



THE IMPORTANCE OF TRUST IN THE AGRIBUSINESS VALUE CHAIN

Trey Malone

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Behavioral Insights for Agricultural Supply Chains (BIAS)

- Topics include:
 - “Why do we sell milk as ‘2% Fat’ as opposed to ‘98% Fat Free’?”
 - “Are consumers really confused by plant-based milks and proteins?”
 - “How Will Mandatory Labeling of Genetically Modified Food Nudge Consumer Decision-Making?”
 - “How have ranchers actually responded to the Endangered Species Act?”
 - “Do voters blame the President for the agricultural trade war with China?”
 - “What makes people think like a farmer?”
 - “Can a grower’s friends influence his tillage decisions?”
 - “How important is trust when growers deal with invasive pest issues?”
 - “How does an advisor develop trust with untrusting people?”



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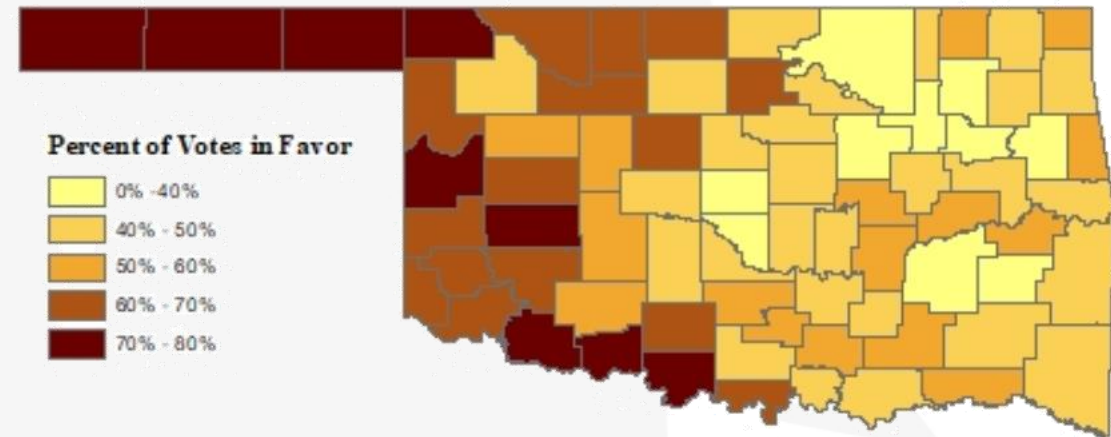
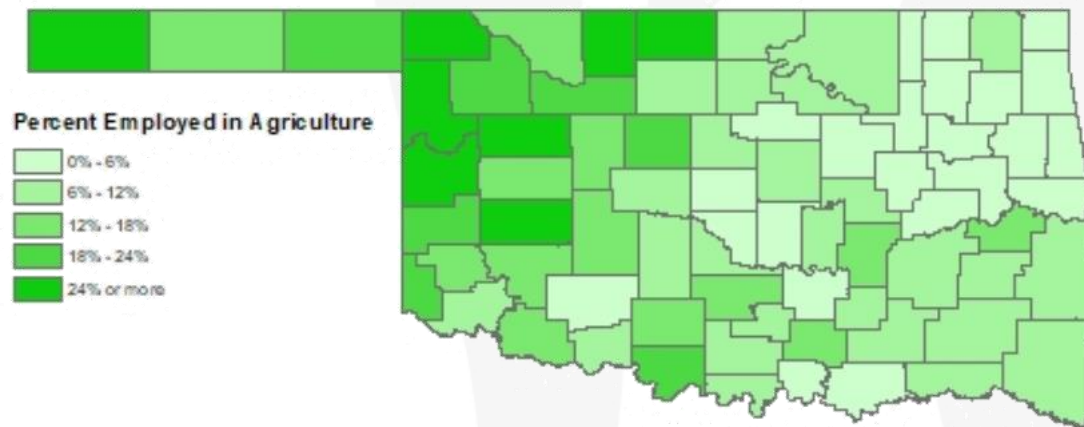
Learning Objectives

