

DETERMINING THE ECONOMIC VALUE OF TRUST

by

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Abstract

Trust has been considered an integral part of maintaining any successful business relationship, and without trust, a business transaction would likely not occur. While trust has been a necessary component of these transactions, there remains to be minimal research on if customers truly value trustworthiness in a sales representative. And if customers do indeed value a trusted relationship, little is known how sales representatives can best enhance these trusted relationships.

The primary objective of this research was twofold; first the economic value of trust and its components was estimated in a loan officer and farmer relationship, and second, was identifying the most effective ways that loan officers or sales representatives can increase their own trustworthiness with farmers.

An online survey distributed to Kansas farmers was composed of three main components; general trust section, a best-worst simulation, and a choice experiment section. The general trust section motivated respondents to think about their perceptions of trustworthiness. In a best-worst simulation, respondents indicated which statements most and least represented the four trust components. The last section prompted respondents to report the trust score of their current loan officer and ranked that loan officer against hypothetical loan officers. Using a rank-ordered logit, the willingness to pay (WTP) estimates were calculated, giving insight to the most valued components of trust.

Results from the choice experiment show that farmers greatly value self-orientation far above the other three trust components. On average, farmers are willing to pay .90% interest rate for a loan officer to be very focused on them and their operation. For a very credible and a very reliable loan officer, farmers were willing to pay .80%. Intimacy, or strong connection between the loan officer and farmer, was a distant last with farmers only willing to pay .40%.

In conclusion, Kansas farmers do place economic value on trust in a business relationship. Self-orientation was the most valued trust component, and sales representatives who want to deepen a trusted relationship should focus on bettering themselves. This paper will generate ample discussion as it is a significant contribution to the literature on trust in business relationships.

Table of Contents

List of Figures	vii
List of Tables	viii
Acknowledgements	ix
Chapter 1 - Introduction.....	1
Chapter 2 - Literature Review.....	5
2.1 Trust from a Sociological Standpoint	5
2.2 Understanding Levels of General Trust.....	7
2.3 Processes to Build and Develop Trusted Relationships with a Salesperson.....	9
2.4 Assessing Risk Associated with the Attribute of Trust	12
2.5 Attributes of Close Trusted Relationships	14
2.6 Importance of Organizational Trust Attributes.....	14
2.7 Establishing the Importance of Salesperson Attributes	16
2.8 The Importance of Lending and Trusted Relationships.....	18
2.9 Conclusion	19
Chapter 3 - Theoretical Framework	21
3.1 Introduction.....	21
3.2 The Random Utility Model.....	22
Chapter 4 - Survey Construction.....	28
4.1 Introduction.....	28
4.2 Online Survey Requirements and Structure.....	29
4.3 Discussion of General Trust Questions	31
4.4 Best-Worst Survey Questions	33
4.4.1 Credibility	35
4.4.2 Reliability.....	36
4.4.3 Intimacy	37
4.4.4 Self-Orientation.....	39
4.5 Best-Worst Survey Design.....	40
4.6 Choice-Experiment	42
4.6.1 General Setup.....	43

4.7 Demographics	47
4.8 Survey Collection	48
Chapter 5 - Farmer and Trust Data	49
5.1 Farmer Data Description.....	49
5.2 General Trust Data Descriptive Statistics.....	51
5.3 General Trust with Agricultural Sales Representatives	54
5.4 Decision Making Ranking	56
5.5 Industry Trust Rankings.....	57
5.6 Ranking the Trust Factors.....	59
Chapter 6 - Loan Officer Choice Experiment.....	61
6.1 Introduction.....	61
6.2 Calculating a Trust Score.....	61
6.3 Current Loan Officer Trust Scores	62
6.3 Empirical Model- Ranked Ordered Logit.....	66
6.4 Choice Experiment Results.....	69
6.5 Conclusions.....	75
Chapter 7 - Best/Worst Survey Results	77
7.1 How to Best Build Trust with Farmers.....	77
7.2 Best-Worst Conditional Logit Model	79
7.3 Best Worst Results.....	82
7.3.1 Credibility	82
7.3.2 Reliability.....	85
7.3.3 Intimacy	88
7.3.4 Self-Orientation.....	90
7.4 Conclusions.....	93
Chapter 8 - Conclusions, Limitations, and Future Research	95
8.1 Summary of Purpose and Methods.....	95
8.2 Research Conclusions	96
8.2 Limitations of the Research	98
8.3 Future Work	99
Chapter 9- References.....	101

Appendix A - Survey Instrument..... 105

List of Figures

Figure 4.1 The Trust Component Statements Utilized in the Best Worst Block Design.....	34
Figure 7.1 : Trust Component Statement Used In Best Worst Block Design.....	78
Figure 7.2: Credibility Histograms Reporting Frequency of Statement Being Always Selected as “Least” Representative (-4) to Always Being Selected as “Most” Representative (4) by Each Respondent.....	84
Figure 7.3: Reliability Histograms Reporting Frequency of Statement Being Always Selected as “Least” Representative (-4) to Always Being Selected as “Most” Representative (4) by Each Respondent.....	87
Figure 7.4: Intimacy Histograms Reporting Frequency of Statement Being Always Selected as “Least” Representative (-4) to Always Being Selected as “Most” Representative (4) by Each Respondent.....	90

List of Tables

Table 5.1 : Descriptive Statistics of Farmer Socioeconomic and Demographics.....	51
Table 5.2 : General Trustworthiness Scores of Farmers.....	52
Table 5.3 : General Trust Likert Scale Score Averages: Segmented by Gender and Age of Farmer	53
Table 5.4 : Average Speed to Trust by Farmer’s Gender and Age.....	54
Table 5.5 Average Agricultural Sales Representative Trustworthiness Scores:.....	55
Table 5.6 : Average Number Agricultural Sales Representative Relationships per Farmer; Analyzed by Farmers’ indicated trust in those relationships	56
Table 5.7 : Ranking of Factors Influencing Business Decisions : Segmented by Gender and Age of the Farmer	57
Table 5.8: Trusted Relationship Industry Rankings : Segmented by Gender and Age of the Farmer	59
Table 5.9 : Ranking Value of Trust Components as Value in a Relationship	60
Table 6.1: Farmers Reported Trust Scores for Current Loan Officer.....	63
Table 6.2 : Average Current Loan Officer Trust Scores : Segmented by Farmer Socioeconomic Demographics	65
Table 6.3 : Rank Order Logit and Willingness to Pay (WTP) Estimates for Trust	71
Table 6.4: Rank Order Logit and Willingness to Pay (WTP) Estimates for Trust Components: Segmented by Socioeconomic Demographics	72
Table 7.1: Conditional Logit Estimates and Representative Shares for Credibility.....	83
Table 7.2: Conditional Logit Estimates and Representative Shares for Reliability	86
Table 7.3: Conditional Logit Estimates and Representative Shares for Intimacy	89
Table 7.4: Conditional Logit Estimates and Representative Shares for Self – Orientation.....	91

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Chapter 1 - Introduction

Trust has been considered an integral part of maintaining any successful business relationship, and without trust, a business transaction would likely not occur. While trust exists often as a necessary component of these transactions, there has been minimal research on the economic value of trust. That is, little is known about the value customers place on trustworthiness of a sales representative. And if customers do indeed value a trusted relationship, the literature is sparse on how sales representatives can best enhance these trusted relationships.

In agriculture specifically, trusted relationships can serve as a vital component of conducting business. Wilson(2000) states that trust plays the role of cohesion in agricultural transactions, holding the relationships together in support of common business goals. Having assurance that each party will honorably uphold their end of a contract under any and all unforeseen circumstances generates value for both parties (Wilson, 2000). Thus, farmers may find additional economic value to work with sales representatives who are knowledgeable and reliable in their field of work.

This thesis has two primary objectives. First, the economic value of trust is estimated in a loan officer and farmer relationship. Second, is to identify the most effective ways that loan officers and/or sales representatives can increase their own trustworthiness with farmers. Furthermore, this research identifies key differences in trust preferences across genders, ages, and size of farm.

In order to meet these two objectives, trustworthiness or trust needed to be clearly defined. Trust is often defined as the dependability, confidence in actions and motives, and faith associated with an individual. However, this definition is nebulous and creates complexities when trying to identify the economic value of trust. Thus, the definition of trust needs to be clearly understood by

farmers. If such a tractable definition could be identified, then trust could be valued as a trait or attribute of a relationship.

To help clarify trust as an attribute, four components of a trusted business relationship are used. Maister, Green, and Galford (2000) decompose trust in a business relationship into credibility, reliability, intimacy or how well you know the customer and his or her goals, and self-orientation or showing one has the customer's best interest at heart. That is, Maister et al. (2000) argue trust is a function of these four components, which creates a clear way to define trust and its attributes for farmers.

Credibility is one's credentials and the words used to describe their field of work (Maister et al, 2000). Thus, breaking down how knowledgeable or skilled the sales representative is at their job. *Reliability* is the ability of the sales representative to connect words with actions (Maister et al., 2000). That is, being able to follow through with actions and remain consistently dependable. *Intimacy* embraces the level of security that a customer feels with their sales representative and is typified by the sales representative truly knowing the goals and objectives of the customer in both business and life (Maister et. Al., 2000). A more open and well-defined relationship will lead to greater transfer of information, increasing satisfaction for both parties. *Self-orientation* considers where the sales representative places the focus of the relationship (Maister et al., 2000). That is, if someone has low self-orientation, then the sales representative has the customer's best interest at heart. Conversely, high self-orientation places the focus on the sales rep and their own personal motivations.

Using this breakdown of trust promoted a greater foundation of understanding on trust preferences that Kansas farmers and/or ranchers have towards ag sales representatives.

Furthermore, it increased the knowledge of the best ways for ag sale representatives to deepen those trusted relationships with their clients, leading to increased satisfaction for all parties.

To collect the necessary data to meet the research objectives, an online survey was developed and distributed to Kansas farmers and ranchers. The survey first collected the respondents' general trust perception. After establishing their views on trust, respondents were asked to identify the best ways to demonstrate the four trust components. A best-worst survey format was used, which allowed for the identification of the best and most important ways to build a trusted relationship. The respondents then went through a choice experiment, which provides data to estimate the willingness-to-pay (WTP) for trust and the four trust attributes. Lastly, the respondents reported demographic information used to identify the sample representativeness.

Analyzing responses from the survey yielded very interesting and insightful results. One of the most intriguing results was that the ranking of the trust components' importance in valued relationships did not match the WTP estimates calculated for each trust component in the choice experiment. For example, farmers ranked self-orientation, or the focus of the sales representative, as the least valued component in a trusted relationship. Yet their responses from the choice experiment revealed they were willing to pay the most for the attribute of self-orientation. That is, they were willing to pay more for someone who is very focused on the farmer's wants and needs, opposed to fulfilling their own agenda.

Another key finding was that the best way for sales representatives to build trustworthiness with farmers is to focus on bettering themselves rather than concentrating on things outside of their control. Farmers value the knowledge, integrity, and motives of the sales representative much more than features like the company they work for or their age. Spending quality time with the farmer to fully understand their goals and values will help the sales representative better define the

problems and needs, without prematurely guessing a solution. These small, but meaningful aspects of the relationship are highly valued by the farmers and will help sales representatives increase their trustworthiness.

In conclusion, Kansas farmers and ranchers do place an economic value on trust in a business relationship. Self-orientation is the trust component that is valued most, and sales representatives who want to deepen a trusted relationship should focus on bettering themselves. This paper will elaborate on several of the key findings discussed in the introduction and generate fruitful discussion as it is a significant contribution to the literature on trust in business relationships.

Chapter 2 - Literature Review

Trust is an integral part of maintaining successful business relationships because of the personal and economic value it provides. While there is much research about different behavioral aspects of trust, there is little information regarding the economic value of trust in sales relationships as an attribute or preference. Below is a discussion of articles, studies, and publications that focus on the necessity of general trust, interorganizational trust, risk associated with trust, and the role of trust in purchasing decisions. After extensively reviewing the trust literature, a gap in the research does exist when it comes to identifying the economic value of trust in an ag sales representative business relationship.

2.1 Trust from a Sociological Standpoint

Drawing on social and marketing psychology literature, trust is defined as the perceived credibility and benevolence behind an individual's behavior and actions (Larzelere and Huston 1980). Coleman (1990) expands on the behavioral approach, emphasizing that individual's behaviors will prompt different reactions in uncertain situations. Based on an individual's perceived gains and losses, one will be internally motivated, creating an influence over their reactive decisions and overall trustworthiness.

In agriculture specifically, trust is a form of social capital. As explained by Wilson (2000), social capital, or trust, includes the benefits or advantages resulting from "one person or group's sense of obligation towards another." This sense of trust simplifies business transactions and frees time for both parties, becoming a vital player in the industry. The scarcity of time as a resource across agribusiness managers and business development makes trust a highly valued component of business (Wilson, 2000). As most agribusiness firms are comprised of trusted

relationships between workers, sharing information within or outside the firm can increase productivity and competitive advantage (Wilson, 2000).

Furthermore, Duetsch (1962) defines trusting behavior as actions that increase an individual's vulnerability to another, whose behavior is not under one's control in a specific situation. Therefore, the individual is subject to gains or losses depending on whether the trustee decides to abuse that vulnerability.

An article by Lewis and Weigert (1985) analyzes trust from a sociological perspective. This approach enriches the discussion of trust in a general population as perceived through political science, physiological, and theoretical demonstrations. Through their analysis of other works including articles by Luhmann (1979), Barber (1980), Parsons (1963), and Simmel (1990), Lewis and Weigert (1985) decompose the elements of trust in a society through social relationships.

Lewis and Weigert (1985) conceive trust as a collective unit of society and not of isolated individuals. After discussing the indispensable aspect of behavioral trust in social relationships, Lewis and Weigert highlight the unavoidable element of risk and potential doubt in friends, political figures, and institutions. As these doubts or suspicions arise in social behaviors and trust games, it is observed that the social bond is problematic because of the ability for distrust to form over time.

One way of explaining this connection is through Coleman's (1990) discussion of gains and losses in any trusted relationship. There is a perceived cost of remaining in a trusted relationship and Coleman (1990) focuses heavily on the risk of experiencing a loss if the relationship was to fall apart. However, this idea of a loss could also be cast through the concept of "having to pay something to get something" in return. Thus, paying a higher price to ensure a

higher quality and more trusted business relationship. Therefore, in our context, we are interested in the marginal valuation, willingness to pay, for trust.

These sociological foundations and analysis focus on a behavior of trust exhibited by individuals in a society. The level of trust and risk perceived can be heavily reliant on the social norms, political perspectives, and psychological demonstrations. These aspects of behavioral trust literature contribute to understanding the dynamic and nebulous definition of trustworthiness. Furthermore, using the anticipated losses or benefits expected from embarking on trusted relationships can arguably shift the observation of trust from a behavior to an attribute. By examining what consumers are willing to pay for trusted attributes, this research can uncover the value of trust traits and attributes opposed to observing trusted behaviors.

2.2 Understanding Levels of General Trust

Through extensive research, general trust scales have been modeled to analyze the different levels of trust preferred and exhibited by vast populations. T. Yamagishi and M. Yamagishi (1994) conducted a comparative Likert scale study on general trustworthiness between the United States and Japan, prompted by literature indicating that American's were overall more trusting than Japanese.

Through a well distributed and well-constructed survey, Yamagishi and Yamagishi (1994) determined the differences in trustworthiness between the United States and Japan. Questionnaires were given to individuals over the age of 20 containing 32 different Likert scale questions related to trust. Of the questions, 19 were on general trust and 13 were focused on specific, close relationships. A total of 208 responses were received from Japan and 265 from the United States. The results supported the previous literature that American's are generally more trusting than Japanese. Across-sample correlations noted that American respondents' mean of the General Trust

Scales was significantly greater than Japanese. Much of these results were attributed to the differences in culture and societal practices between the two countries.

These standards of Americans and Japanese trust differences are especially noticeable in the case of men. The American male population pooled standard deviation was higher than that of Japanese male pooled standard deviation in general trust, showing the heightened reputation for trust in the United States (T.Yamagishi and M. Yamagishi, 1994). Additionally, the mean scores for American and Japanese male respondents on a 5 point Likert scale ranking that ‘most people are trustful of others’, were 3.51 and 3.05, respectively (T.Yamagishi and M. Yamagishi, 1994). Overall, the average trust scores of American males were greater than the Japanese on all general trust scale questions.

A study by Siegerst et al. (2005) investigated the influence of general trust and general confidence on risk perception. The hypothesis was framed such that general trust and confidence can negatively influence risk perceptions in a population. Through a study of 388 telephone interviews in Switzerland, questions were asked regarding general trust of others, general confidence in public policy, and potential risks (Siegerst et al. 2005). The analysis revealed that general trust and confidence can impact overall perceived risks by individuals. Correlations measured between the three variables (trust, confidence, and risk perception) indicated that individuals with higher levels of general trust and confidence exhibited a lower judgement of danger than those who had lower levels of trust and confidence in others. In fact, the correlation between the two factors was .44 (Siegerst et. al., 2005). Furthermore, it was noted that individuals with higher levels of trust and confidence exhibited greater self-satisfaction in life.

These studies on general trust highlight the impact cultural factors have on personal perceptions. Since the United States exhibits a trusting atmosphere greater than other countries,

analyzing the general trust perceptions and preferences for farmers in Kansas will add ample discussion. These general trust and risk perceptions as reported by the Kansas farmers may provide explanation towards their estimated economic value placed on trust. Nonetheless, understanding the impacts that society norms and customs have on general trust perceptions are vital when estimating the economic value associated with trust attributes.

2.3 Processes to Build and Develop Trusted Relationships with a Salesperson

In order for two or more parties to experience a strong trusted relationship, a foundation must be made of the trustor's expectations about the motives and actions of the trustee. As explained by Doney and Cannon (1997) this development is through the characteristics of both the salesperson and the relationship. Per the research, some of these characteristics include expertise, power, willingness to customize, likability, frequent contact, and length of the relationship.

There are several methods and processes that can be used in different situations to build upon a foundation of trust. Currently, there are vast literature by Zucker (1986), Shapiro, Sheppard, and Cheraskin (1992), Lyons and Mehta (1997), and Rousseau et al. (1998) focusing on classifications and methods of establishing trust in different circumstances. Doney and Cannon (1997) do an excellent job in identifying five processes where trust can develop in business relationships: calculative, prediction, capability, intentionality, and transference processes.

Calculative Processes

Calculative processes includes estimating the costs and rewards associated with staying in a current relationship (Lindskold 1978). By analyzing the risk associated with conducting business with another party that may cheat the system. These calculations are made concerning the benefits of the other party cheating and if they exceed the cost of being caught. Therefore, one party is able to make a calculated assumption of whether or not it is in the other party's interest to cheat

(Akerlof 1970). If it is not in their best interest to sway from the deal, then it could be assumed that they can be trusted.

In fact, Akerlof (1970) argues that trust is one of the primary reasons that firms are able to charge premium prices. These high premiums promote a trusted guarantee for high quality to the customer and a certain level of expected consistent revenue for the firm. If either end of the trusted relationship fails, then both segments will experience losses.

Since the costs are higher and there are larger relationship-specific investments in these situations, there are key factors that enable a calculative trust-building process. Doney and Cannon (1997) argue that these factors of building trust include supplier firm reputation, size, willingness to customize sales, and confidential information sharing. Additionally, the length of the relationship with the supplier firm and salesperson are considered important features.

Prediction Processes

The prediction process illustrated by Doney and Cannon (1997) uses an assessment to determine the other party's "credibility and benevolence". This process requires multiple, repeated interactions or outside information about the party's behaviors, motives, and promises. Even Swan and Nolan (1985) identify that making repeated promises and following through with them will allow a salesperson to develop the confidence of the buying firm. This increases the salesperson's predictability and enhances the trust building process.

The focus of this process encompasses a more regimented, repeated, and broader experience for both parties. For that reason, the salesperson's individual likability, similarity, and frequent contact rank as significant factors in the trust building process (Doney and Cannon 1997). Another crucial component to increasing trust through this process is reliant on the longevity of relationship between the buyer and/or supplier or salesperson.

Capability Processes

The capability process, is more qualitative, in the fact that it analyzes the individual's ability to meet the needs of the other party. This hones in on the credibility aspect of trust. Essentially, being able to evaluate the individual's level of integrity through their words and statements (Doney and Cannon 1997).

Integrity is crucial because, if the trustor does not have trust in the trustee's word, then there is no ability to gain that level of trust. Thus, the main factor in achieving trust through the capability process is to provide the capabilities and resources necessary to complete the task. Concentrating on the ability to fulfill stated promises, a salesperson's expertise and power will be highly influential (Doney and Cannon 1997). By exhibiting those two qualities, the salesperson would quickly be able to gain the trust of their clients.

Intentionality Processes

The intentionality process, allows trust to emerge through the assessment and interpretation of a party's motives (Doney and Cannon 1997). Determining intentions is key, as groups and individuals who are motivated to help others will be trusted more than those who may hold destructive motives (Lindsfold 1978). This is also a common factor of gaining trust when the two parties share similar values and norms, promoting a sense of intimacy (Maister et al. 2000).

The intentions of the salesperson are highly evaluated in the intentionality process. For that reason, the willingness to customize sales according to customer needs, provide frequent contact with the buyer, and share information are drivers of increasing a trusted relationship (Doney and Cannon 1997). Yet, the salesperson's likeability and similarity are still deemed highly important factors in the trust-building process.

Transference Processes

Lastly, trust can be developed through a transference process, which utilizes a third party. It has been suggested by Gulati (1995) that companies with past alliances were more trusted when entering new alliances, based on third party reviews. Although the third party plays a more passive and central role, they provide the other two parties a mutual level of trust that can be identified (Coleman 1920).

However, it should be noted, that this process can work in two ways. If a new sales representative for a highly respected firm is working with someone who has had good interaction with the business historically, some of that trust will relay to the new sales representative. Conversely, negative experiences with the organization in the past can expose the presence of general distrust for the new sales representative.

Since the information needed for this process is largely provided from an outside source, the reputation of the supplier firm and salesperson is highly critical. That is, the perceived trust associated with the supplier firm and salesperson is crucial, especially when exposed to third party reviews, indicating the integral aspect of maintaining consistency across experiences.

Understanding the foundations and methods of gaining trust contribute to this study's objectives to provide insights towards ag sales representatives building trust through the aspects deemed most valued by Kansas farmers and ranchers. Utilizing some of these processes will allow for further analysis on how to best establish those trusted relationships based on different buyer types and preferences.

2.4 Assessing Risk Associated with the Attribute of Trust

Even though people seek to reduce their level of situational uncertainty, all of the processes for developing trust adhere themselves to some element of risk. It can be argued that even though

building trust provides relative security, negative consequences are possible. Josang and Presti (2004) discuss the important relationship between relative risk and establishing trust. As noted in the research, risk and trust can be used as tools when properly utilized during decision making in unknown and uncertain environments.

This analysis of risk in uncertain environments reverts back to the simple model of a gambling perspective comprised of gains and losses. The expected value of a decision to trust is given by: $EV = \sum_{i=1}^n P_i G_i$ where P_i is the probability of the outcome and G_i is the expected gain. Like Coleman (1990), Josang and Presti (2004) point out that levels of risk loving or risk adverse preferences are relative to each individual, so the use of trust and risk as preferences will be universally and individually unique.

Those risk perceptions can be influenced by an individual's level of general trust and confidence in others (Siegerst et. al. 2005). Siegerst et. al. (2005) conducted a regression analysis with perceived risks as dependent variables that showed different perceptions of risk associated with trust between ages and genders. The findings concluded that older individuals and females perceived higher risks associated with trusting new relationships than younger individuals and males. For instance, females had lower trust and were more concerned about technical associated risks than males. Overall, females also perceived more risks, showing the variation of risk perceptions impacted by trust levels from different groups and individuals.

As discussed in the previous literature, risk preferences can vary across genders and ages. The study will focused on capturing demographic and socioeconomic factors to allow for analysis on those breakdowns of economic values associated with trust. Variations in the average willingness-to-pay for each breakdown explain fluctuations in risk loving or risk averse preferences associated with trusted relationships.

