

## **Introduction and Purpose of Study**

This research paper is for a professional project with Tyson Foods, Inc. subsidiary, Tyson Foods Local Grain Services (LGS). The international leader in the food industry relies heavily on corn to feed and produce its millions of chickens. The corporation developed a department, Tyson Foods LGS to strategically buy corn from farmers near and around their poultry farmers – cutting costs on transportation and costs of paying the middlemen. The challenge Tyson Foods LGS faces is efficiently reaching out to farmers about this new business. This is due to the lack of knowledge of the specific media channels corn farmers are utilizing to establish these business-to-business relationships, and how and why farmers are using them. Media channels, or the different platforms users utilize to get information, can be broken into two categories: Traditional media (TV, newspapers, magazines, radio, billboards, mail, and face-to-face) and new media (social media, websites, blogs, email, and mobile apps).

This research will explore the media channels farmers use to establish business relationships through four focus group discussions (FGDs) with six farmers each from Missouri and Arkansas. Little research has been done on this topic of farmers and their use of media channels. The few similar studies found were conducted quantitatively (Doerfert, Graber, Meyers, & Irlbeck, 2012; Shaw et al., 2015; Van Dalsem, 2011), which provided insight into patterns of farmer's media use but did not explore the underlying reasons why and how farmer's use media channels. Qualitative methods, such as focus group discussions, would benefit this phenomenon by unearthing insights. Understanding this phenomenon can help researchers better understand this niche group and help professional communicators to ensure efficient communications strategies geared towards farmers.

## **Theory Framework**

### **Diffusion of Innovation Theory**

The theoretical framework for this study draws on two theories: Rogers' (2003) diffusion of innovations theory and uses and gratifications theory (Katz, Blumler, & Gurevitch, 1973). The diffusion of innovations theory explains how new ideas, practice, or products are spread among groups of people. Diffusion of innovations has been applied in many disciplines (Rogers, 2003) and cited in numerous studies, particularly the adoption of new online media. The theory has been used to understand why some users are leaving specific media platforms for others (Coursaris, Yun, & Sung, 2010) and to find specifically who is using certain technologies (Peng & Mu, 2011). The dissemination follows an order of adopters: innovators, early adopters, early majority, late majority and laggards (Rogers, 2003). Rogers (2003) stated that characteristics are different among people who adopt an innovation earlier than people who adopt an innovation later. The innovation's characteristics, from the adopter's perception, help explain the different rate of adoption. These include the economic or social advantage, how compatible it is with existing values, how complex the innovation is, trialability, and observability (Rogers, 2003).

**Economic/Social Advantage** identifies if the innovation is better than the idea it is taking over (Rogers, 2003, p. 212). The advantage is typically expressed in economic profitability, social status or other benefits. Griliches (1957), an economist, conducted a study on U.S. farmers and their adoption of hybrid corn. He believed that over the long haul, "sociological variables tend to cancel themselves out, leaving the economic variables as the major determinants of the pattern of technological change" (Rogers, 2003, p. 213).

**Compatibility** refers to how well an innovation meshes with an individual's existing values, past experiences, and the needs of potential adopters (Rogers, 2003, p.224). Rogers notes

an innovation can be compatible or incompatible with sociocultural values and beliefs, with previously introduced ideas, or with needs for the innovation. How compatible an individual is with an idea they previously adopted can increase or decrease the adoption rate. “Old ideas are the main mental tools that individuals utilize to assess new ideas,” Rogers noted (2003, p. 225). Compatibility can also come in the form of meeting an individual’s felt need. Individuals may not realize they have a need for an innovation until they are made aware of the innovation or its consequences (Rogers, 2003). If these felt needs are fulfilled, the adoption rate typically increases.

**Complexity** refers to how difficult a new innovation is to understand and use.

Rogers(2003) states that an innovation’s complexity is negatively related to its adoption rate. In a study of the first adopters of home computers, researchers – Rogers, Daley, and Wu (1980) – found that early adopters experienced several weeks of extreme frustration in understanding how to use a home computer. Rogers(2003) stated the “perceived complexity of home computers was an important negative force on their adoption rate in the early 1980s” (p. 243). Home computers eventually became easier to use, and the adoption rate rose gradually to about 30 percent of all U.S. households by 1994 (Rogers 2003).

**Trialability** is the extent to which an innovation may be experimented with. New ideas that can be tried out are generally adopted more rapidly (Rogers, 2003). By having the opportunity to test out an innovation, individuals are able to give meaning to the innovation and discover how it works. Trialability can eliminate any doubts about a new idea. Rogers (2003) determined trialability of an innovation is positively related to its adoption rate. Researchers (Gross, 1942; Ryan, 1948) stated that trialability is considered more important for earlier adopters than for later adopters

**Observability** refers to how visible an innovation is to others. Some ideas and its consequences are easily observed to others, such as new technology. Other innovations, however, are more difficult to describe or be visible to others. Rogers (2003) determined observability of an innovation is positively related to its adoption rate.

