

FARM DATA PRIVACY AND SECURITY

American Farm Bureau Federation®
May 25, 2011

Mary Kay Thatcher
American Farm Bureau Federation®
July 30, 2015



AMERICAN FARM BUREAU FEDERATION®

In the beginning... (about May 2013)



Data “sharing”---what is anonymized, aggregated, and “family of companies”?

- ▣ “If we use your data about your operation for purposes outside of consulting with your operation, we may aggregate and anonymize your data with similar data from other growers. The aggregated, anonymized data does not contain information that could be used to specifically identify you or your operation. We may also share your data within the family of companies and with contracted third parties to help us provide information and services that may be of interest to you.”

June/July 2013



IDM

Independent Data Management, LLC



JOHN DEERE

MONSANTO



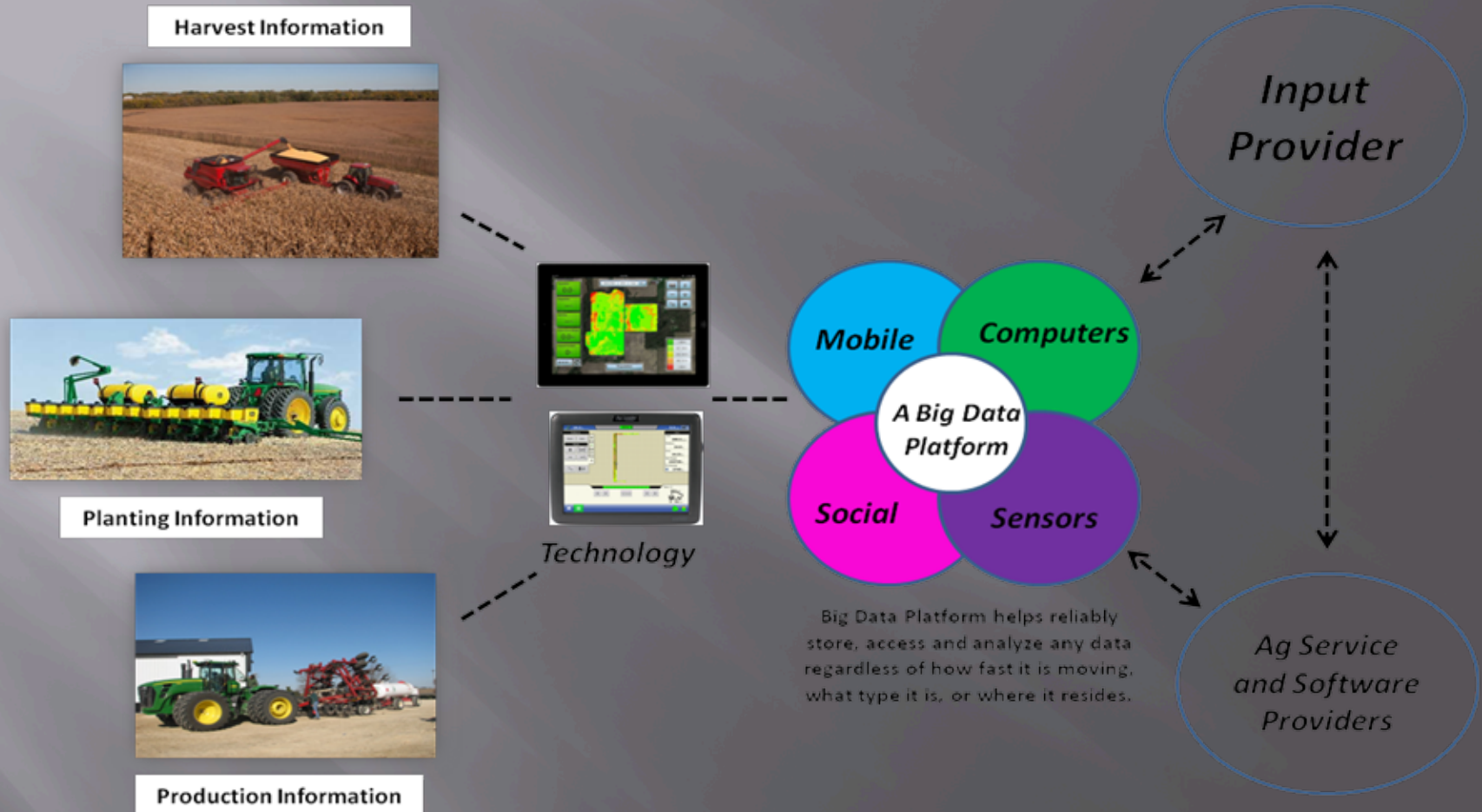
BECK'S
HYBRIDS

CASE II
AGRICULTURE



Think About Nine – Before You Sign

September 2013



December 2013/January 2014

Proprietary data collected from farming and agricultural operations is valuable, should remain the property of the farmer, and warrants protection. We support:

