

Putting Your Data to Work

Benjamin Flansburg
Owner- BCA Ag Technologies
Ben.Flansburg@bcagtech.com
585-356-2751

Data Handling & Management

What are we trying to accomplish with data handling and management?

Why Worry About Data Management?



.... Is not a plan.



This Is a Plan.



What are we trying to accomplish with data handling and management?

- * Precision agriculture works- How do you make it work for your farming operation?
- * It starts with a plan, and a paper map is not a plan.
- * You've invested in your operation and now it's time to measure that investment.
- * Good data = Good decisions.

Good Data = Good Decisions

Standardized Data.

Proper Data Placement.

Proper Data Collection and Storage.

Multiple Datasets for Analysis.

“You can't manage what you can't measure.”

The Value of Data

The information that is recorded from the precision displays has a lot to tell us, but we must ask questions of it to find answers.

The Value of Data

- * Data has Value for management decisions. This value is virtually endless.
- * This is beyond the savings that is acquired from “in-field” operations.
- * Data is the key. Getting beyond savings and focusing on yield increases from management decisions.

The Value of Data

- * Data provides the facts to support or undermine your thoughts. Just because you think it is true, will not affect if it is or not.
- * Have you ever thought, if what you think is true is really true?
- * Long term profits are driven by yield increases, and yield increases are driven by data-based management decisions

Data Handling & Management

What are the biggest struggles farmers face with data handling & management?

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- * Time
- * Resources and Training
- * Accurate data collection and calibration
- * Turning data into decisions
- * Evaluating decisions
- * Distributing data to contributing partners

What Stage are You In On Your Farm or Business?

Stage 1 Descriptive “we have great records on what has happened” 54%

Stage 2 Diagnostic “we know why it happened” 23%

Stage 3 Predictive “we know what will happen” 10%

Stage 4 Prescriptive “we act and our able to be decisive” 13%

Data Handling & Management

Integrating different hardware and software systems

Integrating different hardware and software systems

- * There is no “easy” button
- * Data will need to be passed through multiple programs in order to get a usable result
- * Multiple hardware systems can create challenges in personnel training and quality data collection
- * Having a precision plan will assist in hardware and software purchases.

“Beat Them” is now “Join Them”

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Data Handling & Management

Data Security and data ownership

Data Security and Data Ownership

- * Who owns the data?
- * Who has access to the data?
- * How do they access the data?
- * Where is the data stored?
- * Where is the data vulnerable?
- * What is the “value” of the data?
- * How much data do you feel comfortable sharing?

Food Evolution, Unilever Revolution, Sustainable Evolution



Data Handling & Management

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- * Have a plan – Too much data in the beginning can overwhelm you, and you will lose sight of the goal.
- * What layers are available?
- * Do the layers being used make agronomic sense, or are we using them because we paid a lot of money for the monitor?
- * Is it quality data?
- * Two wet years and a drought does not make three years of harvest data.

What is Happening Is Good for You

Boots on the Ground

Machine As Applied/Recorded



Satellite Imaging

Aerial
Imaging
(Plane)

UAV

Field Monitors

Examples of Data



“I don’t sidedress and I don’t want to deal with the hassle of sidedressing.”



- * Response – University trials show an average \$20 to \$30 more per acre side dressing. OptRx have made \$20 to \$30 per acre over a uniform rate. Can a farmer really miss out on \$40 to \$60 per acre?
- * In Corn, OptRx has averaged more than \$20 per acre over a uniform rate in 3+ years of trials.

The return on investment of autosteering and swath control products can be directly measured. For swath control both the cost of seed production and the loss of yield in double-planted headland areas must be considered.



Light Bar or Auto-Steer?

Tillage savings when using a lightbar or autosteer system can be calculated also. A 7 percent reduction in tillage overlap will result in approximately \$1/ac cost savings.

Imagine improving your yields by as little as just 1% each year, and do it year after year –

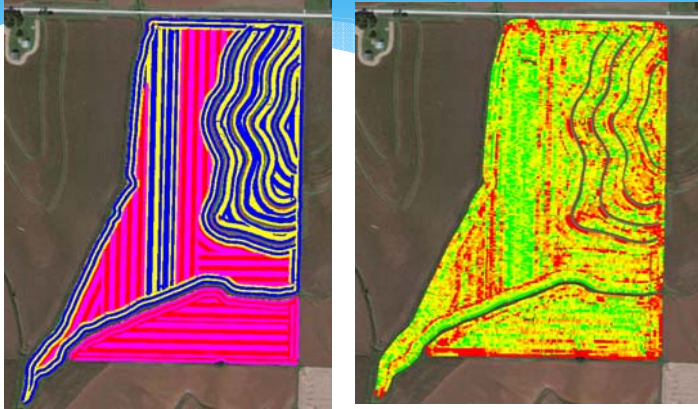
- * If you currently average 180 bushel per acre corn, at \$4.00 per bushel, that is \$720 in gross income.
- * A 1% increase in your yields, 1.8 bushels per acre, would add \$7.20 per acre to your bottom line.

Imagine.....

The next year, you add an additional 1%, increasing average yields to 183.6 bushels per acre, with another 1.8 bushels more than the last year for you to sell.

Your gross income would be \$734.40, adding \$14.40 per acre to your farm.

Simple Seed Selection



How did this pay?

- * 15.96 bushels less per acre X 18.22 acres that this hybrid got planted on = 290.79 bushels X \$4.00 / bushel = \$1163.16,
- * or \$63.84 PER ACRE on the acres that this hybrid was planted to.

The Bottom Line?

If you aren't spending time analyzing your data, then is what you think is true really true? If you don't have the time or ability to do it yourself, hire someone that can.