2.5 Attributes of Close Trusted Relationships

To have a more complete understanding of trust preferences, it is pertinent to consider trust attributes in close, personal relationships. Rempel et al. (1985) used an 18 item instrument Rubin's Loving and Liking Scale, a 26 item Trust Scale, and a Motivation scale to analyze the level of interaction and trust between 47 dating or married couples. The study provides insight on the promises, motives, and qualities individuals strive to find in a life partner. The focus was on estimating the importance of predictability, dependability, and faith in a close relationship.

Through a comparative analysis, faith was found to be the most important aspect of trust for close relationships with a mean of 5.8 on the 7 point Likert scale (Rempel et al 1985). Additionally, faith held the strongest correlations with love (.46) and happiness (.49). Dependability ranked as the second most integral aspect of trusted relationships with a correlation to love of .25. Lastly, thriving marriages were known to cast their partner's characteristics in a positive light, showing appreciation towards their positive attributes.

Although the primary focus of this study is on sales relationships, it is vital to explore key factors in successful, personal relationships. Although business relationships do not exhibit the same level of intimacy and connection, there is a transfer of several necessary and desired attributes. Having a firm grasp of the traits, motives, and actions looked-for in a life partner may yield some insight and similarities to those necessary in business relationships. Thus providing a suggestive importance towards various traits and qualities sales representatives should exemplify.

2.6 Importance of Organizational Trust Attributes

From a business perspective, organizational trust preferences play a key role in business decisions and internal performance. The conceptualization of trust within the workplace can provide organization and coordination of work at a business (McEvilty et al, 2003). This improved

organization can be derived from increased trust from both the employees and managers' perspectives. Utilizing these quality expectations, organizational structuring and mobilizing of information pathways promotes a more effective workplace (McEvilty et al, 2003). This increase in organizational trust can also be linked to human specificity as a resource and competitive advantage (Dyer, 1996). Since employees' skills and work ethic can be hard to imitate, Dyer (1996) emphasizes the importance of creating an environment with job duties and specifications geared towards emphasizing trusted and reliable work. This atmosphere and recognition makes employees feel important, promotes dependability, and increases work productivity.

Zaheer et al. (1998) explores the role of trust in individual and interorganizational exchanges as it promotes increased performance. To gather data for the study, managers of supplying and buying organizations were identified and mailed a questionnaire, with a total of 205 respondents (Zaheer et al. 1998). The attributes of measurement included interorganizational trust relating to the supplier organization, interpersonal trust with the contact person, negotiation practices, conflict encounters, supplier performance, and asset specificity. Questions were evaluated using a maximum likelihood estimation procedure in a trust correlation model and a structural model (Zaheer et al. 1998).

The research concluded that the role trust played in individual and interorganizational exchanges were very distinct. It was found that interorganizational trust and interpersonal trust were related, yet theoretically and empirically distinct. Furthermore, it was noted that the two attributes independently effected different aspects of the business relationship. Interorganizational trust yielded higher internal productivity and the interpersonal trust yielded higher performance with customers. With a sound understanding of the importance associated with organizational

trust, we can transition to the importance of salesperson attributes associated with the buyer-seller relationships.

This analysis of organizational and interorganizational trust opens the door for differentiating the trustworthiness of the organization from the trustworthiness of the employee. That is, this study was prompted to further investigate if the sales representative's personal motives and qualities yield an equal or higher value to the customer than the overall reputation of the company. Some of the literature suggests that the higher performance with customers is greatly due to the direct level of trust associated with the specific sales person, not the company. This study served as an additional test to measure those ideas.

2.7 Establishing the Importance of Salesperson Attributes

It is crucial to investigate customer preferences for their sales representative's attributes as it relates to trust. For example, the more a buyer trusts a supplier representative, the more the buyer will trust the supplier organization and conduct business (Zaheer et. al, 1998). However, this trust can be broken down by further analyzing the attributes that contribute to those trusted transactions.

A paper by Darian et al. (2004) identified the relative importance of perceived prices compared to salesperson service attributes in a retail setting. Since hiring and training has become time consuming and expensive, the study served the purpose of identifying the relative importance of price and salesperson attributes. Respondents were presented with 24 profiles of salespeople with different levels for five attributes of a salesperson: respect for the customer, prices compared to competitors, salesperson's friendliness, salesperson's knowledge, and salesperson's responsiveness (Darain et al. 2004).

Through a conjoint analysis, customers' preferences were examined across 5 different sales person attributes. Although there were not large differences between the 5 attributes' relative

importance scores to respondents, 'salesperson's respect for the customer' was the most important attribute to consumers (Darian et. al, 2004). Following close in second, the 'prices compared to competitors' was highly valued by the customers. The overall 'salesperson's friendliness' and 'salesperson's knowledge' surfaced in the middle as moderately impactful on purchasing decisions. Lastly, 'salesperson's responsiveness' ranked 5th in terms of importance to the customer. Proving that overall, the attitude of the sales representative and price of the product are main drivers in the decision making process.

Using these results, utility levels were estimated for each of the sales representative attributes listed above, based on the Likert scale response. For instance, someone who indicated they prefer a salesperson to be "very respectful" exhibited a larger gain in utility from the transaction than someone who preferred only a "respectful" salesperson (Darian Et Al, 2004). Likewise, if the price was roughly \$20 below other competitors the respondents would experience a higher utility gain than the utility loss experienced if the prices were \$20 above other competitors(Darian et. al, 2004).

Another study conducted by Cannon and Doney (1997) used a regression model examining purchasing choices to determine the impact that trust has on decision-making. The sample included 210 completed questionnaires from workers within the manufacturing industry. Questions ranged from how trust can be developed and how it ultimately influenced the purchasing decisions within the company. The regression model indicated decisions were made based on the whole marketing mix rather than just trust, specifically (Cannon and Doney, 1997). More narrowly, trust was considered an "order qualifier," indicating that it was a qualification that had to be met in order to get the business; however it was not an "order winner" which would be a qualification that essentially wins the order for the organization.

Overall, these articles focus heavily on customers' desire to work with sales representatives exhibiting good attitudes, motives, and knowledge. These explanations serve as a foundation towards evaluating the importance and economic value of trust attributes in sales representatives. This research aims at estimating a marginal utility and marginal valuation for each of the four trust components (credibility, reliability, intimacy, and self-orientation). Placing a value on these four, non-tangible factors associated with trusted sales relationships will add to the past literature and create fruitful discussion.

2.8 The Importance of Lending and Trusted Relationships

Lending relationships were the primary focus for conducting this choice experiment study due to the characteristics of the transaction. This was heavily based on the facts that money is a homogenous product, has consistent value, open availability, and requires a unique trusted relationship between the lender-borrower for the transaction to occur. In fact, several studies across the literature lead to the discussion of the value in relationships between bankers and business owners.

A study conducted in Germany by Lejmann and Nueberger (2001), focuses on the importance of lending relationships between banks and small and medium-sized enterprises (SMEs). The research utilized a survey of German banks in 1997. From the survey, Lejmann and Nueberger (2001), concentrated on the importance and effects of lending relationships. The survey evaluated several components of the bank-borrower relationship. Respondents were asked to refer to loan applications and provide details on firm characteristics, types of credit utilized, information retrieval practices, and the bank-borrower relationship (Lejmann and Nueberger 2001). The bank-borrower relationship was also analyzed through a 5 point Likert scale on 'positive experiences in

the past', 'obligation to the partner', willingness of the borrower to inform about problems', and 'stability of the relationship' (Lejmann and Nueberger, 2001).

Results indicated that trust exhibited by both parties had a positive influence on business transactions and rates. In addition, it was concluded that mutual trust expressed through positive past experiences along with a stable relationship had a negative impact on the interest rate of -.100 and -.367, respectively (Lejmann and Nueberger, 2001). However, only the stability of the relationship showed to be statistically significant at the 1% level (Lejmann and Nueberger, 2001).

Tyler and Stanley (2007) also discovered the important role of trust in financial services business relationships using in-person interviews. The study consisted of 147 interviews with UK bankers and their clients between the years of 1999 and 2005. A majority of the respondents indicated that trust was vital within their banking relationship, with only a handful of clients indicating that it was unnecessary (Tyler and Stanley 2007). That is, the clients indicated trust had a significant reliance on the reliability, efficiency, and honesty within the banking relationship.

This past literature is unique as it provides insight on the importance of borrower-lender relationships from both perspectives. Although this study primarily focuses on the borrower perspective, one must not forget the lender's considerations during the loan process. The five C's of credit, utilized in many lender institutions, emphasizes the importance of borrower character, making this relationship a two way assessment. More so, the literature discusses the intimate nature of borrower-lender relationships due to continual contact and sharing of information. Thus, several of the guiding principles from past literature will be used within this study.

2.9 Conclusion

Past literature supports the importance of trust within general, personal, business, and sales relationships. When identifying trust as an attribute, there are preferences across populations that

would impact the economic value. Furthermore, there are different processes for ag sales representatives to consider when building trusted relationships with their farmer-clients. Using the literature review as a foundation, a study on the economic value of trusted relationships for Kansas farmers and ranchers will provide an additional element of value to past research.

Chapter 3 - Theoretical Framework

3.1 Introduction

The theoretical foundation for this research was grounded in the random utility model (RUM). Using the RUM, a farmer's utility is determined by the choice among different agricultural sales representatives that vary across different trust attributes and prices for the products or services being offered. In the present context, a farmer-loan officer relationship was examined to quantify the utility gained by the farmer when they feel there is trust within a business transaction.

A lender-borrower connection was the ideal sales relationship to utilize for examining the economic value of trust for Kansas farmers and ranchers. That is, this relationship makes it tractable and feasible for farmers to choose among loan officers that vary across different trust attributes. Consider the product being purchased by the farmer, money in the form of debt. Money was an ideal product to examine because it is a similar, homogenous good making it easily comparable across the financial sector. Choosing another product like farm machinery might introduce other extenuating circumstances like brand loyalty.

In addition, the repetitive contact between a loan officer and farmer could lead to an increased importance on a trusted relationship. For instance, the open communication between a lender and borrow includes the sharing of confidential financial information, which naturally requires a standard level of trust. In fact, Lejmann and Nueberger (2001) found that the lender-borrower relationship has a high level of intimacy. They found that the stability of a lender relationship impacts the value of doing business with a specific banker. For farmers, these repetitive interactions would occur with a loan officer who monitors their operating loan. As a

result, focusing the study towards farmers who work with loan officers to maintain an annual operating loan would aid in the process of isolating the farmer's gain in utility from trust.

Using farmers' loan officer relationships as a foundation, the value of trust associated with those relationships was estimated using a RUM framework. The model results will provide well-defined values associated with the utility of trust in a borrower-lender relationship. Moreover, the theoretical structure will help to determine the economic value of trust and allow for testing to determine if the utility model with trust represents a well-behaved, concave utility function, exhibiting diminishing marginal utility.

3.2 The Random Utility Model

The Random Utility Model (RUM) was originally proposed by Block and Marshal (1960) as a representation of probabilities of choice across individuals. That is, individual probability was derived from variability experienced in the individual's preferences across repeated choices from a fixed choice set (Batley, 2007). Although Marshal et al. (1960) conceived much of the theoretical foundations for RUM, McFadden (1968) completed the translation to practice through a modification in the presentation perspective towards discrete choice modeling. McFadden's transformation shifted the model from an individual engaged in repeated choices, to emphasizing choices of a population of respondents, allowing for research to focus on groups and markets opposed to a single individual. Furthermore, the model was deemed practical, widely accepted by researching economists and thus, prompted fruitful research and numerous studies to be conducted using the RUM (Batley 2007).

The conceptual framework used as the foundation in this study assumes that a farmer's utility is derived from the levels of trust in the i^{th} loan officer offering a specific interest rate, r , on an operating loan. The relationship of the utility function can be formally presented as follows:

$$U_i = f(T_i, r_i; Z_i), \quad (3.1)$$

where U denotes the level of utility the farmer receives with the i^{th} loan officer. T represents the level of trust expressed by the farmer for the loan officer. As stated earlier, trust was measured through its decomposed components of credibility (C) reliability (R), intimacy (I), and self-orientation (SO) as $T_i = f(C_i, R_i, I_i, SO_i)$. Lastly, r denotes the interest rate of the operating loan and Z represents other observable characteristics of the loan officer and farmer such as age, gender, farm size, and length of farmer-loan officer relationship in years.

Overall, farmers will ultimately choose to conduct business with loan officers who maximize their utility from a desired level of trust and offer a reasonable loan interest rate as perceived by each individual farmer. Therefore, when comparing loan officer i to loan officer j and their respective operating loan interest rates, the farmer will pick the loan officer relationship that yields the highest level of utility. Thus, $U_i > U_j$ denotes that the respondent will experience greater utility with loan officer i than an alternative loan officer j , where $i \neq j$.

Forcing respondents to complete several iterations of comparisons allowed for the determination of the marginal utility and marginal valuation associated with trust and each of the four trust components. However, a researcher cannot observe a farmer's direct utility and must model the decisions through an indirect utility model. That is, following Barley (2007) and a RUM framework, the farmer utility is modeled through random parameters with an error term. The indirect utility function is comprised of a systematic component denoted (V_i) and a random error component (ε_i) as shown below:

$$U_i = V_i + \varepsilon_i \quad \text{for loan officer } i \quad (3.2)$$

$$V_i = V_i(T_i, R_i; Z_i) \quad (3.3)$$

There are basic assumptions that underline the construction of a Random Utility Model (RUM). The assumptions are (1) the random components of the utility across loan officers are independent and identically distributed (IID), (2) the model will maintain homogeneity in alternative attributes across different respondents, and (3) the error variance of the alternatives loan officers is identical across respondents.

With the foundation of the indirect utility model explained and identified, minor transformations can be utilized to easily access and estimate the marginal utility and valuation of the trust attributes. Starting with the original indirect utility function (3.3), adjustments are made to include the attributes of alternative loan officers and money budget as:

$$U_i = V_i(T_i; y - r_i) + \varepsilon_i \quad (3.4)$$

where V_i is the indirect utility that the farmer received from their loan officer (i). That selection is based on the T_i trust attributes of their loan officer and alternative loan officers' attributes. The y variable is the money budget of the farmer and r_i denotes the interest rate of the operating loan being offered by the i^{th} loan officer. This transformation allows for the derivation of marginal utility, given that the chosen utility function is differentiable (Batley, 2007).

In order to account for the alternatives and money budget in a more conventional manner, a specification and transformation must occur (Batley, 2007). This is done by specifying the indirect utility function V_i , as a continuous and differential function of g . This function of g then include the attributes T_i comprised of the alternative loan officer and allows for the money budget to be entered in additively. However, in this study, only farmer respondents who currently have an operating loan and associated loan officer are considered. As such, farmers are not deemed to be constrained by a money budget because they have access to credit. In other words, they are not

credit constrained because they currently have operating loans. Through these modifications RUM is transformed into an Additive Income RUM, also known as AIRUM (McFadden, 1981):

$$U_i = \alpha(y - r_i) + g(T_i) + \varepsilon_i \quad (3.5)$$

where T_i represents the function of trust attributes, credibility, reliability, intimacy, and self-orientation, provided by the i^{th} loan officer. Therefore, this model specifies the indirect utility as a continuous and differential function g of those trust attributes.

In order to determine the measurements and values of marginal utility and marginal valuation, the initial utility function (3.4) must be used. By taking the original indirect utility function and adding in attributes of the alternatives and the money budget consideration, the equation is presented as:

$$U_i = \lambda[\alpha(y - r_i) + g(T_i) + \varepsilon_i + K] \quad (3.6)$$

where K is a constant and is revealed to be confounded with the additive money budget (y), so that the choice probability for AIRUM is invariant to money budget. Again, this is reasonable in our context because the farmer is not credit constrained. With that consideration in place, the equation can be differentiated to estimate the marginal utility of the trust attributes. The calculation is represented below.

$$\frac{\partial U_i}{\partial T_i} = \frac{\partial U_i}{\partial g} \frac{\partial g}{\partial T_i} = \lambda \frac{\partial g}{\partial T_i} \quad (3.7)$$

Thus, differentiating utility with respect to the vector of trust components (T_i) yields the marginal utility gained for each attribute of trust for loan officer (i). This can be calculated by taking the derivative of farmer utility with respect to the function g alternative loan officer. Then further decomposing the function g with respect to the same trust components for the loan officer, the marginal utility gained from an additional unit of each trust attribute can be estimated for the loan

officer. This estimate is subject to the relative λ scale that is used for a transformation of information.

Furthermore, marginal valuation of the trust and interest rate attributes can be estimated. Using the same utility (3.4), the marginal valuation, also considered the willingness to pay (WTP) for the attributes in vector T_i is given by:

$$V_o(T_i) = \left[\frac{\left(\frac{\partial U_i}{\partial T_i} \right)}{\left(\frac{\partial U_i}{\partial (y-r_i)} \right)} \right] = \left[\frac{\left(\frac{\partial U_i}{\partial T_i} \right)}{\alpha} \right] \text{ for all } T_i \quad (3.8)$$

where V_o , the marginal valuation or WTP is estimated for each trust component (T_i) of loan officer i . The WTP estimate is based on the derivative of utility (U_i) with respect to the trust attribute (T_i). That derivative is divided by the derivative of utility (U_i) with respect to the negative price substitution ($y - r_i$). The numerator, $\left(\frac{\partial U_i}{\partial T_i} \right)$, is representative of the marginal utility of the trust attribute. The denominator of the WTP equation simplifies to (α), or the negative value of the interest rate (r) coefficient within the regression model. Therefore, this calculation yields the marginal valuation of the attributes within the model and provides the effective willingness to pay for trust.

With the RUM framework, the study went one step further to test the behavior of this utility function. McFadden (1998) states that a well behaved utility function should be concave and exhibit the expectations of diminishing marginal returns of utility as, $\frac{\partial U}{\partial T_i} > 0$ and $\frac{\partial^2 U}{\partial^2 T_i} < 0$.

Overall, this theoretical framework provides the foundation for conceptualizing the economic value of trust. Each respondent will compare their current loan officer to different hypothetical loan officers with corresponding traits and interest rate. The marginal value of each

trust component were estimated via the RUM. The results from this model will shed light on the value that farmers place on each component of trust and their willingness to pay for loan officers who exhibit those qualities.

Chapter 4 - Survey Construction

4.1 Introduction

The focus of this chapter was determining the best way to collect the necessary data needed to estimate the economic value of trust and insight on how agricultural sales representatives can best enhance trusted relationships. In order to efficiently collect this information, an online survey was utilized. The survey sample consisted of Kansas farmers and ranchers. To generate a sufficient sample size, the primary target market for respondents was the Kansas Farm Management Association (KFMA). Distributing the survey to members associated with KFMA and other farmers would provide a representative sample of Kansas farmers and ranchers.

To assess farmer and ranchers' trust perceptions and value, the survey consisted of the several integral parts. The first section included general trust questions. This was followed by multiple best-worst iterations exploring how sales representatives can best illustrate trust and a choice experiment assessing the value of trust in a loan officer relationship. The final section was comprised of socioeconomic and demographic questions.

The survey contained several incentives to boost the number of collected surveys. By utilizing an online survey, respondents were able to complete the 30-45 minutes questionnaire on their own time and in a place that was comfortable for them. Also, to incentivize and boost survey response, the first 200 respondents to complete the online survey received a \$50 Visa gift card. Every respondent beyond 200 would be entered into a random drawing to receive one of five remaining \$50 Visa gift cards. These efforts proved valuable as there was a total of 193 responses. Of these respondents, approximately 75 percent of them were members of KFMA. Furthermore, the data was analyzed and is discussed later as being representative of the KFMA data.

4.2 Online Survey Requirements and Structure

Given the survey was to be completed online, it was imperative that it be straightforward and clearly understood. This meant ensuring each and every question was clear and concise because the researchers would not be present to provide clarification. For this reason, multiple individuals at Kansas State University, faculty members, students, and staff, tested the online survey before it was distributed. In addition, Kansas State University's Internal Review Board (IRB) provided their approval to use human subjects. A full version of the survey is provided in Appendix A.

As mentioned earlier, the trust attributes of "intimacy" and "self-orientation" were not presented to farmers because of the ambiguous and confusing definitions they held. Since they are very specific to certain trust characteristics, replacements were utilized. Instead of intimacy, "connection with me and my operation" was used and "focused on me" was used in place of self-orientation. These definitions more clearly defined the trust components for the respondents.

Additionally, due to the sensitivity of capturing a specific target market, it was important to limit the access of this survey to Kansas farmers and ranchers. The internet provides the opportunity for increased response rates, but also opens the doors to potential respondents outside the desired sample to access the survey (Duestkens et. al. 2004). Due to these concerns, a filter was implemented. Respondents had to answer two questions correctly before being allowed to take the survey. The first question asked if the survey respondent was a Kansas farmer or rancher. If no was selected, the individual would not be able to continue onto the survey. The second, and more restrictive question, required a password. This password was provided in the promotional distributed through KFMA, the Arthur Capper Cooperative Center (ACCC), and K-State faculty. The password indicated on the flyers was universal, but necessary to completing the survey.

The survey was created to invoke thinking and respondent considerations when establishing trusted relationships. The first initial set of questions related to general trust and perceptions of trust around ag sales representatives. Leading off with this set of questions prompted the respondents to begin thinking about trust and its implications on business relationships.

The second section of questions asked the respondents to complete a best-worst survey identifying the best and worst ways to represent the four trust components; credibility, reliability, intimacy, and self-orientation. This segment stimulated the respondent to begin considering how ag sales representatives can build trust with them. Furthermore, this section of the survey begins to solidify the definition of the four trust components.

The third set of questions was a choice experiment where respondents were asked to identify and rank their current loan officer against hypothetical loan officers that varied across trust attributes and interest rates. Forcing the respondent to provide the trust levels and interest rate of their current loan officer relationship gave them a frame of reference when comparing to the hypothetical loan officers in the choice experiment. Furthermore, the hypothetical loan officers were designed to significantly vary from the respondent's current loan officer. Doing so presented the farmers some tough decisions between various loan officers.

Lastly, there was a brief section at the end of the survey that focused on demographics. The respondents reported socioeconomic factors like gender, age, size of farm, financial measures, and operational information. Primarily, this section was used to create breakouts for analyzing the data collected.

4.3 Discussion of General Trust Questions

A set of general questions were aimed at identifying those differences in trust perceptions within the sample size. Many of these general trust questions are related to the literature review presented earlier. The variations across respondents' perceptions in general trust could be used to analyze differences among the associated economic value of trust.

The first question of the survey asked the respondents to identify their motivations behind a purchasing decision by ranking three different influencing factors. Although most farmers assess all aspects of a purchasing decisions, leading off with this question forces the respondent to identify what they value most. That is, do they place more weight on the overall impact on the farm, relationship with the sales representative, or price of the product have when considering a purchase. Furthermore, responses to this question provided insight of varying buyer types motivated by business, relationships, or prices.

Questions 2 and 3 focused on gaining a better understanding of the quantity and quality of current ag sales relationships. The respondents were asked to identify the number of ag sales relationships they currently utilize and use a Likert scale ranging from 'none' to 'all' to express how many of those relationships they would consider "trusted" relationships. The placement of these questions geared the respondents towards the survey topic of trust in the agricultural field and allowed them to think about their personal experiences and preferences.

In order to focus in further on agriculture, the next question asked the respondents to rank four agricultural industries based on the value in maintaining a trusted relationship with that industry's ag sales representative. Industries provided in the question included agricultural lending, agronomy, grain/livestock, and machinery and equipment. These relationship were all considered industries that require some amount of trust to complete business transactions. However, past

literature by Wilson (2000) suggested that trust in agricultural lending would hold the highest value. Thus, explaining why it associated with the highest average ranking across respondents.

After ranking the agricultural industries on trust, the respondents were asked to identify their speed to trusting a new relationship. The respondents were able to choose from ‘very slow’, ‘slow’, ‘quick’, and ‘very quick.’ This selection forced the respondent to identify as either slow or quick to trust rather than just a generic neutral.

