PERCEPTIONS OF AND MOTIVATIONS FOR
PURCHASING EXHIBITION LIVESTOCK
THROUGH ONLINE AUCTIONS

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PERCEPTIONS OF AND MOTIVATIONS FOR PURCHASING EXHIBITION LIVESTOCK THROUGH ONLINE AUCTIONS

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Abstract:

The purpose of this study was to assess the perceptions of and motivations for purchasing exhibition livestock through online auctions. Furthermore, the study obtained preferred characteristics of exhibition livestock auction presented on the Internet. The study’s population consisted of all agricultural education teachers teaching for the 2013-2014 academic school year in Oklahoma (N = 428). Using a non-experimental descriptive research study, data were collected to describe the perceptions and motivations for purchasing exhibition livestock through online auctions.

Based on the findings, the typical agricultural education teacher in Oklahoma is a 40-year-old male who has taught an average of 14.40 years. The average size of an Oklahoma FFA chapter is 92 members; however, the most frequent chapter size is 62. Agricultural education teachers in Oklahoma use their smart phones and access their email accounts frequently for work-related purposes. However, the teachers either use social media frequently or not at all.

All teachers have viewed and purchased students’ exhibition livestock via an online auction but rarely, if ever, purchase without evaluating the animal in person. Leading motivators for purchasing livestock online were the variety in the choice of sellers, availability of more livestock to view, or their beliefs that buying online is the only option available for some breeders’ livestock. Additionally, the majority of Oklahoma agricultural educational teachers prefer to see both pictures and videos when purchasing exhibition livestock through online auctions.

Time management plays a critical role the agricultural education teachers’ decisions to purchase students’ livestock via online auctions. These teachers do not consider online livestock purchasing as more cost effective; however, they perceived a difference in the quality of livestock sold through online auctions as compared to traditional auctions.

Exhibition livestock sellers should evaluate how they promote their livestock to this audience and include appropriate technologies. Exhibition livestock breeders who sell through online auctions should allow buyers to evaluate the livestock in person before the online auction begins, and they should integrate video into their existing online auction sites. The instrument should be revised to conduct research with additional populations, such as online auction managers, livestock breeders, and livestock buyers.
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CHAPTER I

INTRODUCTION

Background and Setting

By the beginning of this decade, 79% of individuals 18 and older were using the Internet and 85% of U.S. adults owned a cell phone with Internet access (Gultieri, 2012). In 2013, 70% of farmers in the United States had computer access and 67% had Internet access, according to U.S. Department of Agriculture’s National Agricultural Statistics Service (NASS) (2013). In Oklahoma, 36% of farmers use their computers for farm business and 63% have access to the Internet (NASS, 2013). “Computers are widely recognized as communication tools, and rurality should have a special relevance for designers as they work on systems that are explicitly designed to address problems related to distance” (Gilbert, Karahalios, & Sandvig, 2010, p. 1383).

Technology, such as online auctions and trading, has made its way into rural areas and into the livestock industry. In fact, 70% of livestock farmers have access to a computer and 66% access to the Internet (NASS, 2013). Real developments pertaining to electronic markets, specifically computer-based, began in the late 1970s (McCoy & Sarhan, 1988). The evolution of electronic auctions, particularly the integration of Internet-based auction markets within the livestock industry, began in June 1986 (“Economics and Marketing,” 2013). Xiaoping et al. (2009) found several agribusinesses, especially in recent years, have capitalized on the various advantages and benefits of e-businesses to expand on the marketing and trading of the products the business offers.
Mueller (2000) concluded that e-commerce websites frequently are operated through groups or industries specialized in distinct areas of transactions. Demand for the diverse e-commerce websites is a result of economic interests and necessities, rather than perceived technological capabilities (Mueller, 2000). Successful companies will be the ones that understand customers’ needs and provide them with human interaction (Fong, Chin, Fowler, & Swatman, 1997). “To make the transaction from high-touch to high-tech, a successful business in e-commerce must have strong sales, customer service, and marketing orientation” (Xiaoping et al., 2009, p. 238).

Overby (2009) concluded the products and services sold online or through Internet auctions must be represented properly. Electronic auctions and in-person auctions differ significantly in their methods, assembly, and era of importance; nevertheless, product quality inevitably should remain as a top priority (Overby, 2009). “Possible representation methods vary, from listing the product characteristics, to providing a simple picture, to a full audio/video presentation of the product in question or a combinations of these” (Koppius, Heck, & Wolters, 2004, p. 162).

“Eliminating spatial and temporal constraints to connect consumers who are physically separated, the online auction mechanism has become one of the key icons in today’s e-commerce system” (Chang, 2010, p. 331). Furthermore, Kopius et al. (2004) discovered that e-commerce markets provide significant savings for both the sellers and the buyers. Xiaoping et al. (2009) found online auctions allow prices to be fixed through the buyers — businesses or individuals — who bid against one another. This format of bidding allows sellers to receive the best price possible for their products or services (Xiaoping et al. 2009). Additionally, electronic marketplaces have the ability to bring various benefits to agriculture, although the adoption into the agricultural electronic marketplace remains gradual (Xiaoping et al., 2009).

While the traditional auction method offered the audience a direct inspection of the livestock for auction, online exhibition livestock auctions offer the audience a limited number of
photos or video clips with a detailed description of the livestock being sold (Roe, Wysynski, & Olimov, 2011). The lack of physical or direct inspection of the product sold through online auctions results in a decrease in the overall revenue of the purchase price (Diekmann, Roe, & Batte, 2008; Roe et al., 2011).

Electronic markets, combined with other e-commerce, began penetrating the agricultural industry at the end of the 20th century (Xiaoping et al., 2009). “Agricultural e-commerce is the kind of trading models whereby buying and selling of agriculture products and services are carried out electronically with the use of computer systems linked together over inter network protocols and standards” (Xiaoping et al., 2009, p. 232). The majority of the agricultural industry perceives Internet technology as extremely beneficial, especially with current developments such as live broadcasts of auctions (Gordon, 2002). These auctions make it possible for producers, feeders, and buyers to view and bid on the livestock in the sale ring simultaneously from virtually any location by using the Internet (Gordon, 2002). Electronic marketplaces are most beneficial because they are less time consuming and less expensive for buyers when compared with traveling to traditional stockyards (Driedonks et al., 2005). Internet sales can reduce transaction prices, but the technology has the most profound impact on trading costs, especially when livestock are sold online by digital video (Mueller, 2000).

Any company has the ability to take advantage of the Internet, especially as a communications channel for exchanging and communicating information with current or potential customers (Kiang, Raghu, & Shang, 2000). Communications channels, personal and interpersonal, play a vital role in electronic marketplaces and electronic auctions being accepted into the cattle industry (Driedonks et al., 2005). In addition, communications channels play a major role in the diffusion of this new technology; these channels include the livestock producers’ social systems, the industry’s power distribution, and the industry context (Driedonks et al., 2005). Kiang et al. (2000) found the instant communications features found within Internet-based
auctions allow the companies or producers the opportunity to respond efficiently to market changes, customer preferences, and product customization.

Furthermore, access to the Internet is unlimited in physical boundary and available 24 hours a day, allowing companies the opportunity and availability to reach a much broader customer base (Kiang et al., 2000). “Though online auctions are a multi-billion dollar annual activity, with a growing variety of sophisticated trading mechanisms, scientific research on them is at an early stage” (Pinker, Seidmann, & Vakrat, 2003, p. 1,457).

**Statement of the Problem**

Previous research on the characteristics of online exhibition livestock auctions in the United States is limited. Research by Wyszynski (2010), Garicano and Kaplan (2000), Chang (2010), and Hamm et al. (1985) focused on the financial aspects of online auctions compared to traditional ones. However, no research exists to describe the common characteristics and perceptions of agricultural educators regarding online exhibition livestock auctions.

**Purpose of the Study**

The purpose of this study was to assess the perceptions of and motivations for purchasing exhibition livestock through online auctions.

**Research Objectives**

The following objectives guided this research study:

1. Describe selected characteristics of Oklahoma agricultural educational teachers who purchase exhibition livestock via online auctions.

2. Describe Oklahoma agricultural educational teachers’ interaction with online livestock exhibition auctions.
3. Describe the motivation of Oklahoma agricultural educational teachers to purchase exhibition livestock through online auctions.

4. Describe the online exhibition livestock auction format preferences of Oklahoma agricultural education teachers.

**Scope of the Study**

The scope of this study included agricultural education teachers actively teaching in an Oklahoma high school system during the 2013-2014 academic year ($N = 428$).

**Significance**

The study has the ability to benefit the livestock industry as well as the agricultural education sector. Livestock breeders who are interested in using online auction websites as well as those who currently use online auctions websites to purchase or sell livestock have the potential to increase their customer base and income. Teachers and their students could benefit as improvements are made to online auctions sites as teachers’ preferences are implemented.

**Limitations of the Study**

The following limitations were noted in this study:

1. The results of this study cannot be generalized beyond the exhibition livestock industry as it intersects with the Oklahoma’s livestock industry.

2. The results cannot be generalized to the livestock producers’ additional audiences.

3. The results cannot be generalized to agricultural educators in other states.
Assumptions

The following assumptions were acknowledged in this study:

1. The email addresses provided by the Oklahoma Department of Career and Technology Education agriculture department were active.
2. Oklahoma agricultural educators know their expected role in students’ supervised agricultural experiences, specifically exhibition livestock and shows.
3. Respondents were honest in their answers to the survey.
4. The perceptions of agricultural education teachers could be measured with a questionnaire.
5. The motivation of agricultural education teachers could be measured with a questionnaire.
6. Oklahoma agricultural education teachers are familiar with online auctions for exhibition livestock.

Definitions

The following definitions were used to guide this study:

E-commerce – “Business-to-consumer and business-to-business commerce exchange conducted by way of the Internet or other electronic networks” (E-commerce, 2014, para. 1).

Electronic auctions – An Internet-based market subspace generated and designed for the existence of one or multiple overlapping auctions: these electronic auctions also are known as online auctions (Chang, 2010).

Electronic markets – A central dealing or trading platform that can be found on the Internet for agricultural product enterprises: these online market platforms also are known as e-markets (Xiaoping et al., 2009).
Exhibition livestock – Livestock bred and raised by club or show breeders; the livestock’s specific purpose is to be purchased by youth to care for, train, and exhibit at a junior livestock show (Roe et al., 2011).