- Efforts to better **educate** farmers and ranchers regarding new technology or equipment that may receive, record, transmit, share and/or sell their farming and production data;
- Requiring anyone who is collecting, storing, and analyzing proprietary data, including photographs, to provide **full disclosure of their intended use of the data**;
- Formation of standardized protocols regarding privacy and terms of conditions to ensure a **standard definition** of all components within the contract. We should be an active participant in developing these protocols;
- **Compensation to farmers** whose proprietary data is shared with third parties that offer products, services or analyses benefitting from that data;
- Multiple participation options being included in all contracts;
- All proprietary information between the farmer and the company remaining between the two entities. This would not preclude a farmer from sharing data with whomever he/she chooses (e.g., a consultant);
- Ensuring proprietary data are stored at an entity that is not subject to a **Freedom of Information Act** (FOIA) request, utilizing all safeguards, including encryption, to protect the data;
- The farmer's right to enter into agreement and their rights to sell their proprietary data to another producer (e.g., in a land sale);
- Private companies entering into agreements which would allow for the compatibility/updating of equipment and updating of software;
- The **right of a farmer to have access to their own data**, regardless of when it was shared with a company;
- Language in user agreement contracts to allow producers **to remove their past aggregated data from the company's database and revoke that company's ability to sell or use that data in the future**;
- Programs to increase producers' awareness on how their data is being managed, secured, protected or used;
- Ag-tech providers **(ATP) assuming liability of all data breaches**;
- ATPs clearly explaining the **definition** of the terms "affiliate," "business partner" and "third party" and **in all precision ag contracts**;
- Farmers having the ability to control when and where they utilize precision ag technology, i.e. **field-to-field kill switch**; and
- The **development and use of independent, third-party evaluation** of the variables used by ATPs in their privacy policies and user agreements.

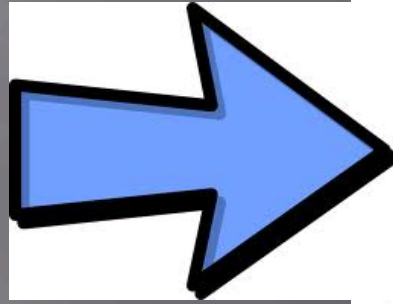
We oppose any federal agency or FOIA-eligible entity from serving as a data clearinghouse for all proprietary data or aggregated data collected by private companies.

Eight Major Questions for U.S. Farmers

- ▣ What info is being collected?
- ▣ What control does the farmer have over the info that is collected?
- ▣ With whom does the ATP share the information?
- ▣ Who else can obtain my data?
- ▣ Will the ATP notify the farmer if their policies/procedures change?
- ▣ Can I delete my data from an ATP's database?
- ▣ Who is liable if there is a data breach?
- ▣ Can I get paid for my data?

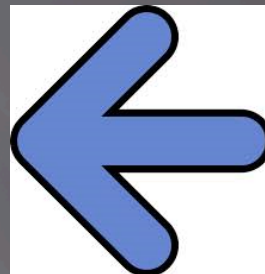
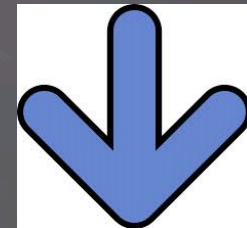
Market manipulation?





JOHN DEERE





EPA RELEASES PRODUCER INFORMATION TO ANIMAL RIGHTS GROUPS



NCBA was notified by the EPA in February 2013 that the agency had been collecting information from states on CAFOs. The information was requested by extremist groups, including Earth Justice, the Pew Charitable Trust and the Natural Resources Defense Council through a Freedom of Information Act request and the was given to them.