Respondents were then asked a series of Likert scale questions to reveal their perceptions on general trust. The 7 point Likert scale ranged from ‘Strongly Disagree’ to ‘Strongly Agree’ and broke down the respondents’ views on trust towards general society. Rating statements included “most people are trustworthy”, “most people are trustful of others”, and “most people will respond in kind when trusted” allowed for an analysis of the respondents general perceptions of trust. Moreover, it will generated discussion of how overall trusting the respondents are towards society and ag sales representatives.

The last two questions in the general trust section focus on the four trust components and their correlation to ag sales representatives. First, respondents were asked to complete a 7 point Likert scale rating ag sales representatives on their ability to be trustworthy, credibility, reliability, connected to the farmer and their operation, and focused on the farmer. Presenting these trust components before the best-worst questions allows the respondent to consider their general trust perceptions towards agricultural sales representatives. Finally, the respondents were asked to identify the most valued qualities in a trusted relationship. Ranking the qualities of credibility, reliability, intimacy, and self-orientation force the respondent to reveal where they place value in a trusted relationship.

4.4 Best-Worst Survey Questions

In order to determine the best ways for ag sales representatives to build trusted relationships with farmers, respondents were shown statements used to define the each of the four trust components: credibility, reliability, intimacy, and self-orientation. From the list of statements, the respondent selected which statement most represents the trust component (is most important) and which statement least represents the trust component (least important) of trust. As will be described later, each statement was shown an equal number of times to each respondent and was matched with other statements in a manner to maximize the design efficiency of the survey.

Best-worst analysis was first introduced by Finn and Louviere (1992), and has several advantages over alternative methods of importance measurements (Scarpa et al, 2011). One alternative, Likert scale rankings, is where the respondent would score the importance on a scale of 1 to 5, with 1 being the least important and 5 being the most important. Although this method provides a numerical score of importance, it neglects to force the respondent to pick between two or more relatively important topics (Lusk and Briggeman, 2009). It would be easy for a respondent to indicate that all of the statements are highly important rather than providing a true ranking of importance or representativeness. Another potential issue with a Likert scale format is understanding that individuals will interpret the scale differently. This problem stems from the lack of a common reference point across all respondents.

Another potential, yet inferior method, was asking the respondents to rank the statements. Though this method would provide analysis on the comparative value of each statement, it would not provide a magnitude of representativeness over the other statements. That is, respondents on average could rank one statement clearly first over the other statements, but there is no indication of how much more important that factor is to farmers. Furthermore, it would be difficult and

cumbersome for respondents to rank multiple items. Therefore, a best-worst survey to accomplish the objective of this study is the most appropriate approach.

Before identifying the optimal survey design, it is first important to identify the statements that best illustrate each of the four trust components. Following Maister, Green, and Galford (2000), figure 1 lists the seven statements that best demonstrate how an ag sales representative can build trust with a farmer. Each statement ties directly to its associated trust components of credibility, reliability, intimacy, and self-orientation and is based on the research of Maister, Green, and Galford. While the authors had a much more expansive list of statements, many of them were repetitive and had significant overlap. These seven statements reflect the best ways to building a trusted relationship, are tied directly the work of Maister, Green, and Galford, and explained clearly below. Furthermore, these statements aimed at increasing trust encompass concepts discussed in the trust literature by Doney and Cannon (1997), Darian et al (2004), and Duetsch (1962).

Figure 4.1 The Trust Component Statements Utilized in the Best Worst Block Design

<p><i>Credibility</i></p> <ul style="list-style-type: none"> Does their homework on me and my operation Does not lie or exaggerate Years working in the industry Is passionate and loves their topic Reputation of the company they work for Well researched and knowledgeable of topic When they don't know, they say so 	<p><i>Intimacy</i></p> <ul style="list-style-type: none"> Ability to be candid and upfront about situations Stays in contact via calls, visits, etc. Not afraid to make conversation Finds the fun and fascination in my operation Understands my goals, mission, and values Years working in the industry Shares a common interest
<p><i>Reliability</i></p> <ul style="list-style-type: none"> Sends meeting materials in advance Are always transparent Makes sure meetings have clear goals, not just agendas Reputation of the company they work for Adapts to changing circumstances and situations Makes specific commitments and delivers on them Follows through on actions requested by me 	<p><i>Self-Orientation</i></p> <ul style="list-style-type: none"> Asks open ended questions to better understand me Listens without distractions Reflective listening, summarizing what they've heard Allows me to fill the empty spaces in conversations Asks me to talk about what's behind an issue If communication fails, they take most of the responsibility Focuses on defining problem, not guessing the solution

4.4.1 Credibility

According to Maister, Green, and Galford, credibility ties directly to the words that an individual speaks. Credentials do go towards one's credibility, but it is more about what is said by a sales rep. When it comes to credibility, customers tend to focus on what is said by the sales rep.

Figure 1 discusses the seven statements speak directly to a sales rep's credibility.

The first statement "does their homework on me and my operation" focuses on the sales representatives understanding of the intricacies of the farmer's business. This includes but is not limited to understanding the practices, missions, values, and structure of the organization. Also investigating some of the potential goals and procedures can contribute to this statement.

"Does not lie or exaggerate" emphasizes the ability to speak rationally about information, outcomes, and predictions. Providing accurate information on product features, anticipated results, and listing possibilities is crucial in providing valued information to the customer.

"Years working in the industry" is attributed to an individual's personal reputation and vast experience in the field. Working with others promotes increased advertising and third party endorsements of the sales representative.

"Being passionate and loving the topic of work", as discussed by Maister, Green, and Galford, leads to increased credibility through vast knowledge and the desire to do a good job. According to Doney and Cannon (1997), enjoying a job will make one work harder and more effectively, improving the demeanor of the sales representative.

"Reputation of the company" often serves as a reflection on the sales representative. The missions, values, and goals of the representative's company is significantly what the sales representative works to reflect. In doing so, a division in these characteristics impacts the trustworthiness of the sales representative in either a negative or positive light.

“Being well researched and knowledgeable” of the topic is key in any field. From both experience and education, it is necessary to perform exceptionally well within your area of work. This knowledge increases responsiveness and accuracy while on the job.

Lastly, sales representatives who exhibit honesty and identify that “when they don’t know, they say so”, build an essential component of credibility. This quality exhibits the willingness to admit that there is a lack of knowledge on a potential topic and opens the door for future discussion and education.

4.4.2 Reliability

Reliability is about the actions of an individual. Maister, Green, and Galford discuss at length that reliability is about being dependable. So, customers derive trust from knowing that a sales rep will deliver on services, goods, or any other promise. The following seven statements discuss more about how a sales rep can further demonstrate reliability.

“Sending meeting materials in advance” exhibits an organized behavior with effective follow through. These materials can increase efficiency of meetings and guarantee that certain topics will be covered in each conversation.

In conjunction with meeting materials, “making specific goals for meetings” is crucial for establishing reliability with customers. This provides the customer with a framework of the tasks that will be accomplished at each meeting.

Reliability can be greatly shown by representatives through their “ability to be transparent.” Transparency allows for further discussion and understanding between the two parties. Increasing that connection with customers allows them to become more aware of the overall dependability of the sales representative.

Again, we see that “the reputation of the company” has a spillover effect on the reliability of a sales representative. The company’s ability to have supplies on hand, provide excellent services, and have efficient administrative practices can influence the perceived reliability of sales representatives.

Being able to “adapt to changing situations and circumstances” demonstrates to customers the strong dependability of a sales representative. This greatly increases the reassurance that a sales representative is flexible as complications arise. Knowing that you are working with someone who can remain calm and find alternative solutions, deems to be very crucial in establishing reliability as a characteristic.

“Making specific commitments and delivering on them” is the physical actions related to this component of reliability. Being able to follow through on the commitments you promise on accomplishing holds high regard in the agricultural world. Therefore, it is important to not make a promise you cannot keep.

“Following through on actions requested by a farmer” demonstrates the dependability of an ag sales representative to meet the needs of their customer. This provides the farmer with some reassurance that the individual is going to complete tasks asked of them.

4.4.3 Intimacy

According to Maister, Green, and Galford, intimacy is about having a strong connection between the sales rep and customer. Between the two, there is a level of safety or security that promotes open communication and sharing of sensitive information. This close relationship can even extend beyond the business relationship in to a personal relationship.

Given the word “intimacy” might be taken out of context, the survey does not say “intimacy.” Rather, the description shown to farmers is, “strong connection to both you and your operation.” Below are the seven statements that best illustrate the trust component, intimacy.

A sales representative’s “ability to be candid and upfront about situations” gives the farmer some level of intimate understanding of what is occurring. In this specific instance, it provides the farmer the assurance that they will be informed about different situations that may arise. Even if these situations may be difficult to discuss.

“Stays in contact via calls, visits, etc.” will vary between sales representatives and farmers. Depending on the level of intimacy, some sales representatives might desire annually, monthly, or more frequently contacts their clients. This is highly dependent on the preferences of both parties.

Sales representatives that are “not afraid to make conversation” helps to create a more intimate relationship with their clients. This connection increases the exchange of information and lead to a more trusted relationship.

Maister, Green, and Galford highlight that when working with a client, “finding the fun in their operation” increases the level of engagement and intimacy. Clients that feel you are interested and connected to their operation, will be more willing to share their experiences, needs, and concerns. Thus building intimacy.

“Understand the goals, mission, and values” promotes one of the greatest intimacy connections needed to enhance intimacy with a sales representative. Knowing crucial facts about the client will prompt conversation and lead to more intricate details about new potential avenues or endeavors that could increase business.

Some farmers spend a vast amount of time with their sales representative, potentially giving the “years working with a sales representative” a significant impact on the overall connection between the two parties. As prefaced in the literature by Doney and Cannon (1997), the more contact that occurs between two parties allows for heightened interaction and trust.

Lastly, “sharing a common interest” with the client outside of work also leads to a sense of familiarity and connection. Being able to bond over other aspects of life increases the personal intimacy established and enhance the business relationship overall.

4.4.4 Self-Orientation

Finally, self-orientation refers to the focus in the relationship. Maister, Green, and Galford put special emphasis on the focus the sales rep would have on their own motives relative to the customers’ needs. So, does the sales rep focus solely on their own agenda or is only the customer’s needs on their mind? Furthermore, the authors contend that having the “customer’s best interest at heart” is also very important in establishing a strong emphasis on the customer. To ensure this trust component is clearly explained to farmers, “self-orientation” is not stated, rather “focused on you and have your best interest at heart” is presented to farmers. The following seven statements tie directly to self-orientation.

A sales representative, can increase conversation by “asking the farmer open ended questions” to better grasp their wants and needs. Using this method allows the farmer to speak about their values, show you have their best interest at heart, and shows you are willing to listen and learn about their operation.

When talking to a client, it is important to “limit any distractions” that are likely to occur including social settings, electronic devices, and internal conflicts. Giving the client your

undivided attention gives the impression that you are paying attention because you care and are there to benefit them.

Additionally, providing a “summarization of what you have heard” gives the farmer the reassurance that you care enough to clarify. This clarification provides a solid foundation towards enhanced understandings of problems that need to be addressed and solved.

Allowing the farmer to “fill the empty spaces” in conversations exhibits self-orientation, showing that you are interested in learning about them and their operation. It shows that they are the main focus of the conversation and you are providing your undivided attention, as well.

“Asking the farmer to talk about what is behind an issue” is an additional way to increase the overall level of self-orientation. It is critical for a sales representative to allow their client to explain the situation and provide information. Taking the time to understand their perspective of an issue will allow for more thorough discussion on how to define and combat the problem.

Sometimes “communication fails”, and it is important for the “sales representative to take responsibility” and not cast blame. Understandably, these situation arise, but not passing the guilt to the farmer serves as a trust building exercise, promotes future communication, and allows both parties to move forward.

Lastly, in order to gain self-orientation an ag sales rep should “focus on defining the problem, not guessing the solution”. By defining the problem, one is showing that they are trying to understand all components of the situation without prematurely providing an irrelevant answer. This allows for a more thorough investigation of potential outcomes and alternatives.

4.5 Best-Worst Survey Design

The best-worst survey follows a Balanced – Incomplete Block Design (BIBD). It is important, as in any survey design that the best-worst design is orthogonal, and it is especially

important that the design is balanced or each statement appears equally across all questions. To create a BIBD survey, it is important that (1) the number of times each statement appears through all questions is equal, and (2) the number of times a pair shows up in the same block is equal too. To achieve these two requirements, the following equations must yield an integer value: (1) $\frac{b*k}{a}$ and (2) $[\frac{b*k}{a}] * [\frac{(k-1)}{(a-1)}]$, where b is the number of questions asked, k is the number of statements in each question, and a is the number of statements available for each trust component. Therefore, considering survey fatigue for the respondent and that each trust component has 7 statements, the BIBD has 7 total questions for each trust component with 4 statements presented in each question. So, the respondent would be selecting the most and least representative statements among 4 total statements, and would do this exercise 7 total times within each trust component.

It is also important that the statement pairings maximize the D-efficiency through an orthogonal design. When D-efficiency is 100, the design used is considered orthogonal and balanced. A D-efficiency of 0 indicates that at least one of the parameters cannot be estimated. In this particular survey design, the design yielded a D-efficiency score of 87.5, which is similar to other best-worst survey designs.

The BIBD approach is necessary as it provides the opportunity to estimate both the main effects and interactive effects within the statements. That is, the orthogonal design permits the ability to compare the statements to each other and determine the magnitude of representativeness between the statements.

However, this design still allows the researcher to analyze the data using a simple count method. What this means, is that the researcher can essentially “count” the number of times that a statement is selected as “most” or “least” representative. When a respondent is faced with one

choice block containing 4 statements, they will pick one statement as most representative of the trust component and one statement as least representative of the trust component. The most representative statement will be given a value of 1, while the statement selected as least representative will be given a value of -1. If the statement is not selected as most or least representative, the statement will receive a value of 0. Therefore, since each statement is shown 4 times throughout the 7 questions, it could yield a score ranging from -4 to 4 depending on the frequency it was selected as most or least representative.

To analyze the best-worst data, a conditional logit model was used to estimate the probability that one statement will be chosen over another statements. These parameter estimates were used to calculate a “representative share” for each statement within the components of trust. Therefore, if one value has a share value over three times as big as another, it can confidently be reported that the former value is so much greater in importance than the latter. This provides the ultimate magnitude of importance relative to the base case denoted k and the other statements in the best-worst scenario.

Overall, the best-worst data will provide insights into the most efficient ways for ag sales representatives to gain the trust of Kansas farmers and ranchers. In addition, it highlighted any potential differences in obtaining the trust for beginning farmers compared to more seasoned farmers, male and females, and size of farms. Although every customer is unique, this analysis prompted educational extension programs identifying key components of gaining trust within the industry.

4.6 Choice-Experiment

To better understand the economic value of trust in sales representative relationships, a choice experiment was implemented within the survey. This section of the survey forced the

respondents to rank loan officers based off their personal attributes of credibility, reliability, intimacy, self-orientation, and the offered interest rate. Using a rank ordered logit model, the results were then be tied back to the random utility model discussed in Chapter 3, Theoretical Framework. This allowed for the marginal value, willingness-to-pay (WTP), and economic value of each trust attribute and trust as a whole to be determined.

4.6.1 General Setup

In order to capture accurate information from the respondents, a current loan officer relationship was used as a frame of reference. In particular, the focus was on Kansas farmers and ranchers who have an operating loan. The reason for using this particular type of loan is because these loans are analyzed, discussed, and renewed each year. Focusing on other types of loans, such as long-term farmland loans, would not be as a beneficial because these loans do not require much servicing after the loan is approved and distributed. Therefore, farmers will likely have the best frame of reference to gauge a trusted relationship with a loan officer that meet with regularly.

However, not all Kansas farmers and ranchers who completed the survey would have an operating loan or even debt. Therefore, each respondent was first asked whether or not they had a current operating loan. Respondents who indicated they did have a current operating loan were directed to a set of questions regarding the traits of their loan officer and interest rate. Before discussing the questions presented to farmers without a current operating loan, Figure 4.3 shows the questions completed by farmers who do have a current operating loan.

Figure 4.2: Survey Questions Rating Current Loan Officer and Interest Rate

37, part A. Think about that loan officer who you work with and who oversees your operating loan.

Please rate this loan officer in the following characteristics:

	Very Low Credibility	Low Credibility	Moderate Credibility	High Credibility	Very High Credibility
Credibility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Very Low Reliability	Low Reliability	Moderate Reliability	High Reliability	Very High Reliability
Reliability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Very Weak Connection	Weak Connection	Moderate Connection	Strong Connection	Very Strong Connection
Connection with Both You and Your Operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Very Focused on Themselves	Focused on Themselves	Moderate Focus	Focused on You	Very Focused on You
Focus in Relationship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

37, part B. Please type in the box below your current or most recent annual interest rate you paid on this operating loan.

For Example: If you had a 5.75% interest rate, you would type in 5.75

%

The rating of the current loan officer followed a Likert Scale template. Thus allowing the respondent to rank the loan officer from “very low” to “very high” on each trust component. By creating these individual benchmarks, the respondents would be able to compare their current situation to what were the hypothetical loan officers.

Additionally, respondents were asked questions regarding a few other components of the lending relationship. The respondent was asked how many years they had worked with their current loan officer and how long they had borrowed from that lending company. This helped to identify the longevity of the relationship. Secondly, respondents were asked if they had any family relations or obligations to that specific lender. This underlined any discrepancies that might influence their lending decisions.

Once these initial questions were completed each individual was sent through a series of choice tasks. Each task set included 3 loan officers, the respondent's current loan officer and two hypothetical loan officers. The current loan officer reflected the trust scores and interest rate provided by the respondent while the other two loan officers had trust scores and interest rates generated.

Ultimately, this method forces the respondents to make tough decisions by ranking the loan officers based on trust levels and interest rates that best represent the respondent's individual preferences. Ranking their preferences permitted the construction of an empirical model known as the rank ordered logit model, which estimates coefficients and the willingness to pay for each of the trust components. The design used two levels of variation for the hypothetical loan officer four trust components. The two levels of variation were the extremes from the Likert scale. That is, respondents saw that the hypothetical loan officers had either a "very low" or "very high" ratings for the four trust attributes. Thus forcing them to make tough decisions and decide what attributes they value most.

The block design also used three different interest rates that corresponded with the hypothetical loan officers. The three interest rate options for the hypothetical loan officers were 2% above, 2% below, or the same interest rate they currently had. Utilizing these three interest rate options gives all respondents the same net change to consider when deciding between loan officers. Furthermore, the interest rates are tied directly to their current situation providing a frame of reference or benchmark comparison as mentioned.

The respondent was then asked to rank the three loan officers from (1) most preferable to (3) least preferable. This setup forced the respondents to make tough decisions between costs and

trust attributes. As an example, the respondents are asked to rank the three loan officers (or situations) as shown in the choice set below in figure 4.3.

Figure 4.3: Choice Experiment Question for Farmers with an Operating Loan

Set #1

	Loan Officer A	Loan Officer B	Your Loan Officer
Credibility	Very Low Credibility	Very Low Credibility	Very High Credibility
Reliability	Very Low Reliability	Very Low Reliability	Moderate Reliability
Connection with You and Your Operation	Very Strong Connection	Very Strong Connection	Strong Connection
Focus In Relationship	Very Focused on You	Very Focused on You	Focused on You
Interest Rate (Interest Cost per \$1,000)	4.5% (\$45)	8.5% (\$85)	6.50% (\$65)

For set #1, click on the drop down boxes below to rank Loan Officer A, Loan Officer B, and your loan officer from 1 being the most preferred to 3 being the least preferred.

Loan Officer A	Loan Officer B	Your Loan Officer
<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>

A block design was generated to ensure a balanced and orthogonal design for the choice experiment. The orthogonal design compared multiple situations in a balanced format, allowing all respondents to see loan officer choices and compare them accordingly. Ultimately, the design aims to maximize the observed variation so that main effects and interactions between the trust attributes can be estimated and evaluated. The design resulted in 6 different, unique blocks each comprised 8 choice sets. This block design yielded a D-efficiency of 93.0.

For each choice set the respondents were asked to analyze the characteristics and rank the three loan officers accordingly. The rankings would be from 1 being the most preferred to 3 being the least preferred. The purpose of these different choice sets was to force respondents to make tough choices and tradeoffs between interest rate costs and the four components of trust. Many of the sets provided tough tradeoffs to consider and hard decisions to be made.

If the respondent indicated they did not have an operating loan currently, they were sent through the same block design iteration, however, they did not have a third loan officer. In this case, the third option was an opt out, or to remain without an operating loan. This was deemed appropriate since they may not currently need an operating loan. However, it opened the door to investigate if they would acquire an operating loan given the right circumstances.

For those farmers without an operating loan, the interest rates presented to them were based on current operating loan interest rates offered by lenders. According to the Federal Reserve Bank of Kansas City, the average operating loan interest rate offered in 2015 was 5.75%. Therefore, farmers who stated they did not have an operating loan would be presented with one of three interest rates, 3.75%, 5.75%, and 7.75%. These three levels follow a similar +/- 2% and stay the same pattern as the operating loan interest rates presented to those farmers who currently have an operating loan. To see the full choice sets presented to farmers with and without an operating loan, please refer to Appendix A.

4.7 Demographics

The last section of the survey was dedicated to questions regarding respondent demographics. The detailed questions included gender, age, size of farm, and whether or not they had an affiliation with KFMA. Additionally, questions were asked about the operation including employees, financial measures, and years in the industry. These questions provide elements of differentiation within the data that permit analysis to be conducted on different groups of respondents. Thus providing the ability to compare various socioeconomic groups on their trust preferences and values.

4.8 Survey Collection

Using an online survey meant providing flexibility to generate the most effective quantity of responses. Flyers were mailed out to 2,348 KFMA members and e-mailed to 510 cooperative contacts through the Arthur Capper Cooperative Center (ACCC) who were asked to pass along to their members.

The flyers were distributed in July, the summer of 2015. The flyer indicated the survey would close on August 31st, 2015. Respondents had approximately a month to complete the survey that was estimated to take 30-45 minutes. Once the respondents started the survey, there was no time constraint on how long they had permitted to complete the questions. These factors were thought to increase the incentive of responding to the flyer asking for their participation.

Aside from flyers, two sessions were held at the Risk and Profit Conference at Kansas State University providing another opportunity to take the survey. A total of 34 farmers attended the Risk and Profit Conference, 10 of which completed the trust survey. Though this only contributed to a very small contribution of the total responses, the set up was identical to those taking the survey at home in order to ensure consistency in responses. This meant that no questions could be answered or clarification given while they were completing the questions. On August 31st, the survey was officially closed with a total of 193 usable responses, 147 (76%) of which were associated with KFMA.

Chapter 5 - Farmer and Trust Data

The initial socioeconomic data and general trust perceptions provided by the Kansas farmer and rancher respondents provided a foundation for the research results. Overall, the demographics reported by respondents indicated that the data is highly representative of the Kansas Farm Management Association (KFMA). That is, a significantly high proportion of respondents were associated with or shared averages with farmers within KFMA. Furthermore, the responses in the general trust section show that Kansas farmers and ranchers do not place higher trust in agricultural sales representatives than in the general public.

Using the information from this chapter as a foundation, the economic value of trusted relationships in the agricultural industry was determined and additional ways to deepen those trusted relationships between agricultural sales representatives and farmers was established.

5.1 Farmer Data Description

Although there was variation amongst the 193 respondents, overall the results showed that the survey sample was significantly representative of KFMA. Table 5.1 provides the descriptive statistics for the survey sample. A sizable percentage, 76 percent, of the respondents were members of KFMA. As such, many of the demographics and financial measures of our sample are similar to the KFMA Executive Summary Data for 2014. For instance, the average total value of assets for respondents was \$2,637,264 compared to the KFMA 2014 average of \$2,313,939. Also, the average total debt of respondents and KFMA members was \$529,585 and \$537,305, respectively. Furthermore, the size of farms for the respondents and KFMA members average 2,544 and 2,198 acres, respectively. Furthermore, our sample size reported less than a 14 percent difference than the KFMA demographics, giving strong support for a representative sample.

A strong majority of the farmers who completed the survey were the primary contact and decision makers for the operation. A total of 175 respondents (91%) indicated that farming was their primary occupation and 164 respondents (85%) reported themselves as the primary operator of the operation. Thus identifying their role as the primary contact for the farm or ranch.