Traditional auctions – A area of business where the public may consign livestock for sale by auction, often open for public bidding or sold on a commission basis (“Livestock Auction Market,” n.d.).
CHAPTER II

REVIEW OF LITERATURE

This chapter provides a review of appropriate literature and the theoretical framework for this study. Topics include technology in the classroom, agricultural education supervised agricultural experiences (SAEs), FFA livestock exhibitions in Oklahoma, the evolution of auctions, and Rogers’ diffusion of innovation theory.

Technology in the Classroom

Technology helps students achieve higher standards and perform at improved levels while promoting alternative, innovative approaches through the teaching and learning processes (George, 2000). It also has “an important role in education if the teacher believes he or she is capable of teaching in a technology-enhanced learning environment” (Stewart, Antonenko, Robinson, & Mwavita, 2013, p. 158). Research in 2009 by National Center for Education Statistics (NCES) (2013) found 97% of teachers had daily access to at least one computer in their classrooms and 93% of these classroom computers could access the Internet.

When computers first became available for use in schools, administrators and teachers were concerned about providing enough access to computers and the Internet to properly accommodate their student body, whereas now educators are more concerned about the students-to-computer ratio, which was found to be 5.3 to 1 in 2009 (NCES, 2013). The same NCES (2009) study found 40% of teachers or their students often use the computers during class instructional time. In addition, 44% of teachers have integrated technologies, such as computers and the
Internet, into their classroom planning and instruction with 42% integrating computer applications and 41% integrating the Internet for research purposes (NCES, 2013).

Agriscience teachers are found to be the most active teachers in the exploration phase of integrating potential technology in the classroom (Kortlik, Redmann, & Douglas, 2003). Furthermore, Kortlik et al. (2003) found agriscience teachers are effective in adopting technology to use regularly during their instructional time. Agricultural education teachers today focus on traditional, real-life learning environments and skills dealing with livestock, mechanics, and FFA (Stewart et al., 2013). The ability for instructors to integrate 21st-century experiential education avenues — including technologies such as interactive white boards, Internet, mobile applications, video-based simulations, and countless other technologies — has provided a more interactive engagement between students and teachers (Stewart et al., 2013). “New technologies, practices, and products are emerging continually; as a result, an increased demand exists for information and technology processing and analysis” (Stewart et al., 2013, p.157).

Agricultural Education Supervised Agricultural Experiences (SAEs)

The passage of the Smith-Hughes Act in 1917 declared the guidance of students’ supervised agricultural experiences (SAEs) projects to be the responsibility of the agricultural education teacher (Phipps, Osborne, Dyer, & Ball, 2008). Agricultural education teachers have various duties within their job descriptions, including the guidance of their students’ SAE projects (Robinson & Haynes, 2011). “SAE programs allow students to build relationships and connect with community industry representatives, and enable teachers to build personal relationships with students by making home visits” (Robinson & Haynes, 2011, p. 54).

Although Wilson and Moore (2007) found one-third or fewer of agricultural education teachers nationwide reported 75% or higher student SAE involvement, agricultural education teachers value their students’ SAE programs as they aid in students’ preparation for potential
careers through enhancing and developing life skills beyond high school (Robinson & Haynes, 2011). Similarly, Robinson and Haynes (2011) concluded agricultural education teachers expect and encourage their students to own and manage their SAEs, keep accurate data of their SAEs through record books, and expect students’ SAEs to be competitive at a high level. Additionally, agricultural education teachers expect SAE programs to teach students basic skills and values to be used beyond the classroom such as responsibility, accountability, and work ethic (Robinson & Haynes, 2011).

Roberts and Dyer (2004) concluded that “being an effective agriculture teacher goes beyond classroom teaching.” An SAE project requires students and teachers to work beyond the classroom environment with projects such as livestock. Over the years, research within agricultural education has included agricultural education teachers’ impact and involvement with students and their livestock exhibition. Morgan and Holley (1984) studied Oklahoma’s Northwest District FFA chapters, where more than 50% of the supervised occupational experience programs were exclusively the exhibition of animals.

“FFA and 4-H livestock projects allow students the opportunity to participate in all aspects of livestock production and witness abstract science, technology, engineering, and mathematics concepts in real-life situations” (Wooten, Rayfield, & Moore, 2013, p. 31). Agricultural education students with junior livestock projects as SAEs have a superior opportunity to learn about proper junior exhibition livestock presentation and the ability to apply their knowledge in real-life pressing situations (Wooten, Rayfield, & Moore, 2013).

“Being around livestock and attending shows, students have ample opportunity to learn characteristics which make a livestock animal desirable or valuable” (Wooten, Rayfield, & Moore, 2013, p. 40). This knowledge benefits students’ ability to learn, develop, and enhance these skills so they can select desirable livestock in the future (Wooten, Rayfield, & Moore, 2013).
FFA Livestock Exhibitions in Oklahoma

In a book about the history of Oklahoma FFA, McCrae (2011) stated the Farm Boys’ Country Life Achievement Club was established in 1927 at the Oklahoma State Fair. One of its competitions involved young men showing their stock (McCrae, 2011). “The FFA, stock shows and judging competitions have always been an integral part of each other, especially in Oklahoma” (McCrae, 2011, p. 99). Oklahoma FFA “members participated in stock shows from almost every chapter in the state” (p. 100); by the 1930s Oklahoma stock show members were winning multiple national honors at shows such as Texas State Fair, American Royal, and the Golden Gate Exposition (McCrae, 2011).

“It is difficult to spotlight one or two years in which Oklahoma excelled at state and national shows because Oklahoma excelled almost every year” (McCrae, 2011, p. 102). “In 1945 Oklahoma once again swept all championships of the FFA division at the American Royal” (McCrae, 2011, p. 103). Surprisingly, Oklahoma FFA members’ earned four grand champions in 1947 during their first attendance at the International Livestock Show in Chicago, Illinois (McCrae, 2011). McCrae (2011) stated before long several of the state fairs across the nation had separate divisions within their shows — junior divisions for members of the state along with open divisions members from anywhere else — Oklahoma members were successful in these fairs.

By the 1950s, the livestock show circuit was as imperative to several Oklahoma FFA members as the state and national FFA conventions (McCrae, 2011). Oklahoma FFA members attended county fairs throughout the summer months while attending various state and national livestock shows mainly from September through November; the spring show in Oklahoma City was the premier livestock show of the season (McCrae, 2011).

The Oklahoma Youth Expo, established in 1915, continues to excel (McCrae, 2011). In fact, it remains the largest junior livestock show in number of entrants in the nation (McCrae, 2011). In 2001, the Oklahoma Youth Expo transitioned into ownership by businessman in
Oklahoma City who partnered with the Oklahoma State Fair to create a non-profit entity (McCrae, 2011). This new organization altered the show’s focus to not only emphasize the exhibition of livestock but also to recognize academic and leadership performances (McCrae, 2011). McCrae (2011) stated the livestock show industry remains a vital part of the Oklahoma FFA, as members continue to compete in a variety of competitive events, including local, county, district, state, and national livestock shows.

Over the years, research within agricultural education has included agricultural education teachers’ impact and involvement with students and their livestock exhibition. Morgan and Holley (1984) studied Oklahoma’s Northwest District FFA chapters, where more than 50% of the supervised occupational experience programs were exclusively the exhibition of animals.

**Evolution of Auctions**

In a traditional auction, the public may consign livestock for sale through public bidding (“Livestock Auction Market”, n.d.). Nielek, Wawer, and Wierzbicki (2009) found common sellers at traditional markets tend to be more emotional and expressive than buyers. Interpersonal communication is important when looking at wholesale livestock at traditional auctions (Fong et al., 1997). Interpersonal communication channels involve face-to-face exchange between two or more individuals (Rogers, 2010).

In the agricultural industry, markets for durable and nondurable agricultural inputs are becoming modified due to the emergence of Internet-based trading and auction venues (Diekmann et al., 2008). Previous studies on both traditional and electronic auctions within the agricultural industry have been conducted; however, the majority of the studies (Brynjolfsson et al., 2009; Hamm et al., 1985; Koontz & Ward, 1993) focused on the economics and procedures of these auctions. “The traditional literature on information technology and exchange coordination tends to focus on the implications of technology for coordinating the exchange of goods and services” (Fong et al., 1997, p. 3).
Diekmann, Roe, and Batte (2008) found a distinction between in-person, traditional auction methods and eBay and electronic other auctions: Fraud and misrepresentation is easily noticed and avoided during in-person auctions simply because the buyer is present to inspect the product. A seller’s reputation influences his or her profitability (Diekmann et al., 2008; Nielek et al., 2009). Negative comments made at traditional auctions can be addressed interpersonally; however, in bi-directional comment or evaluation found on websites negative comments left online can have a greater effect on the seller because the comments can be seen by all users and though the seller may address the negative comment with a positive counter comment the discussion is still available for viewing to all (Nieleke et al., 2009).

Virtual electronic markets, such as ones conducted by Willoughby Sales and showpig.com, did not require the physical presence of the party, buyers or sellers, at one specific location (Fong et al., 1997). Fong et al. (1997) concluded the various types of electronic auction platforms most often do not allow interpersonal inspection of the product because the system works on the foundation “sale-by-description” (p. 189).

Comparatively, Fong et al. (1997) recognized information technology alone does not have the capability to produce the desired end result — acceptance of the new information technology method and overall prospective participation with the technology — which are vital for the success of any electronic market system. In fact, the process most used to attract user acceptance is much more significant than that used to implement the information technology (Fong et al., 1997). Therefore, the significant characteristic of successful electronic markets is that they fulfill a valiant, genuine relevant need (Fong et al., 1997).

Electronic market platforms, specifically in agriculture, become successful systems if they take a facilitative approach by using the existing marketing platforms and integrating electronic market systems with one another, not replacing them (Fong et al., 1997). Thus, the auctioneer receives bids from potential buyers who are physically attending the sale and simultaneously from potential buyer bids transmitted through a market-networking site,
increasing buyer potential to the entire country (Fong et al., 1997). Hamm, Purcell, and Hudson (1985) also found electronic trading is beneficial due to its capability to accommodate a vast number of geographically dispersed traders and large product volumes.