The information released by EPA covers livestock operations in more than 30 states, including many family farmers who feed less than 1,000 head and are not subject to regulation under the Clean Water Act.

“My data is valuable – and I want to be paid for it.



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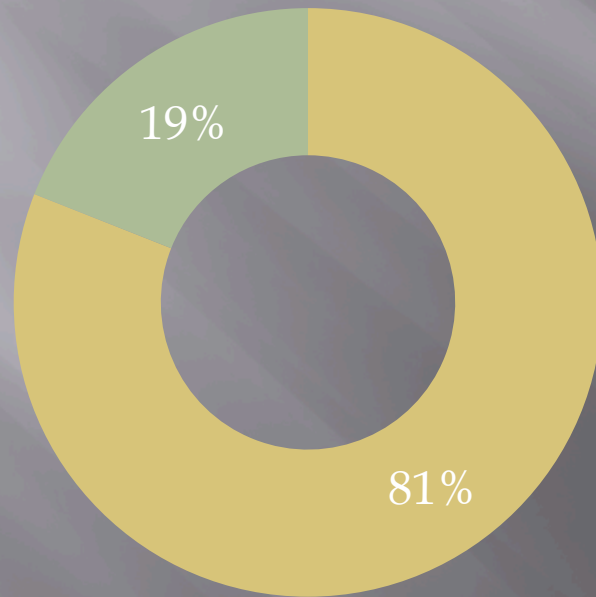
Working Group of 13

(April 2014)

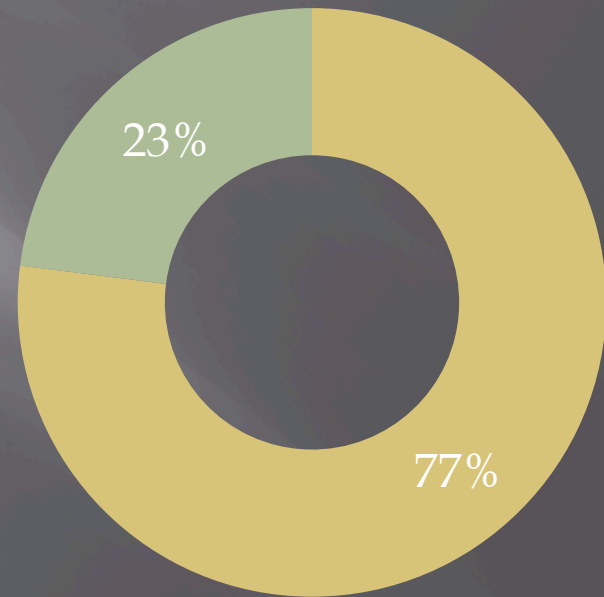
- ▣ Farm Bureau
- ▣ Farmers Union
- ▣ Soybeans
- ▣ Corn
- ▣ Wheat
- ▣ Cotton
- ▣ Rice
- ▣ John Deere
- ▣ Monsanto
- ▣ Beck's Hybrid Seed
- ▣ Raven
- ▣ Pioneer
- ▣ Dow

81% think they own their data and 77% are worried about data security

(September 2014 AFBF Survey)