The descriptive statistics also show some diversity within the sample. Of the 193 responses, 165 (86%) were male while 28 (14%) of respondents were female. The average age of respondents was roughly 56, but ranged from 22 to 86. Variation in gender and age provided the perspective of multiple generations and mindsets to the survey results. As the survey results are used to determine the economic value of trust and identify ways to best build trusted relationships, these contributions provided a breakdown for more robust and complete analysis.

Table 5.1 : Descriptive Statistics of Farmer Socioeconomic and Demographics

Variable	Observations	Mean	Median	Std. Dev.
<i>Respondent Demographics</i>				
KFMA = 1 ; Non KFMA =0	193	0.76	1.00	0.430
Male = 1 ; Female =0	193	0.86	1.00	0.353
Age	193	55.04	56.00	13.62
Farming Primary Occupation =1; Not Primary Occupation = 0	193	0.91	1.00	0.29
Years as Primary Occupation	175	29.97	28.00	17.65
<i>Farm Operations</i>				
Primary Operator =1 ; Not Primary Operator = 0	193	0.85	1.00	0.36
Average Years as Primary Operator	163	12.46		
Less than 6 Months= 1 ; Else 0	163	0.00	0.00	0.00
1 Year = 1 ; Else 0	163	0.01	0.00	0.11
2-5 Years = 1 ; Else 0	163	0.08	0.00	0.29
5-10 Years = 1 ; Else 0	163	0.12	0.00	0.32
10-15 Years = 1 ; Else 0	163	0.09	0.00	0.28
15+ Years = 1 ; Else 0	163	0.69	1.00	0.47
Full Time Employees	193	1.34	2.00	1.45
0 = 1 ; Else 0	193	0.43	0.00	0.50
1 to 3 = 1 ; Else 0	193	0.51	1.00	0.50
4 to 6 = 1 ; Else 0	193	0.05	0.00	0.21
7 to 10 = 1 ; Else 0	193	0.00	0.00	0.10
11+ = 1 ; Else 0	193	0.00	0.00	0.00
Acres Farmed/Ranched	193	2,544	1800	2526
<i>Primary Production</i>				
Crops = 1 ; Else 0	193	0.61	1.00	0.49
Livestock = 1 ; Else 0	193	0.18	0.00	0.38
50/50 = 1 ; Else 0	193	0.21	0.00	0.41
<i>Financial Measures</i>				
Revenue	193	\$780,494	\$425,000	\$1,084,378
Assets	193	\$2,627,264	\$1,750,000	\$2,433,164
Debt	193	\$529,585	\$237,500	\$954,395
Debt to Asset Ratio		0.20		

5.2 General Trust Data Descriptive Statistics

The general trust section of the survey provided insight towards farmers' perceptions and preferences of trust with the general population and agricultural business relationships. The information gathered in this part of the survey revealed the importance of trust in society and

agricultural business transactions. The responses provided a comprehensive analysis of how much emphasis farmers place on trust when making business decisions, how much they trust their agricultural sales representatives, and what industries they feel rely heavily on trusted relationships.

The initial results identify that overall respondents think people in the general public are trustworthy. That is, they reported above average means for the Likert scale general trust questions as shown in table 5.2. Notably, ‘people respond in kind when trusted’ was highly agreed upon within the sample. When analyzing these results from an ag sales representative perspective, one might believe this would translate to business with an ag sales representative. That they too would respond in kind when trusted by their farmer clients.

Interestingly, respondents ranked their own trustworthiness the highest relative to all other statements. In fact, there was not a single respondent who reported themselves below a “neutral” on the Likert Scale. That is, nobody thought that they were untrustworthy. Thus raising questions regarding differences in self-reflection versus peer assessment.

Table 5.2 : General Trustworthiness Scores of Farmers

Variable	Observations	Mean	Median	Std. Dev.
<i>In General*:</i>				
People are trustworthy	193	3.55	4.00	0.82
People are trustful of others	193	3.48	4.00	0.74
I am trustworthy	193	4.64	5.00	0.52
People respond in kind when trusted	193	4.10	4.00	0.67
<i>Speed to trust:</i>				
Very Slow = 1 ; Else 0	193	0.07	0.00	0.25
Slow = 1 ; Else 0	193	0.52	1.00	0.50
Quick = 1 ; Else 0	193	0.40	0.00	0.49
Very Quick = 1 ; Else 0	193	0.02	0.00	0.12

*Likert scale (1-strongly disagree ; 5- strongly agree)

Females reported being significantly more trusting than males. In all instances, the mean rating from females on the trust Likert scale was 0.14 to 0.31 greater. Showing a fairly expressive variance between gender trust preferences and perceptions (table 5.3). Yet, the largest disagreement between genders was experienced when rating ‘people are generally trustworthy’, where the average for females was 0.31 greater than males. These differences may translate to differences in their willingness to pay for trust attributes.

Table 5.3 : General Trust Likert Scale Score Averages: Segmented by Gender and Age of Farmer

Variable	Gender			Age		
	Total Sample	Male	Female	Under 40	40-65	Above 65
<i>In General:</i>						
People are trustworthy	3.55	3.51	3.82	3.55	3.53	3.80
People are trustful of others	3.48	3.45	3.68	3.48	3.40	3.63
I am trustworthy	4.64	4.60	4.86	4.64	4.63	4.73
People respond in kind when trusted	4.10	4.08	4.21	4.10	4.08	4.17

*Likert scale (1-strongly disagree ; 5- strongly agree)

Most farmers tried to identify with a more moderate rather than extreme speed to establish trust in a new relationship. That is, approximately 90 percent of respondents indicated that they were slow or quick to trust, while only 8 percent stated that they were very slow or very quick to trust. Approximately 52 percent of the respondents indicated that they were slow to trust contrasting to the 40 percent that identify as being quick to trust.

Notably, males and females exhibited a similar average speed to establish trust in a new relationship. Males and females had average speed to trust means of 2.37 and 2.32, respectively (table 5.4). This is significantly different from the results yielded through the trust preferences. That is, females and males have different levels of trust towards general public, but they report similar speeds to trust in new relationships. Thus posing an interesting question as to where the differences lie between genders and what causes these variations.

Another interesting note was the close similarities of trust speed across age groups. Those under 40 and above 65 had average speeds of 2.36 and 2.39, respectively. Indicating that despite the differences in perceptions of general trust, the different genders and groups show a relatively similar speed in gaining trust for new relationships.

Table 5.4 : Average Speed to Trust by Farmer’s Gender and Age

Variable	Average Speed to Trust
<i>Gender</i>	
Male	2.37
Female	2.32
<i>Age</i>	
Under 40	2.36
40 to 65	2.36
Above 65	2.39

*Likert Scale Labels: 1-Very Slow to Trust, 2-Slow to Trust, 3-Quick to Trust, 4-Very Quick to Trust

5.3 General Trust with Agricultural Sales Representatives

Overall, respondents view sales representatives as generally trustworthy. The results across the 5 variables of trustworthy, credible, reliable, intimate, and self-orientated yielded above average means. (table 5.5). Hence indicating that Kansas farmers and ranchers feel agricultural sales representatives exhibit these traits when dealing with their farmer clients.

Females’ feel that their ag sales representatives do a better job of illustrating their client focus. When comparing female to male ratings, self-orientation showed a 0.511 increase for the average female (table 5.5). Past literature by Buchan Et Al. (2008) and Gneezy (2009) indicated that females are more prone to have motherly and good hearted instincts towards general society. These findings might explain the observed differences between males and females.

In contrast, there was minimal differences across the age groups in rating agricultural sales representatives being trustworthy, credible, reliable, intimate, and self-oriented. The main variation was experiences with intimacy, where respondents less than 40 felt intimacy was

exhibited slightly more by ag sale representatives than respondents over the age of 65. Otherwise, the comparisons for all trust components were very similar.

Table 5.5 Average Agricultural Sales Representative Trustworthiness Scores: Segmented by Gender and Age of the Farmer

Variable	Mean	Median	Std. Dev.	Gender		Age		
				Male	Female	Under 40	40 to 65	Above 65
<i>Ag Sales Representatives are :</i>								
Trustworthy	3.53	4.00	0.66	3.51	3.68	3.53	3.52	3.56
Credible	3.51	4.00	0.82	3.48	3.71	3.51	3.48	3.63
Reliable	3.51	4.00	0.80	3.49	3.61	3.51	3.48	3.61
Intimate	3.49	3.00	0.94	3.47	3.61	3.49	3.48	3.44
Self-Oriented	3.10	2.00	0.89	3.02	3.54	3.10	3.05	3.20

* Likert Scale

Aside from rating trust perceptions for agricultural sales representatives, respondents reported a high quantity of current trusted sales relationships. Farmers specified working with 3 to 21 ag sales representatives for their current operations. Remarkably, over 80 percent of the farmers indicated they would consider more than half their relationships to be ‘trusted’ (table 5.6). Moreover, every farmer in the sample indicated that they had at least one or more trusted relationships. Therefore, all of the farmers felt they had at least a few sales relationships that they would consider trusted.

Table 5.6 : Average Number Agricultural Sales Representative Relationships per Farmer; Analyzed by Farmers' indicated trust in those relationships

Variable	Mean	Median	Std. Dev.
Avg. Ag. sales reps	9.67	8.00	5.73
<i>How many of those relationships are trusted:</i>			
None = 1 ; Else 0	0.00	0.00	0.00
Very Few = 1 ; Else 0	0.02	0.00	0.14
Few = 1 ; Else 0	0.03	0.00	0.17
About Half = 1 ; Else 0	0.14	0.00	0.34
Most = 1 ; Else 0	0.63	1.00	0.48
All = 1 ; Else 0	0.18	0.00	0.38

5.4 Decision Making Ranking

Farmers must consider several factors when making purchasing decision for their operations. These decisions can impact the overall profitability, operating performances, and financial stability of the operation. Also, when making a purchase, a farmer must consider who and where to buy products and, what impacts that might have on current or future business.

Overall, farmers place strong emphasis on a purchases overall impact to the operation. “The purchase’s overall impact” had an average rank of 1.39, compared to “the price of the product or service” (2.03) and the “relationship with the sales representative” (2.58). Although the trusted relationship with the sales representative is a factor to consider in a purchase, farmers feel that the significance the products and/or services will have on the farm hold a higher value.

Table 5.7 : Ranking of Factors Influencing Business Decisions : Segmented by Gender and Age of the Farmer

Variable*	Gender			Age		
	<u>Average Rank</u>	<u>Male</u>	<u>Female</u>	<u>Under 40</u>	<u>40-65</u>	<u>Above 65</u>
The purchase's overall impact	1.39	1.41	1.29	1.39	1.39	1.38
Relationship with sales representative	2.58	2.56	2.68	2.58	2.56	2.59
The price of the product or service	2.03	2.03	2.04	2.03	2.05	2.03

*Rank from 1 being most important factor to 3 being least important factor

In both gender and age break outs, farmers collectively reported the overall impact or return to the operation as the number one important factor when making a purchasing decision. The ‘price of the product’ and ‘relationship with sales representative’ rank second and third in the results, respectively. This contradicts prior literature by Doney and Cannon (1997), who concluded that older business operators have a value associated with trust and consider relationships highly influential in business decisions.

5.5 Industry Trust Rankings

Kansas farmers and ranchers works with sales representatives in several agricultural industries. These industries and business relationships vary in their impact on the operation. Therefore, farmers were asked to rank the importance of having a trusted relationship in various agricultural industries. The agricultural industries that farmers ranked in terms of value in trusted relationships included agricultural lending, grain/livestock, agronomy, and machinery and equipment (table 5.8).

Agricultural lending ranked first in the importance of having a trusted relationships with the sales representative, or in this case, the loan officer. Of the 193 responses, 130 expressed agricultural lending as the most important industry to have a trusted relationship. This ranking held across all gender and age groups. Males (1.72), contributing to a higher portion of responses,

showed a slightly lower average ranking for ag lending than females (1.11). However, age groups exhibited a general consensus that agricultural lending ranked first.

Agricultural lending ranking as agriculture's most vital industry to have a trusted relationship supports the decision to use a loan officer relationships for the choice experiment section of the survey. Since farmers value trusted relationships with their loan officers the most, using a loan officer for the simulation will provide a magnified value of trust. Furthermore, it supports past literature by Lejmann and Nueberger(2001) who found that the value of trust was significantly high in loan officer relationships due to the increased connection and repetitive contact. Therefore, increasing relationship building between the two parties. So, using this industry for the foundation of the choice experiment was greatly supported.

Analyzing the ranking results in conjunction with reviewing past literature shed some light on factors that may influence the need for deep, trusted relationships within industries. For instance, Lejmann and Nueberger (2001) discuss the importance of trust when there is frequent contact and business transactions. In some industries, such as machinery, farmers have minimal engagements with the sales representatives after the purchase. Thus, they do not value trusted relationships as much as in other industries. This diminished need for trust with the sales representative can also be explained by the customer placing importance on product differentiation and brand trust. Darain et al. (2004) found that buyers can also place value of on the price and features of the product over the sales representatives personal attributes in certain cases. This puts more emphasis on the product price than the relationship held with the sales representative.

Table 5.8: Trusted Relationship Industry Rankings : Segmented by Gender and Age of the Farmer

Variable*	Gender		Age			
	<u>Average Rank</u>	<u>Male</u>	<u>Female</u>	<u>Under 40</u>	<u>40-65</u>	<u>Above 65</u>
Ag Lending	1.63	1.72	1.11	1.63	1.58	1.68
Grain/Livestock	2.69	2.66	2.93	2.69	2.76	2.34
Agronomy	2.46	2.41	2.75	2.46	2.34	2.85
Machinery	3.22	3.22	3.21	3.22	3.32	3.12

* Rank each industry from 1 being the most important to have a trusted relationship with the industry's sales representative to 4 being the least important.

5.6 Ranking the Trust Factors

The respondents were then asked to think about what they value most in a trusted relationship. They were asked to rank the four components of trust (credibility, reliability, intimacy, and self-orientation), where 1 indicated the most valued quality in a trusted relationship and 4 represented the least valued quality in a trusted relationship.

The results emphasize that all farmers, despite gender and age, put a very high value on credibility and reliability when assessing relationships. Although females see slightly more value in credibility than males, table 5.9 shows that most farmers agree that credibility and reliability are valued more than intimacy and self-orientation.

However, self-orientation ranks as the lowest amongst the four trust components, refuting statements made in *The Trusted Advisor* (Maister et. at, 2000). Through surveys conducted with multiple industry sales representatives, Maister et al. (2000) concluded that self-orientation was the most influential and important trust component. Furthermore, they argue that in an empirical application that it is the best way for sales representatives to build trust. Interestingly, farmers in this study indicated that self-orientation was ranked the lowest among the four trust scores. With that said, more analysis is necessary to confirm this belief among farmers. Most notably, farmers

need to be placed in a situation in which there are economic implications for their tradeoffs among the various trust attributes.

Table 5.9 : Ranking Value of Trust Components as Value in a Relationship

Variable	Gender		Age			
	<u>Average Rank</u>	<u>Male</u>	<u>Female</u>	<u>Under 40</u>	<u>40-65</u>	<u>Above 65</u>
Credibility	1.94	1.98	1.68	1.94	1.91	1.95
Reliability	1.99	1.99	1.96	1.99	2.03	1.85
Connection with Me and My Operation	2.68	2.68	2.68	2.68	2.64	2.78
Focused on Me	3.39	3.35	3.68	3.39	3.42	3.42

*Rank where 1 indicates the most valued quality to 4 being the least valued quality in relationships

Ultimately, this segment of the research provided the foundation of how trust is viewed and perceived by the respondents. There was an understanding of general trust preferences, analysis on factors influencing decisions, and the comparison of characteristics used to calculate trust, all which provide valuable information as we move forward to examine the WTP factors for trust.

Chapter 6 - Loan Officer Choice Experiment

6.1 Introduction

The choice experiment asked farmers to choose between their current loan officer and hypothetical loan officers who had different trust attributes and loan interest rates. Using a rank-ordered logit model, the marginal valuations were estimated and the economic value associated with each trust component was estimated. Some of the key findings indicated that farmers find their current loan officers moderately trustworthy. In contrast to the farmers' initial rankings, farmers are willing to pay the most for self-orientation. Across the different breakdowns of gender, age, and size, some of the most noticeable differences in willingness to pay (WTP) were seen between genders.

To estimate the WTP, the sample focused on those respondents that had a current operating loan. Therefore, a total of 172 responses were used, not including the 11 respondents who did not have a current operating loan. Focusing on farmers with a current loan officer relationship allowed for analysis on the economic value of trust from a specific frame of reference, their current loan officer. Future research and analysis should consider estimating the economic value of trust for those farmers who do not have a current operating loan.

6.2 Calculating a Trust Score

Farmers were asked to state the level of trust they have with their current loan officer by rating the loan officer's level of credibility, reliability, intimacy, or self-orientation. These ratings were allocated through a 5 point Likert scale. Recall that the Likert scale ranged from "very low" to "very high" for each of the trust components.

Using the reported ratings for the farmer's current loan officer on the four components of trust, a trust score index was calculated. The trust score was calculated following the trust equation of Maister, et al. (2000) as:

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

The trust score index is equal to the scores of credibility, reliability, and intimacy added together and then divided by self-orientation. On a 5 point scale, where each of the four components can have a score ranging from 1 to 5, the trust scores appear along the interval of 0.6 to 15.0. Therefore, the average trust score of this interval would be 7.8.

This calculation was used to determine the current trust score index for the farmer respondents' current loan officer relationships. Allowing there to be a comparison of trust between farmers and their loan officers.

6.3 Current Loan Officer Trust Scores

The average trust scores for current loan officers of Kansas farmers and ranchers fell just below the trust index score average. That is, the average loan officer's trust score was 7.1 while the previously noted mean trust score index would be 7.8. However, there was a fair amount of variation across the trust scores for loan officers. Farmers gave their loan officers scores ranging from 1.2 to 15.

Kansas farmers rated their current loan officers very highly on credibility and reliability. Credibility and reliability had the two highest mean scores of 4.28 and 4.23, which helped increase the overall trust score (table 6.1). Furthermore, the minimum score allocated to a loan officer for these two components was a two or "low credibility." Showing that overall, no farmer felt their current loan officer exhibited "very low" credibility or relatability.

Also contributing to the trust scores with more variation was intimacy and self-orientation. Although intimacy exhibited the same median as credibility and reliability, the average reporting rating for loan officers was significantly lower at 3.86. Likewise, self-orientation revealed

fluctuation in responses ranging from “very focused on me” to “very focus on themselves.” These factors of variability impacted the mean trust score indexes from the sample.

Collectively, it is observed that current loan officer trust scores and farmer preferences vary across respondents. Influences of gender, age, and size suggest there might be differences in the willingness to pay for trust in an ag sales relationship. The choice experiment unfolded these desires to pay more for trusted qualities in an ag sales representative. Furthermore, they serve as motivation for loan officers to work on increasing their trust score with farmer clients.

Table 6.1: Farmers Reported Trust Scores for Current Loan Officer

Variable	Mean	Min	Median	Max
Trust Score	7.07	1.20	6.00	15.00
<i>Decomposing Trust Score into Components</i>				
Credibility	4.28	2.00	4.00	5.00
Reliability	4.23	2.00	4.00	5.00
Intimacy	3.86	1.00	4.00	5.00
Self-Orientation	2.17	1.00	2.00	5.00

Female Kansas farmers view their loan officer as being more trustworthy than their male counterparts. Female farmers had demonstrated higher average trust scores (8.7) than male farmers (6.8) in their loan officer relationships (table 6.2). In fact, females scored every trust component of their current loan officer higher than males. This finding is supported by extant literature. Buchan et. al. (2008), Corson and Gneezy (2009), and Siegirst and Gustcher (2005) found that females have strong trusting perceptions compared to male counterparts.

Similarly, Kansas farmers have different views on trust based on operation size. Larger farmers who have over \$1 million in revenues tended to give their loan officers higher trust scores (8.0) than smaller farms with less than \$250,000 in revenue (6.6). This supports research by Chiles and McMackin (1996) who discuss the importance of having trusted relationships in large business

operations to improve efficiencies and reduce transaction costs. This increased trust can be generated from a better connection with the loan officer and their ability to show they have the operation's best interest at heart. Furthermore, as Duarte et al. (2012) discusses, larger farms typically borrow a greater amount of funds, provide better credit scores, and generate higher trust in a business relationship.

Another interesting finding was that more "years" tend to yield higher trust scores. This includes both years in terms of age and experience. Farmers over 65 tended to rate their loan officer higher (7.3) than their younger counterparts (6.7). Additionally, experienced farmers, 10 or more years farming, rated their loan officer with a trust score of 7.2, while more novice farmers average trust score was 5.6. More than 5 years working with the loan officer resulted in a trust score of 7.2 compared to less than 5 years of working together (6.8). Taken all together, these results support the literature by Lewick and Nunker (1996) and Doney and Cannon (1997) that trust takes time to develop and acquire in a business relationship. It also lends itself to discussion of differences in preferences across generations, operational practices and procedures.

Table 6.2 : Average Current Loan Officer Trust Scores : Segmented by Farmer Socioeconomic Demographics

Variable	Trust Index Score	Credibility	Reliability	Intimacy	Self-Orientation
Average	7.07	4.28	4.23	3.86	2.17
<i>Gender</i>					
Male	6.76	4.21	4.17	3.80	2.24
Female	8.67	4.64	4.57	4.18	1.79
<i>Age</i>					
Less than 40 years old	6.74	4.30	4.40	3.80	2.27
Between 40-65 years old	7.09	4.29	4.2	3.89	2.15
More than 65 years old	7.28	4.26	4.18	3.84	2.13
<i>Revenue</i>					
Less than \$250,000	6.55	4.20	4.14	3.76	2.24
\$250,000 - \$1,000,000	6.87	4.22	4.22	3.76	2.23
Greater than \$1,000,000	7.99	4.49	4.36	4.16	1.98
<i>Farmer</i>					
Beg.	5.55	4.05	4.19	3.57	2.38
Seasoned	7.24	4.32	4.26	3.92	2.14
<i>Years with Loan Officer</i>					
Less than 5 years	6.75	4.16	4.10	3.76	2.26
Greater than 5 years	7.2	4.33	4.28	3.90	2.13
<i>Farm Type</i>					
Crop	6.81	4.25	4.22	3.84	2.2
Livestock	7.61	4.37	4.23	3.90	2.07
<i>Total Acres</i>					
< 2,500 acres	6.92	4.26	4.19	3.78	2.20
> 2,500 acres	7.36	4.33	4.32	4.02	2.10
<i>KFMA Member</i>					
Member	7.22	4.3	4.23	3.88	2.12
Non-Member	6.6	4.24	4.24	3.80	2.32

6.3 Empirical Model- Ranked Ordered Logit

The loan officer trust component ratings and current operating loan interest rate were used as the base case in the choice experiment. Farmers were asked to rank their current loan officer against two hypothetical loan officers. These hypothetical loan officers' trust component levels varied according to the orthogonal survey design. Furthermore, the hypothetical loan officers' offered operating loan interest varied relative to the farmer's current operating loan interest rate. Recall that the interest rate varied across three levels – same, 2 percent higher, or 2 percent lower. To analyze this data, a ranked ordered logit model was employed to estimate the trust preferences of the respondents and the economic value of trust.

Recall that farmers will ultimately choose the loan officer that yields the highest level of utility. Therefore, the farmer will select loan officer (i) that generates U_i if ($U_i > U_{\neq i}$). That is, they will select loan officer (i) as their first rank, if they feel the utility gained from that loan officer will be greater than the other 2 within the choice set. These rankings are subject to the farmers' perceptions on value associated with each of the four trust components and the interest rate offered. Also, this choice is estimated as the probability that loan officer i 's utility will be greater than another loan officer's utility as:

$$\mathbf{Prob}(U_i) = \mathbf{Prob} (U_i > U_{\neq i}) . \quad (6.1)$$

With the rankings collected from respondents, the ranked ordered logit model can then be used to define a random result that is based on a set of discrete, ordered outcomes. Therefore, using the original model foundation for this study is the RUM from Chapter 3:

$$\mathbf{V}_i = \mathbf{V}_i(\mathbf{T}_i, \mathbf{R}_i; \mathbf{Z}_i) \quad (6.2)$$

where the indirect utility (V_i) observed by the farmer is subject to the level of trust (T_i) and interest rate (R_i) associated with loan officer i . This also includes the other unobservable factors (Z_i) of the farmer and loan officer.