Rogers (2003) stated diffusion is the process by which an innovation is communicated to members of a social system through certain channels. Individual's make innovation decisions based on a five-step process (Rogers, 2003):

1. Knowledge – person becomes aware of an innovation and has some idea of how it functions.
2. Persuasion – person forms a favorable or unfavorable attitude toward the innovation.
3. Decision – person engages in activities that lead to a choice to adopt or reject the innovation.
4. Implementation – person puts an innovation into use.
5. Confirmation – person evaluates the results of an innovation-decision already made.

Rogers (2003) also notes the importance of understanding a target populations' characteristics when promoting an innovation because it could influence the adoption of the innovation. The communication channels used to spread an innovation may also help or hinder the innovation's adoption rate. Researchers (Petrini et al., 1968) found that different communication channels and the complexity of an innovation can influence the adoption rate for Swedish farmers. Media channels, such as agricultural magazines, were preferred for less complex innovations. However, Swedish farmers preferred interpersonal contact with company representatives or extension agents when the innovation was more complex. It is suggested that if an inappropriate media channel was used, the rate of adoption would be slower.

### **Uses and Gratifications**

Uses and gratifications (U&G) theory is relevant to media channels because of its origination in communications literature (Whiting & Williams, 2013). Traditionally,

communication researchers asked the question of what the media do to people. A U&G approach was first formally outlined by Katz (1959) when he instead asked what people do with the media. U&G theory addresses how people choose particular media to fulfill certain needs they expect to be met. The basic goals of this theory, as outlined by Katz, Blumler, and Gurevitch in 1974, are: "(a) to explain how people use media to gratify their needs, (b) to understand motives for media behavior, and (c) to identify functions or consequences that follow from needs, motives, and behavior" (Bryant & Zillmann, 1994, p. 527). The core assumption of U&G is that the audience is active, not passive, in choosing media to fulfill their needs and wants. Their selection and use of media is purposive and motivated to satisfy their social and psychological needs or desires (Katz, 1959).

Rosengren (1974) stated that to stimulate motives for media use, communication should intermingle with social and psychological factors. To meet a specific goal, people will select a certain type of media based upon its ability to help meet that goal (Katz et al., 1973). One defining portion of the theory suggests that U&G theory researchers recognize that the audience may select more than one type of media and some media choices may be older, more traditional types of media, such as TV, radio or newspaper, that satisfy needs in unchanged ways (Katz et al., 1973). The theory also emphasizes that motives, attitudes, and behaviors of media consumption varies by individual or group (Papacharissi, 2009), such as farmers. U&G studies typically look at a specific medium or compare U&G across media. It has historically addressed choices in traditional media such as print, radio, and television. However, current studies are exploring the major trends in U&G and extending the framework to newer media and genres (Papacharissi, 2009).

**Classification.** Palmgreen (1984) summarized uses and gratifications research into an overarching umbrella of six main areas that specifically relate to the scope of U&G research: (1) gratifications and media consumption; (2) social and psychological origins of gratifications; (3) gratifications and media effects; (4) gratifications sought and obtained; (5) expectancy-value approaches to uses and gratifications; and (6) audience activity. Some researchers base their studies and focus on one of the areas he identified. Within each of these areas, several classifications of mass media uses have been suggested. When entertainment was added as a media use, Wright (1959) recommended a category which would assume importance in other classifications, such as play and pleasure (Stephenson, 1967). Conversely, McQuail (1972) suggested that the most common motivation of media users was escaping reality. In addition, other researchers proposed that media needs may be “cognitive, affective, or both, and oriented towards an individual’s sense of self or the social environment” (Gurevitch, Katz, & Haas, 1973). Of the classifications addressed, researchers grouped media use into five main categories, (Katz et al., 1973): (1) be informed or educated (cognitive needs), (2) strengthening aesthetic, pleasurable, and emotional experience (affective needs), (3) social interaction with family, friends, and the world (integrative needs), (4) escape from reality, and (5) to increase credibility, confidence, and status.

**Criticism.** Uses and gratifications research has long been challenged for various reasons. The assumption that the audience is active and in control, is argued by researchers (Lometti, Reeves, & Bybee, 1977) that “uses and gratifications are mediators of, rather than substitutes for, media effects” (p. 325). Others (Barratt, 1990) question the view that there are no “hidden messages” in media content. Researchers have also expressed the concerns about the limited scope of U&G. Palmgreen, Wenner, and Rayburn (1981) argue that there is still a lot to learn

