Collect Soil Samples
  - + Store work orders, inputs, application data
  - + Work with you customize the forms and features to maximize your success



# DTN AG WEATHER TOOLS

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- [http://www.dtn.com/go/agweather-mobileapp/?DCMP=ag\\_AgWeatherMobileApp\\_0612\\_SellSheet\\_URL](http://www.dtn.com/go/agweather-mobileapp/?DCMP=ag_AgWeatherMobileApp_0612_SellSheet_URL)
  - + Native iOS and Android App
  - + Provides complete Historical and Forecast data for your current location
  - + With the DTN Weather Station Program, the actual precipitation and forecasting maps will be enhanced
  - + Provides info at your finger tip to make better decision

# SUMMARY

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- A number of new technologies have increased the amount of knowledge we have available to make agronomic decisions
- New technologies provide new analytics tools to help us make better decisions

THANKS FOR THE OPPORTUNITY TO SPEAK TODAY

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