Brynjolfsson, Hu, and Rahman (2009) studied the effectiveness, challenges, and overall differences found in the traditional sales and online sales of tractors. Their findings suggest Internet retailers have the potential to diversify their promotional strategies and product offerings originally limited by the geographic location of potential consumers (Brynjolfsson et al., 2009). Accordingly, Brynjolfsson et al. (2009) concluded information technology, specifically Internet markets, has the capability to lower consumers’ search costs significantly. All things considered, a lower cost ultimately allows consumers the chance to explore beyond a small number of popular products, giving consumers the opportunity of a wider variety of producers and products (Brynjolfsson et al., 2009). Furthermore, Koontz and Ward (1993) found socioeconomic characteristics, age, and demographical factors also may affect market choices when considering traditional or online auctions. Furthermore, Koontz and Ward (1993) study of electronic markets found that “middle-aged producers are more likely to use the electronic markets” (p. 79).

**Advancement in Online Livestock Auctions**

Efforts made to establish electronic markets in the livestock exhibition or breeding industry are the outcome of concerted efforts by producers directed at enhancing the market structure to improve prices producers receive (Koontz & Ward, 1993). Prior to the Internet or electronic auctions, exhibition livestock sales season involved large weekend auctions where potential buyers purchased livestock for the purpose of exhibiting those animals at specific shows or fairs or for the purpose of multiple livestock shows during that specific state’s exhibition season (Roe et al., 2011); Oklahoma’s spring exhibition season for livestock, such as pigs, are purchased in late October through middle of November (C. Blehm, personal communication, July 31, 2014). “Sellers face preparation and transportation costs to move pigs to the central facility
and costs associated with running the auction, which we estimate based on discussions with the sellers” (Roe et al., 2011). Accordingly, Roe et al. (2011) listed these operational items as the cost of operating the truck and trailer, seller labor costs for preparing and loading the animals for transport, traveling to the sale location and back, and hours on site during the auction.

“Key structural elements of the exhibitions involve the fact that buyers must purchase pigs several months prior to a show” (Roe et al., 2011). For example, the club-pig, or show-pig, industry markets young pigs by club-pig breeders to individuals whose purpose is to exhibit the purchased club-pig in the future at junior livestock shows (Roe et al., 2011). When buyers bid on livestock offered through an electronic auction with the use of computers or telephones to communicate their bid to the electronic “auctioneer” (Economics and Marketing, 2013), the animals stay in their natural habitat, which results in no significant loss of condition, no acquisition of illness or potential disease, and less cost in preparation and travel expenses (Fong et al., 1997). In addition, the livestock being sold in online auctions are accompanied with a complete description from the seller in terms of individual livestock characteristics (Kiang et al., 2000).

Roe et al. (2011) suggested bidders preferred the direct inspection of pigs found at traditional auctions, which led to the conclusion that lack of direct inspection may lower bids at Internet auctions due to the bidders’ inability to sort across venues. In addition, Roe et al. (2011) found sale prices and net revenues were significantly higher for traditional auctions than in a competing Internet auction.

Wyszynski (2010) conducted a study of the exhibition pig industry, specifically the pigs sold online versus pigs sold offline, by a niche market of three sellers of exhibition pigs. Wyszynski (2010) concluded pigs sold online produced greater net revenue when compared to offline contemporaries. However, Wyszynski (2010) found “for the seller, auction commissions and listing fees were the sole determinants of online transaction costs and actually exceed the costs associated with live auctions.”
While regional live sales average crowds of mere hundreds, a May 2010 report by The Wendt Group Inc. reported 8,000 bidders and nearly 3 million visits on their online swine auction site. Still, only 5 percent of respondents to a showpig.com survey chose online auctions as their favorite venue for buying pigs. Some aversion exists toward the use of online auctions from a buyer’s perspective; perhaps this is due to the inability of purchasers to inspect lots in person. However, both buyers and sellers benefit from online transactions, as the hogs do not travel to a central sale location where they are exposed to additional stress and potential disease. (Wyszynski, 2010, p. 10)

Roe et al. (2011) found buyers bid on individual pigs they have observed and evaluated through a limited number of still photos or video and accompanied with a written description provided by the seller. The bidding on each listing of an individual animal is scheduled to end at a specified time (Roe et al., 2011). Figure 1 provides an illustration of an online livestock auction conducted through Willoughby Livestock Sales. Each individual livestock lot included a photo and description, similar to the description by Roe et al. (2011). Photos and descriptions of the livestock are available for viewing before the actual auction starts, while bidding is often only one to two days in length.
“Although e-marketplace can bring the benefits for agriculture product marketing, e-marketplace adoption still faces an inordinate number of challenges” (Xiaoping et al., 2009, p.238). Nielek et al. (2009) and Diekmann et al. (2008) agreed additional studies are needed to determine how the communication at traditional auctions and online auction platforms influences both buyers’ and sellers’ attitudes and perceptions.
Theoretical Framework

In recent years, the expansion of traditional marketing has been stimulated by the diffusion and adoption of new communication technologies in various organizations and communities, especially with the use of the Internet in marketing new products and services to the public (Rogers, 2010). “In addition to mass media and interpersonal communication channels, interactive communication via the Internet has become more important for the diffusion of certain innovations in recent decades” (Rogers, 2010, p. 18).

Rogers’ (2010) diffusion of innovation theory states the acceptance, or diffusion, of new ideas into a social system is more likely acceptable if the communication channels of the idea are similar or were previously established channels of communication. According to Rogers’ (2010) theory, the adoption of an innovation will create opportunities for those innovations that are designed to accommodate individuals’ needs for learning and training of the new innovation. In addition, the diffusion of innovations theory articulates the perceived attributes to motivate the diffusion process in a given social system (Rogers, 2010). As defined by Rogers (2010), “diffusion is the process in which an innovation is communicated through certain channels over time among the members of a social system” (p. 5).

Individuals go through a process when making their decision about each new technology; this is known as the innovation-decision process shown in Figure 2 (Rogers, 2010).
Rogers (2010) defined the process through five specific stages: knowledge, persuasion, decision, implementation, and confirmation. The knowledge stage is initiated when an individual is exposed to an innovation and gains an understanding of how the innovation functions (Rogers, 2010). Rogers (2010) said, “Persuasion occurs when an individual forms a favorable or an unfavorable attitude toward the innovation”; therefore, by simply choosing to like or dislike an innovation, individuals participate in the persuasion stage. “According to Rogers (2010) the success of innovations depends on certain criteria: advantages over traditional techniques, materials or behaviors; high compatibility with existing values; “low complexity”; the possibility to try out the innovation and easily observe its benefits” (Kutter et al., 2011, p. 12).

The decision stage occurs when an individual becomes actively involved with the innovation, leading to the decision to adopt or reject (Rogers, 2010). Implementation is where the
individuals begin put the innovation to use (Rogers, 2010). In confirmation, individuals seek reinforcement about their decision to accept the innovation; this stage also can lead to the revising of an individual’s previous decision due to conflict (Rogers, 2010).

Equally important to this study are Rogers’ (2010) adopter categories in the decision stage. This adopter categorization is designed on the innovativeness of individuals and is calculated by a normal adopter distribution (Rogers, 2010). Rogers (2010) established five adopter categories on the concepts based on observations designed to make comparisons possible in the adoption process. Figure 3 shows the five-adopter categories: innovators, early adopters, early majority, later majority, and laggards (Rogers, 2010).

Figure 3. Rogers’ Adopter Categories.

Innovators make up 2.5% of the bell curve; this category consisting of those who invented the innovation (Rogers, 2010). The early adopter category, 13.5% of the bell curve,
receives the highest degree of opinion leadership in most systems because potential adopters generally turn to early adopters for advice, information, or reassurance when considering adopting the new technology (Rogers, 2010). The early majority category interacts often with peers and most often may deliberate for some time before completely adopting the innovation (Rogers, 2010). The late majority category often adopts due to economic necessity or increased peer pressures, often waiting long enough to ensure the technology is safe for use (Rogers, 2010). The early majority and late majority adopter categories each contain 34% of the bell curve (Rogers, 2010). Laggards are the last to adopt, if they ever choose to adopt; this category makes up 16% of the bell curve (Rogers, 2010).

These five categories in the adoption stage found in the innovation decision process are essential when dealing with new and rising phenomena, like electronic auctions (Rogers, 2010). “Among the perceived attributes suggested by Rogers (2003), perceived relative advantage is used to assess how well an innovation is thought to offer increased benefits in excess of those technologies that one intends to replace” (Tey & Brindal, 2012, p. 724).

Driedonks et al. (2005) concluded early adopters of online auctions were stimulated to adopt because they perceived lower transaction costs and were attracted by gaining access to more buyers, increasing competition, and generating higher prices. The low rate of adoption of online auctions is the nature of the livestock producers’ social system in its characteristics and use of communication channels (Driedonks et al., 2005). Rogers (2010) confirms the previous statements because mass media channels are most often relatively more significant when comparing earlier adopters with later adopters. Social communication channels play a major role in the adoption of new technologies and innovations: “Diffusion is a very social process that involves interpersonal communication relationships” (Rogers, 2010, p. 19).

The present study focuses on two areas of the diffusion of innovations theory: the persuasion stage and the adopter categories. The persuasion stage of the theory deals with this study’s pursuit to clarify and analyze the factors persuading and motivating livestock buyers’
choice to use Internet auctions. “Persuasion is equivalent to attitude formation and change on the part of an individual, but not necessarily in the direction intended by some particular source” (Rogers, 2010, p. 175). The perceived characteristics of the innovation, found in the persuasion stage, include relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2010). Motivational and persuasion factors could include time management, accessibility to demographic locations, economic benefits, and countless other influences (Rogers, 2010).
CHAPTER III

METHODOLOGY

This chapter explains the methods used by the researcher to conduct the study. The chapter includes Institutional Review Board (IRB) approval, research design, population, research instrument, validity and reliability, data collection, and data analysis.

Institutional Review Board

Federal regulations and OSU policy require approval of all human subject research prior to when the research begins. OSU’s Office of University Research Services and the IRB review research methods and procedures before investigation to protect the welfare of human subjects involved in biomedical and behavioral research. This study was reviewed by the OSU IRB and received approval on November 26, 2013. A modification to the IRB was submitted to the review board and received approval on January 23, 2014. The application number assigned to this study was AG1353 (see Appendix A).

Research Design

This study used a non-experimental descriptive design to collect data to describe the perceptions of and motivations for purchasing exhibition livestock through online auctions. The researcher used an online survey methodology via email to reach the population.
Population

The population for this study included all agricultural education teachers teaching during the 2013-2014 academic school year in Oklahoma \(N = 428\). The researcher received approval from Oklahoma Department of Career and Technology Education office to use its statewide email address list, which was available on the agency’s website.