about gratifications and how they relate to media behavior. More fundamentally, some mass communication scholars have contended that uses and gratifications are not a rigorous social science theory and criticized it for being vague and atheoretical. It has been accused by many scholars including Swanson (1977) of simply restating some aspects of theories, and offering little more than an approach to collect data or a research strategy. However, several U&G researchers beg to differ (Blumler, 1979; Palmgreen, 1984; Papacharissi, 2009; Ruggiero, 2000). Ruggiero (2000) also talks about the debate if U&G is a “legitimate” theory. He argues that with newer media emerging, U&G is a rigorous theory and will be applied to understand new media because it brings a wider range of media channels for audience to choose from (Ruggiero, 2000). With the core criticism that U&G is non-theoretical, Palmgreen (1984) argues that it would be difficult to defend such a statement today because growth of theory of U&G has increased. Researchers stated that U&G is now shifting to theory development focusing on understanding and explaining how an audience’s motives, motives, expectations, and behaviors are interconnected (Katz, Blumler, & Gurevitch, 1974).

Recent studies have explored major trends in U&G and applied the framework to studies about new media and different genres (Papacharissi, 2009). Whiting and Williams (2013) explored the U&G that consumers receive from using social media. They found ten U&G relevant to social media including interaction, information seeking and entertainment (Whiting & Williams, 2013). The researchers cited that previous studies have provided that gratifications are “good predictors” of what media consumers use and will use again. U&G can be essential when developing “better scales and measurement instruments” for social media marketers (Whiting & Williams, 2013, p. 362). This statement is important to bear in mind when looking at U&G from an advertising and marketing perspective.

## Literature Review

While many DOI and U&G studies have been conducted to explore various media and genres, few have looked at farmers and their media use. Recent research reported that farmers use both traditional and non-traditional sources of media to get news and information about new products and services (National Association of Farm Broadcasters, 2010; Readex Research, 2016; Woodruff, 2016). These studies show that using the internet for information and news-seeking purposes has increased over time. However, in these studies, the internet was not the primary or secondary selected communication channel for farmers. In the American Business Media Agri Council's 2016 media channel study (Readex Research, 2016) findings indicated that digital and mobile use was growing rapidly. However, print media channels (newspapers and magazines) still remained the most salient way farmers were learning about new products, services, and information.

One study explored the use of traditional and social media farmers in Texas (Doerfert et al., 2012). This study had several objectives including exploring what media channels were used to make production or business decisions and access information. The researchers found that farmers were multiple channel consumers who were utilizing traditional media and were just starting to use new media for personal reasons. Agricultural magazines were used as the primary channel for information seeking and decision making, and social media was not used in any form to assist in decision making or finding new products or services. Farmers indicated magazines were most frequently used to help make business decisions and access information. After magazines, the most used media channels were interpersonal or peers, newspapers and extension agents with internet sites coming in last. The most consistently underused media channels included radio, blogs, Facebook and Twitter.



Shaw et al. (2015) took this research one step further to determine what stage of adoption farmers are in with new media channels. The researchers state that U&G can explain why people leave traditional media for new emerging online media, specifically, Facebook, Google+, Twitter, YouTube, and websites. These were selected by the researchers to examine based on popularity of use. People tend to choose new media because it is filling the same social and psychological needs as traditional media did. The following research questions were constructed to achieve the study's purpose of determining farmer's use of online communication tools: (1) "What is the extent of the respondents' personal use of online communication tools? (2) What is the extent of respondents' business use of online communication tools? (3) What relationship exists between online communication tool use for personal and business purposes?" (Shaw et al., 2015, p. 4). Researchers found that websites – no specific websites – and Facebook were regularly used among the participants for personal and business use. About one third of the respondents indicated that websites were the sole and only tool they used every day for business purposes. The researchers were grasping for a reason why farmers weren't using more online communication tools or new media for business purposes. Justification for this can be found with the diffusion of innovations theory in that "adoption is a function of time and influenced by innovation attributes such as trialability, observability, and compatibility (Rogers, 2003)" (Shaw et al., 2015, p. 13). This indicates that farmers may still be in the initial adoption stages for new media. What is not known from this study is if new media channels are in the early stages of adoption or have already been rejected.

Another study explores the contexts surrounding the information seeking of Australian grain and cotton growers (Starasts, 2015). The researcher examined what guides farmer's information seeking for business purposes and what they considered to be information. The

findings suggest that farmers used online databases and systems that provided them with information from farmers in specific locations – typically those who lived near them. Farmers also sought answers or information from other farmers who had similar problems as them. To help other farmers out, farmers would share their own experiences.