- Discuss the heterogeneity of beliefs regarding American agriculture
- Identify how that confusion and uncertainty creates a deep need for trust
- Describe how relational trust influences agribusiness decision-making
- Outline the attributes most important to developing trust in relationships with agriculture



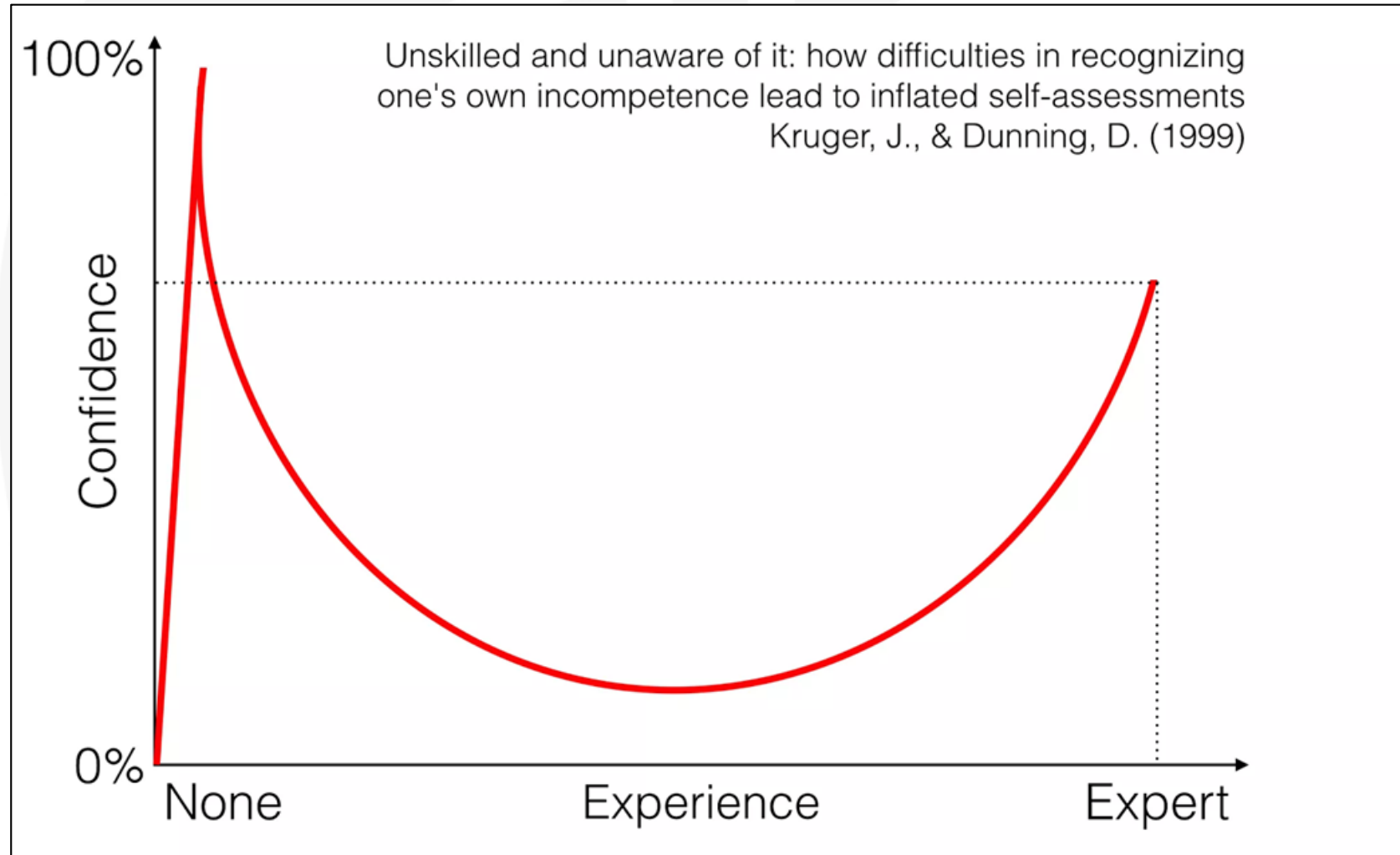
#1: Discuss the heterogeneity of beliefs regarding American agriculture