Turning this original RUM model into an empirical model allows for the trust and interest rate parameter estimates through a regression model as:

$$V_i^* = BT_i + R_i + e_i \quad (6.3)$$

where V_i^* , is the indirect utility for the farmer, and is observed in a discrete form as indicated by each loan officer (i) relationship. B_i represents the beta associated with that loan officer's trust score. This is what is used to generate the estimated parameters for trust in the rank ordered logit model. In this case, the coefficient vectors to be estimated within T_i , include the four components of trust: credibility, reliability, intimacy, and self-orientation. When analyzing from a simple format using the trust score index, T_i , simply represents the loan officers trust score. R_i signifies the interest rate associated with loan officer (i). Lastly, e_i is a random error term that is assumed to be IID.

Using the rankings from the respondents, parameter estimates are estimated based on the probability of a farmer selecting one loan officer over another. That is, a farmer or rancher will choose the loan officer that generates them the highest level of utility when considering the trust attributes and interest rates. Furthermore, the marginal utilities of trust can be generated using the probability of choosing one loan officer over the other

The rankings with the associated trust scores and interest rates, the regression for the following analysis would be as follows:

$$Y_i = \beta_1 \text{TrustScore} + \beta_2 \text{InterestRate} + \beta_3 \text{CurrentSituation} + e_i \quad (6.1)$$

where Y_i , the ranking of the loan officer (1, 2, or 3), is dependent on the trust score, interest rate, and a dummy variable for the choice of remaining in their current situation. In this case, the dummy variable was 1 for their current situation or 0 if it was a hypothetical loan officer. Researchers, including Hensher and Bradley (1993) and McFadden (1980), justify using a dummy variable in discrete models when using choice data to analyze the impact of the current situation has on their decision. Doing so helps control for status quo bias. Lastly, an error term is included in the model to capture any other observable characteristics of the loan officer or farmer.

Another rank ordered logit model is estimated with the trust score being decomposed into its component parts. In this case, the trust score is replaced with credibility, reliability, intimacy, and self-orientation in the regression model 6.4. Given the farmers rated their current loan officer on these four components separately, it is appropriate to enter them into the regression equation additively rather than following the trust score equation of Maister, et al.

With this rank ordered logit model there are assumptions that (1) there is independence across different loan officer situations and unique utility functions; (2) identical variances across loan officers so the excess means are absorbed in the constants; and (3) the same possibilities for all loan officers.

The parameter estimates from the rank ordered logit were estimated along with the statistical significance of the parameters. This then allowed for the willingness-to-pay (WTP) to be estimated for each trust component. Once the statistical significance is identified through the regression, the parameter estimates were utilized to create a WTP in terms of an interest rate. This is the cost associated with taking out an operating loan with a current loan officer. The two main parameter estimates used to calculate the WTP are the beta parameter estimates for trust or the trust component and interest rate. To calculate the WTP, the following formula is used:

$$\left(\frac{\frac{B_{Ti}}{-B_5}}{1,000} \right) = WTP, \quad Ti = C, R, I, SO \quad (6.2)$$

where the beta parameter estimate for trust(or the trust component) is divided by the negative of the cost parameter estimate. This gives the WTP ratio for the trust component to interest rate. However, the ratio must be divided by 1,000 to convert the WTP to an interest rate.

6.4 Choice Experiment Results

The results identified that Kansas farmers and ranchers do in fact value trusted business relationships with loan officers. The parameter estimates from the rank ordered logit model were all statistically significant. Table 6.3 breaks down the rank ordered logit and WTP parameter estimates for the trust score model, the trust squared model, and the trust model with the four breakout trust components.

Because parameters from a rank-order logit model must be transformed to be interpreted, the primary discussion of these results is focused on the WTP estimates. One thing to point out about the parameter estimates, is that every regression parameter yielded the expected signs. Thus indicating that the model was set-up correctly.

Additionally, using the Delta Method, the statistical significance of the WTP for each attribute was tested. This test compares to see if the ratio, which in this case is the willingness to pay (the trust parameter estimate divided by the negative cost parameter estimate) is statistically significant from zero (table 6.3).

Farmers do place an economic value on trust because they are willing to pay for trust. By evaluating the loan officers based on the trust score, interest rate, and dummy variable of the current situation, it is estimated that farmers are willing to pay 0.59% interest rate to work with a

loan officer that is trustworthy. Although economic value is gained from trusted relationships, it cannot be said that trust has diminishing marginal utility. The second model did yield a statistically significant trust variable but the trust squared variable was not statistically significant. The trust curve yielded the correct sign (-.00167) but was not statistically significant.

When decomposing trust, the rank ordered logit parameter estimates show that farmers greatly value self-orientation far above the other three trust components. This is based on the calculated WTP estimates for each of the four trust components. Kansas farmers and ranchers were willing to pay 0.93% for a loan officer who was very focused on them and their operation. This was 0.10% above any of the other trust components. For loan officers that exhibited very high credibility and reliability, farmers were willing to pay 0.78% and 0.83%, respectively. Intimacy, or strong connection between loan officer and farmer, was a distant fourth with farmers only willing to pay 0.41%.

Table 6.3 : Rank Order Logit and Willingness to Pay (WTP) Estimates for Trust

Variables	Trust Model		Trust Squared Model		Original Attribute Model	
	<i>ROLOGIT EST.</i>	<i>WTP</i>	<i>ROLOGIT EST.</i>	<i>WTP</i>	<i>ROLOGIT EST.</i>	<i>WTP</i>
Trust	0.15*	0.59%***	0.17*	0.59%*		
	(0.01)		(0.02)			
Trust Squared			-0.01			
			(0.01)			
Credibility					0.23*	0.78%*
					(0.02)	
Reliability					0.24*	0.83%*
					(0.02)	
Intimacy					0.12*	0.41%*
					(0.01)	
Self-Orientation					0.27*	0.93%***
					(0.02)	
Cost (Interest cost per \$1,000)	-0.03*		-0.03*		-0.03*	
	(0.00)		(0.00)		(0.00)	
Dummy Base	2.63*		2.62*		2.10*	
	(0.07)		(0.07)		(-0.06)	
Observations	4,122		4,122		4,122	
Number of groups	173		173		173	

Standard errors in parentheses

*Statistically Significant $p < 0.01$

WTP was calculated by dividing the attribute ROLOGIT EST. by the negative of the cost ROLOGIT EST.

Table 6.4: Rank Order Logit and Willingness to Pay (WTP) Estimates for Trust Components : Segmented by Socioeconomic Demographics

Variables	Gender				Farmer Age						Total Revenue of Operation							
	Original		Male		Female		Under 40		40-65		Above 65		Less than \$250,000		\$250,000-\$1,000,000		More than \$1,000,000	
	EST.	WTP	EST.	WTP	EST.	WTP	EST.	WTP	EST.	WTP	EST.	WTP	EST.	WTP	EST.	WTP	EST.	WTP
Credibility	0.23*	0.78%*	0.21*	0.67%*	0.33*	1.79%*	0.19*	0.61%*	0.22*	0.74%*	0.25*	1.02%*	0.20*	0.82%*	0.24*	0.68%*	0.21*	0.89%*
	(0.02)		(0.02)		(0.04)		(0.04)		(0.02)		(0.03)		(0.03)		(0.02)		(0.03)	
Reliability	0.24*	0.83%*	0.24*	0.79%*	0.25*	1.35%*	0.28*	0.92%*	0.23*	0.76%*	0.25*	1.00%*	0.26*	1.05%*	0.23*	0.65%*	0.24*	1.01%*
	(0.02)		(0.02)		(0.04)		(0.04)		(0.02)		(0.03)		(0.06)		(0.02)		(0.03)	
Intimacy	0.12*	0.41%*	0.11*	0.37%*	0.16*	0.84%*	0.13*	0.43%*	0.12*	0.40%*	0.11*	0.43%*	0.11*	0.44%*	0.13*	0.37%*	0.10*	0.40%*
	(0.02)		(0.02)		(0.04)		(0.04)		(0.02)		(0.03)		(0.03)		(0.02)		(0.03)	
Self-Orientation	0.27*	0.93%*	0.28*	0.90%*	0.24*	1.29%*	0.34*	1.09%*	0.26*	0.85%*	0.26*	1.07%*	0.28*	1.15%*	0.29*	0.83%*	0.22*	0.91%*
	(0.02)		(0.02)		(0.04)		(0.04)		(0.02)		(0.03)		(0.03)		(0.02)		(0.03)	
Cost (Interest Cost per \$1,000)	-0.03*		-0.03*		-0.02*		-0.03*		-0.03*		-0.02*		-0.02*		-0.03*		-0.02*	
	(0.02)		(0.02)		(0.01)		(0.01)		(0.01)		(0.01)		(0.01)		(0.01)		(0.01)	
Dummy Base	2.10*		2.11*		2.03*		2.13*		1.99*		2.47*		2.081*		1.84*		2.96***	
	(0.06)		(0.07)		(0.18)		(0.16)		(0.08)		(0.16)		(0.12)		(0.09)		(0.18)	
Observations	4,122		3,453		669		717		2,499		906		1,194		1,854		1,074	
Number of groups	173		145		28		30		105		38		50		78		45	

Standard errors in parentheses

*Statistically Significant $p < 0.01$

WTP was calculated by dividing the attribute ROLOGIT EST. by the negative of the cost ROLOGIT EST.

The economic value of trust was also analyzed for different socioeconomic breakdowns of respondents. Table 6.4 reports estimated farmer's WTP for trust across gender, age, and size of farm. This analysis added to the discussion of trust economic value differences for the indicated groups.

Notably, females are willing to pay almost double that of males on several of the trust components, lending to their high value of trust in a sales relationship. As mentioned in Coroson and Gneezy (2009) and Siegrist et al. (2005), female preferences are generally more risk averse and may suggest they would be willing to pay more for increased stability within relationships. Females are willing to pay the most for credibility (1.79%) and self-orientation (1.29%) while males are willing to pay the most for self-orientation (0.90%) and reliability (0.79%). However, one commonality between males and females is their universal agreeance that intimacy is the least valuable component of trust.

Across ages of farmers, there are several similarities in their WTP for trust components. Farmers under the age of 40 and older than 65 were both willing to pay the most for self-orientation (1.08%). This is in line with past literature like Darain et al. (2004) who emphasize that salesperson's respect for the customer has significant importance in business decisions. Additionally, both age groups were willing to pay the least for intimacy (0.43%).

However, the discrepancies between ages and WTP was noticed more for credibility and reliability. That is, farmers of different ages associated stronger variation in value towards the two trust components. For instance, farmers over 65 put a stronger value on credibility than those under 40. This was demonstrated by the nearly 0.41% increase in WTP for those over 65.

Interestingly, the middle age group including respondents between the ages of 40 and 65 exhibited significantly different WTP patterns than their counterparts. Most notably, those in the

middle age bracket were only willing to pay 0.85% for loan officers with self-orientation. This is approximately 0.20% lower than the other two age groups. Additionally, the willingness to pay for reliability was lower than that of its counterparts. This might be due to the combination of different generations and preferences within the age group.

One reoccurring result across all age groups was that intimacy held the lowest value of the four trust components. Per the results, farmers felt that being knowledgeable, following through, and showing your customer focus was more important than sharing a strong connection with the farmer and operation. This is expressed through intimacy's low WTP across all ages.

Another notable finding was that different farm sizes showed a wide dispersion of WTP for trust. For example, farmers with revenues less than \$250,000 placed the highest value on self-orientation (1.15%). This result is much higher than the WTP for self-orientation of farmers with between \$250,000 and \$1,000,000 revenues, 0.83%, and large farmers with more than \$1,000,000 revenues, 0.93%. Additionally, farmers in the highest revenue bracket placed the most value on the trust component of reliability (1.01%). In fact, this was the only model to show that the group valued reliability more than self-orientation. This related back to the previous literature mentioned about larger farms wanting to establish reliable relationships in order to focus on smooth, efficient transactions.

While there are similarities between the two outside revenue groups, there is more noticeable deviation in the middle group of respondents. While small farms are willing to spend about 1.0% for reliability, medium sized farms do not place a high value on the trust component (0.65%). Furthermore, a similar situation is experienced in credibility where the small and large farmers are willing to pay over 0.80% medium sized farms are only willing to pay 0.67%.

Again, one strong commonality between all revenue groups is the low economic value placed on intimacy. Ranging from 0.37% to 0.44%, intimacy ranked the lowest in terms of willingness to pay for an attribute across the four trust components. Indicating that loan officers should focus on increasing their other attributes regardless of the farm size based on revenues.

6.5 Conclusions

The average Kansas farmer and/or rancher is working with loan officers with whom they trust. The average reported loan officer trust score was 7.2. Furthermore, in over 81% of the choice experiment sets, farmers opted to stay with their current loan officer. Even though some of the other options offered operating loan interest rates that were 2% lower than the farmer's current interest rate, more often than not, the farmer would remain with their current loan officer.

Furthermore, the analysis indicated that Kansas farmers and ranchers place high value on working with trusted loan officers and agricultural sales representatives. The average Kansas farmer is willing to pay 0.59% for a trusted loan officer relationship. Thus proving that trust plays a role and holds value in business transactions.

In terms of breaking down the value of trust into the four trust components, self-orientation yields the highest value. With WTP ranging from 0.83% to 1.29%, almost all breakouts proved that self-orientation had the highest WTP. That is, farmers value loan officers and agricultural sales representatives who are deeply focused on their customers rather than their own agenda.

Although all trust components were statistically significant, intimacy was consistently the lowest WTP value. That is, farmers placed a greater WTP on the other three trust components. Therefore, being educated, well research, dependable, and focus on the customer is more important to the farmer than being connected to the operation.

However, maintaining and increasing authority in all trust components is crucial in developing a strong trust score. It could be assumed that most farmers expect their ag sales representative or loan officer to be knowledgeable in their field of work and provide follow through on their actions. By working on these qualities of personal and professional development, the value of ag sales representatives will increase.

Chapter 7 - Best/Worst Survey Results

The best worst survey results offer agribusiness sales representatives insight into the most effective ways to build trust with their farmer customers. Based on this analysis, it is clear that to deepen a trusted relationship with a farmer, an ag sales rep must be well researched, follow through on actions requested by the farmer, and focus on defining the problem. Furthermore, trust with the organization did not prove as impactful in building a trusted relationship as the time and effort put forth by the sales representative.

7.1 How to Best Build Trust with Farmers

Understanding how to best build trust with farmers stems strongly from the perceptions and preferences associated with trust. Following Maister et al. (2000), figure 7.1 lists a set of statements that demonstrate how an ag sales representative can build trust with a farmer. Each statement ties directly to its associated trust components of credibility, reliability, intimacy, and self-orientation. While not an exhaustive list, these statements do capture the best ways to building a trusted relationship. Furthermore, these accounts of increasing trust encompass concepts stemming from literature from Doney and Cannon (1997), Darian et al (2004), and Duetsch (1962).

Figure 7.1 : Trust Component Statement Used In Best Worst Block Design

<p><i>Credibility</i></p> <ul style="list-style-type: none"> Does their homework on me and my operation Does not lie or exaggerate Years working in the industry Is passionate and loves their topic Reputation of the company they work for Well researched and knowledgeable of topic When they don't know, they say so 	<p><i>Intimacy</i></p> <ul style="list-style-type: none"> Ability to be candid and upfront about situations Stays in contact via calls, visits, etc. Not afraid to make conversation Finds the fun and fascination in my operation Understands my goals, mission, and values Years working in the industry Shares a common interest
<p><i>Reliability</i></p> <ul style="list-style-type: none"> Sends meeting materials in advance Are always transparent Makes sure meetings have clear goals, not just agendas Reputation of the company they work for Adapts to changing circumstances and situations Makes specific commitments and delivers on them Follows through on actions requested by me 	<p><i>Self- Orientation</i></p> <ul style="list-style-type: none"> Asks open ended questions to better understand me Listens without distractions Reflective listening, summarizing what they've heard Allows me to fill the empty spaces in conversations Asks me to talk about what's behind an issue If communication fails, they take most of the responsibility Focuses on defining problem, not guessing the solution

Using 7 representative statements to reflect each trust component, allows for several themes to surface. While many focus heavily on the individual, other general themes are apparent throughout all statements. Some of these themes include being within the control of the sales representative, outside of their control, open communication, and personal connections.

Notably, one of the most clearly defined themes amongst the statements is those that are under the direct control of the sales representative. Credibility and reliability highlight several factors ag sales representatives can control such as, ‘does not lie of exaggerate’, ‘makes specific commitments and delivers on them’, and ‘sends meeting materials in advance.’ Furthermore, taking personal initiative to understand the farmers by exhibiting close intimacy and self-orientation factors can increase trust. The statements having the ability to ‘be candid and upfront about situations’ and ‘listens without distractions’ provide subtle, but meaningful ways ag sales representatives can directly impact their perceived trustworthiness.

Conversely, there are statements that are largely outside of the control of the ag sales representative. Most notably, the ‘reputation of the company they work for’ is not necessarily something the sales representative can manage. Although they may like to work for a highly reputable company, sometimes situations outside of their control arise that can impact the company’s overall image. Years working in the industry is also largely outside of the control of an individual sales representative.

The statements, especially those relating to intimacy, reveal a strong need for open, personal communication within the relationship. Without solid communication, how would a sales representative ‘understand the goals, missions, and values’ of the farmer? Communication is heavily reliant on the ability to ‘not be afraid to make conversation’, ‘listen without distractions’, and maintain a habit of ‘reflective listening.’ In order to expand that trusted relationship, communicating timely and effectively is crucial.

Lastly, that ability to have strong communication pairs with the importance of sharing a deep personal connection illustrated through the statements. By ‘doing their homework on me and my operation’ a sales representative is able to share some common points of understanding about the farming operation’s practices and procedures. This connection can only grow as the sales representative begins to ‘find the fun and fascination in my operation.’ Increasing the passion to be involved with the farmer and ‘share common interests’ promotes relationship development and a significant increase in trust.

7.2 Best-Worst Conditional Logit Model

Analyzing the best-worst survey is primarily done through the estimation of a conditional logit model (CLM). The CLM is used for three primary purposes. First, the CLM is based on the widely accepted random utility theory, which provides a theoretical basis for why farmers

selected the statements as most representative and least representative. Next, is to identify if the statements within each trust component are statistically different from the other statements. Finally, the CLM allows for the calculation of a magnitude of representativeness share that is used to determine which statements best demonstrate a particular trust component.

When responding to each best-worst question, farmers are essentially choosing two statements that maximize the difference between one that most represents trust and the one that least represents trust. That is, each farmer has an underlying scale of representativeness that each statement falls on for a particular trust component. So, following Lusk and Briggeman (2009), there are J number of statements that represent a given trust component, which means in the main effects design there would be $J(J-1)$ possible best-worst combinations that the farmer could choose from each question (in our case, 42 possible best-worst combinations). Therefore, each farmer will always select the one combination that maximizes the difference between the most representative statement j relative to the least representative statement k .

A random utility framework can be used to illustrate this underlying scale of representativeness. Assume that farmer i will choose statement j that maximizes the representativeness of the trust component on a representativeness scale. Further assume that the λ_j is the scale parameter on this scale for farmer i , and the latent unobserved level of representativeness for farmer i is shown as $R_{ij} = \lambda_j + e_{ij}$, where e_{ij} is a random error component.

From this framework, the probability that a farmer will choose one statement over another statement can be presented. Assume that farmer i chooses statement j over statement k as the most representative and least representative combination out of a J choice set. Therefore, the probability to be estimated is the difference between R_{ij} and R_{ik} is greater than all other $J(J-1)$ statements within the choice set. Now, if the e_{ij} random error component is IID type 1

random variates and with the IIA property, then the probability results in McFadden's conditional logit specification for the choice probabilities as:

$$P(j \text{ is chosen most representative and } k \text{ is chosen least representative}) = \frac{e^{\lambda_j V_{jt}}}{\sum e^{\lambda_j V_{kt}}} \quad (7.1).$$

Therefore, the probability to be estimated is that statement j is chosen over statement i . In the equation, λ_j represents the specific location of the value j on the “representative” scale. This location on the “representative” scale is directly reliant on the probability that state j will be selected over the other statements. The estimated λ_j provides the representativeness of the value j relative to a statement that was normalized to zero to serve as the dummy variable or base case. This CLM does take into consideration the assumption that all of the statements in the sample would be able to hold the same level of representativeness.

Once the CLM is estimated to arrive at the λ_j values, the share of representativeness for statement j is calculated to determine which statement is the most important through a representativeness share as,

$$\text{Representative Share} = \frac{e^{\hat{\lambda}_j}}{\sum_{k=1}^j e^{\hat{\lambda}_j}} \quad (7.2).$$

Given this equation, we can calculate a “share of representativeness” for each of the statements within each component of trust. The exponents of the conditional logit estimates are used to develop the representativeness of each statement on a scale of 0 to 1. This allows for the analysis of magnitude of representativeness of each statement. Therefore, if one statement has a share value of 0.3 compared to another statement's share of 0.1, the former statement is three times as important as its counterpart. This provides the ultimate magnitude of importance relative to the base case and the other statements in the best-worst analysis.

In addition, the best-worst survey design also allows the researcher to analyze the data using a simple count method. What this means, is that the researcher can count the number of times that a statement is selected as “most” or “least” representative. When selected as “most” representative, the statement will be given a value of 1, while a statement selected as “least” representative will be given a value of -1. If the statement is not selected as most or least representative, the statement will receive a value of 0. Given each statement is shown 4 times throughout the 7 questions, it could yield a representative score ranging from -4 to 4 depending on the frequency it was selected as most or least representative. These results can be displayed in tables, or visually through histograms.

7.3 Best Worst Results

The Conditional Logit Model (CLM) results showed that almost all of the estimates derived from the trust statements were statistically significant. Furthermore, the representative scores that show the magnitude of importance yield some striking results that should help agricultural sales representatives build stronger credibility, reliability, intimacy, and self-orientation with their farmer-customers. In short, the results show that farmers feel the statements that are under direct control by the sales rep are the most representative of the four trust components. This is especially interesting because often times younger sales reps may feel disadvantaged in building trust because of their age. Something that is outside of their control. Yet, farmers clearly place a larger value on statements that are directly within the control of the sales rep. To prove this assertion, each of the trust component CLM results are discussed in turn.

7.3.1 Credibility

Credibility with farmers is best established and built by the ag sales representative being honest and knowledgeable about the products and/or services. Comparing the highest CLM

representativeness share of 0.28 to the lowest share of 0.03 in table 7.1, shows that “does not lie or exaggerate” is ten times more representative of credibility than “years working in the industry.” Also highly reflective of credibility is “when they don’t know, they say so” (0.24), and being “well researched and knowledgeable of topic” (0.24). Thus, indicating farmers find much more value in sales representatives who have knowledge and integrity in their field of work.

These results stress the fact that factors outside the control of the sales representative have a smaller influence on building credibility. The low representativeness shares of “years working in the industry” (0.03) and the “reputation of the company they work for” (0.06) demonstrates that farmers do not believe these external factors are the best methods for building credibility. Credibility is more reliant on the direct words and knowledge of the sales representative.