These prior studies provide insights into farmers and their media uses, but the gap provides a need for qualitative research. The DOI theory and U&G theory will help provide a framework for understanding the experiences of farmers and their media uses, and help answer the following research questions:

**RQ1:** What media channels are corn farmers utilizing to establish their business relationships?

**RQ2:** How are farmers using these media channels?

**RQ3:** Why are farmers using specific media channels over others to establish business relationships?

## **Methodology**

### **Case study**

A single case study approach using four focus group discussions (FGDs) comparing two different types of participant groups were utilized to explore the research questions, and uncover patterns and linkages to theory (Daymon & Holloway, 2002). A case study is usually associated with a location, but the case may be an organization, an event, or – in this case – a set of people, corn farmers. Case studies aim to increase knowledge about real, contemporary communication events in their context. Daymon and Holloway (2002) stated that questions about how and why things occur in a particular situation, or “what is going on here?” are your primary concern when you opt for a case study approach. The subject of the case study is the “practical, historical

unity” through which the theoretical focus of the study is being viewed (Daymon & Holloway, 2002). The object is the theoretical focus – the analytical frame. In this current study, the object is farmers and their media uses for business reasons, and the subject is Tyson Foods Local Grain Services’ corn farmers. This case was selected primarily for practical reasons as I was working there at the time of this study, and the findings would also help prioritize marketing strategies for Tyson LGS. In addition, the case is an understudied phenomenon, which lends itself as a logical choice for selection (Stake, 1995). The case was also selected for the “everyday goings on” (Daymon & Holloway, 2000, p. 110). Daymon and Holloway (2000) stated that analyzing “how and what things become ordinary or generally acceptable can make a significant contribution” (p. 110).

### **Focus Group Discussions**

Four FGDs were conducted to elicit the responses needed to answer the research questions. There was an important need for four FGDs because qualitative studies require in-depth data and the only way to do this is to conduct more than one FGD. This method is the most appropriate because the objectives of analyses are to explore corn farmers’ current behaviors and feelings about media uses in relationship with businesses. Each FGD was conducted at 90-120 minutes with minigroups, which consisted of a homogeneous group of six participants. Greenbaum (1993) states that some researchers like to use minigroups rather than full groups, which consists of 8-10 participants, because “they feel they can gain more in-depth information from smaller groups” (Greenbaum, 1993, p.3). With a smaller group, participants had more time each for input. Although FGDs elicit in-depth data, they are lacking in a few areas. Some participants were hesitant to express their honest thoughts, but strategic moderations helped allow each member to speak their thoughts.

## **Demographic Criteria and Sampling**

Participants were purposively recruited from farmers who have and continue to sell their grain to Tyson Foods LGS. Access to their contact information was simple because every farmer had a profile with their contact information listed on the company server. These profiles showed that farmers who make the business decisions and sell the grain are male Caucasians ranging from ages 25 to 80. Age was not a criterion in this study as having a good range of ages in each FGD will produce a true cross sample of experiences.

In order to answer the research questions and apply the theories to better understand this niche group and their media uses, FGDs were conducted with groups of active corn farmers and groups of less active corn farmers. Active corn farmers are consistently selling their grain to the company and interacting with the company regularly, whereas less active farmers had not sold or interacted with the company within the last six months. This comparative study will allow the researcher to look at why some farmers aren't as receptive as others. The first two FGDs in Missouri and Arkansas consisted of six active farmers each. The last FGDs in Missouri consisted of six less active farmers each. The FGD locations were chosen for convenience reasons. Emails were sent out to the selected focus group participants with a deadline to accept or decline by. Phone calls followed the emails to assure the farmers knew what and why they were asked to participate. In total, 24 farmers were asked to participate but only 20 participated. Two farmers from one of the less active groups were no-shows. They had confirmed their participation but did not show up to the FGDs, so there was no time to contact the back-up potential participants. Participants' identities have been kept confidential. Because the FGDs were conducted face-to-face, it is automatically labeled as confidential and I would be able to identify who provided the data (Statistics Solutions, 2009). The data was analyzed at the group level. Each participant was

also incentivized with \$25 gift cards funded by the Division of Applied Social Sciences through the University of Missouri College of Agriculture, Food and Natural Resources.

### **Data Collection**

The four FGDs were conducted between June – August 2018. The discussions were structured around an interview guide, a list of open-ended questions. A set of predetermined semi-structured and theory-based questions were constructed ahead of time (See in Appendix A). A pilot study of the FGD was conducted in early June, which led to minor restructurings of a few questions in the discussion guide. Time and room were also made to serve any questions that arose during the discussion. According to Harrell (2009), semi-structured interviews collect detailed information in a style that is conversational for participants. This type of interview is typically used when a researcher's goal is to delve deep into a topic and understand the answers the participants provide (Harrell, 2009). The aim of the FGD was to foster a free-flowing discussion. The participants' own comments stimulated and influenced the sharing of others in the group. Creative techniques were also implemented to elicit the responses needed. These included having farmer's draw their decision-making process and the media channels involved. The FGDs were video-taped and transcribed. Demographic questions were asked to break the ice and initiate the conversation, followed by questions, such as "Where do you get new information about agricultural businesses?" or "Write down what a typical day looks like, including any time you have interactions with media channels."