- Less than 1% of people directly involved with agriculture
- Proposition 777: Oklahoma Right to Farm
 - 71.4% of variation in voting explained by agricultural employment





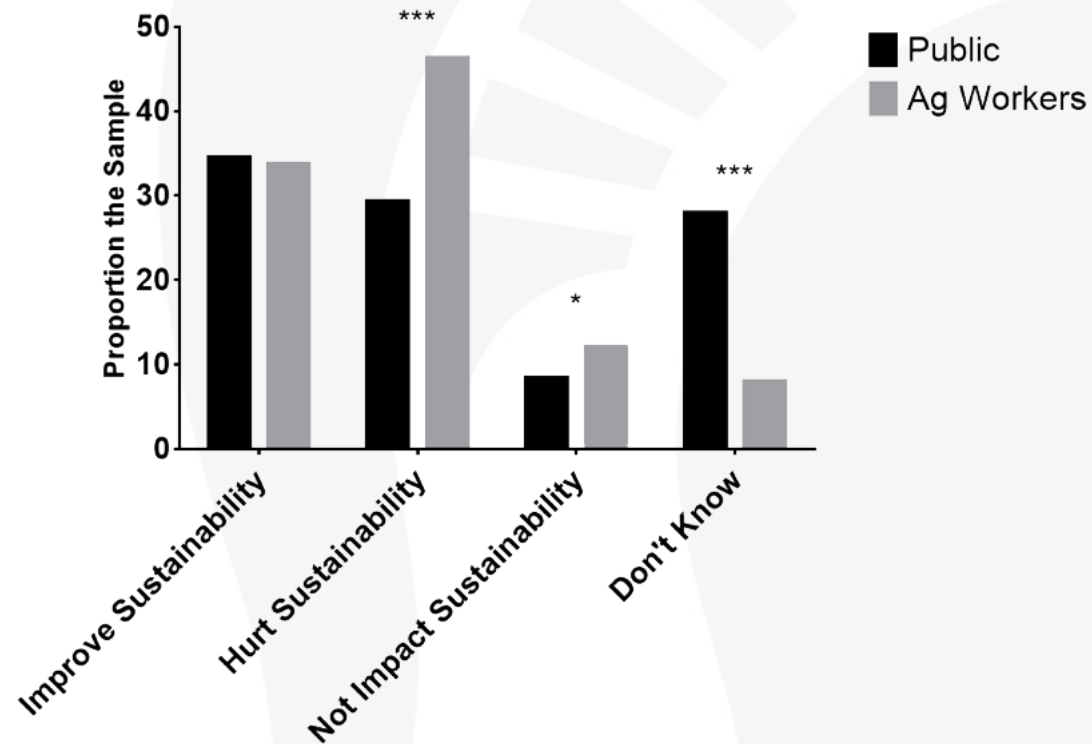
Dunning-Kruger Effect





What do people think, and how confident are they about it?

- placing additional regulations on farmers to adopt more sustainable practices would...





#2: How that confusion and uncertainty creates a deep need for trust

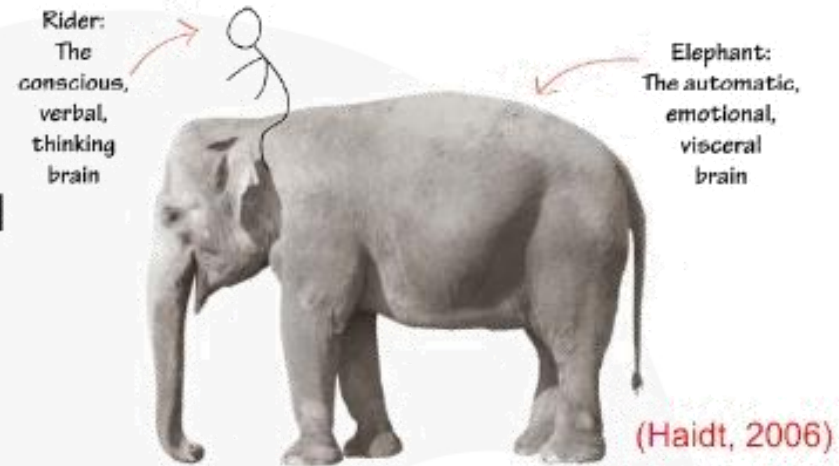
Shubert's Fisherman and Trout

- With clarity the trout (consumer) has the edge. But muddy the waters, and the balance of power shifts to the fisherman (companies).
- Counting on high search opportunity costs for consumers, companies seem to be trying to muddy the waters and segment markets on real differences in demand for fictional differences in food.