■ Yes ■ No

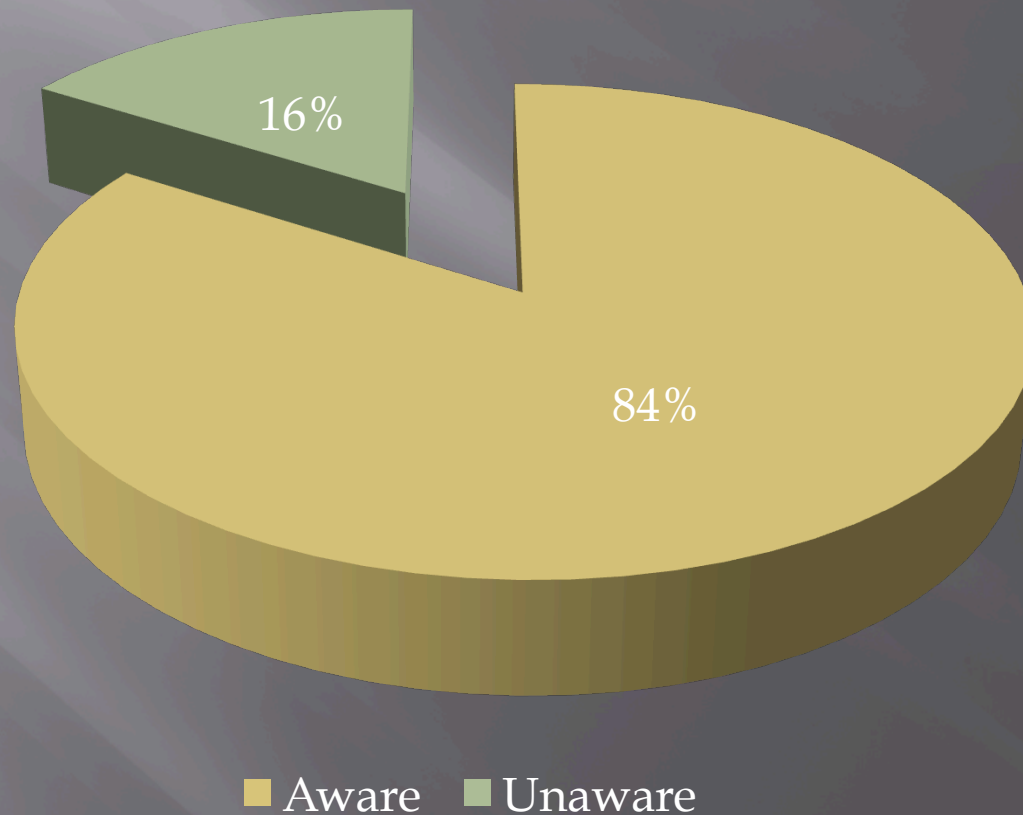


■ Yes ■ No

Education -- If you ask a company “who owns a farmer’s data, virtually every response is “the farmer owns the data””.

- ▣ **You own the data IF you own the data**
- ▣ --does the landowner own the data or the tenant?
- ▣ --what about a crop share agreement?
- ▣ --does the coop who applies the fertilizer own the data or the farmer who pays for the application?
- ▣ --does the owner of the precision ag hardware own the data or the farmer on whose land it is used?
- ▣ --IF the tenant owns the data, and the landlord is later required to prove compliance with an environmental regulations, how will he or she be able to do so?
- ▣ --IF the landowner owns the data, does it lead to higher rental rates for the tenant?

Only 16% of farmers are aware of the ways companies intend to use their data.



PRIVACY AND SECURITY PRINCIPLES FOR FARM DATA

(6-7 MONTHS -- NOVEMBER 2014)

.... the undersigned organizations and companies believe the following data principles should be adopted by each Agriculture Technology Provider (ATP).

....an ATP's principles, policies and practices be consistent with each company's contracts with farmers. The undersigned organizations are committed to ongoing engagement and dialogue regarding this rapidly developing technology.

34 Groups Signed 13 Principles

(April 2015)

- ▣ Education
- ▣ Ownership
- ▣ Collection, Access and Control
- ▣ Notice
- ▣ Transparency and Consistency
- ▣ Choice
- ▣ Portability
- ▣ Terms and Definitions
- ▣ Disclosure, Use and Sale Limitation
- ▣ Data Retention and Availability
- ▣ Contract Termination
- ▣ Unlawful or Anti-competitive Activities
- ▣ Liability and Security Safeguards