Open coding was used for the initial analysis. All transcripts were read vertically, then horizontally (Dey, 1993). After listing the different types of media channels used and pulling low inference descriptors, or direct quotes, from participants related to the channels, pattern coding was utilized (Saldaña, 2013). I then used the five-step decision process within the diffusion of

innovations theory to help categorize what media channels were used during which step of the decision-making process, which made analyzing much simpler and more organized. I took on the epistemological orientation of social constructivism, which guided the analysis process. Social constructivism argues that reality and the meaning or categories that frame everyday life are created socially. This perspective, in terms of FGD analyses, emphasizes that group members collaborate on “some issue, how they achieve consensus (or fail to), and how they construct shared meanings about products, communications, or social concerns” (Stewart, Shamdasani, & Rock, 2007).

### **Findings**

All participants were Caucasian males and ranged between the ages of 30 – 67. The ages of the less active participants were 44, 47, 49, 50, 54, 59, 62, 67, 67 and 69. The active participants were 30, 30, 32, 37, 38, 42, 43, 53, 58 and 66 years old. The amount of time these farmers have been farming ranged drastically between 3 – 50 years, with the majority of the younger farmers having fewer years of experience.

Table 1 shows a summary of the media channels farmers use and indicates how they are used. Active participants indicated they used more new media channels than traditional, and less active participants used more traditional media channels than new media channels. Researchers (Katz et al., 1973) recognized that people may select more than one type of media, with some choices being more traditional types of media that satisfy their needs in unchanged ways.

While farmers are using multiple media channels, they are also using them for different reasons to fulfill different needs. Table 1 shows what media channels were used during which steps of decision-making process. The findings point that farmers are using media channels during step 1 of knowledge, and step 3 of making a decision. Orr (2003) states that the

knowledge step is when an individual becomes aware of an innovation and has some idea of how it functions. The decision step is when the individual engages in activities that lead to a choice to adopt or reject the innovation.

**Table 1** Summary of how farmers use media channels

<b>Media channel types</b>	<b>Less active and/or active</b>	<b>DOI: Five-step decision process (Orr, 2003)</b>	<b>How farmers used the media channel</b>
Interpersonal: Word of mouth from neighbor or friends	Less active and active	Step 1: Knowledge	Passively happens during casual conversations or need recognition leads to this
	Less active and active	Step 3: Decision	Actively seeking peer's reviews and own experiences
Google search	Active	Step 1: Knowledge	Need recognition leads to online search
	Less active and active	Step 3: Decision	Search for more information about the company through company website or published articles
Facebook	Less active and active	Step 3: Decision	Search for reviews from peers or mentions about the innovation, and examine the company's page
Twitter	Active	Step 1: Knowledge	Search for new innovation from farmers across the country
YouTube	Less active and active	Step 1: Knowledge	Actively seeking new innovations
Radio	Less active	Step 1: Knowledge	Passively happens as radio is constantly on
TV	Less active and active	Step 1: Knowledge	Passively happens
Magazine	Less active and active	Step 1: Knowledge	Actively seeking ads and articles about new innovations

## **Word-of-mouth**

Word-of-mouth is both actively sought after a need is recognized and passively learned through casual conversations with peers. Both active and less active participants use word-of-mouth to help make decisions through their peers' reviews. Below I list a few examples of how participants have used word-of-mouth from peers to become aware of a new innovation and to make a decision about the innovation. The letter "A" indicates the quote came from an active participant and "LA" indicates it came from a less active participant.

*"They've experienced it themselves and they've also done the research and I've never done research. Why do I have to bother doing it? I trust them." (LA)*

*"We often have a neighbor, he says, 'Try this. I've tried it out for so long it works for me and saves me money or makes me money.' I appreciate when he does that because it's the best and it's saved me a lot of time from having to search for things and do a lot of digging." (LA)*

*"If somebody else actually used it first and are talking to people and tell us about their experiences, we'll listen but will also look it up and get our own opinion."*  
(A)

Overall, participants in this study identified word-of-mouth as an important way to become aware of new innovations, be persuaded about the innovation, and helps them decide to adopt or reject the innovation. Non-active participants rely heavily on their peers' reviews and recommendations. The FGD setting allowed me to witness this happen during the discussions. One participant talked about a Facebook group he was a member of and a YouTube channel he watched to learn about new agricultural practices. Every participant immediately jotted down notes and followed-up with questions such as, "What kind of things have you learned?" and "How do you spell that?"

## **Google**



Active participants used Google to find a solution when they recognize a need. Google search is also used by both LA and A participants to seek more information about the innovation, company behind it or any articles published about it.

*"Speed is key. If you want to know something, you can Google it pretty quickly."*  
(A)

*"If I want to know about something, then I'll go Google it then find the company website." (A) "But nobody puts anything on their website or online about how crappy they are or their product is. Still trial and error and visiting with other people and that sort of thing." (LA)*

## **Facebook**

Facebook is used by both groups for two separate reasons: (1) Search peers' reviews and experiences with the innovation, and (2) examine the company's Facebook page to see how it interacts with customers.