One brain, two minds

- Elephant = impulsive mind
- Rider = Rational mind
- Path = the environment

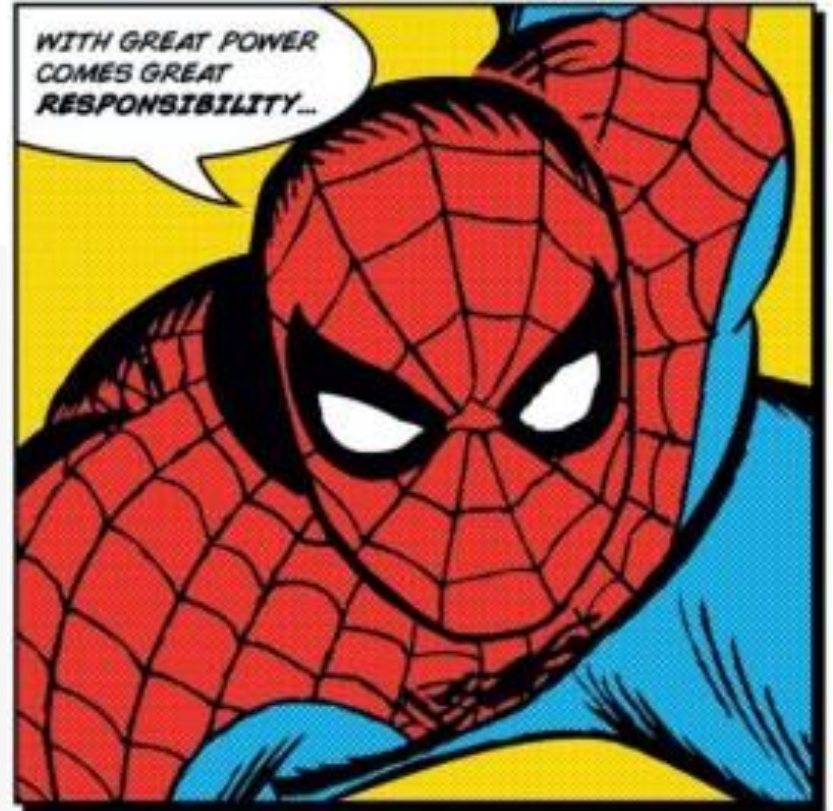


Willpower is the strength of the rider



Takeaways

- The less knowledgeable a buyer is about what they are purchasing, the more power the seller has
- With great power comes great responsibility...





Farmers talk. This is why that matters.



- Ongoing tillage intensity project with MI soybean growers.
- In collaboration with James DeDecker, Director of the Upper Peninsula Research and Extension Center



Farmers talk. This is why that matters.

- Why tillage?



FOOD + POLICY

FARMING

HEALTH

ENVIRONMENT

No-Till Farmers' Push for Healthy Soils Ignites a Movement in the Plains

No-till farming started as a way to keep costs down for conventional farmers in danger of losing their land. Now it has become a subculture and a way of life for outsider farmers all over rural America.



4:33

PRODUCERS

A Grass-Roots Movement For Healthy Soil Spreads Among Farmers

Even Jimmy Emmons, who seems about as self-assured as a farmer can be, acknowledged that he doesn't even go to his local coffee shop anymore. If he did, he'd hear disapproval from his fellow farmers for doing things like planting his wheat directly into a living stand of plant residue without tilling or grazing his animals on cover crops.



Farmers talk. This is why that matters.