Instrumentation

Due to the newness and unexplored nature of the research area, the researcher elected to create and design the instrument for this study. Instrument design for data collection by researchers typically includes the writing of different types of questions, the use of strategies for good question construction, and the conduction of a pilot test of the question construction (Creswell, 2012). The questionnaire was developed to assess the perceptions and motivations of Oklahoma agricultural education teachers toward online exhibition livestock auctions. The instrument was developed through the Qualtrics online platform and consisted of 17 items (see Appendix B).

The first five items were designed to collect personal and professional characteristics. Personal questions asked sex and age. Professional questions asked number of academic years of teaching agricultural education; Oklahoma FFA district of respondents’ chapters, and number of students enrolled in respondents’ FFA chapters this academic school year.

Two items asked the respondents to report their use of technology and online auctions. This multiple-choice question included answer choices of never, less than once a month, once a month, two to three times a month, once a week, two to three times a week, and daily. Two bipolar items anchored as yes and no asked respondents about their history with online exhibition livestock auctions and club livestock personal website sales.
Four items inquired about the respondents’ motivation for purchasing exhibition livestock through online auctions on a five-point rating scale anchored as *strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree*.

Three items inquired about respondents’ perceptions of online auctions for exhibition livestock anchored as *strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree*.

Five items had an answer of *other* provided with additional space for respondents’ explanation, allowing respondents to indicate their own specific reasoning or answer to the indicated question.

**Validity and Reliability**

Reliability is the consistency and stability of the scores for an instrument (Creswell, 2012). Validity refers to the strength of the researcher’s conclusions from the answered research instrument, measuring the intended content (Creswell, 2012). Creswell (2012) describes the two terms’ differences:

These two terms sometimes overlap and at other times are mutually exclusive.

Validity can be thought of as the larger, more encompassing term when you assess the choice of an instrument. Reliability is generally easier to understand, as it is a measure of consistency. (p. 169)

A panel of experts was used to assess the face and content validity of the research instrument. The panel of experts consisted of an OSU agricultural education faculty member, an OSU youth extension livestock specialist, and an Oklahoma CareerTech district program specialist. In addition to the panel of experts, the researcher’s thesis committee also reviewed the instrument.

To address reliability, a pilot study was conducted. The pilot test group consisted of the fall 2013 agricultural education student teachers at OSU. These students were given the
instrument following their student teaching block experience. The pilot test also included students in the foundations and philosophies of agricultural education class (AGED 3103) offered on OSU’s main campus. Five graduate students in the OSU Department of Agricultural Education, Communications and Leadership in fall 2013 also received the pilot instrument. The researcher was aware only five individuals in the pilot study had full-time teaching experience; however, these were the only groups available at the desired time of pilot testing. The pilot study response totaled 38 respondents, of which 30 had data that could be analyzed.

The five items using a summated rating scale yielded a Cronbach’s alpha coefficient of 0.686. To increase this coefficient, one statement was removed prior to the data collection, which increased the Cronbach’s alpha coefficient to 0.708.

**Data Collection**

The researcher obtained the email address list from the Oklahoma CareerTech website in January 2014. This study was conducted as a census; therefore, the instrument was sent to the entire population of Oklahoma Agricultural Education teachers. To aid in a high response rate, the Oklahoma CareerTech agricultural education office distributed an email to the total survey population. Kathie Short, secretary for the Oklahoma FFA Association and the Oklahoma FFA Alumni Association at the Oklahoma FFA CareerTech office, was the author of the CareerTech email letting the teachers know the survey would be coming and encouraging them to take the survey (see Appendix C). Her email was distributed prior to the researcher’s initial research study email.

Collection of data by the researcher began by sending an initial email (see Appendix D) to the entire population stating what the study was about, why the study was important, and how findings and conclusions from the study could benefit the respondents and the exhibition livestock industry. Dillman (2007) suggested distribution of an instrument on a Web-based
program be distributed to potential respondents by clicking on an active address link contained in an email message; therefore, the researcher used this format in all contact email messages.

The email consisted of a brief summary of the study and its purpose, a consent form, a description of respondents’ rights if they chose to be involved in the study, and a link to the active instrument website address. The initial email was sent at 7 a.m. Jan. 29, 2014, to all Oklahoma agricultural education teachers. Three reminder emails were sent to those individuals who did not respond to the initial survey. Those emails also were sent at 7 a.m. Feb. 5, Feb. 12, and Feb. 19, 2014 (see Appendix E).

An attempt was made to follow up with non-respondents; however, not enough agreed to complete the instrument to calculate data. To ensure the results of this census study were an accurate representation of the population, the researcher compared respondents to the population as suggested by Miller and Smith (1983). Demographic characteristics asked in the instrument included sex, years of teaching experience, and chapter district representation as assigned by Oklahoma FFA. The researcher obtained these same statewide demographic characteristics from the Oklahoma CareerTech office. Miller and Smith (1983) stated characteristics of the population, such as the ones listed above, could be compared to these same characteristics of the respondents. “If respondents are typical of the population … this similarity can be reported and the evaluator can then generalize from respondent sample” (Miller & Smith, 1983, p. 47). Miller and Smith (1983) suggested this rationale would indicate that the respondents are truly representative of the population.

Data Analysis

Data were analyzed using SPSS/PSAW Statistics 18.0 for Macintosh™. All nominal and ordinal data were analyzed using frequencies and percentages. The range of scores was calculated, and the mode summarized the agricultural education teachers’ perceptions. Any
responses to open-ended questions provided in the instrument were analyzed and categorized by the researcher (see Appendix F).
CHAPTER IV

FINDINGS

Introduction

This chapter will exhibit and describe the findings of this research study based on the respondents who completed instruments. The results will be reported as they relate to one of the four objectives of the study. Also found in this chapter are selected responses to open-ended questions in the research instrument as well as themes the researcher identified from the open-ended question responses. This study had a response rate of 37.38%.

Research Findings

Comparison for Non-Response

The researcher compared the statewide agricultural education teachers’ demographics received from the Oklahoma Department of Career and Technology Education and the study respondents’ demographic characteristics before the results were determined. Regarding sex, 11% \((f = 46)\) of Oklahoma agricultural education teachers are females and 89% \((f = 382)\) are males (K. Short, personal communication, April 24, 2014); in the study response rate regarding sex, 14.47% \((f = 23)\) were female and 85.53\% \((f = 136)\) were male (see Table 1). Regarding teaching experience, Oklahoma CareerTech indicated Oklahoma agricultural education teachers have an average 13 years of teaching experience (K. Short, personal communication, April 24, 2014); respondents’ teaching experience average is 14.40 years. The Oklahoma FFA chapters are
organized into districts as follows: 34% (f = 143) of chapters are located in the western districts, 20% (f = 85) are in the Central district, and 46% (f = 198) are in the eastern districts (K. Short, personal communication, April 24, 2014); the study responses regarding the Oklahoma FFA chapter districts were as follows: 36% (f = 58) were from the western districts, 19% (f = 31) were from the Central district, and 45% (f = 71) were from the eastern. As only whole number statistics were provided from CareerTech, no statistical comparisons could be made; however, no practical differences were found between statewide demographics and the study’s respondents. Therefore, with no practical difference in data, the findings of this study are an accurate representation of the census population.

Table 1

Comparison of Respondents to the Population

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Statewide Percentage (%)</th>
<th>Respondent Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>14.47</td>
</tr>
<tr>
<td>Male</td>
<td>89</td>
<td>85.53</td>
</tr>
<tr>
<td>Average Years of Teaching Experience</td>
<td>13</td>
<td>14.40</td>
</tr>
<tr>
<td>FFA Chapter District</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West</td>
<td>34</td>
<td>35.70</td>
</tr>
<tr>
<td>Central</td>
<td>20</td>
<td>19.40</td>
</tr>
<tr>
<td>East</td>
<td>46</td>
<td>44.40</td>
</tr>
</tbody>
</table>

*Note: The statewide statistics were available only in whole numbers.*
Findings Associated with Objective 1

Objective 1 sought to describe selected personal and professional characteristics of Oklahoma agricultural education teachers regarding sex, age, number of academic years teaching agricultural education, size of FFA chapter, and Oklahoma FFA chapter district. Of the agricultural education teachers who responded to the question regarding sex, 85.53% \((f = 136)\) were male and 14.47% \((f = 23)\) were female. The mean age of respondents was 39.99 \((f = 160)\). Three respondents were the youngest at 22 \((f = 3)\), and the oldest respondent was 69 \((f = 1)\). The median of the respondents’ age is 38 and the mode age was 35.

Respondents were asked to report how many academic years they have taught agricultural education. The mean number of years was 14.4 \((n = 160)\). The maximum number of academic years teaching agricultural education was 44 \((f = 1)\). The mode of the respondents teaching experience was 1, and the median teaching experience was 12. Respondents were asked how many students were members of their FFA chapters this academic year; the mean was 92.08 \((n = 160)\) and the mode was 65 \((n=160)\). The maximum number of FFA members in a respondent’s chapter this academic year was 300 \((f = 1)\), and the minimum reported was 9 \((f = 1)\).

Of the 160 respondents who answered the question regarding the Oklahoma district of their FFA chapter, 31.90% \((f = 51)\) were from the Northeast, 20.00% \((f = 32)\) were from the Northwest, 19.40% \((f = 31)\) were from the Central, 12.50% \((f = 20)\) were from the Southeast, and 16.30% \((f = 26)\) were from the Southwest (see Figure 4).
Findings Associated with Objective 2

Objective 2 was to describe Oklahoma agricultural educational teachers’ frequency use of specified technology as well as interaction with online exhibition livestock auctions.