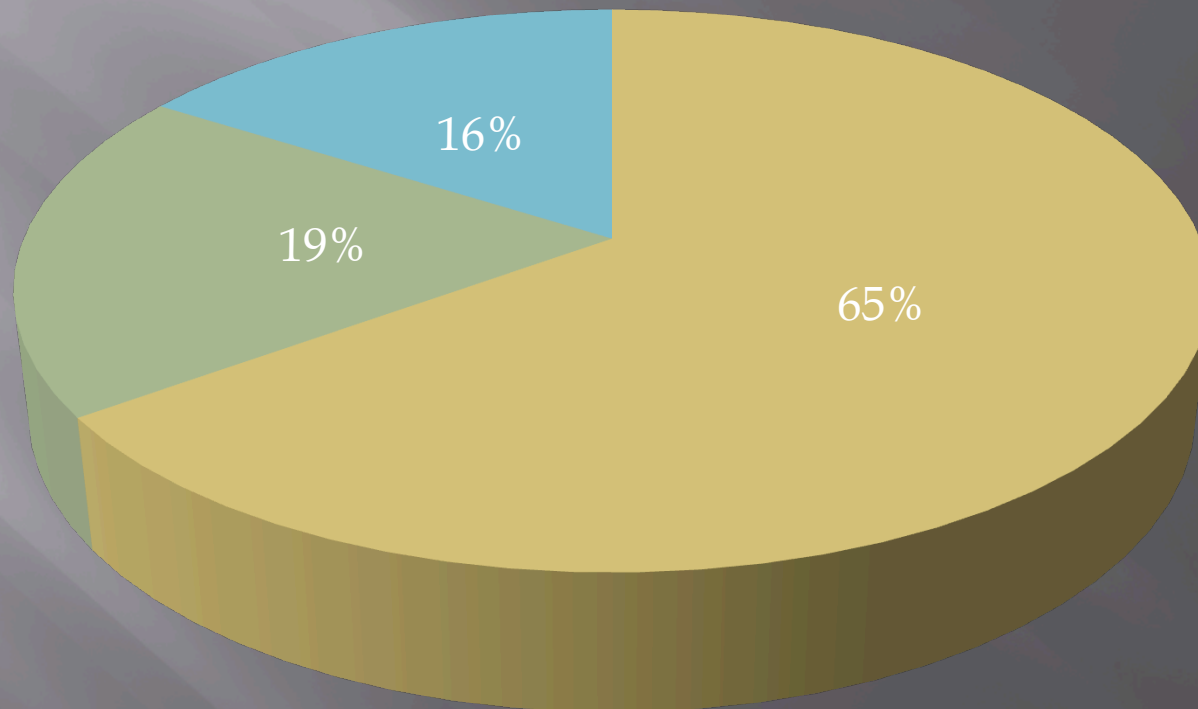
34 Supporting Groups

- ▣ AGCO
- ▣ Ag Connections, Inc.
- ▣ AgSense
- ▣ AgWorks
- ▣ Ag Leader Technology
- ▣ American Farm Bureau Federation
- ▣ American Soybean Association
- ▣ Beck's Hybrids
- ▣ CNH Industrial
- ▣ Crop IMS
- ▣ CropMetrics
- ▣ Dow AgroSciences LLC
- ▣ DuPont Pioneer
- ▣ Farmobile LLC
- ▣ Granular
- ▣ Grower Information Services Cooperative
- ▣ GROWMARK, Inc.
- ▣ Independent Data Management
- ▣ John Deere
- ▣ Mapshots, Inc.
- ▣ National Association of Wheat Growers
- ▣ National Barley Growers Association
- ▣ National Corn Growers Association
- ▣ National Cotton Council
- ▣ National Farmers Union
- ▣ National Sorghum Producers
- ▣ North American Equipment Dealers Association
- ▣ OnFarm
- ▣ Raven Industries
- ▣ Syngenta
- ▣ The Climate Corporation – a division of Monsanto
- ▣ USA Rice Federation
- ▣ Valley Irrigation
- ▣ ZedX Inc.

The process is working by “just” talking

- ▣ One CEO – privacy policy drafted but doesn't say what I'm doing and certainly not what I want my customers to think I'm doing
- ▣ Large company begged me not to publish privacy and security documents until their privacy policy was changed so they could sign.
- ▣ Never thought “playing the CBOT” was a concern.
- ▣ Language in user agreement contracts to allow producers to remove their past aggregated data from the company's database and revoke that company's ability to sell or use that data in the future; (Email goes through 46 servers)
- ▣ Ownership vs. control

How do you feel about the new technology?