Tillage intensity project with James DeDecker, Director of the Upper Peninsula Research and Extension Center as part of a long-term tillage intensity project with Michigan soybean growers.

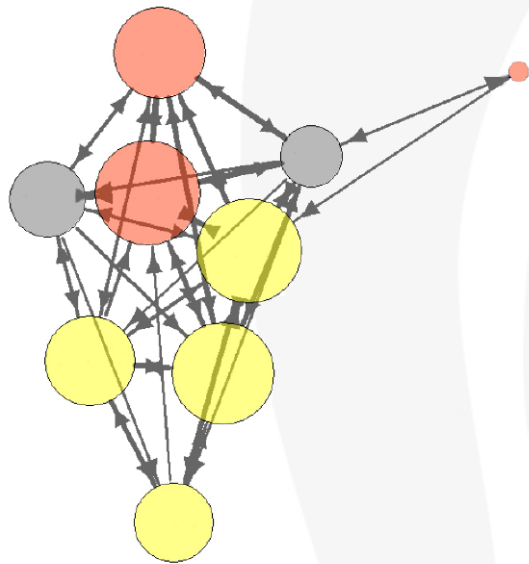
How well do you know each of the following growers?

	Extremely well	Very well	Moderately well	Slightly	Not at all	Click here if this is you
FARMER NAME	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FARMER NAME	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
FARMER NAME	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

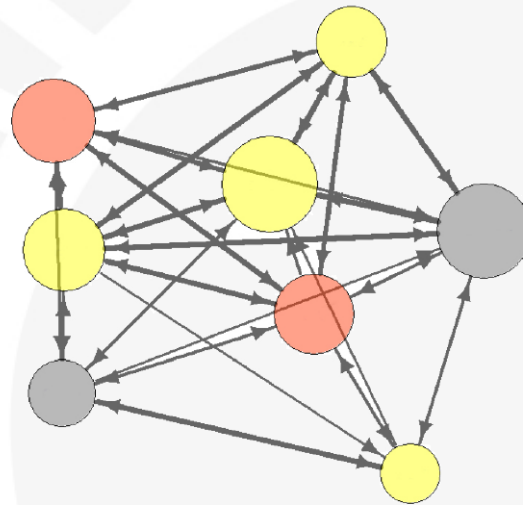


Farmers talk. This is why that matters.