Respondents were asked how often they use the following technologies for work-related purposes: smart phones, email accounts, iPads or other tablets, digital textbooks, social media, industry-related discussion boards, YouTube or other video sites, online magazines, and online newsletters (see Table 2). Of the respondents, 65.82% ($f = 104$) reported using a smart phone multiple times a day, and 76.10% ($f = 121$) indicated accessing an email account multiple times per day. Also, 101 respondents (64.74%) reported never using digital textbooks.
# Table 2

**Use of Technologies for Work-Related Purpose**

<table>
<thead>
<tr>
<th>Element</th>
<th>Frequency of Use</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>Less than once a month</td>
</tr>
<tr>
<td></td>
<td>$f$</td>
<td>%</td>
</tr>
<tr>
<td>Smart phone (Android or iPhone) ($f = 158$)</td>
<td>22</td>
<td>13.93</td>
</tr>
<tr>
<td>Email account ($f = 159$)</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>iPad or other type of tablet ($f = 157$)</td>
<td>41</td>
<td>26.12</td>
</tr>
<tr>
<td>Digital textbooks ($f = 156$)</td>
<td>101</td>
<td>64.74</td>
</tr>
<tr>
<td>Social media (Facebook, Twitter, LinkedIn) ($f = 158$)</td>
<td>57</td>
<td>36.08</td>
</tr>
<tr>
<td>Industry-related discussion boards ($f = 159$)</td>
<td>39</td>
<td>24.53</td>
</tr>
<tr>
<td>YouTube or other video sites ($f = 157$)</td>
<td>17</td>
<td>10.76</td>
</tr>
<tr>
<td>Online magazines ($f = 157$)</td>
<td>39</td>
<td>24.84</td>
</tr>
<tr>
<td>Online newsletters ($f = 157$)</td>
<td>33</td>
<td>21.02</td>
</tr>
<tr>
<td>Other ($f = 30$)</td>
<td>20</td>
<td>66.67</td>
</tr>
</tbody>
</table>

*Note:* Mode appears in bold.
The respondents provided examples of how they use the technology in the *other* category regarding technology they use for work purposes. These uses are presented in Table 3.

<table>
<thead>
<tr>
<th>Technology</th>
<th>$f$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Online livestock sales”</td>
<td>1</td>
<td>3.33</td>
</tr>
<tr>
<td>“Online advertisements”</td>
<td>1</td>
<td>3.33</td>
</tr>
<tr>
<td>“Online messages”</td>
<td>1</td>
<td>3.33</td>
</tr>
<tr>
<td>“Blog”</td>
<td>1</td>
<td>3.33</td>
</tr>
<tr>
<td>“n/a”</td>
<td>15</td>
<td>50.00</td>
</tr>
<tr>
<td>Unusable responses</td>
<td>11</td>
<td>36.68</td>
</tr>
</tbody>
</table>

When asked if they had ever purchased a student’s exhibition livestock project through livestock breeders’ websites, 53.75% of respondents ($f = 86$) had not, while 46.25% ($f = 74$) had purchased in this manner. When respondents were asked if they had ever purchased a student’s exhibition livestock project through an online auction 61.88% ($f = 99$) responded yes and 38.12% ($f = 61$) responded no (see Table 4). Of the respondents, 21.21% ($f = 21$) indicated viewing exhibition livestock presented in online auctions two to three times a month, and an additional 21.21% ($f = 21$) indicated viewing two to three times a week. Zero respondents indicated they never view exhibition livestock presented in online auctions (see Table 4).
<table>
<thead>
<tr>
<th>Choices</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple times a day</td>
<td>8</td>
<td>8.08</td>
</tr>
<tr>
<td>Daily</td>
<td>14</td>
<td>14.14</td>
</tr>
<tr>
<td>2 to 3 times a week</td>
<td>21</td>
<td>21.21</td>
</tr>
<tr>
<td>Once a week</td>
<td>12</td>
<td>12.12</td>
</tr>
<tr>
<td>2 to 3 times a month</td>
<td>21</td>
<td>21.21</td>
</tr>
<tr>
<td>Once a month</td>
<td>6</td>
<td>6.06</td>
</tr>
<tr>
<td>Less than once a month</td>
<td>17</td>
<td>17.17</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Respondents were asked how often they use an online auction to purchase exhibition livestock projects without evaluating the animal in person. Forty-four (44.9%) selected the rarely option. When asked how frequently they have students purchase from exhibition auctions without personally evaluating the animal in person, 32 indicated sometimes (32.99%). Zero respondents indicated they always have students who purchase exhibition livestock through online auctions without asking for their opinions, while 35.05% \((f = 34)\) respondents indicated they sometimes have students who do this (see Table 5).
Table 5

*Advisor Involvement with Purchasing Livestock Through Online Auctions*

<table>
<thead>
<tr>
<th>Element</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of show livestock projects through online auctions without evaluating the animal in person ($n = 99$)</td>
<td>17</td>
<td>17.35</td>
<td>44</td>
<td>44.9</td>
<td>25</td>
</tr>
<tr>
<td>Students purchase show livestock projects through online auctions without advisor evaluating the animal in person ($n = 98$)</td>
<td>27</td>
<td>27.83</td>
<td>28</td>
<td>28.87</td>
<td>32</td>
</tr>
<tr>
<td>Students who purchase show livestock through online auctions without advisor’s opinion ($n = 98$)</td>
<td>29</td>
<td>29.89</td>
<td>28</td>
<td>28.87</td>
<td>34</td>
</tr>
</tbody>
</table>

Findings Related to Objective 3

Objective 3 was to describe certain aspects that motivated Oklahoma agricultural educational teachers to purchase exhibition livestock through online auctions.

Ninety respondents (56.25%) indicated the most beneficial aspect of purchasing exhibition livestock at the farm or traditional auctions was having the opportunity to make personal judgment based on livestock, while 6.25% ($f = 10$) of respondents specified interpersonal communication (see Table 6).
Table 6

_Most Beneficial Aspect of Purchasing Exhibition Livestock at the Farm or Traditional Auction (n = 160)_

<table>
<thead>
<tr>
<th>Element</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity to make personal judgment based on livestock</td>
<td>90.00</td>
<td>56.25</td>
</tr>
<tr>
<td>Ability to view livestock in natural surroundings</td>
<td>36.00</td>
<td>22.50</td>
</tr>
<tr>
<td>Physical interaction with livestock</td>
<td>18.00</td>
<td>11.25</td>
</tr>
<tr>
<td>Interpersonal communication</td>
<td>10.00</td>
<td>6.25</td>
</tr>
<tr>
<td>Other</td>
<td>6.00</td>
<td>3.75</td>
</tr>
</tbody>
</table>

For the _other_ option inquiring about most beneficial aspect of purchasing exhibition livestock at the farm or traditional auction, respondents provided their own responses. From the provided responses, the researcher identified one theme of “Internet-based options.” The following are selected illustrative responses: “Online livestock sales,” “Online advertisements,” and “Online messages.”

The respondents’ leading motivator for purchasing exhibition livestock through online auctions was _variety in the choice of sellers_ (f = 34; 34.34%); _other_ (f = 31; 31.31%) was the second-highest motivator (see Table 7).
Table 7

Respondents’ Lading Motivator for Purchasing Exhibition Livestock Through Online Auctions
(n = 99)

<table>
<thead>
<tr>
<th>Element</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variety in the choice of sellers</td>
<td>34</td>
<td>34.34</td>
</tr>
<tr>
<td>Other</td>
<td>31</td>
<td>31.31</td>
</tr>
<tr>
<td>Saves time</td>
<td>18</td>
<td>18.18</td>
</tr>
<tr>
<td>More convenient</td>
<td>15</td>
<td>15.15</td>
</tr>
<tr>
<td>Saves money</td>
<td>1</td>
<td>1.01</td>
</tr>
</tbody>
</table>

The researcher found two major themes from the respondents’ information found in the other response data for instrument question regarding the respondents’ motivation for purchasing exhibition livestock through online auctions. Table 8 shows the two themes: “The only option available” and “The availability to view or purchase more livestock.” Selected illustrative quotes from the respondents support the themes.
Table 8

*Selected Statements Pertaining to Motivation for Purchasing Exhibition Livestock Online (n = 31)*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Illustrative Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only option available</td>
<td>“Because that is the only way the breeder will offer certain animals.”  &lt;br&gt;“Breeders have quit offering many of their animals for sale at home or at live auction.”  &lt;br&gt;“Forced to purchase that way because that is how they sell them.”  &lt;br&gt;“Only option available for a particular animal or breed.”  &lt;br&gt;“Only way the seller marketed their livestock.”  &lt;br&gt;“Sometimes the only option available to purchase the stock you want.”</td>
</tr>
<tr>
<td>Availability of more livestock</td>
<td>“Through online auctions, I am able to purchase animals that are in another state, that I may not of had the opportunity of viewing or buying had it not been for an online auction.”  &lt;br&gt;“Opportunity to purchase from producers in other states.”  &lt;br&gt;“Exposure to livestock we might not get to see otherwise.”</td>
</tr>
</tbody>
</table>

Respondents ranked the following factors according to why they have purchased exhibition livestock through online auctions. Respondents most frequently ranked *better selection of animals* ($f = 26; 28.26\%$) as first choice; *saves time* as second choice ($f = 38; 41.30\%$); *more convenient* as third choice ($f = 29; 31.52\%$); *saves money* as fourth choice ($f = 41; 44.56\%$); and *other* as fifth choice ($f = 61; 66.30\%$) (see Table 9).
The researcher found two major themes from the respondents’ answers found in the other response data indicating factors for previously purchasing exhibition livestock through online auctions. Table 10 displays these identified themes: “Ability to compare livestock” and “Only option available.” To support these found themes, the researcher provided selected illustrative quotes.
Table 10

*Selected Statements of Factors Pertaining to Respondents’ Previous Use of Online Auctions (n = 38)*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Illustrative Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to compare livestock</td>
<td>“Opportunity to view livestock from various places that are not always feasible to travel to.”</td>
</tr>
<tr>
<td></td>
<td>“Comparison to where I normally buy animals from.”</td>
</tr>
<tr>
<td>Only option available</td>
<td>“Can look at multiple breeder sites same day.”</td>
</tr>
<tr>
<td></td>
<td>“Only option available to purchase from some breeders.”</td>
</tr>
<tr>
<td></td>
<td>“Most breeders are using this type of marketing format.”</td>
</tr>
<tr>
<td></td>
<td>“Animals viewed in person are being sold this way.”</td>
</tr>
</tbody>
</table>