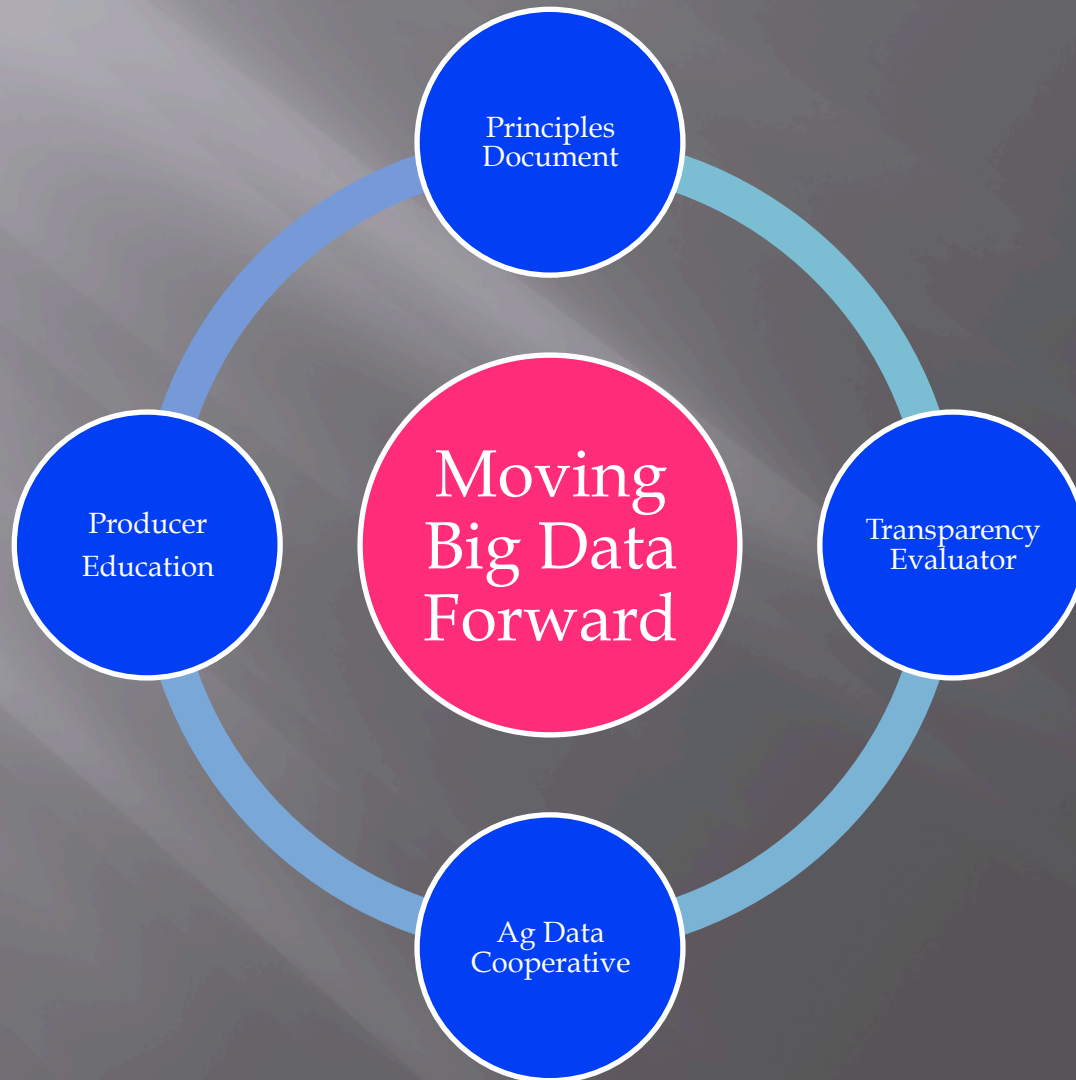


■ Skeptical/Fearful ■ Neutral ■ Embracing

Numerous audiences within agriculture (and maybe mostly generational)

- ▣ Comfortable with technology, but not with usage, privacy, transparency issues
- ▣ Uncomfortable with technology (103 beta tests and only 20 downloaded and 20 more hired someone)
- ▣ Nonbelievers- “have more in their head about their farming operation than data could possibly provide” – Outlaw – “what’s a browser”?

Farm Bureau finished the privacy and security principles and signed a “peace treaty” with the ATPs.



Lesson: Confusion reigns supreme

▣ Various contracts govern precision ag products

- ▣ Terms of Use
- ▣ Privacy Policy
- ▣ End User License Agreement
- ▣ Guiding Principles
- ▣ Data Sharing Agreement

▣ Updates are frequent

[Privacy FAQ](#) | [Privacy Policy](#) | [End User License Agreement](#) | [Terms of Use](#)

Privacy Policy

Last Updated August 1, 2014.