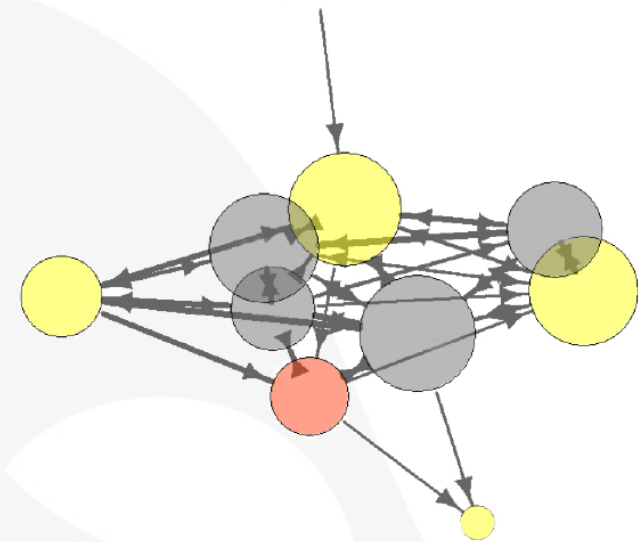
Central Region
Social Network



Northeast Region
Social Network



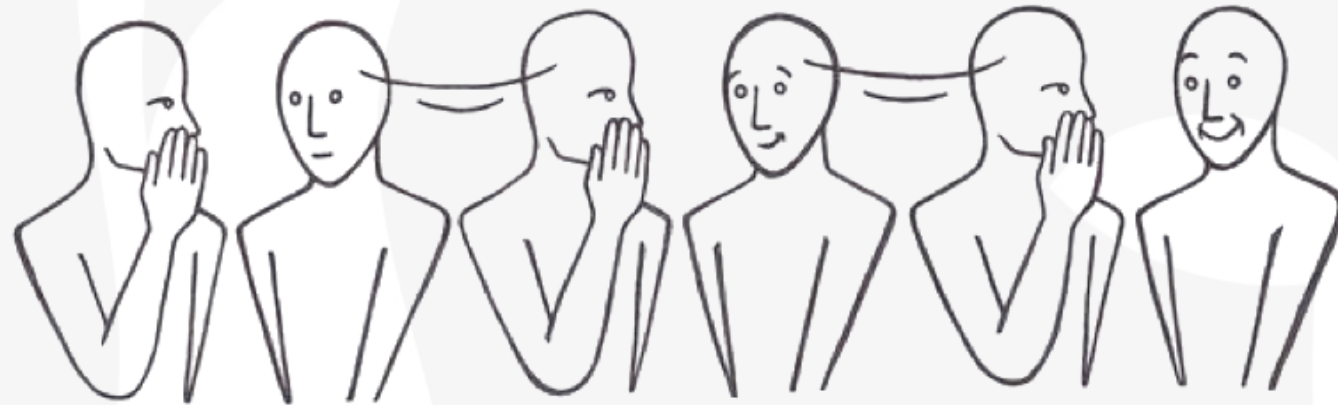
Southwest Region
Social Network





Takeaways

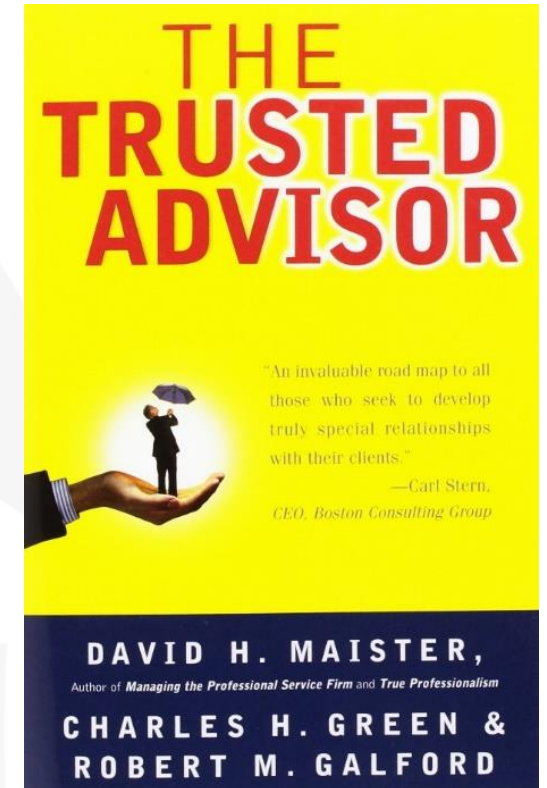
- Even when people think they're isolated, they aren't
 - At least in a rural ag community
- Even though tillage decisions should be made on a case-by-case basis, the tillage intensity decisions of neighbors are likely to significantly influence other neighbors





#4. Outline the attributes most important to developing trust in the value chain

$$\text{Trust} = \frac{\text{Credibility} + \text{Reliability} + \text{Intimacy}}{\text{Self Orientation}}$$





How relational trust enters into grower decisions

- **Credibility** – the quality of being believable
- **Reliability** – the quality of being dependable
- **Intimacy** – the quality of being familiar
- **Self-Orientation** – the quality of being overly concerned with yourself relative to others



How relational trust enters into grower decisions


- Economists traditionally think people have relatively stable **preferences**
 - Examples: I like steak more than chicken, I like lower prices, etc.
- **Beliefs** and **perceptions** are much more fragile
 - Relational trust fits here





How relational trust enters into grower decisions

- Discrete choice experiment on invasive insect pest management with Braeden Van Deynze and Scott Swinton
- Soybean growers contacted via mail, survey conducted online (N=288 choices)

Environmental Conditions:

 *Expected Pest Damage* 20% Yield Loss After 3-Day Delay

Custom Spray Options:

	Co-Op	Another Farmer	Input Dealer
 <i>Chance of a 3-Day Delay</i>	40%	20%	40%
 <i>Custom Fee</i>	\$5 / Acre	\$5 / Acre	\$5 / Acre

Additional Assumptions:

- Expected soybean price at harvest is **\$9 per bushel**
- Insecticide chemical cost is **\$5 per acre**

Given the information above, which option would you choose?