Table 7.1: Conditional Logit Estimates and Representative Shares for Credibility

Credibility Statements	CLM Estimates	Representative Share
Does not lie or exaggerate	2.32*	0.28
When they don’t know, they say so	2.17*	0.24
Well researched and knowledgeable of topic	2.15*	0.24
Does their homework on me and my operation	1.22*	0.09
Reputation of the company they work for	0.75*	0.06
Is passionate and loves their topic	0.73*	0.06
Years working in the industry	Base	0.03

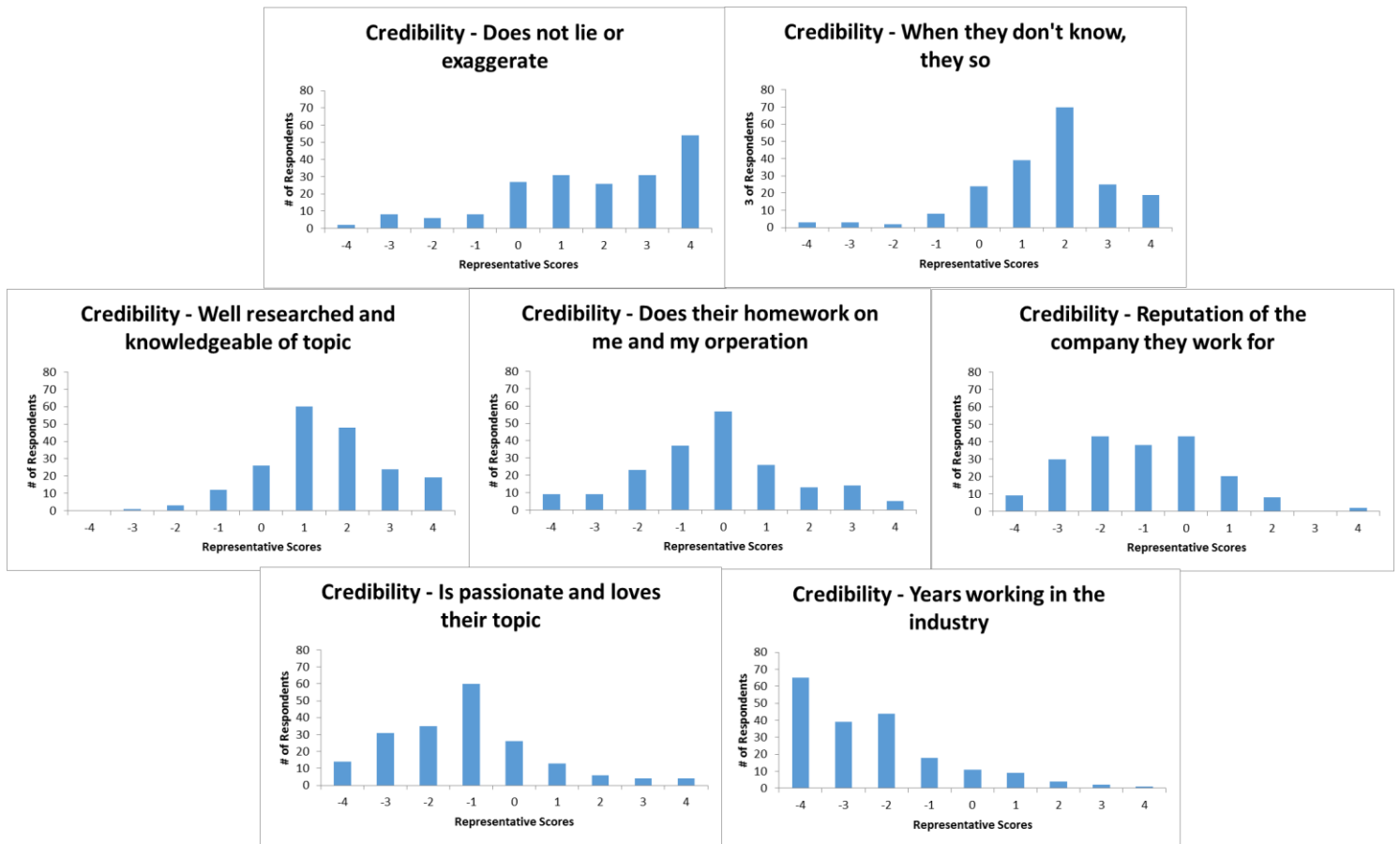
* Statistically significant at the 1 percent level

Using a count method described earlier, representative scores can also be calculated and shown through a histogram. Recall that the count method assigns a score to each statement when it is selected “most” representative (1), “least” representative (-1), or not selected at all (0). Since

each statement is shown in 4 questions, the scores can range from -4 to 4 for reach respondent. Then the collected data can be illustrated on a graph, or histogram.

Given farmers vary in personality, desires, and needs, there will be differences in how to build trust with them. The results from the histograms in figure 7.2 support the results in table 7.1 while also identifying variation across different respondent preferences. Overall, “does not lie or exaggerate”, being “well researched and knowledgeable of topic”, and “expressing when you don’t know” are collectively important ways to increase and represent credibility. This is demonstrated through the heavily right skewed histograms. Thus, most farmers selected these statements as “most” representative in several, if not all of the questions.

Figure 7.2: Credibility Histograms Reporting Frequency of Statement Being Always Selected as “Least” Representative (-4) to Always Being Selected as “Most” Representative (4) by Each Respondent.



Furthermore, farmers also agree that “years working in the industry” and “is passionate and loves their topic” is not as significant in gaining credibility. These histograms being more left skewed highlights the farmers’ collective perceptions that these aspects are not as essential in deepening credibility.

But, farmers’ representative scores vary significantly. That is, even though the representative shares show certain statements are far more important in terms of magnitude, not all farmers agree based on their calculated representative scores. For example, consider “Does their homework on me and my operation.” There is a wide distribution of representative scores across farmers. That is, some farmers find this statement to be very representative of credibility, while others do not. These results highlight the importance of knowing the farmer on an individual basis and addressing their needs.

Ultimately, credibility is highly reliant on the words and knowledge that surround the sales representative. Thorough the analysis, farmers stated that they rely heavily on the honesty and integrity of the sales representative as an individual rather than through their company. Being upfront about possibilities and potential areas for growth is vital when gaining the trust of Kansas farmers and ranchers.

7.3.2 Reliability

Reliability with farmers and ranchers can best be demonstrated by ag sales representatives by utilizing actions that support agreements made or transactions that have been promised. Ag sales representatives should focus on providing the services and/or products as discussed with their clients.

The results show that “following through on actions requested by me” was most representative of reliability. With a representative share of 0.45 in table 7.2, follow through was

approximately eight times more representative of reliability than “sending meeting material in advance”, which was the lowest share statement. Following closely behind, “makes specific commitments and delivers on them” had a share of 0.34.

The least representative statements of reliability include “make sure meetings have clear goals, not just agendas”, “the reputation of the company they work for”, and “sends meeting materials in advance.” Although they are indicators of reliability, they do not hold the same magnitude of importance when trying to establish the characteristic with Kansas farmers and ranchers.

Table 7.2: Conditional Logit Estimates and Representative Shares for Reliability

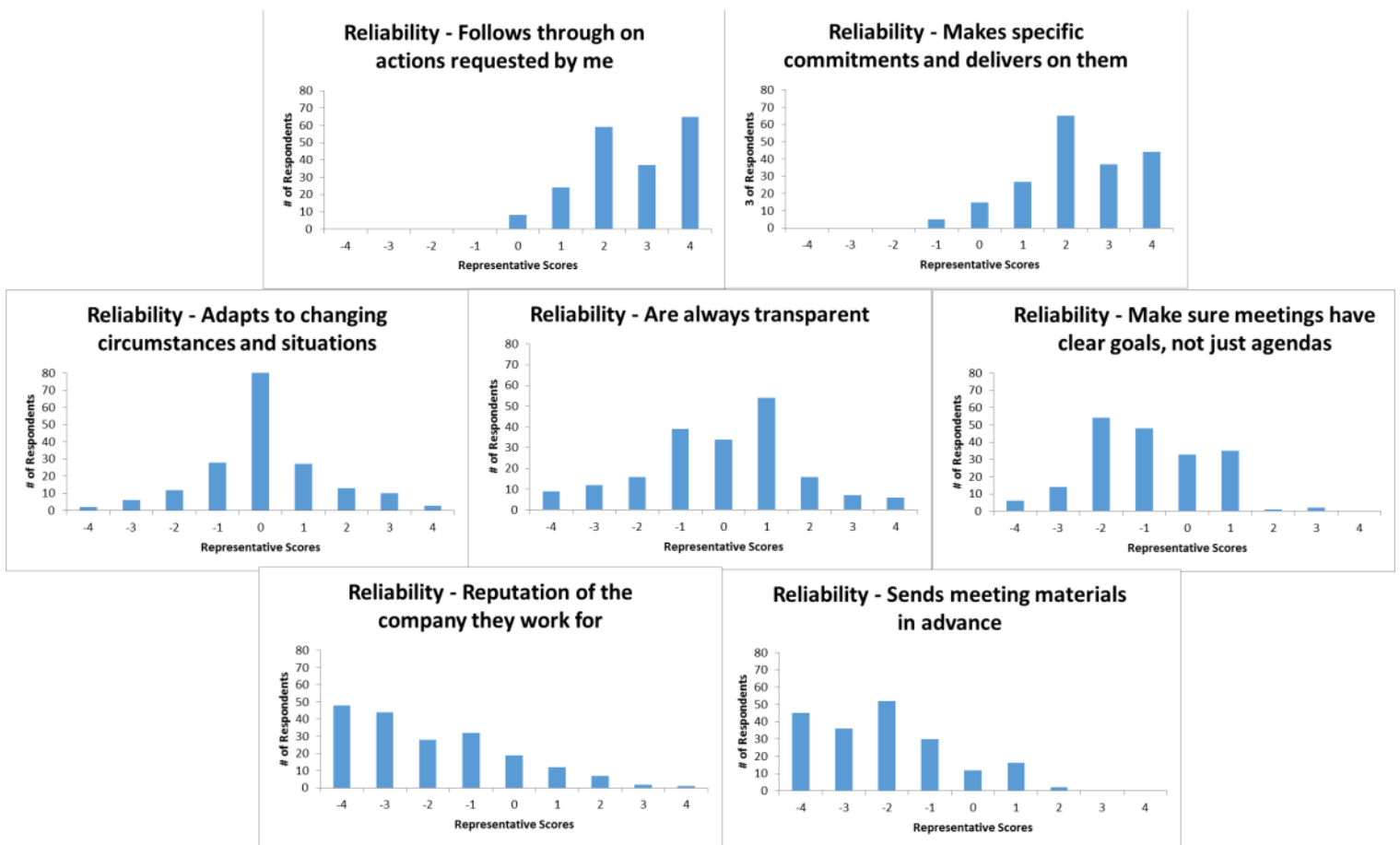
Reliability Statements	CLM Estimates	Representative Share
Follows through on actions requested by me	3.36*	0.45
Makes specific commitments and delivers on them	3.08*	0.34
Adapts to changing circumstances and situations	1.68*	0.08
Are always transparent	1.30*	0.06
Make sure meetings have clear goals, not just agendas	0.65*	0.03
Reputation of the company they work for	0.23**	0.02
Sends meeting materials in advance	Base	0.02

* Statistically significant at the 1 percent level

The histograms created for the reliability emulate the results from the Conditional Logit Model. The heavily right skewed histograms in figure 7.3 for “follows through on actions requested by me” and “makes specific commitments and delivers on them”, shows the relevance for these factors and significant agreement amongst farmers. In fact, the histogram for “follows through on actions requested by me” shows that either no farmers selected the statement as “least” representative or if they did, they also selected it as “most” representative in another question canceling out the scores back to a zero. Thus, indicating the important role follow through has on establishing reliability.

The distribution of “adapts to changing circumstances and situations” and “are always transparent” emphasize the importance of knowing the farmer. Since there is vast variation within the distribution of responses, there was minimal agreeance on the importance on these characteristics when working to establish reliability. As a result, when it comes to these statements relative to reliability, farmers have wide varying opinions.

Figure 7.3: Reliability Histograms Reporting Frequency of Statement Being Always Selected as “Least” Representative (-4) to Always Being Selected as “Most” Representative (4) by Each Respondent.



Overall, reliability is highly dependent on the actions and follow through of a sales representative. The analysis indicates that farmers expect the sales representatives to come through on their commitments and deliver on promises rather than being prepared for meetings or working for a strong company. Being sure to not overpromise and under deliver would be crucial in obtaining high respect in terms of reliability from a Kansas farmer or rancher.

7.3.3 Intimacy

Intimacy centers around the sales representative's ability to connect with the farmer and their operation. This communication is necessary for a sales representative to provide the right service to the farmer. Without this connection, the wants and needs of the farmer will not be properly translated to the sales representative.

The results show that "understands my goals, missions, and values" is the most vital way to establish intimacy. In fact, the representative share of 0.34 is approximately 11 times more representative than the base case statement of "not afraid to make conversation" as shown in table 7.3. Farmers feel that this common connection and understanding of their values will help the sales representative better address current and future needs.

Having straightforward, honest communication is greatly valued by farmers. Being "able to be candid and upfront about situations" and "stays in contact via calls, visits, etc." are relatively representative of an intimate connection with scores of 0.29 and 0.17, respectively. The difference in the representative share shows the significance in having meaningful and relevant conversations with the farmer when needed.

Interestingly, "finds the fun and fascination in my operation" was the only statement in the best worst survey results that did not prove to be statistically significant. That is, the CML estimate did not prove to be different from the base statement of "not afraid to make conversation." This finding is in direct contradiction to the findings of Maister, Green, and Galford who found strong support for this statement being a way to build strong, intimate connections.

Table 7.3: Conditional Logit Estimates and Representative Shares for Intimacy

Intimacy Statements	CLM Estimates	Representative Share
Understands my goals, mission, and values	2.40*	0.34
Able to be candid and upfront about situations	2.26*	0.29
Stays in contact via calls, visits, etc.	1.71*	0.17
Years working with me	1.12*	0.09
Shares a common interest	0.56*	0.05
Finds the fun and fascination in my operation	0.03	0.03
Not afraid to make conversation	Base	0.03

* Statistically significant at the 1 percent level

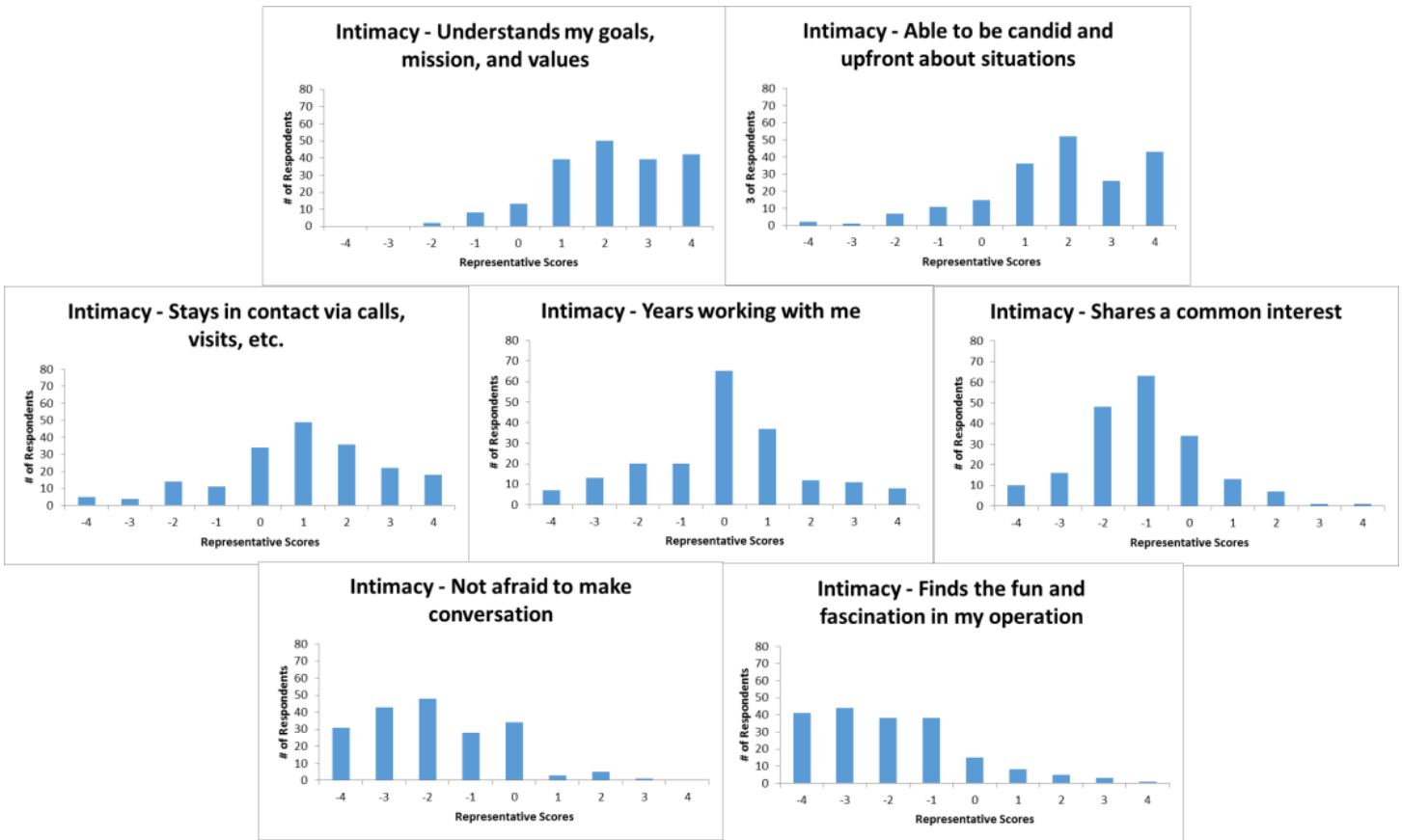
The histograms reiterate the importance of taking time to “understand the goals, missions, and values” of farmers when trying to establish an intimate relationship (figure 7.4).

Demonstrating a desire to learn enhances the conversations in conducting business, allowing for mutual growth and success. The research visually shows that a sales representative’s “[ability] to be candid and upfront about situations” and “stays in contact via calls, visits, etc.” is also viewed as a positive trait by most Kansas farmers, but not all.

The left skewed histograms of statements like “not afraid to make conversation” and “finds the fun and fascination in my operation” illustrate the common lack of magnitude these factors have on building intimacy. Although they are still important in establishing trust, a majority of farmers associated these statements with “least” representative out of the options provided.

“Years working with me” is the one statement that has the most fluctuation across farmer respondents. As shown in the histograms, some farmers find it very important while others do not feel it has very much influence. This further reiterates the importance of knowing the personal needs of each farmer as a sales representative.

Figure 7.4: Intimacy Histograms Reporting Frequency of Statement Being Always Selected as “Least” Representative (-4) to Always Being Selected as “Most” Representative (4) by Each Respondent.



In general, Kansas farmers feel that establishing intimacy is greatly reliant on understanding their personal and operational goals and values. It is also relatively important to maintain candid, upfront conversations about situations as they arise and continue the discussion around the needs of the operation. Although it is important to communicate, not being afraid to make conversation is not something many farmers value. Moreover, it is crucial have informative and worthwhile dialogue.

7.3.4 Self-Orientation

Self-orientation, for sales representatives, is about showing the appropriate focus in the relationship with farmers. That is, exhibiting behaviors that stress the desires to address the

needs of the client rather than their personal motives. To achieve this, both words and actions are found to be beneficial to establishing this appropriate focus.

The results stress the value of a sales representative who “focuses on defining the problem and not guessing the solution.” In table 7.4, this statement’s representative share of 0.36 is over 18 times more representative of self-orientation than “allows me to fill the empty spaces in conversation. Furthermore, the second most representative statement, “listens without distractions,” has only half the magnitude as “focusing on defining the problem, not guessing the solution.” Thus, sales representatives should spend time not “selling solutions” but rather talking and understanding the issues or problems for a given farmer. On the contrary, farmers do not feel it is necessary for sales representatives to take full responsibility of miscommunication or force conversation to show they care. “If communication fails, they take most of the responsibility” and “allows me to fill the empty space in conversation” only have representative shares of 0.05 and 0.02, respectively. Therefore, the magnitude of representation for self-orientation is far below other contributing factors.

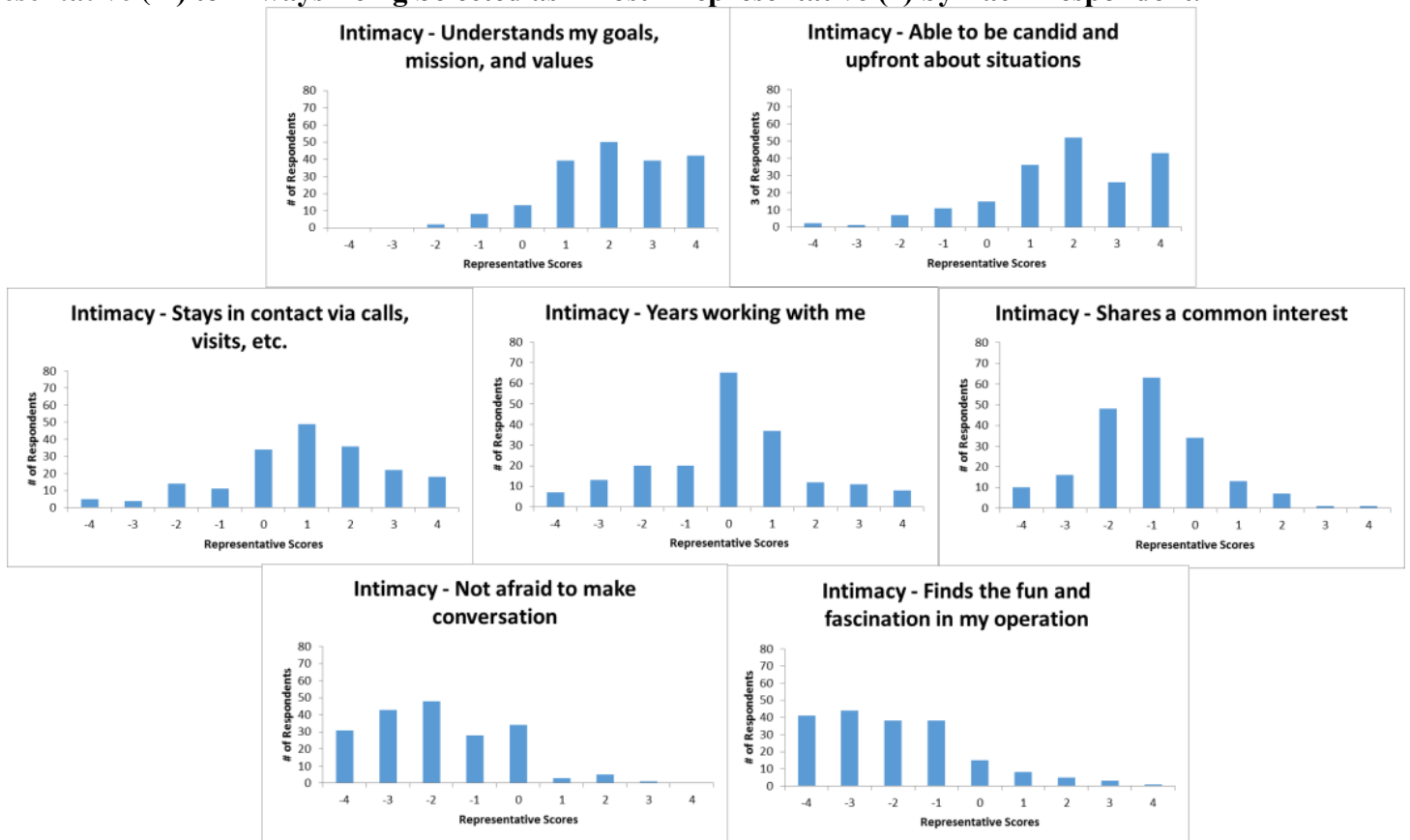
Table 7.4: Conditional Logit Estimates and Representative Shares for Self – Orientation

Self-Orientation Statement	CLM Estimates	Representative Share
Focuses on defining the problem, not guessing the solution	2.91*	0.36
Listens without distractions	2.19*	0.18
Asks open ended questions to better understand me	1.98*	0.14
Asks me to talk about what’s behind an issue	1.90*	0.13
Reflective listening, summarizing what they’ve heard	1.77*	0.12
If communication fails, they take most of the responsibility	0.83*	0.05
Allows me to fill the empty spaces in conversations	Base	0.02

* Statistically significant at the one percent level

The histograms further emphasize the importance “focuses on defining the problem, not guessing the solution,” as a majority of the farmers identify with higher representativeness scores. Figure 7.5 also shows that establishing positive self-orientation is highly reliant on the individual farmer’s preferences. This is shown through the vast variation and distribution shown in several of the histograms. For example, “listens without distractions,” “asks open ended questions to better understand me,” and “asks me to talk about what’s behind and issue” were in fact valued by some farmers in establishing self-orientation.