*"In terms of businesses, you can get a pretty quick feel about a company through their social media page because the people that are gonna comment generally are the ones that they've upset. So I mean you can very quickly see some very upset people and read what they have to say and kind of put it in perspective and how the company dealt with them." (LA)*

*"With Facebook, other users and farmers are writing their own reviews and I trust them more than the own company's words." (A)*

*"Social media is fast and quicker than traditional." (A)*

However, some less active participants indicated they did not use Facebook and commented on why they prefer not to use it:

*"There's a lot of wasted and unnecessary things on Facebook that I don't have time for." (LA)*

*"I've watched the amount of time it takes others to learn and use it [Facebook], and it doesn't interest me at all." (LA)*

## **Twitter**

Twitter is used only by active participants to learn about new innovations.

*“I use twitter probably more or less just to see what everybody else from other parts of the country are doing in the field. So I just like seeing what everybody else is doing and see if I might want to try or use it too.” (A)*

## **YouTube**

YouTube is used by both groups to search and learn about new innovations.

*“YouTube is just nice because people normally do these video reviews of products or show how they use new practices and ideas on their farms. We get to see it right in front of our eyes and it makes understanding it easier and makes it more simple to take what I learn and put it to use on my own farm.” (A)*

*“You can watch anything anywhere with YouTube. If I need to search how to fix this or how to use something new on my farm, I just YouTube it and sometimes I’ll find a video about it.” (LA)*

## **Radio and TV**

LA participants indicated usage of both radio and TV. They stated both media channels are always turned on and they end up hearing advertisements through these channels. Active participants said they usually turn the TV on but don’t fully pay attention to it.

*“Radio is right with you. Everywhere you go. Your tractor and trucks pick up everything. So I have the radio on all the time.” (LA)*

*“I normally just turn the TV to an Ag show like RFD-TV in case they say something that’s important I need to hear, but I don’t really pay attention. There’s a lot said on TV that I don’t really care for or doesn’t benefit me, and I don’t have a lot of time to just sit around and watch TV to learn things.” (A)*

## **Magazines**

Less active participants indicated they used magazines heavily to learn about new practices and innovations.

*“I like reading the articles. I always end up learning a lot and have put what I learned to use.” (LA)*

Active participants, on the other hand, mentioned that they don’t typically read the articles in a magazine.

*“If I do look in a magazine, you know, they usually list their website in there. I hardly ever read anything in a magazine. I usually just search, look at it and if I like something posted in there and think it will help me in some way, I’ll go to the website and learn more.” (A)*

*“I hate reading magazines because I wind up reading articles and following their advice and it’s usually wrong. So now I have to go online on Facebook on Google, and see what other people are saying about it.” (A)*

## **Discussion**

### **RQ1: What media channels are farmers using?**

Participants, both less active and active, exhibited multi-channel usage – similar to what Doerfert et al. (2012) found. This mirrors earlier findings that farmers utilized a multitude of various media channels to get information about the agriculture industry (Readex Research, 2016; National Association of Farm Broadcasters, 2010). Katz, Blumer, et al. (1973) recognized that an audience may select more than one type of media channel to fulfill their needs and the results of this study confirm that previous finding. Participants in this current study used a combination of new and traditional media. LA participants used word-of-mouth (WOM), Google search, Facebook, YouTube, radio, TV, and magazine. Active participants used WOM, Google search, Facebook, Twitter, YouTube, TV and magazine. Both groups used nearly the same types

of media channels. Their activity with the company does not make a big difference in the types of media channels used. The only differences were that LA participants used radio and A participants did not, and A participants used Twitter and LA participants did not.

**RQ2: How are farmers using these media channels? and RQ3: Why are farmers using certain media channels over others?**

Based on the findings, farmers are using the selected media channels for two reasons: 1) Become aware or gain more knowledge about an innovation and 2) make a decision to adopt or reject the innovation. The active and less active groups use slightly different media channels to gain more knowledge about new innovations:

**Active**  
WOM  
Google  
Twitter  
YouTube  
TV  
Magazine

**Less Active**  
WOM  
YouTube  
Radio  
TV  
Magazine

Participants in both groups are clearly using the above media channels to fulfill cognitive needs – becoming informed or educated about an innovation (Katz et al., 1973). While they use different channels to become informed, participants in this study are only using the same three media channels to make decisions: WOM, Google and Facebook. The following discussion will help us understand how and why they are using these media channels.

First, magazine, while used quite often by all participants to gain knowledge, is used differently by less active and active participants. Less active participants read the articles and will either implement what they learned or use it as a topic to discuss with peers. Active participants, on the other hand, do not enjoy reading the articles as much.