Six items asked respondents to indicate their levels of agreement about statements pertaining to their decisions to purchase exhibition livestock through online auctions (see Table 11). Of the respondents, 53 (54.08%) agree and 13 (13.27%) strongly agree that time management plays a critical role in their decision to purchase students’ livestock projects through an online auction. In addition, 50 respondents (51.02%) reported finding the livestock before recommending students purchase an animal in an online auction. Fifty-three respondents (54.08%) agreed or strongly agreed students bring their attention to perspective livestock sold through online auctions. Zero respondents strongly agree that purchasing students’ exhibition livestock projects through online auctions is the most cost effective method.
<table>
<thead>
<tr>
<th>Element</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree or Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing livestock for students through online auctions is easier than traditional purchasing methods. (n = 99)</td>
<td>19 19.39</td>
<td>23 23.47</td>
<td>24 24.49</td>
<td>27 27.55</td>
<td>5 5.10</td>
</tr>
<tr>
<td>Time management plays a critical role in deciding to purchase livestock through online auctions. (n = 99)</td>
<td>7 7.14</td>
<td>11 11.22</td>
<td>14 14.29</td>
<td>53 54.08</td>
<td>13 13.27</td>
</tr>
<tr>
<td>Purchasing students' show livestock projects through online auctions is most cost effective than traditional purchasing methods. (n = 99)</td>
<td>32 32.65</td>
<td>36 36.74</td>
<td>19 19.39</td>
<td>11 11.22</td>
<td>0 0.00</td>
</tr>
<tr>
<td>I find the livestock before recommending students purchase an animal through an online auction. (n = 99)</td>
<td>0 0.00</td>
<td>2 2.04</td>
<td>16 16.33</td>
<td>50 51.02</td>
<td>30 30.61</td>
</tr>
<tr>
<td>Students (including via their parents) bring my attention to livestock they want to purchase through online auctions. (n = 99)</td>
<td>5 5.1</td>
<td>13 13.27</td>
<td>27 27.55</td>
<td>48 48.98</td>
<td>5 5.10</td>
</tr>
<tr>
<td>Online show livestock auctions are more convenient than traditional purchasing methods. (n = 99)</td>
<td>11 11.22</td>
<td>25 25.51</td>
<td>15 15.31</td>
<td>43 43.88</td>
<td>4 4.08</td>
</tr>
</tbody>
</table>

*Note:* Mode appears in bold.
Findings Related to Objective 4

Objective 4 sought to describe the online exhibition livestock auction format preferences of Oklahoma agricultural education teachers.

When asked if the quality of exhibition livestock purchased through online auctions differs when compared to traditional purchasing methods, 59.18% (f = 58) indicated yes, while 40.82% (f = 40) indicated no. When asked their preferred media when purchasing exhibition livestock through online auctions, 81.82% (f = 81) indicated both pictures and videos, 18.18% (f = 18) indicated videos, and 0% indicated pictures.

In ranking what characteristics most influence their opinions of online exhibition livestock auctions, respondents most frequently ranked interpersonal relationship with seller (f = 47; 30.72%) as first choice; trustworthiness of seller (f = 55; 35.95%) as second choice; and the credibility of the seller (f = 37; 24.17%) as third choice (see Table 12).

The researcher found one theme from responses provided to the other category for this question about characteristics that influenced the purchase of exhibition livestock in online auctions. The researcher-created theme of “Availability of prior evaluation of livestock” included the following selected illustrative quotes from respondents: “I will not utilize an online auction, unless I can view the animals in person prior to the auction,” “if I cannot go evaluate the animal live, I will not purchase the animal,” “ability to see animal before sale,” and “being able to view livestock in person.”
### Table 12

**Characteristics Influence Opinions of Online Exhibition Livestock Auctions**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal relationship with seller(s) ( (n = 155) )</td>
<td>47</td>
<td>30.72</td>
<td>29</td>
<td>18.95</td>
<td>28</td>
<td>18.3</td>
<td>22</td>
<td>14.38</td>
<td>10</td>
</tr>
<tr>
<td>Trustworthiness of the seller ( (n = 155) )</td>
<td>37</td>
<td>24.18</td>
<td>55</td>
<td>35.95</td>
<td>30</td>
<td>19.61</td>
<td>16</td>
<td>10.46</td>
<td>9</td>
</tr>
<tr>
<td>Accessibility of the animals for pickup/delivery after purchase ( (n = 155) )</td>
<td>4</td>
<td>2.62</td>
<td>13</td>
<td>8.50</td>
<td>22</td>
<td>14.38</td>
<td>28</td>
<td>18.30</td>
<td>33</td>
</tr>
<tr>
<td>Personal ability to use or experience with online auctions ( (n = 155) )</td>
<td>3</td>
<td>1.96</td>
<td>1</td>
<td>0.65</td>
<td>1</td>
<td>0.65</td>
<td>28</td>
<td>18.30</td>
<td>29</td>
</tr>
<tr>
<td>Manipulation of animals in photos or videos ( (n = 155) )</td>
<td>26</td>
<td>16.99</td>
<td>9</td>
<td>5.88</td>
<td>23</td>
<td>15.03</td>
<td>17</td>
<td>11.11</td>
<td>25</td>
</tr>
<tr>
<td>Credibility of the seller ( (n = 155) )</td>
<td>16</td>
<td>10.46</td>
<td>32</td>
<td>20.92</td>
<td>37</td>
<td>24.18</td>
<td>20</td>
<td>13.07</td>
<td>23</td>
</tr>
<tr>
<td>Ability to compare animals from multiple breeders ( (n = 155) )</td>
<td>8</td>
<td>5.23</td>
<td>6</td>
<td>3.92</td>
<td>7</td>
<td>4.58</td>
<td>13</td>
<td>8.50</td>
<td>16</td>
</tr>
<tr>
<td>Convenience of viewing multiple sales simultaneously ( (n = 155) )</td>
<td>7</td>
<td>4.58</td>
<td>7</td>
<td>4.58</td>
<td>5</td>
<td>3.27</td>
<td>8</td>
<td>5.23</td>
<td>8</td>
</tr>
<tr>
<td>Other ( (n = 155) )</td>
<td>5</td>
<td>3.26</td>
<td>1</td>
<td>0.65</td>
<td>0</td>
<td>0.00</td>
<td>1</td>
<td>0.65</td>
<td>0</td>
</tr>
</tbody>
</table>

**Note:** Mode appears in bold.
CHAPTER V

CONCLUSIONS, RECOMMENDATIONS, IMPLICATIONS & DISCUSSION

This chapter presents the conclusions of the researcher concerning study as well as implications, recommendations for practice and future research, and a related discussion section.

Conclusions

Objective 1: Characteristics of Oklahoma Agricultural Education Teachers

The demographic characteristics of the respondents are similar to the statewide demographics and offer no practical differences. Therefore, according to Miller and Smith (1983), the researcher is allowed to generalize the findings of this study to the population, which included all 2013-2014 Oklahoma agricultural education teachers. In addition, Miller and Smith (1983) suggested this logic indicates the researchers’ respondents to the instrument are a true and accurate representation of the population studied.

Based on the findings of this study, the typical agricultural education teacher in Oklahoma is a 40-year-old male who has taught an average of 14.40 years. The average size of an Oklahoma FFA chapter is 92 members; however, the most frequent chapter size is less at 62, indicating much variance within chapter size.
Objective 2: Oklahoma Agricultural Educational Teachers’

Use of Specified Technology

The majority of agricultural education teachers in Oklahoma use their smart phones and access their email accounts frequently for work-related purposes. Agricultural education teachers are less likely to use an iPad, tablet, or YouTube; access industry discussion boards; or access online magazines or newsletters for work-related purposes. When considering social media, such as Facebook or Twitter, agricultural education teachers either use it frequently or not at all; therefore, as medium, social media offers partial contact with Oklahoma agricultural education teachers but could not be used as the only source for information distribution. Additionally, few agricultural education teachers in Oklahoma have used a digital textbook for work or in their classrooms.

Overall, agricultural education teachers are familiar with and frequently use technology, mostly to access the Internet and check their email accounts; however, this technological savvy and acceptance does not carry over to the classroom as the majority of teachers generally do not use digital textbooks for classroom instruction. These conclusions support Rogers’ (2010) diffusion of innovations theory that the success of innovations depends on certain criteria such as advantages over traditional techniques and technology compatibility.

Oklahoma agricultural education teachers have experience viewing exhibition livestock via an online auction. Furthermore, they have purchased exhibition livestock animals for students via electronic methods, most frequently an online auction. However, Oklahoma agricultural education teachers rarely, if ever, purchase an animal online without evaluating the animal in person. In addition, their students rarely, if ever, purchase an animal online without asking their advisors’ opinions, but some students will purchase an animal online without the advisor evaluating the animal in person. Evaluation of the animal before purchase, whether initially found on the Internet or not, is critical to agricultural education teachers before
considering to purchase animals online. This conclusion supports research by Roe et al. (2011) about bidders’ preferences to inspect the livestock, like you would find at traditional auctions, before actually purchasing the livestock through online auctions.

Objective 3: Oklahoma Agricultural Educational Teachers’ Motivation to Purchase Exhibition Livestock Online

For Oklahoma agricultural education teachers, the most beneficial aspect of purchasing exhibition livestock at the farm or from a traditional auction is the opportunity to make a personal judgment of the livestock. However, their leading motivators for purchasing livestock online were the variety in the choice of sellers, availability of more livestock to view, or their beliefs that buying online is the only option available for some breeders’ livestock. Various factors — better selection of animals, time saving, convenience, ability to compare livestock and “only option available” — influenced their choices to purchase online but none more so than another. The availability to evaluate livestock in person prior to purchase strongly influences Oklahoma agricultural education teachers’ decisions to purchase their students’ livestock projects through online auctions. This supports Roe et al. (2011) and Diekmann et al. (2008) regarding their conclusions that online bidders prefer direct inspection of livestock prior to purchase. In addition, Rogers (2010) concludes that new innovations, via the Internet, are accepted and easily adopted when integrated with traditional methods; in this case, the viewing of livestock as with a traditional auction being integrated with the advancement of online purchase.

Oklahoma agricultural education teachers do not share the same opinions on the ease or convenience of purchasing students’ livestock online; however, time management plays a critical role the decision to purchase students’ livestock via online auctions. These teachers do not consider online livestock purchasing as more cost effective, though the overwhelming majority find their students’ livestock before recommending the students purchase an animal through online methods.
Rogers (2010) indicates motivational and persuasion factors such as time management, accessibility to demographic locations, cost effectiveness, and other economic benefits are significant factors when considering a new innovation. The current study supports Rogers (2010) in that these factors were important to Oklahoma agricultural education teachers when deciding whether to purchase livestock through an online auction.