Figure 7.5: Intimacy Histograms Reporting Frequency of Statement Being Always Selected as “Least” Representative (-4) to Always Being Selected as “Most” Representative (4) by Each Respondent.



Ultimately, for a sales representative to better establish self-orientation with a Kansas farmer, it is vital to focus on defining the problem rather than guessing the solution. Practicing

active listening while free from distractions will exemplify your motives to help the farmer fix any issues or concerns they have at the time. Furthermore, taking the time to understand the farmer is crucial as these results show the variation amongst what farmers feel is important in establishing self-orientation. Asking and learning about the farmer will help one show they have the farmer's interest at heart.

7.4 Conclusions

Building trust is important for an agricultural sales representative. Trust is often at the center of any successful business relationship and exploring trust has been the focus of many research studies. Using a unique best-worst survey approach, farmers' preferences for how to best build trusted relationships were discovered. The key findings all centered around a unifying theme: sales reps are well positioned to build more trusted relationships because the best way to do it, is well under the control.

Tying back to the themes mentioned above, farmers gain trust in ag sales representatives significantly based on things in their control, that enhance effective communication, and increase the connection or understanding between the two parties. Farmers will value the knowledge and honest of an ag sales representative over their longevity in the industry, company reputation, or years serving as their sales representative. Additionally, farmers see great significance in having conversations about the problems they are facing opposed to making sure they have constant contact with the sales representative. Lastly, Kansas farmers find importance in sharing a connection with the ag sales representatives. This connection is based on the agricultural sales representative's ability to understand the operations' missions and values more than the ability to have common interests with the farmer. Focusing on engaging in these themes will increase trusting behavior as an agricultural sales representative.

To further build trust with farmers, agricultural sales representatives should focus on improving themselves both professionally and personally. Sales reps should focus on being more knowledgeable in their specific area, exemplify dependability, and demonstrate their desire to help their farmer-customers. To do so, sales reps need to improve and constantly work on their communication skills. They should also take time to understand the goals and missions of the operation while working with the farmers to clearly define potential problems. While these statements seem straightforward and easily done, they are worth spending some time working on because more often than not, sales reps focus on selling solutions and not identifying what is the real issue faced by their customer.

Chapter 8 - Conclusions, Limitations, and Future Research

8.1 Summary of Purpose and Methods

This research was conducted to identify the economic value farmers place on trust with agricultural sales representatives. The two primary objectives of this research included (1) determining the economic value of trusted relationships in business relationships and (2) establishing the best ways for agricultural sales representatives to build trusted relationships with Kansas farmers and ranchers. The results from this thesis could then be used as extension tools or economic references in the agriculture industry.

The online survey was completed by 193 respondents, comprising a representative sample of KFMA. Utilizing an online survey paired with a gift card upon completion incentivized respondent participation. This participation was gained through flyers distributed to KFMA economics, KFMA members, and Kansas State University faculty.

In order to create a clear concise definition of trust, the four trust components established by Maister, Green, and Galford (2001) were utilized. These trust components included credibility, reliability, intimacy, and self-orientation. This method generated a tractable, measurable, and easily comprehensible definition of trust as it relates to business relationships.

The survey was designed in four main segments: (1) general trust components, (2) best-worst analysis, (3) the loan officer choice experiment, and (4) the demographic questions. Each question and section was carefully designed to promote the respondents to think about what they value most in trusted relationships.

Using a random utility framework, the marginal utility and marginal valuation for trust and the four trust attributes were assessed. These results were estimated through the rank order logit model used to analyze the choice experiment ranking responses. Running the regression

models outputting parameter estimates used to calculate the WTP for each of the trust attributes in terms of an interest rate. This established an economic value for trust in an agricultural business relationship between a loan officer and Kansas farmer.

The best-worst survey results investigated the best ways for agricultural sales representatives to build trusted relationships with farmers. A conditional logit model was used to generate the parameter estimates or probabilities that each statement would be selected above the others. From there, the estimates were transformed to generate a representativeness share for each statement. This indicated the total magnitude of importance that statement had on building its respected component of trust.

8.2 Research Conclusions

Kansas farmers and/or rancher do in fact place an economic value on trust in an agricultural sales relationship. The choice experiment yielded the results that farmers are, on average, willing to pay 0.59% for a loan officer whom they trust. This element of trust is something that they consider in their business decisions and an attribute that they find exceptional value in maintaining.

Out of the four trust components, self-orientation, was the most valued by Kansas farmer and ranchers. The WTP for self-orientation ranged from 0.83% to 1.29%, with a respondent average of 0.93% across respondents. That is, farmers are willing to pay the most to work with agricultural sales representatives who are extremely focused on the farmers needs rather than fulfilling their own sales or agenda. These are sales representatives that exemplify they have their farmer-clients best interest at heart.

Conversely, the lowest valued trust component was intimacy. In all models, intimacy ranked fourth in terms of WTP measurements. Farmers valued self-orientation, credibility, and

reliability all above that of intimacy. It did yield an average WTP of 0.43%, showing it still holds value to farmers, but its value is less than that of its counterparts.

The demographic breakdowns of WTP for gender, age, and size of farm provided interesting insight towards trust preferences. Females were more trusting and willing to pay more for a trusted loan officer than males. This may be due to their motherly nature and desires to be risk adverse, however, the analysis proved they were willing to pay significantly more for a safe, trustworthy sales representative. Age and generational gaps did not provide as large of an influence on economic value as originally expected. More so, the size of the farm really identified where the farmer places their focus on establishing trust. That is, smaller farms were more concentrated on self-orientation while larger farms want sales representatives who are reliable, improving transaction efficiencies. Overall, the socioeconomic segments of the analysis all proved to value trust in their business relationships.

Kansas farmers and/or ranchers also believe that the best way to establish or deepen trusted relationships is heavily dependent on factors within the control of the agricultural sales representative as opposed to factors outside of their control. Farmer's value the knowledge, honesty, and follow through on commitments more than the years in the industry or reputation of the company which the sales representative works for. Agricultural sales representatives who focus on self-development can increase the ability for heightened levels of trust with their farmer-clients.

Furthermore, the sales representative exemplifying self-orientation by showing they have the farmers best interest at heart is both valued by the farmer and a noble way to establish trust. By listening without distractions and working with the farmer to discuss what is behind an issue will allow the ag sales representative to focus on defining the problem rather than trying to guess

or sell solutions. This approach will increase the level of trust with farmers and generate better communication between both parties.

Agricultural sales representatives need to focus on building a foundation of trust with their clients. Trust generates stronger communication, efficiency, increased performance, and a positive outcome for both parties. Since the trust building process is greatly in their control, it is important for them to continually work on developing their personal and professional skills. This includes expanding their knowledge and experience in their field of work, following through on their commitments, understanding the missions and values of their clients, and focusing on address the issues that their farmers are facing. By consistently working on these components of their personal and professional life, agricultural sales representatives will be able to increase their trustworthiness and assist farmers in increasing their productivity, while also increasing their value as a sales representative in the field!

8.2 Limitations of the Research

One primary limitation for this research was that it was only conducted in the state of Kansas. Due to budget constraints, the size and scope of the survey was relatively small. This limits capturing and analyzing any potential variation of trust preferences and perceptions across geographical regions similar to the trust study conducted by Yamagishi (1998). For comparative purposes, it would be beneficial to investigate different crop industries within agriculture as well to identify differences in the value of trust for business transactions. In short, exploring the trust perceptions of different farmers from different locations as well as relationships with different industry sales representatives would greatly benefit the research.

Since this survey was conducted online and used a choice experiment, there is always potential for hypothetical bias. That is, farmers could have selected another loan officer besides

their current situation without being forced to switch. Due to this, there could be biasness within the results of the choice experiment. This could be minimized or eliminated by placing farmers in an experimental setting that forces them to make decisions between specific agricultural sales representatives.

8.3 Future Work

Though this research greatly contributed to the existing literature, the data collected as well as future survey work provide ample opportunity to extend this research. This includes additional models that could be run with the given data and additional data that could be collected through similar survey designs.

One future extension to consider is the significance of gender roles in trusted relationships between farmers and agricultural sales representatives. Since females were more trusting and had a higher WTP for trust than males, it would be interesting to investigate if the gender of the loan officer or sales representative would impact trustworthiness. That is if the farmer is male, would they consider a female or male more trustworthy, and vice versa for females. Overall, would that gender play a role in perceived trustworthiness? The same could be said for ethnicity.

From an econometrics perspective, investigating the interactive effects between the different trust components in the willingness to pay estimates would be valuable. Since several of the trust components had slightly overlapping definitions, looking at the interactive effects could explain additional significance.

Additionally, examining the loss aversion associated with trusted relationships might provide insight towards the value of sales representatives working to maintain those trusted relationships. Trust very well might have diminishing marginal returns at an increasing rate. That

is, if trust is lost or eroded, it would decrease more rapidly than the rate it increases. It would be valuable to investigate the loss that would be experienced if the sales representative would lose their farmer's trust. Would this decrease be larger and cause more loss than the cost it takes to maintain that trusted relationship? If so, that would justify the extensive work sales representatives consistently put in to increasing customer satisfaction.

Lastly, it would be interesting to investigate the potential for using trust through direct contact and third parties to generate new customers. By analyzing the respondents without a current loan officer, one could investigate the probability that they would take on a loan with a new loan officer given specific trust attributes and interest rate. Doing so could lead to an estimation on the value of trust components to potential customers.

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Appendix A - Survey Instrument



Since this survey is intended and designed for Kansas farmers and ranchers, the following two questions **MUST** be answered to start the survey.

Are you a Kansas farmer and/or rancher?

- Yes
- No

In the box below, please type the *password* provided in your e-mail or flyer.

Questions 1-8 of 50

1. There are different factors that motivate you to purchase a product or service for your farming operation. Of the three motivating factors below, please rank them from 1 being the most important factor when making a purchasing decision to 3 being the least important factor. Click on the drop down boxes to make your rank selections.

The price of the product or service being purchased	Your relationship with the sales representative	The purchase's overall impact on the farm or ranch
<input type="text"/>	<input type="text"/>	<input type="text"/>

2. Please click on the total number of sales, service, and loan officer relationships utilized by your farm and/or ranch:

- | | | |
|---------------------------|-----------------------------|-----------------------------|
| <input type="radio"/> 0 | <input type="radio"/> 6-10 | <input type="radio"/> 16-20 |
| <input type="radio"/> 1-5 | <input type="radio"/> 11-15 | <input type="radio"/> 21+ |

3. Of the total relationships reported in question 2, please click on the button below that indicates how many you would consider to be trusted relationships.

None	Very Few	Few	About Half	Most	All
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Of the following industries below, in which one do you feel it is most important to have a trusted relationship with that industry's sales representative? To answer this question, please rank each industry from 1 being the most important to have a trusted relationship with the industry's sales representative to 4 being the least important. Click on the drop down boxes to make your rank selections.

Grain and Livestock Marketing	Machinery and Equipment	Agronomy (seed, fertilizer, herbicide, etc)	Ag Lending
▼	▼	▼	▼

5. Please click on the button below that best represents your answer to the following question:

	Very Slow to Trust	Slow to Trust	Quick to Trust	Very Quick to Trust
When it comes to trusting someone, how long does it take you to trust them?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Using the given scale, please click on the button that indicates how much you disagree or agree with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Most people are trustworthy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people are trustful of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am trustworthy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people will respond in kind when they are trusted by others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Now we would like you to focus on agricultural sales representatives or ag sales reps. Using the given scale below, please click on the button that indicates how much you disagree or agree with the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Ag sales reps are trustworthy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ag sales reps are credible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ag sales reps are reliable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ag sales reps are connected with you and your operation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ag sales reps are focused on you, not themselves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. In a relationship between you and an ag sales rep, please rank the following four qualities you value most in the relationship, where 1 indicates the most valued quality to 4 being the least valued quality. Click on the drop down boxes to make your rank selections.

Credibility	Reliability	Is focused on you, not themselves	Connection, or is in tune with you and your operation
▼	▼	▼	▼

We would now like to ask you several repeated questions regarding a set of statements that illustrate four factors of trust. The four factors of trust are: (1) credibility, (2) reliability, (3) connection with you and your operation, and (4) focus in relationship.

Questions 9-15 of 50

Trust Factor: Credibility

9. When working with an ag sales rep, you may often assess their credibility. Below are several repeated statements that report ways an ag sales rep can demonstrate credibility.

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		Least Represents Credibility
<input type="radio"/>	Does their homework on me and my operation	<input type="radio"/>
<input type="radio"/>	Does not lie or exaggerate	<input type="radio"/>
<input type="radio"/>	Years working in the industry	<input type="radio"/>
<input type="radio"/>	Is passionate and loves their topic	<input type="radio"/>

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		Least Represents Credibility
<input type="radio"/>	Reputation of the company they work for	<input type="radio"/>
<input type="radio"/>	Years working in the industry	<input type="radio"/>
<input type="radio"/>	Well researched and knowledgeable of topic	<input type="radio"/>
<input type="radio"/>	Does not lie or exaggerate	<input type="radio"/>

11. 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		Least Represents Credibility
<input type="radio"/>	Does their homework on me and my operation	<input type="radio"/>
<input type="radio"/>	Well researched and knowledgeable of topic	<input type="radio"/>
<input type="radio"/>	Reputation of the company they work for	<input type="radio"/>
<input type="radio"/>	Is passionate and loves their topic	<input type="radio"/>

12. 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		Least Represents Credibility
<input type="radio"/>	Years working in the industry	<input type="radio"/>
<input type="radio"/>	When they don't know, they say so	<input type="radio"/>
<input type="radio"/>	Is passionate and loves their topic	<input type="radio"/>
<input type="radio"/>	Reputation of the company they work for	<input type="radio"/>

13. 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		Least Represents Credibility
<input type="radio"/>	When they don't know, they say so	<input type="radio"/>
<input type="radio"/>	Well researched and knowledgeable of topic	<input type="radio"/>
<input type="radio"/>	Does their homework on me and my operation	<input type="radio"/>
<input type="radio"/>	Years working in the industry	<input type="radio"/>

14. 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		Least Represents Credibility
<input type="radio"/>	Does not lie or exaggerate	<input type="radio"/>
<input type="radio"/>	Does their homework on me and my operation	<input type="radio"/>
<input type="radio"/>	Reputation of the company they work for	<input type="radio"/>
<input type="radio"/>	When they don't know, they say so	<input type="radio"/>

15. 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		Least Represents Credibility
<input type="radio"/>	Is passionate and loves their topic	<input type="radio"/>
<input type="radio"/>	Well researched and knowledgeable of topic	<input type="radio"/>
<input type="radio"/>	When they don't know, they say so	<input type="radio"/>
<input type="radio"/>	Does not lie or exaggerate	<input type="radio"/>

Questions 16-22 of 50

Trust Factor: Reliability.

16. When working with an ag sales rep, you may often assess their reliability. Below are several repeated statements that report ways an ag sales rep can demonstrate reliability.

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

Most Represents Reliability		Least Represents Reliability
<input type="radio"/>	Sends meeting materials in advance	<input type="radio"/>
<input type="radio"/>	Are always transparent	<input type="radio"/>
<input type="radio"/>	Makes sure meetings have clear goals, not just agendas	<input type="radio"/>
<input type="radio"/>	Reputation of the company they work for	<input type="radio"/>

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

Most Represents Reliability		Least Represents Reliability
<input type="radio"/>	Adapts to changing circumstances and situations	<input type="radio"/>
<input type="radio"/>	Makes sure meetings have clear goals, not just agendas	<input type="radio"/>
<input type="radio"/>	Makes specific commitments and delivers on them	<input type="radio"/>
<input type="radio"/>	Are always transparent	<input type="radio"/>

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

Most Represents Reliability		Least Represents Reliability
<input type="radio"/>	Sends meeting materials in advance	<input type="radio"/>
<input type="radio"/>	Makes specific commitments and delivers on them	<input type="radio"/>
<input type="radio"/>	Adapts to changing circumstances and situations	<input type="radio"/>
<input type="radio"/>	Reputation of the company they work for	<input type="radio"/>

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

Most Represents Reliability		Least Represents Reliability
<input type="radio"/>	Makes sure meetings have clear goals, not just agendas	<input type="radio"/>
<input type="radio"/>	Follows through on actions requested by me	<input type="radio"/>
<input type="radio"/>	Reputation of the company they work for	<input type="radio"/>
<input type="radio"/>	Adapts to changing circumstances and situations	<input type="radio"/>

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

Most Represents Reliability		Least Represents Reliability
<input type="radio"/>	Follows through on actions requested by me	<input type="radio"/>
<input type="radio"/>	Makes specific commitments and delivers on them	<input type="radio"/>
<input type="radio"/>	Sends meeting materials in advance	<input type="radio"/>
<input type="radio"/>	Makes sure meetings have clear goals, not just agendas	<input type="radio"/>

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

Most Represents Reliability		Least Represents Reliability
<input type="radio"/>	Are always transparent	<input type="radio"/>
<input type="radio"/>	Sends meeting materials in advance	<input type="radio"/>
<input type="radio"/>	Adapts to changing circumstances and situations	<input type="radio"/>
<input type="radio"/>	Follows through on actions requested by me	<input type="radio"/>

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

Most Represents Reliability		Least Represents Reliability
<input type="radio"/>	Reputation of the company they work for	<input type="radio"/>
<input type="radio"/>	Makes specific commitments and delivers on them	<input type="radio"/>
<input type="radio"/>	Follows through on actions requested by me	<input type="radio"/>
<input type="radio"/>	Are always transparent	<input type="radio"/>

Questions 23-29 of 50

Trust Factor: Strong Connection to Both You and Your Operation

23. When working with an ag sales rep, you may often assess how well they truly know and are strongly connected to both you and your operation. Below are several repeated statements that report ways an ag sales rep can demonstrate a strong connection.

In the set of statements below, please click the button of the one statement that **MOST** represents a strong connection or an ag sales rep is truly in tune with both you and your operation, and click the button of the one statement that **LEAST** represents a strong connection.

Most Represents a Strong Connection		Least Represents a Strong Connection
<input type="radio"/>	Ability to be candid and upfront about situations	<input type="radio"/>
<input type="radio"/>	Stays in contact via calls, visits, etc.	<input type="radio"/>
<input type="radio"/>	Not afraid to make conversation	<input type="radio"/>
<input type="radio"/>	Finds the fun and fascination in my operation	<input type="radio"/>

24. In the set of statements below, please click the button of the one statement that **MOST** represents a strong connection or an ag sales rep is truly in tune with both you and your operation, and click the button of the one statement that **LEAST** represents a strong connection.

Most Represents a Strong Connection		Least Represents a Strong Connection
<input type="radio"/>	Understands my goals, mission, and values	<input type="radio"/>
<input type="radio"/>	Not afraid to make conversation	<input type="radio"/>
<input type="radio"/>	Years working with me	<input type="radio"/>
<input type="radio"/>	Stays in contact via calls, visits, etc.	<input type="radio"/>

25. In the set of statements below, please click the button of the one statement that **MOST** represents a strong connection or an ag sales rep is truly in tune with both you and your operation, and click the button of the one statement that **LEAST** represents a strong connection.

Most Represents a Strong Connection		Least Represents a Strong Connection
<input type="radio"/>	Ability to be candid and upfront about situations	<input type="radio"/>
<input type="radio"/>	Years working with me	<input type="radio"/>
<input type="radio"/>	Understands my goals, mission, and values	<input type="radio"/>
<input type="radio"/>	Finds the fun and fascination in my operation	<input type="radio"/>

26. In the set of statements below, please click the button of the one statement that **MOST** represents a strong connection or an ag sales rep is truly in tune with both you and your operation, and click the button of the one statement that **LEAST** represents a strong connection.

Most Represents a Strong Connection		Least Represents a Strong Connection
<input type="radio"/>	Not afraid to make conversation	<input type="radio"/>
<input type="radio"/>	Shares a common interest	<input type="radio"/>
<input type="radio"/>	Finds the fun and fascination in my operation	<input type="radio"/>
<input type="radio"/>	Understands my goals, mission, and values	<input type="radio"/>

27. In the set of statements below, please click the button of the one statement that **MOST** represents a strong connection or an ag sales rep is truly in tune with both you and your operation, and click the button of the one statement that **LEAST** represents a strong connection.

Most Represents a Strong Connection		Least Represents a Strong Connection
<input type="radio"/>	Shares a common interest	<input type="radio"/>
<input type="radio"/>	Years working with me	<input type="radio"/>
<input type="radio"/>	Ability to be candid and upfront about situations	<input type="radio"/>
<input type="radio"/>	Not afraid to make conversation	<input type="radio"/>

28. In the set of statements below, please click the button of the one statement that **MOST** represents a strong connection or an ag sales rep is truly in tune with both you and your operation, and click the button of the one statement that **LEAST** represents a strong connection.

Most Represents a Strong Connection		Least Represents a Strong Connection
<input type="radio"/>	Stays in contact via calls, visits, etc.	<input type="radio"/>
<input type="radio"/>	Ability to be candid and upfront about situations	<input type="radio"/>
<input type="radio"/>	Understands my goals, mission, and values	<input type="radio"/>
<input type="radio"/>	Shares a common interest	<input type="radio"/>

29. In the set of statements below, please click the button of the one statement that **MOST** represents a strong connection or an ag sales rep is truly in tune with both you and your operation, and click the button of the one statement that **LEAST** represents a strong connection.

Most Represents a Strong Connection		Least Represents a Strong Connection
<input type="radio"/>	Finds the fun and fascination in my operation	<input type="radio"/>
<input type="radio"/>	Years working with me	<input type="radio"/>
<input type="radio"/>	Shares a common interest	<input type="radio"/>
<input type="radio"/>	Stays in contact via calls, visits, etc.	<input type="radio"/>

Questions 30-36 of 50

Trust Factor: Focus on You and Have Your Best Interest At Heart

30. When working with an ag sales rep, you may often assess how much they focus on you and show they have your best interest at heart. Below are several repeated statements that report ways an ag sales rep can show they are focused on you.

In the set of statements below, please click on the button of the one statement that **MOST** represents an ag sales rep is focused on you, and click the button of the one statement that **LEAST** represents being focused on you.

Most Represents Focus on You		Least Represents Focus on You
<input type="radio"/>	Asks open ended questions to better understand me	<input type="radio"/>
<input type="radio"/>	Listens without distractions	<input type="radio"/>
<input type="radio"/>	Reflective listening, summarizing what they've heard	<input type="radio"/>
<input type="radio"/>	Allows me to fill the empty spaces in conversations	<input type="radio"/>

31. In the set of the statements below, please click the button of the one statement that **MOST** represents an ag sales rep is focused on you, and click the button of the one statement that **LEAST** represents being focused on you.

Most Represents Focus on You		Least Represents Focus on You
<input type="radio"/>	Asks me to talk about what's behind an issue	<input type="radio"/>
<input type="radio"/>	Reflective listening, summarizing what they've heard	<input type="radio"/>
<input type="radio"/>	If communication fails, they take most of the responsibility	<input type="radio"/>
<input type="radio"/>	Listening without distractions	<input type="radio"/>

32. In the set of the statements below, please click the button of the one statement that **MOST** represents an ag sales rep is focused on you, and click the button of the one statement that **LEAST** represents being focused on you.

Most Represents Focus on You		Least Represents Focus on You
<input type="radio"/>	Asks open ended questions to better understand me	<input type="radio"/>
<input type="radio"/>	If communication fails, they take most of the responsibility	<input type="radio"/>
<input type="radio"/>	Asks me to talk about what's behind an issue	<input type="radio"/>
<input type="radio"/>	Allows me to fill the empty spaces in conversation	<input type="radio"/>

33. In the set of the statements below, please click the button of the one statement that **MOST** represents an ag sales rep is focused on you, and click the button of the one statement that **LEAST** represents being focused on you.