*“I hate reading magazines because I wind up reading articles and following their advice and it’s usually wrong. So now I have to go online on Facebook on Google, and see what other people are saying about it.”*

This individual’s perceived compatibility (Rogers, 2003) of magazines and his past experience with what was learned in the magazines led him to fact-check or review what others are saying. Incompatibility did not lead him to reject the innovation as he was already using it. It just added another layer to the decision-making process. Rogers (2003) stated that even if mis-adoption of an innovation occurs, individuals will continue to use it and fix it if they still have needs that need to be fulfilled.

Second, YouTube was used by all participants to find out more about an innovation. It can be assumed from the findings that these individuals enjoy seeing examples and visuals to learn from, and they are using YouTube to replace TV. Individuals noted that seeing how something works “makes understanding it easier and makes it more simple to take what I learn and put it to use on my own farm.” Participants also noted that while they do watch agricultural TV shows to learn more about the agricultural industry or relevant news, they do not fully pay

attention. One participant said he turns the TV on just in case there is something important he needs to hear but “there’s a lot said on TV that I don’t really care for or doesn’t benefit me, and I don’t have a lot of time to just sit around and watch TV to learn things.” Whereas YouTube allows them to control what they want to see or learn. The uses and gratifications theory states that people leave traditional media for new emerging online media channels because they fill the same social and psychological needs as traditional media did. In this case, participants also have an economic advantage because YouTube is free compared to TV. However, Griliches (1957) conducted a study where he found that in the long-run, sociological variables will diminish and economic variables will be the main reason whether an individual adopts or rejects a new technology. YouTube is currently a free and accessible tool for all. If a fee is ever implemented in order to watch videos, that may deter participants in this study from using it.

Third, WOM is crucial for both groups. WOM relies on consumers talking to one another in a direct way, is more effective than traditional marketing such as TV, radio or magazine. Researchers (Trusov, Bucklin, & Pauwels, 2009) conducted a study examining WOM and its effects. They found that WOM referrals have much longer marketing effects than traditional advertising. The researchers suggest WOM is a more attractive way to disseminate information because “they combine the prospect of overcoming consumer resistance with significantly lower costs and fast delivery—especially through technology, such as the Internet” (Trusov, Bucklin, & Pauwels, 2009, p. 90), which leads us to understand how and why farmers are using Facebook.

Fourth, Facebook and Google are interestingly used by most participants in both groups as a way to make a decision on an innovation. Customer reviews on a company’s Facebook page or on Google can make the final decision for these individuals. In addition, how prompt the company is to interact or respond to a customer, and how they talk or comment back to the

customer are major factors in whether or not individuals in this study adopt or reject an innovation. Participants in this study noted that “you can get a pretty quick feel about a company through their social media page.” In addition, Facebook and Google reviews are merely a form of written WOM. Individuals in this study said they trust other Facebook users and farmers who write reviews more than they trust what the company says. Some of the active participants said at times they enjoyed going online for reviews instead of asking neighbors and friends because it is “faster and quicker than traditional ways.”

Lastly, age and how active the participant is with the company may or may not influence why certain media channels are used over others. The comparative research design helps us understand if and why some individuals are more receptive to certain media channels.

**Active.** The majority of participants in the active group were younger, but there were a few older people at 52, 58 and 66 years old. The findings showed that those in the active group used more new and social media methods. However, those few older participants in this active group make an interesting case. Two of these participants, while older, can be labeled as innovators or early adopters. These two exhibited signs of innovators and early adopters, and exuded influence during the FGDs. They each also led most of the conversations and recommended new ways to find information for the other participants in the FGDs. Through the uses and gratifications theory, it is possible they do this to increase credibility, confidence and/or status. Below are comments each one of them made during their FGDs:

*“I’ve been part of a lot of those first groups who get to try out new things before they come out. And it teaches me a lot about changes in this industry.”*

*“Some of the older folks are stuck in their own ways but we need to learn that these things, these technologies can actually help us more.”*

Both quotes indicate the participants may be innovators or early adopters. Rogers (2003) stated that for innovators or earlier adopters, trialability is more important than it is for later adopters. These individuals generally adopt new technologies or ideas because they are new (Investopedia, 2018). Early adopters create opinions about innovations and are then generally disseminated to their peers. These individuals also tend to take more risks and are able to see the innovation's potential more than their peers. They are also the type of individuals businesses should target first when looking at marketing strategies (Gabugli, 2014).

The third deviant participant in this group used new media channels regularly, despite his age. He did not exude behaviors of an innovator or early adopter. Rather, he is comfortable using new media channels because his son works with him on the farm and has successfully introduced him to new media channels. This supports Rogers' (2003) idea that if a tool has been tested and approved by friends, family, and peers, people are more likely to use it. It can also be assumed that positivity from observability, trialability and compatibility were factors in this case. Both observability and trialability are positively related to an innovations adoption rate (Rogers, 2003).

**Less active.** The majority of participants in the less active group were older but a few younger individuals fell in this group at 44, 47 and 49 years old. While more traditional media channels were utilized in this group, a couple new media channels were used as well, including YouTube and Facebook.