**Objective 4: Oklahoma Agricultural Educational Teachers’ Preference of Online Exhibition**

Oklahoma agricultural education teachers perceived a difference in the quality of livestock sold through online auctions as compared to traditional auctions. Oklahoma agricultural education teachers prefer photographs and videos when viewing online auction websites, suggesting they want to see the livestock in still images as well as in video to evaluate the animal properly. This supports the findings of Overby (2009) and Koppius et al. (2004) that products and services sold online must be represented properly through various advertisement methods.

No single characteristic rises to the top among Oklahoma agricultural education teachers, from the eight provided characteristics in the study that could influence their opinions of online exhibition livestock auctions. Therefore, a combination of all the characteristics — such as interpersonal relationship with seller, accessibility of the animals for pickup/delivery after purchase, convenience of viewing multiple sales simultaneously, trustworthiness of the seller, or any of the other provided characteristics — influence their opinions.

Rogers (2010) rationalized that “innovations are perceived by individuals as having greater relative advantage, capability, trialability, and observability, and less complexity” (p. 16). The current study supports Rogers (2010) in that no specific characteristic is the ideal key motivator or reasoning behind why Oklahoma agricultural education teachers chose to purchase through online auctions; however, they must see a greater relative advantage that has led them to adopt this technology.
Recommendations for Practice

Oklahoma agricultural education instructors use the Internet and email for work-related purposes frequently. Therefore, exhibition livestock sellers should evaluate how they promote their livestock to this audience and include these technologies. They should advertise not only via the online auction sites, which distribute email blasts weekly advertising the sale, but also they should use their own websites and social media to promote available livestock and direct potential buyers to the auction sites. Breeders should consider creating their own social media accounts on Facebook and Twitter to assist in promoting their production as well as upcoming online and traditional auctions in which their animals will be sold.

Additionally, exhibition livestock breeders who sell their livestock through online auctions should give buyers the opportunity to evaluate the livestock in person before the online auction begins. By providing buyers the option to evaluate available livestock prior to online auctions, sellers could expand their buyer population and increase sale prices.

Because Oklahoma agricultural education teachers prefer to see both photos and videos of the livestock when they consider purchasing online, auction sites that have only photographs should integrate videos into auction systems. By providing a video or a link to a video, the online auction websites and the breeders can increase the number of perspective viewers and buyers. Furthermore, online auction companies should hire their own media specialists to produce photos and videos for their auctions; this ensures they will receive consistent high-quality and trustworthy media for each online auction they conduct. Online auction managers and owners need to consider these factors when designing and implementing their online exhibition livestock auction websites.
Recommendations for Future Research

Researchers should consider sampling populations that include, but are not limited to, livestock buyers, livestock breeders, and online auction website owners/managers. Studying these targeted populations will assist in defining and determining the overall perceived implication, design, quality, and perception on online exhibition livestock auctions. In Oklahoma, researchers should collect data at meetings or conferences the agricultural education teachers are required to attend, such as during the Oklahoma CareerTech Summer Conference or district teacher meetings. This offers an opportunity for a higher response rate and to conduct focus groups and individual interviews beyond a survey instrument.

A focus group should be used to develop a more accurate understanding of what areas of the online exhibition livestock auctions are most crucial to potential buyers. From the focus group responses can come a more detailed and precise set of questions for the modification of the instrument.

Modification of the instrument should be considered. Dillman (2007) recommends placing demographic questions at the end of an instrument; in this study, the demographic questions were at the beginning because it better represented the format Oklahoma CareerTech uses for various statewide reports agricultural education teachers are required to complete. Modification and adjustments need to be made to the entire instrument if distributed among other populations to target the populations’ unique factors. Modifications to the instrument should be made to ask about adoption of the technology to describe precisely where the population is on Rogers’ (2010) adopter categories curve. In addition, to better understand where in Rogers’ (2010) diffusion of innovation model the population is, the instrument needs to be modified to ask more specific questions related to respondents and their knowledge and interaction with the innovation, in this case online exhibition livestock auctions.
Research also needs be conducted to compare the perceptions of livestock buyers and their experiences with specific online auction websites to clarify the credibility, ethical perspectives, and communication channels most desired by online auction website buyers.

Future researchers should work with established online livestock auction managers or owners to survey their clients about the clients’ online purchasing experiences. This research has the potential to not only bring more information to the industry but also to benefit the online auction website. This type of research could vastly aid in creating a similar framework for all the online auction websites from which to base their operations. This provides potential customers with a basic ability and comfort to navigate each auction site, which has the ability to increase the number of views or visitors the online auction site receives.

**Implications and Discussion**

Knowing customer preferences can benefit the breeder and online auction website manager by providing a better insight to their audience to create and provide a more user-friendly Internet auction environment for everyone involved.

Oklahoma agricultural education teachers were in strong agreement of preferring videos or videos and photographs as the primary method of viewing livestock sold online. Although this could be the result of an increase in digital photography and possible manipulation of photographs over the past decade, I believe it has more to do with and is based on the conclusion that perspective buyers prefer to have the ability to watch the livestock move around freely in videos so they can see the animals in their natural state without being displayed in a still photograph only.

Oklahoma agricultural education teachers commonly reported feeling they have no other option but to purchase livestock through online auctions. It is important to determine why they feel this way. Although Oklahoma agricultural education teachers indicated time management plays a critical role in whether to purchase students’ livestock projects online, they did not say
why, such as highest-quality livestock, last-minute purchasing for students, or breeders’ geographic locations. If it is a geographic restraint with breeders because of the lack of ability to view livestock in person prior to purchase, which I highly believe it is, then breeders need to consider their best answer still could be to travel to some traditional auctions to sell more livestock.

On an educational level, teachers reported time management plays a critical role in purchasing students livestock projects through online auctions. If agricultural education teachers across the nation, not just Oklahoma, can purchase their students’ exhibition livestock through online auctions then the educators save time and miss fewer days for in-class instruction.

As the literature indicated and supported, advancement in technology continues to evolve. If we continue to modify the way professionals interact with the livestock breeding industry via the Internet, we need to continue to research how it benefits those involved and in what ways can we modify the technology to benefit others. It appears online auctions are not only beneficial but also are still advancing and modifying to better meet the needs and wants of buyers and sellers.
REFERENCES


Morgan, K. & Holley, W. (1984, April). Comparison of selected characteristics of vocational agricultural departments in the northwest district of Oklahoma based on high, medium, or low levels of livestock show participation. Paper presented at the Southern Regional Research Conference in Agricultural Education, Oklahoma City, OK.


NASS [see National Agricultural Statistics Service].


APPENDIX A

IRB APPROVAL FORM
Oklahoma State University Institutional Review Board


IRB Application No: AG1353
Proposal Title: Oklahoma Agricultural Educators' Perception and Motivation for Purchasing Exhibition Livestock Through Online Auctions

Reviewed and Processed as: Exempt Modification

Status Recommended by Reviewer(s): Approved
Principal Investigator(s):

Kari Wendt 1703 Maple Ct Stillwater, OK 74074
Shelly Sitton 435 Ag Hall Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:
Modification to 1) email all Oklahoma Agricultural Educators, 2) increase sample size to 450 and 3) modify the survey.
No increased risk.

Signature:

Sheila Kennison, Chair, Institutional Review Board

Thursday, January 23, 2014
Date
Default Question Block

Thank you for participating in this research study!

What is your sex?
☐ Male
☐ Female

What is your age?

How many academic years have you been teaching agricultural education? Use whole numbers and count this year as one.

How many students are members of your FFA chapter this academic year?

In which Oklahoma District is your FFA Chapter?
☐ Northeast
☐ Northwest
☐ Central
☐ Southeast
☐ Southwest

How often do you use the following technologies for work-related purposes?

<table>
<thead>
<tr>
<th></th>
<th>Less than Once a Year</th>
<th>Once a Month</th>
<th>2-3 Times a Month</th>
<th>Once a Week</th>
<th>2-3 Times a Week</th>
<th>Daily</th>
<th>Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart phone (Android or iPhone)</td>
<td>☐ ☐ ☐ ☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
### What is the most beneficial aspect of purchasing show livestock at the farm or through traditional auctions?
- Interpersonal communication
- Physical interaction with livestock
- Ability to view livestock in natural surroundings
- Opportunity to make personal judgment based on livestock
- Other, please list: [Other]

### Have you purchased a student’s show livestock project through livestock breeders’ websites?
- Yes
- No

### Have you ever purchased a student’s show livestock project through an online auction?
- Yes
- No

### Does the quality of show livestock purchased through online auctions differ when compared to traditional purchasing methods?
- Yes
What is your leading motivator for purchasing show livestock through online auctions?

- No
- Saves time
- Saves money
- More convenient
- Variety in the choice of sellers
- Other: [ ]

It is more helpful to view _________ when purchasing show livestock through online auctions.

- Pictures
- Videos
- Both

How often do you view show livestock presented in online auctions?

- Never
- Less than once a month
- Once a month
- 2-3 times a month
- Once a week
- 2-3 times a week
- Daily
- Multiple times a day

Rank the following factors as to why you have purchased show livestock through online auctions.

- Saves time
- Saves money
- More convenient
- Better selection of animals
- Other: [ ]
Please select your level of agreement with the following statements. **NOTE:** A traditional purchasing method would be at a live auction or by private treaty.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing livestock for students through online auctions is easier than traditional purchasing methods.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Time management plays a critical role in deciding to purchase livestock through online auctions.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Purchase students' show livestock projects through online auctions is most cost effective than traditional purchasing methods.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I find the livestock before recommending students purchase an animal through an online auction.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Students (including via their parents) bring my attention to livestock they want to purchase through online auctions.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Online show livestock auctions are more convenient than traditional purchasing methods.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

**How often do you ...**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase show livestock projects through online auctions without evaluating the animal in person?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Have students purchase show livestock projects through online auctions without you evaluating the animal in person?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Have students who purchase show livestock through online auctions without your opinion?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Rank the following characteristics that influence your opinion of online show livestock auctions.
• Trustworthiness of the seller
• Accessibility of the animals for pickup/delivery after purchase
• Personal ability to use or experience with online auctions
• Manipulation of animals in photos or videos
• Credibility of the seller
• Ability to compare animals from multiple breeders
• Convenience of viewing multiple sales simultaneously
• Other, please list: ________________________________
APPENDIX C

OKLAHOMA CAREERTECH LETTER
On 02/05/14, Kathie Short <Kathie.Short@careertech.ok.gov> wrote:

Chance to win one of three $50 gift cards and help Kari Wendt with her thesis

From: Wendt, Kari [mailto:kwendt@okstate.edu]
Subject: Assistance with Research Study

Thesis Outline

Population/Sampling: The population for this study is all Oklahoma high school agricultural education instructors currently teaching this academic school year. The online questionnaire will be sent by email. To incentivize this study the sampling participants have the opportunity to provide their email addresses to be placed in the drawing for three $50 gift cards.