Most Represents Focus on You		Least Represents Focus on You
<input type="radio"/>	Reflective listening, summarizing what they've heard	<input type="radio"/>
<input type="radio"/>	Focuses on defining the problem, not guessing the solution	<input type="radio"/>
<input type="radio"/>	Allows me to fill the empty spaces in conversation	<input type="radio"/>
<input type="radio"/>	Asks me to talk about what's behind an issue	<input type="radio"/>

34. In the set of the statements below, please click the button of the one statement that **MOST** represents an ag sales rep is focused on you, and click the button of the one statement that **LEAST** represents being focused on you.

Most Represents Focus on You		Least Represents Focus on You
<input type="radio"/>	Focuses on defining the problem, not guessing the solution	<input type="radio"/>
<input type="radio"/>	If communication fails, they take most of the responsibility	<input type="radio"/>
<input type="radio"/>	Asks open ended questions to better understand me	<input type="radio"/>
<input type="radio"/>	Reflective listening, summarizing what they've heard	<input type="radio"/>

35. In the set of the statements below, please click the button of the one statement that **MOST** represents an ag sales rep is focused on you, and click the button of the one statement that **LEAST** represents being focused on you.

Most Represents Focus on You		Least Represents Focus on You
<input type="radio"/>	Listens without distractions	<input type="radio"/>
<input type="radio"/>	Asks open ended questions to better understand me	<input type="radio"/>
<input type="radio"/>	Asks me to talk about what's behind an issue	<input type="radio"/>
<input type="radio"/>	Focuses on defining the problem, not guessing the solution	<input type="radio"/>

36. In the set of the statements below, please click the button of the one statement that **MOST** represents an ag sales rep is focused on you, and click the button of the one statement that **LEAST** represents being focused on you.

Most Represents Focus on You		Least Represents Focus on You
<input type="radio"/>	Allows me to fill empty spaces in conversation	<input type="radio"/>
<input type="radio"/>	If communication fails, they take most of the responsibility	<input type="radio"/>
<input type="radio"/>	Focuses on defining the problem, not guessing the solution	<input type="radio"/>
<input type="radio"/>	Listens without distractions	<input type="radio"/>

Now that you have answered questions on trust in a general relationship, let's focus on a specific relationship you may have with an agricultural loan officer. If you currently do not have an operating loan or lender relationship, you will still be able to complete this section of the survey.

Note that this section contains questions 37 and 38. The final set of questions, 39-50, are short, general questions about you and your operation.

37. Do you currently or have you ever had an operating loan for your farm and/or ranch?

- Yes
- No

37, part A. Think about that loan officer who you work with and who oversees your operating loan.

Please rate this loan officer in the following characteristics:

Credibility	Very Low Credibility <input type="radio"/>	Low Credibility <input type="radio"/>	Moderate Credibility <input type="radio"/>	High Credibility <input checked="" type="radio"/>	Very High Credibility <input type="radio"/>
Reliability	Very Low Reliability <input type="radio"/>	Low Reliability <input type="radio"/>	Moderate Reliability <input checked="" type="radio"/>	High Reliability <input type="radio"/>	Very High Reliability <input type="radio"/>
Connection with Both You and Your Operation	Very Weak Connection <input type="radio"/>	Weak Connection <input type="radio"/>	Moderate Connection <input type="radio"/>	Strong Connection <input type="radio"/>	Very Strong Connection <input checked="" type="radio"/>
Focus in Relationship	Very Focused on Themselves <input type="radio"/>	Focused on Themselves <input type="radio"/>	Moderate Focus <input type="radio"/>	Focused on You <input checked="" type="radio"/>	Very Focused on You <input type="radio"/>

37, part B. Please type in the box below your current or most recent annual interest rate you paid on this operating loan.

For Example: If you had a 5.75% interest rate, you would type in 5.75

%

Here is the annual operating loan interest rate you provided:

5%

Based on the interest rate, your annual interest rate cost per \$1,000 is:

\$50

37, part C. Please type in the box below the number of years you have worked with this loan officer.

For Example: If you worked with this loan officer for 5 years type in 5

37, part D. Now think about the lender that this loan officer works for. Please type in the box below the number of years you have worked with this lender.

For Example: If you worked with this lender for 10 years type in 10

37, part E. Do you currently have any family relation or connection with this lender?

- Yes
 No

38. Let's assume you have a choice between various loan officers and interest rates. That is, you could choose your current loan officer or from 2 different loan officers that are each offering their own interest rate. Below are 8 different sets of loan officers that only differ across the four trust factors and their given operating loan interest rates. All other factors about these loan officers and operating loans are similar. The first two loan officers have their given trust factors and stated interest rates, and 'Your Loan Officer' reflects the response you provided earlier about your actual loan officer.

Within each of the sets below, please rank the first loan officer, the second loan officer, and your loan officer from 1 being the most preferred to 3 being the least preferred.

Set #1

	Loan Officer A	Loan Officer B	Your Loan Officer
Credibility	Very High Credibility	Very Low Credibility	High Credibility
Reliability	Very Low Reliability	Very Low Reliability	Moderate Reliability
Connection with You and Your Operation	Very Strong Connection	Very Weak Connection	Very Strong Connection
Focus In Relationship	Very Focused on You	Very Focused on You	Focused on You
Interest Rate (Interest Cost per \$1,000)	5% (\$50)	3% (\$30)	5% (\$50)

For set #1, click on the drop down boxes below to rank Loan Officer A, Loan Officer B, and your loan officer from 1 being the most preferred to 3 being the least preferred.

Loan Officer A	Loan Officer B	Your Loan Officer
<input type="text" value="v"/>	<input type="text" value="v"/>	<input type="text" value="v"/>

Set #2

	Loan Officer C	Loan Officer D	Your Loan Officer
Credibility	Very Low Credibility	Very Low Credibility	High Credibility
Reliability	Very Low Reliability	Very High Reliability	Moderate Reliability
Connection with You and Your Operation	Very Weak Connection	Very Weak Connection	Very Strong Connection
Focus In Relationship	Very Focused on Themselves	Very Focused on You	Focused on You
Interest Rate (Interest Cost per \$1,000)	3% (\$30)	5% (\$50)	5% (\$50)

For set #2, click on the drop down boxes below to rank Loan Officer C, Loan Officer D, and your loan officer from 1 being the most preferred to 3 being the least preferred.

Loan Officer C	Loan Officer D	Your Loan Officer
<input type="text" value="v"/>	<input type="text" value="v"/>	<input type="text" value="v"/>

Set #3

	Loan Officer E	Loan Officer F	Your Loan Officer
Credibility	Very Low Credibility	Very Low Credibility	High Credibility
Reliability	Very High Reliability	Very High Reliability	Moderate Reliability
Connection with You and Your Operation	Very Weak Connection	Very Strong Connection	Very Strong Connection
Focus In Relationship	Very Focused on You	Very Focused on You	Focused on You
Interest Rate (Interest Cost per \$1,000)	7% (\$70)	5% (\$50)	5% (\$50)

For set #3, click on the drop down boxes below to rank Loan Officer E, Loan Officer F, and your loan officer from 1 being the most preferred to 3 being the least preferred.

Loan Officer E	Loan Officer F	Your Loan Officer
<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>

Set #4

	Loan Officer G	Loan Officer H	Your Loan Officer
Credibility	Very Low Credibility	Very High Credibility	High Credibility
Reliability	Very Low Reliability	Very High Reliability	Moderate Reliability
Connection with You and Your Operation	Very Strong Connection	Very Weak Connection	Very Strong Connection
Focus In Relationship	Very Focused on You	Very Focused on You	Focused on You
Interest Rate (Interest Cost per \$1,000)	5% (\$50)	3% (\$30)	5% (\$50)

For set #4, click on the drop down boxes below to rank Loan Officer G, Loan Officer H, and your loan officer from 1 being the most preferred to 3 being the least preferred.

Loan Officer G	Loan Officer H	Your Loan Officer
<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>

Set #5

	Loan Officer I	Loan Officer J	Your Loan Officer
Credibility	Very High Credibility	Very Low Credibility	High Credibility
Reliability	Very High Reliability	Very Low Reliability	Moderate Reliability
Connection with You and Your Operation	Very Weak Connection	Very Weak Connection	Very Strong Connection
Focus In Relationship	Very Focused on Themselves	Very Focused on Themselves	Focused on You
Interest Rate (Interest Cost per \$1,000)	7% (\$70)	7% (\$70)	5% (\$50)

For set #5, click on the drop down boxes below to rank Loan Officer I, Loan Officer J, and your loan officer from 1 being the most preferred to 3 being the least preferred.

Loan Officer I	Loan Officer J	Your Loan Officer
<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>

Set #6

	Loan Officer K	Loan Officer L	Your Loan Officer
Credibility	Very High Credibility	Very Low Credibility	High Credibility
Reliability	Very High Reliability	Very High Reliability	Moderate Reliability
Connection with You and Your Operation	Very Strong Connection	Very Strong Connection	Very Strong Connection
Focus In Relationship	Very Focused on Themselves	Very Focused on Themselves	Focused on You
Interest Rate (Interest Cost per \$1,000)	5% (\$50)	3% (\$30)	5% (\$50)

For set #6, click on the drop down boxes below to rank Loan Officer K, Loan Officer L, and your loan officer from 1 being the most preferred to 3 being the least preferred.

Loan Officer K	Loan Officer L	Your Loan Officer
<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>

Set #7

	Loan Officer M	Loan Officer N	Your Loan Officer
Credibility	Very High Credibility	Very High Credibility	High Credibility
Reliability	Very Low Reliability	Very High Reliability	Moderate Reliability
Connection with You and Your Operation	Very Weak Connection	Very Weak Connection	Very Strong Connection
Focus In Relationship	Very Focused on You	Very Focused on Themselves	Focused on You
Interest Rate (Interest Cost per \$1,000)	7% (\$70)	7% (\$70)	5% (\$50)

For set #7, click on the drop down boxes below to rank Loan Officer M, Loan Officer N, and your loan officer from 1 being the most preferred to 3 being the least preferred.

Loan Officer M	Loan Officer N	Your Loan Officer
<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>

Set #8

	Loan Officer O	Loan Officer P	Your Loan Officer
Credibility	Very Low Credibility	Very High Credibility	High Credibility
Reliability	Very Low Reliability	Very Low Reliability	Moderate Reliability
Connection with You and Your Operation	Very Strong Connection	Very Strong Connection	Very Strong Connection
Focus In Relationship	Very Focused on Themselves	Very Focused on You	Focused on You
Interest Rate (Interest Cost per \$1,000)	3% (\$30)	5% (\$50)	5% (\$50)

For set #8, click on the drop down boxes below to rank Loan Officer O, Loan Officer P, and your loan officer from 1 being the most preferred to 3 being the least preferred.

Loan Officer O	Loan Officer P	Your Loan Officer
<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>

Questions 39-49 of 50

As we near the end of the survey, we would like to ask you some background information. This is an important part of our analysis. The survey is anonymous and your name is in no way linked to the responses.

39. Are you a Kansas Farm Management Association (KFMA) Member?

- Yes
- No

40. Please select your gender:

- Male
- Female

41. Please type your age in the box below.

For Example: If you are 65 years old, then type 65

42. Is farming and/or ranching your primary occupation?

- Yes
- No

42, part A. Given that you indicated yes in the previous question, in the box below, please type in how long farming and/or ranching has been your primary occupation?

For Example : If it has been your primary occupation for 15 years type in 15

43. Are you the primary operator of the farm or ranch?

- Yes
- No

43, part A. Given that you indicated yes in the previous question, please click on the button that represents how long have YOU been the primary operator?

- Less than 6 months
- 1 Year
- 2-5 Years
- 5-10 years
- 10-15 Years
- 15+ Years

44. Please click the range that indicates how many other full-time employees work for your farm and/or ranch, excluding yourself?

- 0 4-6 11+
- 1-3 7-10

45. In the box below, please type the total acres (owned and rented) in your operation in 2014.

For Example: If your operation has 1000 owned acres and 500 rented acres you would type in 1500

46. Please click on the range that includes the total revenues or sales for your operation in 2014:

- | | |
|---|---|
| <input type="radio"/> \$0 | <input type="radio"/> \$350,000 - \$499,999 |
| <input type="radio"/> \$1 - \$24,999 | <input type="radio"/> \$500,000 - \$749,999 |
| <input type="radio"/> \$25,000 - \$49,999 | <input type="radio"/> \$750,000 - \$999,999 |
| <input type="radio"/> \$50,000 - \$74,999 | <input type="radio"/> \$1,000,000 - \$1,499,999 |
| <input type="radio"/> \$75,000 - \$99,999 | <input type="radio"/> \$1,500,000 - \$1,999,999 |
| <input type="radio"/> \$100,000 - \$124,999 | <input type="radio"/> \$2,000,000 - \$2,999,999 |
| <input type="radio"/> \$125,000 - \$149,999 | <input type="radio"/> \$3,000,000 - \$4,999,999 |
| <input type="radio"/> \$150,000 - \$199,999 | <input type="radio"/> \$5,000,000 - \$7,499,999 |
| <input type="radio"/> \$200,000 - \$274,999 | <input type="radio"/> \$7,500,000 - \$9,999,999 |
| <input type="radio"/> \$275,000 - \$349,999 | <input type="radio"/> \$10,000,000 and over |

47. Please click the button that best describes your operation's primary source of revenue

- Primarily crops
- Primarily livestock
- 50-50 split between crops and livestock

48. Please click the range that includes the value of your operation's total farm assets in 2014:

- | | |
|---|---|
| <input type="radio"/> \$0 | <input type="radio"/> \$350,000 - \$499,999 |
| <input type="radio"/> \$1 - \$24,999 | <input type="radio"/> \$500,000 - \$749,999 |
| <input type="radio"/> \$25,000 - \$49,999 | <input type="radio"/> \$750,000 - \$999,999 |
| <input type="radio"/> \$50,000 - \$74,999 | <input type="radio"/> \$1,000,000 - \$1,499,999 |
| <input type="radio"/> \$75,000 - \$99,999 | <input type="radio"/> \$1,500,000 - \$1,999,999 |
| <input type="radio"/> \$100,000 - \$124,999 | <input type="radio"/> \$2,000,000 - \$2,999,999 |
| <input type="radio"/> \$125,000 - \$149,999 | <input type="radio"/> \$3,000,000 - \$4,999,999 |
| <input type="radio"/> \$150,000 - \$199,999 | <input type="radio"/> \$5,000,000 - \$7,499,999 |
| <input type="radio"/> \$200,000 - \$274,999 | <input type="radio"/> \$7,500,000 - \$9,999,999 |
| <input type="radio"/> \$275,000 - \$349,999 | <input type="radio"/> \$10,000,000 and over |

49. Please click the range that includes the dollar amount of your operation's total farm debt in 2014:

- | | |
|---|---|
| <input type="radio"/> \$0 | <input type="radio"/> \$350,000 - \$499,999 |
| <input type="radio"/> \$1 - \$24,999 | <input type="radio"/> \$500,000 - \$749,999 |
| <input type="radio"/> \$25,000 - \$49,999 | <input type="radio"/> \$750,000 - \$999,999 |
| <input type="radio"/> \$50,000 - \$74,999 | <input type="radio"/> \$1,000,000 - \$1,499,999 |
| <input type="radio"/> \$75,000 - \$99,999 | <input type="radio"/> \$1,500,000 - \$1,999,999 |
| <input type="radio"/> \$100,000 - \$124,999 | <input type="radio"/> \$2,000,000 - \$2,999,999 |
| <input type="radio"/> \$125,000 - \$149,999 | <input type="radio"/> \$3,000,000 - \$4,999,999 |
| <input type="radio"/> \$150,000 - \$199,999 | <input type="radio"/> \$5,000,000 - \$7,499,999 |
| <input type="radio"/> \$200,000 - \$274,999 | <input type="radio"/> \$7,500,000 - \$9,999,999 |
| <input type="radio"/> \$275,000 - \$349,999 | <input type="radio"/> \$10,000,000 and over |

This final section is where you have the opportunity to fill out your mailing information to receive a \$50 Visa gift card for participating in this survey.

50. Would you like to receive a \$50 gift card for participating in this survey?

- Yes
 No

So we can mail you your gift card, please complete the boxes below with your contact information.

**Please note the following information will in no way have any connection to your answers given in the survey. Your survey responses will be anonymous and confidential.

You should receive your gift card by Friday, August 7th.

Name	<input type="text"/>
Address	<input type="text"/>
Address 2	<input type="text"/>
City	<input type="text"/>
State	<input type="text"/>
Postal Code	<input type="text"/>

To submit your survey responses and information for your \$50 Visa gift card, please continue to the final page!

** If the respondent answered NO to question 37, then they were presented with a choice experiment block design following this layout

37. Do you currently or have you ever had an operating loan for your farm and/or ranch?

- Yes
- No

38. Let's assume you have a choice between various loan officers and interest rates. That is, you could choose your current situation or from 2 different loan officers that are each offering their own interest rate. Below are 8 different sets of loan officers that only differ across the four trust factors and their given operating loan interest rates. All other factors about these loan officers and operating loans are similar. The first two loan officers have their given trust factors and stated interest rates, and 'Current Situation' reflects your position of not having an operating loan.

Within each of the sets below, please rank the first loan officer, the second loan officer, and your 'Current Situation' from 1 being the most preferred to 3 being the least preferred.

Set #1

	Loan Officer A	Loan Officer B	Current Situation
Credibility	Very Low Credibility	Very Low Credibility	Remain in current situation, no operating loan
Reliability	Very Low Reliability	Very High Reliability	
Connection with You and Your Operation	Very Strong Connection	Very Strong Connection	
Focus In Relationship	Very Focused on Themselves	Very Focused on Themselves	
Interest Rate (Interest Cost per \$1,000)	3.75% (\$37.50)	7.75% (\$77.50)	

For set #1, click on the drop down boxes below to rank Loan Officer A, Loan Officer B, and Current Situation from 1 being the most preferred to 3 being the least preferred.

Loan Officer A	Loan Officer B	Current Situation
<input type="text" value="v"/>	<input type="text" value="v"/>	<input type="text" value="v"/>

Set #2

	Loan Officer C	Loan Officer D	Current Situation
Credibility	Very Low Credibility	Very Low Credibility	Remain in current situation, no operating loan
Reliability	Very Low Reliability	Very Low Reliability	
Connection with You and Your Operation	Very Weak Connection	Very Weak Connection	
Focus In Relationship	Very Focused on You	Very Focused on You	
Interest Rate (Interest Cost per \$1,000)	7.75% (\$77.50)	5.75% (\$57.50)	

For set #2, click on the drop down boxes below to rank Loan Officer C, Loan Officer D, and Current Situation from 1 being the most preferred to 3 being the least preferred.

Loan Officer C	Loan Officer D	Current Situation
<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>

Set #3

	Loan Officer E	Loan Officer F	Current Situation
Credibility	Very Low Credibility	Very Low Credibility	Remain in current situation, no operating loan
Reliability	Very High Reliability	Very High Reliability	
Connection with You and Your Operation	Very Strong Connection	Very Weak Connection	
Focus in Relationship	Very Focused on You	Very Focused on Themselves	
Interest Rate (Interest Cost per \$1,000)	5.75% (\$57.50)	5.75% (\$57.50)	

For set #3, click on the drop down boxes below to rank Loan Officer E, Loan Officer F, and Current Situation from 1 being the most preferred to 3 being the least preferred.

Loan Officer E	Loan Officer F	Current Situation
<input type="button" value="v"/>	<input type="button" value="v"/>	<input type="button" value="v"/>

Set #4

	Loan Officer G	Loan Officer H	Current Situation
Credibility	Very High Credibility	Very High Credibility	Remain in current situation, no operating loan
Reliability	Very High Reliability	Very Low Reliability	
Connection with You and Your Operation	Very Strong Connection	Very Weak Connection	
Focus In Relationship	Very Focused on You	Very Focused on Themselves	
Interest Rate (Interest Cost per \$1,000)	5.75% (\$57.50)	3.75% (\$37.50)	

For set #4, click on the drop down boxes below to rank Loan Officer G, Loan Officer H, and Current Situation from 1 being the most preferred to 3 being the least preferred.

Loan Officer G	Loan Officer H	Current Situation
<input type="text" value="v"/>	<input type="text" value="v"/>	<input type="text" value="v"/>

Set #5

	Loan Officer I	Loan Officer J	Current Situation
Credibility	Very High Credibility	Very High Credibility	Remain in current situation, no operating loan
Reliability	Very High Reliability	Very Low Reliability	
Connection with You and Your Operation	Very Weak Connection	Very Strong Connection	
Focus In Relationship	Very Focused on Themselves	Very Focused on You	
Interest Rate (Interest Cost per \$1,000)	7.75% (\$77.50)	3.75% (\$37.50)	

For set #5, click on the drop down boxes below to rank Loan Officer I, Loan Officer J, and Current Situation from 1 being the most preferred to 3 being the least preferred.

Loan Officer I	Loan Officer J	Current Situation
<input type="text" value="v"/>	<input type="text" value="v"/>	<input type="text" value="v"/>

Set #6

	Loan Officer K	Loan Officer L	Current Situation
Credibility	Very Low Credibility	Very High Credibility	Remain in current situation, no operating loan
Reliability	Very High Reliability	Very High Reliability	
Connection with You and Your Operation	Very Weak Connection	Very Strong Connection	
Focus In Relationship	Very Focused on Themselves	Very Focused on Themselves	
Interest Rate (Interest Cost per \$1,000)	3.75% (\$37.50)	7.75% (\$77.50)	

For set #6, click on the drop down boxes below to rank Loan Officer K, Loan Officer L, and Current Situation from 1 being the most preferred to 3 being the least preferred.

Loan Officer K	Loan Officer L	Current Situation
<input type="text" value="v"/>	<input type="text" value="v"/>	<input type="text" value="v"/>

Set #7

	Loan Officer M	Loan Officer N	Current Situation
Credibility	Very High Credibility	Very Low Credibility	Remain in current situation, no operating loan
Reliability	Very Low Reliability	Very Low Reliability	
Connection with You and Your Operation	Very Weak Connection	Very Strong Connection	
Focus In Relationship	Very Focused on Themselves	Very Focused on Themselves	
Interest Rate (Interest Cost per \$1,000)	3.75% (\$37.50)	3.75% (\$37.50)	

For set #7, click on the drop down boxes below to rank Loan Officer M, Loan Officer N, and Current Situation from 1 being the most preferred to 3 being the least preferred.

Loan Officer M	Loan Officer N	Current Situation
<input type="text" value="v"/>	<input type="text" value="v"/>	<input type="text" value="v"/>

Set #8

	Loan Officer O	Loan Officer P	Current Situation
Credibility	Very High Credibility	Very High Credibility	Remain in current situation, no operating loan
Reliability	Very Low Reliability	Very High Reliability	
Connection with You and Your Operation	Very Strong Connection	Very Weak Connection	
Focus In Relationship	Very Focused on Themselves	Very Focused on You	
Interest Rate (Interest Cost per \$1,000)	7.75% (\$77.50)	7.75% (\$77.50)	

For set #8, click on the drop down boxes below to rank Loan Officer O, Loan Officer P, and Current Situation from 1 being the most preferred to 3 being the least preferred.

Loan Officer O	Loan Officer P	Current Situation
<input type="text" value="v"/>	<input type="text" value="v"/>	<input type="text" value="v"/>

TO: Brian Briggeman
Agricultural Economics
305C Waters

Proposal Number: 7760

FROM: Rick Scheidt, Chair 
Committee on Research Involving Human Subjects

DATE: 05/28/2015

RE: Proposal Entitled, "The Economic Value of Trust"

The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is EXEMPT from further IRB review. This exemption applies only to the proposal - as written - and currently on file with the IRB. Any change potentially affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Based upon information provided to the IRB, this activity is exempt under the criteria set forth in the Federal Policy for the Protection of Human Subjects, **45 CFR §46.101, paragraph b, category: 2, subsection: ii.**

Certain research is exempt from the requirements of HHS/OHRP regulations. A determination that research is exempt does not imply that investigators have no ethical responsibilities to subjects in such research; it means only that the regulatory requirements related to IRB review, informed consent, and assurance of compliance do not apply to the research.

Any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.