Co-op

Another farmer

Input dealer

Spray myself

Not spray



How relational trust enters into grower decisions

- Discrete choice experiment on invasive insect pest management with Braeden Van Deynze and Scott Swinton
- Soybean growers contacted via mail, survey conducted online (N=288 choices)

Think about the person you would consider hiring from a **co-op** to apply insecticides on your soybean fields.

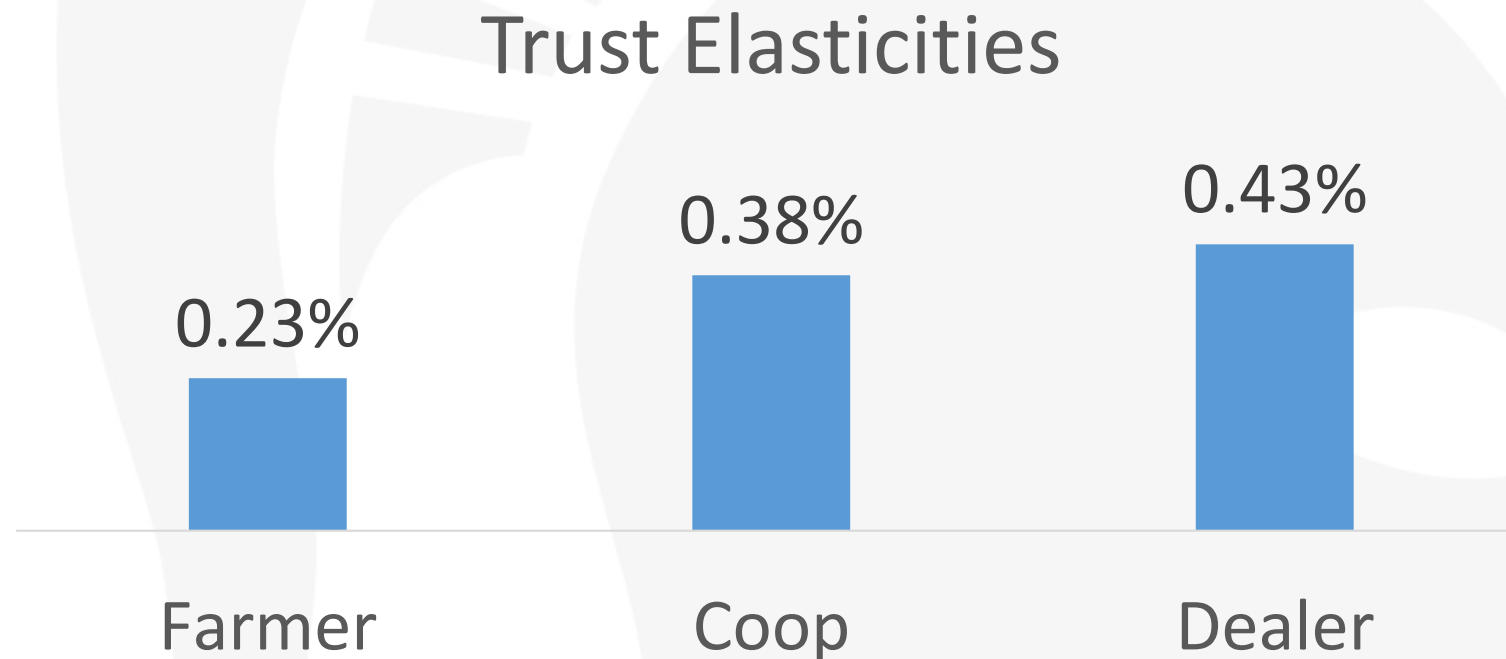
Please rate this person on the following characteristics:

Low Expertise	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	High Expertise
Low Reliability	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	High Reliability
Weak Connection to Your Operation	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Strong Connection to Your Operation
Focused on Themselves	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Focused on You



How relational trust enters into grower decisions

- Empirical Results: Interpreted as what happens to a grower's choice given a 1% increase in their trust of a producer





How relational trust enters into grower decisions

- Key Takeaways
 - Relational trust matters for everyone but...
 - The impact of a change in relational trust is almost twice as beneficial/harmful for businesses (e.g. input dealers and coops) as it is for other farmers

Go above and beyond to develop those relationships with your clients



How do I develop relational trust with clients?