Purpose: The purpose of this study is to access the perceptions and motivation of agricultural educators’ toward online auctions for students exhibition livestock projects.

Objectives:

1. Determine the motivation to purchase show livestock through online auctions as perceived by select Oklahoma agricultural education teachers.
2. Describe the characteristics of online show livestock auction customers.
3. Determine the online show livestock auction format preferences of selected Oklahoma agricultural education teachers.
4. Determine the relationship of individuals self-report of technology and use of technology.

Your help with this matter would be greatly appreciated.

Thank you,

Kari Wendt
Oklahoma State University
Graduate Assistant
DASNR International Programs
(405) 227-3373
APPENDIX D

ININITIAL LETTER TO PARTICIPANTS
Greetings! As an Oklahoma Agricultural Education instructor for the 2013-2014 academic school year, you have been selected to participate in a research project titled “Oklahoma Agricultural Educators’ Perceptions and Motivations for Purchasing Exhibition Livestock through Online Auctions.”

The purpose of this web-based questionnaire research study is to determine selected characteristics about agricultural educators who purchase or have not purchased a student’s show livestock project through online auctions. If you choose to participate, you will be asked questions about your experience with online livestock auctions as well as selected motivators and personal characteristics to aid in research analysis.

The amount of time to complete the survey will be approximately 15 minutes. Your identity is kept confidential and in no way will influence your responses in data collection. If you choose to provide an email address at the end of the questionnaire and be registered for one of three $50 gift cards, you will not receive any additional information from the researchers. Additionally, that email address will be extracted from the data to ensure anonymity.

By clicking on the link below, you are giving your consent to participate in this study. To access the online survey, please use your Internet browser of choice and go to (insert survey link here).

Your immediate response would be appreciated greatly.

You may choose at any time to withdraw from the study without penalty. The risks associated with this project are not greater than those ordinarily encountered in daily life. Your responses are voluntary and confidential, and they will be treated with confidentiality. Your e-mail address was included via the Oklahoma CareerTech website link of agriculture teachers e-mail database.

All answers will be stored online in a password-protected software account until the survey is closed; then, they will be transferred to a password-protected computer to be analyzed. Any written results will discuss group findings and will not release any information that could possibly identify you as an individual. The data will be kept for up to five years on a password-protected computer only available to the principal investigator and advisor.

We would appreciate your assistance with this survey. If you have any questions or concerns about this project, please contact Kari Wendt, M.S. Student, at 405-744-3690 or kwendt@okstate.edu or Shelly Sitton, Professor, at 405-744-3690 or shelly.sitton@okstate.edu. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

Investigators: Kari L. Wendt, M.S. Student; Shelly Sitton, Professor
APPENDIX E

FOLLOW-UP LETTER TO PARTICIPANTS
Hello! Last week, you received a message asking for your perceptions of purchasing exhibition livestock via online auctions.

This research project, titled “Oklahoma Agricultural Educators’ Perceptions and Motivations for Purchasing Exhibition Livestock through Online Auctions,” is to determine selected characteristics about agricultural educators who purchase or have not purchased a student’s show livestock project through online auctions. If you choose to participate, you will be asked questions about your experience with online livestock auctions as well as selected motivators and personal characteristics to aid in research analysis.

The amount of time to complete the survey will be approximately 15 minutes. Your identity is kept confidential and in no way will influence your responses in data collection. If you choose to provide an email address at the end of the questionnaire and be registered for one of three $50 gift cards, you will not receive any additional information from the researchers. Additionally, that email address will be extracted from the data to ensure anonymity.

By clicking on the link below, you are giving your consent to participate in this study. To access the online survey, please use your Internet browser of choice and go to (insert link to questionnaire here).

Your immediate response would be appreciated greatly.

You may choose at any time to withdraw from the study without penalty. The risks associated with this project are not greater than those ordinarily encountered in daily life. Your responses are voluntary and confidential, and they will be treated with confidentiality. Your e-mail address was included via the Oklahoma CareerTech statewide agriculture teachers e-mail database.

All answers will be stored online in a password-protected software account until the survey is closed; then, they will be transferred to a password-protected computer to be analyzed. Any written results will discuss group findings and will not release any information that could possibly identify you as an individual. The data will be kept for up to five years on a password-protected computer only available to the principal investigator and advisor.

We would appreciate your assistance with this survey. If you have any questions or concerns about this project, please contact Kari Wendt, M.S. Student, at 405-744-3690 or kwendt@okstate.edu or Shelly Sitton, Professor, at 405-744-3690 or shelly.sitton@okstate.edu. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

Investigators: Kari L. Wendt, M.S. Student; Shelly Sitton, Professor
APPENDIX F

“OTHER” RESPONDENT STATEMENTS
Statements Pertaining to Questions with other Responses Provided by Respondents

Statements Pertaining to Technology Frequency for Work-Related Purposes

INTERNET-BASED OPTIONS
“Blog”
“Online livestock sales”
“Online advertisements”
“Online messages”

OTHER RESPONSES
“A”
“Ag ed”
“Text”
“Textbooks”

UNUSABLE RESPONSES
“Internet”
“Jerry.brooks@guthrieps.net”
“n/a”
“Never”
“Newspaper”
“None”
“Streaming media”
“Toilet paper”
“Websites from a hard mounted computer in my classroom”
Statements Pertaining to Motivation for Purchasing Exhibition Livestock Online

ONLY OPTION
“Because that is the only way the breeder will offer certain animals.”
“Breeders have quit offering many of their animals for sale at home or at live auction”
“Forced to purchase that way because that is how they sell them.”
“I have no choice”
“Only if that is where the animals is sold is online”
“Only option available for a particular animal or breed”
“Only option for some breeders is online sales”
“Only way breeders will sell them”
“Only way the seller marketed their livestock”
“Some breeders use this method only”
“Some livestock I want are only sold online”
“Sometimes the only option available to purchase the stock you want”
“Sometimes they will only sell through online auctions”

AVAILABILITY TO MORE LIVESTOCK
“Exposure to livestock we might not get to see otherwise.”
“Location of the Breeders”
“More available animals”
“Opportunity to purchase from producers in other states”
“Through online auctions, I am able to purchase animals that are in another state, that I may not of had the opportunity of viewing or buying had it not been for an online auction.”

LIVESTOCK LOCATION AND ACCESS
“Access is the biggest reason. Most of these producers are using this resource and have limited our ability to go to farms for purchases.”
“Afraid you might miss something someone else might get or you might not see at the farm.”
“Can be in more than one place at once”
“Lets me see what is out there for quality and what they are going for.”
OTHER RESPONSES

“Looking for a bargain”

“Many breeders are selling online, so there are fewer places to buy livestock in other ways.”

“Parents looking online”

“The money never has to go through me the students can pay the breeder directly and I am not held responsible for that student’s money.”

“They hold all of the sales within a couple weeks from each other and you have to use the online sales because you can’t be everywhere at one time. Also the breeders better animals are on the online sales because they get more people interested.”

“Was out of time and options.”

“All the above”

“All the above except saves money”

Statements Pertaining to Factors to Why Respondents Had Previously Purchased Exhibition Livestock Through Online Auctions

ABILITY TO COMPARE LIVESTOCK

“Opportunity to view livestock from various places that are not always feasible to travel to.”

“Comparison to where I normally buy animals from.”

“Can look at multiple breeder sites same day”

ONLY OPTION AVAILABLE

“Only option available to purchase from some breeders”

“Most breeders are using this type of marketing format”

“Animals viewed in person are being sold this way”

“That’s where livestock is being offered for sale”

“If that is the place where they are sold”

OTHER RESPONSES

“It does not save money”

“No other reasons”

“None”
Statements Pertaining to Characteristics of Respondents Opinions of Online Exhibition Livestock Auctions

NO OTHER CHARACTERISTICS THAN LISTED
No
None
No other reason
No other reasons

AVAILABILITY OF PRIOR EVALUATION
“Ability to see animal before sale”
“Being able to view livestock in person”
“I will not utilize an online auction, unless I can view the animals in person prior to the auction”
“If I can not go evaluate the animal live, I will not purchase the animal”
“Availability of a particular animal”

OTHER RESPONSES PROVIDED BY RESPONDENTS
“Don’t like the style that bids close and if you have bid then you can continue to bid which may go on for a long time”
“Online makes us drive twice. Once to look at them before the auction to check for credibility. Then again to pick up the animal. I like to go one time.”
“That’s where the animal is offered for sale”
“The only way to purchase from select breeders”
RESPONDENTS’ RESPONSES

“All of the above”

“Combination of in person contacts and viewing the livestock”

“Involving student in process”

“Videos can hide structure, soundness, and attitude also can misrepresent size by having smaller panels surrounding the livestock”

“You can know who is bidding against you at an auction”
VITA

Kari L. Wendt

Candidate for the Degree of

Master of Science

Thesis: PERCEPTIONS OF AND MOTIVATIONS FOR PURCHASING EXHIBITION LIVESTOCK THROUGH ONLINE AUCTIONS

Major Field: Agricultural Communications

Biographical:

Education:

Completed the requirements for the Master of Science degree in Agricultural Communications at Oklahoma State University, Stillwater, Oklahoma, in July, 2014.

Completed the requirements for the Bachelor of Science degree in Agricultural Education at Oklahoma State University, Stillwater, Oklahoma, in 2010.

Experience:

OSU DASNR International Programs, August 2013 – June 2014
Graduate Assistant
Create, design and maintain programs webpage (www.internationalagprograms.okstate.edu) and Facebook page (DASNR International Programs at Oklahoma State). Design, edit and organize study abroad course flyers using Adobe Creative Suite programs. Photograph international visitors for multimedia and print use. Work with Program Director to ensure weekly goals and individual assignments were completed/achieved.

Alva Public Schools, August 2010 – June 2012
Agricultural Education Instructor & FFA Advisor
Planned and implemented chapter and community activities, focused on building a support system. Supervised students at contests and conventions who were responsible for representing the chapter and community, in addition to preparing and coordinating chapter trips to livestock show, camps, conferences and contests.