DO THIS, DON’T DO THAT!

- Creating Greater Insight with Modern Farming Solutions.

Charlie Magruder
Agriculture Practice Lead, Esri
ArcGIS Enterprise is More than Software

“Mapping, Data Mgmt, Mobility, Analysis, Decision Support…”
Agriculture Decisions

- Commodity Prices
- Labor
- Pests
- Mother Nature
- Politics
GIS Decisions

- On Premise, SaaS, Hosted
- Education, “How To”
- Needs/Functions
- Time
- Budget
ArcGIS Platform

- **Big Data GeoAnalytics**: Analyze your historic spatial and non-spatial data
- **Real-time Tracking**: Capture, analyze, and alerting of device readings for fixed and mobile assets
- **System of Insights**: Interactive exploration and analysis of spatial, tabular, and unstructured data
- **Imagery**: Visualize, Manage and Analyze Imagery from every source
- **System of Engagement**: Maps and apps for everyone on any device, anywhere, anytime.
- **Field Mobility**: Inspect, Inventory, Survey and Report on all aspects of your business
- **Desktop**: Professional GIS users develop, manage and create information products used throughout the organization

**System of Record**: Establish the Esri platform as the core repository for all spatial data
ArcGIS Farm Platform

Big Data GeoAnalytics
YEAR OVER YEAR, ANCILLARY DATA, TRENDS

System of Insights
REPORTS, ANALYSIS, OUTPUT

Real-time Tracking
ASSETS, WEATHER

Developers
INTEGRATION OF APPS

Field Mobility
CROP HEALTH, OBSERVATIONS, WORKORDERS

System of Engagement
MODERN SYSTEM OF FARMING, ENGAGING

Imagery
IN SEASON ANALYSIS, VISUALIZATION

Desktop
PRO’S, MANAGEMENT, HEART OF YOUR ORGANIZATION

System of Record
Establish the Esri platform as the core repository for all spatial data
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Farm Platform

- Big Data GeoAnalytics
  - Year over year, ancillary data, trends
- Real-time Tracking
  - Assets, weather
- System of Insights
  - Reports, analysis, output
- Imagery
  - In season analysis, updated visuals
- Developers
  - Integration of apps
- System of Engagement
  - Modern system of farming, engaging
- Desktop
  - AG PRO, heart of your organization
- Field Mobility
  - Crop health, observations, workorders

System of Record
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Beck’s - FarmServer

- Precisely monitor cropping variables
- Collect data concerning variables
- Analyze data
- Use information to increase productivity on the farm
Farm Platform

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Field Mobility
CROP HEALTH, OBSERVATIONS, WORKORDERS
Focused, Powerful, and Ready-to-Use
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Major Ag Lender

- Plat Builder App driven by workflow
- Can query “Loan” at any step in the process
- Mobile App to support real-time
HAIL SWATH

SkyWise processes radar data from across the US on a 24/7 basis. All of that data is quality controlled and processed through our hail swath algorithm to determine areas where hail has fallen and what the hail size was in real-time. With archived hail size data back to 2002, WDT maintains the most authoritative hailfall database in the US.

USE CASE

Claims - Property owners don’t always know when damage occurs, so adjusting losses and assigning the loss to the correct event can be difficult. Helping homeowners find the right date of loss is critical and can help reduce fraudulent claims or claims for losses outside of coverage.

Catastrophe - Using a data service that provides hail size updates every 5 minutes can help catastrophe teams predict losses, deploy adjusters, and manage financial instruments. Additionally, WDT’s historical archive of hail data can be used to make sure that the correct date of loss is assigned to a claim so that insurances companies can maximize claims to their reinsurance companies.

Underwriting - Hail climatology data has historically been based off of point observations of hail reported to the NWS over the last 50 years. Leveraging 15 years of hail data, WDT can greatly improve the underlying data set to better understand hail risk and more appropriately set premiums.

Roofing/Restoration - roofers face constantly increasing competition. WDT’s hail data can ensure you are the first to contact owners of damaged property and expedite your claim by making sure you claim the correct date.
Farm Platform

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YEAR OVER YEAR, ANCILLARY DATA, ONGOING

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Big Data

GeoAnalytics

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Data GeoAnalytics

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Image IN SEASON ANALYSIS, UPDATED VISUALS

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ArcGIS used in new ways...

- Allowed grower(s) to map and monitor real-time data and estimate potential losses.
- Executives kept up to date
- Maps were used in insurance claim.