International Food and Agribusiness Management Review
Volume 19 Issue 3, 2016

Farmers' Perceptions of Building Trust

Claire Newman^a and Brian C. Briggeman[ⓑ]

^a *Professor and Director, Arthur Capper Cooperative Center, Department of Agricultural Economics,
Kansas State University, 305C Waters Hall, Manhattan, KS 66506, USA*



How do I develop relational trust with clients?

- 193 members of the Kansas Farm Management Association
- Best – Worst Estimation
 - Asked participants to say which items were most/least important
 - Just as true for people who are *untrusting*

10. In the set of statements below, please click the button of the one statement that **MOST** represents credibility in an ag sales rep, and click the button of the one statement that **LEAST** represents credibility.

Most Represents Credibility



Reputation of the company they
work for

Years working in the industry

Well researched and
knowledgeable of topic

Does not lie or exaggerate

Least Represents Credibility





How do I develop relational trust with clients?

- Top 3 ways to develop:
 - Self Orientation
 - Focuses on defining the problem, not guessing the solution
 - Listens without distractions
 - Asks me to talk about what's behind an issue
 - Reliability
 - Follows through on actions requested by me
 - Makes specific commitments and delivers on them
 - Adapts to changing circumstances and situations



How do I develop relational trust with clients?

- Top 3 ways to develop:
 - Credibility
 - Does not lie or exaggerate
 - When they don't know, they say so
 - Well researched and knowledgeable of topic
 - Intimacy
 - Able to be candid and upfront about situations
 - Stayed in contact via calls, visits, etc.
 - Not afraid to make conversation



A Cautionary Tale

“The advisor who thought
he knew it all.”

– Francis Epplin

“The curious task of
economics is to
demonstrate to men how
little they really know
about what they imagine
they can design.”

– F.A. Hayek





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Empirical Results

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	<i>B</i>	<i>CI</i>	<i>p</i>	<i>B</i>	<i>CI</i>	<i>p</i>	<i>B</i>	<i>CI</i>	<i>p</i>	<i>B</i>	<i>CI</i>	<i>p</i>
(Intercept)	368.65	278.94 – 458.35	<.001	241.88	110.39 – 373.37	<.001	11.96	-150.01 – 173.93	.884	358.67	134.61 – 582.72	.002
cec	-14.02	-23.57 – -4.47	.004	-17.00	-26.58 – -7.42	<.001	-15.42	-24.31 – -6.54	<.001	-15.06	-23.30 – -6.82	<.001
degreenorm				227.62	51.14 – 404.11	.012	245.79	82.49 – 409.09	.004	210.08	57.67 – 362.49	.007
income							37.31	19.93 – 54.69	<.001	33.93	17.73 – 50.13	<.001
redcost										-52.42	-77.56 – -27.29	<.001
Observations	103			103			103			103		
R ² / adj. R ²	.077 / .068			.134 / .117			.268 / .246			.377 / .352		



How relational trust enters into grower decisions

Variable	Estimate
Another farmer	3.705* (0.786)
Another farmer's fee	-0.083 (0.052)
% increase in the change the neighbor farmer is delayed three days	-0.052* (0.014)
Trust in another farmer	0.057 (0.048)
Coop	3.925* (0.788)
Coop Fee	-0.070 (0.069)
% increase in the change the coop is delayed three days	-0.052* (0.012)
Trust in the coop	0.069 (0.036)
Input Dealer	4.077* (0.645)
Input Dealer's Fee	-0.142* (0.044)
% increase in the change an input dealer is delayed three days	-0.033* (0.008)
Input Dealer's Trust	0.095* (0.029)
Spray Myself	2.575* (0.367)



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