The Climate Corporation and its affiliates value the privacy and security of the information that our customers ("**customers**" or "**you**") choose to share with us through their purchase, enrollment or use of our farm management and decision support software, precision agriculture services and software, Precision Planting farming equipment, and insurance services, and our technology platforms, applications, and services insofar as they are used to deliver and support those products and services, which are described at www.climate.com/privacy-policy/products, (collectively, the "**Climate Corporation Service Platform**").

Please read this Privacy Policy carefully before you use the Climate Corporation Service Platform so that you will understand our practices and your options before you choose to share your information. Your use of the Climate Corporation Service Platform means that you agree to our collection, use, and disclosure of the information you share with us, as explained in this Privacy Policy.

Your Ownership of Your Information

We presume you own the information and data that you provide to us when you purchase, set up an account for, or use any Climate Corporation Service Platform product or service, including, for example, the data generated from the farming equipment you own or lease (collectively, "**Your Information**"). We do not claim any ownership interest in Your Information. That means that as between you and us, Your Information remains yours even after you provide it to us. By providing Your Information, you represent that you have the right to share it with us and to allow us to use and disclose it as explained in this Privacy Policy.

Your Information

Information We May Collect from You

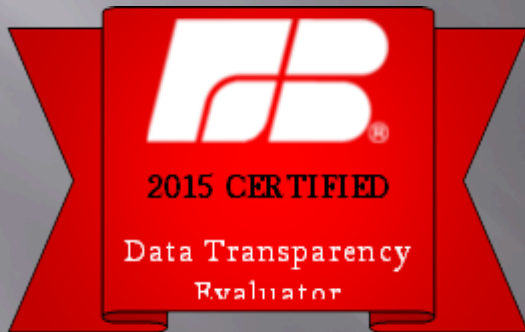
As a Climate Corporation Service Platform customer, we may collect from you the following information:

For Insurance Products

- Name, address and telephone number
- Email address
- Date of Birth
- Social Security Number
- Credit or consumer reporting or history
- Field location
- Browser and device information
- Demographic information
- Information related to administering your coverage or claims

Transparency Evaluator

- ▣ Simple
- ▣ Quick and Easy
- ▣ Transparent



It's got to be simple and quick

- ▣ Farmers can rely on seal
- ▣ Specific to type of data and product
- ▣ Allows farmer to dig deeper if interested
- ▣ Will drive ATPs to create better contracts for farmers

	Question	Answer	Explanation/Link
1	What types of information does the product collect from me?	Agronomic Data	Agronomic data is defined here [link to provision]
2	Can I terminate the contract at any time? (Understanding that payment obligation may remain)	Yes	Link to provision
3	Can I delete my data upon termination?	Yes	Link to provision
4	Does the product allow the ATP to share my data with third parties without my authorization?	Yes	Link to provision
5	Does the ATP pledge not to sell, trade, or give my data to third parties without my consent?	Yes	Link to provision
6	Does the ATP confirm that marketing materials are consistent with contracts governing use of the product?	Yes	Link to provision
7	Does the ATP obligate itself to provide notice to me if its privacy policies change?	Yes	Link to provision
8	Does the ATP define any third parties that may have access to my data?	Yes	Link to provision
9	Will the ATP notify me if a breach of data security occurs, causing disclosure of my data?	Yes	Link to provision
10	Does the ATP take appropriate security measures to safeguard my data?	Yes	Link to provision

Why would an ATP use the TE?

- In control of the process.
- No mandated contract terms.
- No risk of failure. Opportunity to revise contracts.
- Product specific. No corporate wide mandates.
- Backed by AFBF/commodity group reputation.
- Good marketing tool
- Already have “commitments”



Ag Data Cooperative – How portable is your data and is it “clean” and valuable?

- ▣ Develop a depository to aggregate, store and protect production data.
- ▣ Standardize and transfer aggregated data (*at the direction of data owners*) to agri-businesses for the creation of value.
- ▣ Develop and implement a process to **certify** producer data.
- ▣ Develop analytical tools/applications that create value for ADC members.
- ▣ Generate self-sustaining revenue to support continuing ADC operations.

- Most farmers have always thought what they did was private. With technology changes, including drones, there has been or will be a paradigm shift.
- Very likely to lead to greater consolidation in agriculture
- Farmers are excited, challenged, pleased, fearful and intimidated.