*“You can watch anything anywhere with YouTube. If I need to search how to fix this or how to use something new on my farm, I just YouTube it and sometimes I’ll find a video about it.”*



As stated earlier, YouTube may be fulfilling the same social and psychological needs as TV, a traditional media. The uses and gratifications theory states that people leave traditional media for new emerging online media channels because of this. Participants in this group may be changing their usage patterns because they have identified YouTube as being better in some way than TV.

For many of the less active participants, Facebook was an important media channel used to help make innovation decisions. While the group may be using more traditional than new media channels, uses and gratifications theory can help explain why Facebook is highly adopted and used among this group. Doerfert et al. (2012) found that farmers were using Facebook at a higher rate for personal reasons, such as communicating and socializing with family and friends as it has a reputation for being a socializing tool. Participants in this study may be using Facebook to help make innovation decisions because it is a popular media channel used among their peers. Observability (Rogers, 2003) explains that if media channel is positively and widely used among an individual's friends and family, they are more likely to adopt the media channel or tool.

Interestingly enough, the younger, less active participants did not indicate they used Facebook for any personal or business reasons. All three made many comments about no interest in using it moving forward. Their reasons varied from complexity to incompatibility and not fulfilling any needs.

*“I've watched the amount of time it takes others to learn and use it [Facebook], and it doesn't interest me at all.”*

This particular younger, less active participant seems to have rejected Facebook. It can be assumed from the quote that observability and complexity played a large role. This individual indicated that he observed his peers' difficulty in using Facebook and the consequences led him to assume this innovation was too complex, and, therefore, rejected it. Rogers (2003) notes that observability is positively related to adoption rate. However, in this case where complexity of the innovation was visible, observability became a negative factor in adoption.

*“There’s a lot of wasted and unnecessary things on Facebook that I don’t need or have time for.”*

In addition, Facebook did not fill a psychological need for this individual. Instead, they may be fulfilling their needs through other media channels. Diffusion of innovations also help explain the incompatibility characteristic of Facebook for this individual. For an innovation to be compatible, it must mesh well with the person's existing values and needs (Rogers, 2003). Incompatibility hinders the likelihood of adoption.

### **Conclusion and Limitations of the Study**

The aim of this study was to explore the different types of media channels corn farmers used when establishing business relationships, understand how they used the media channels, and why they were using certain media channels over others. This case study looked at farmers who were active and less active with Tyson Foods Local Grain Services. The comparative study allowed an examination of whether inactivity influences media usage and why some farmers are more receptive to certain media channels. The analysis strongly suggested that farmers are still

multi-channel users (Doerfert et al., 2012), and while this is an interesting finding in the study, the most salient findings are how farmers are using media channels for specific reasons and why certain channels are used over others. In addition, how active an individual is with a company was evidently not important in determining media channel usage. Age, however, was an interesting analysis as there were some cases where the younger participants did not adopt new media channels and vice versa – the older participants adopted new media channels.

Past research (National Association of Farm Broadcasters, 2010; Readex Research, 2016; Woodruff, 2016) show that the internet was not the primary or secondary media channel farmers used to learn about new innovations. In addition, Doerfert et al. (2012) found that print media channels, such as newspapers and magazines, were the most popular ways farmers learned about new innovations. In this current study, farmers indicated magazines as one of the ways they get information, but more and more are turning to different media channels (Google, Twitter and YouTube) to learn about products or services. One of the most salient ways farmers were learning about innovations was through word-of-mouth (WOM) –directly talking to other farmers face-to-face. WOM is a crucial and often overlooked way of marketing to potential customers. Researchers (Trusov, Bucklin, & Pauwels, 2009) have found that WOM referrals “have substantially longer carryover effects than traditional marketing” (p.90) strategies. It is also financially more beneficial for companies to focus on WOM marketing as it could save more money.

In addition, the findings may suggest that farmers have already either adopted or rejected some new social media channels, including Facebook. A few younger participants have rejected Facebook due to incompatibility and how complex Facebook was observed to be, and, coincidentally, a few older participants adopted Facebook due to successful trialability,

observability, and compatibility. A couple of the latter participants are also early adopters and innovators – venturesome in their risks, and also leading and shaping opinions about innovations. Previous researchers (Doerfert et al., 2012) found that farmers were utilizing traditional media and were just starting to use new media. In the aforementioned study, the most consistently underused media channels to find more information about innovations included blogs, Facebook and Twitter. Shaw et al. (2015) later found that many farmers were still not using social media in any way for business purposes, with only a small amount using Facebook. The researchers believed many of the social media channels were still in the initial stages of adoption. Three years after the latter research, this current study finds that farmers are using social media channels, such as YouTube and Facebook, to seek information and make business decisions. Following Rogers' (2003) curve of diffusion, these social media channels have surpassed the adoption stages and are largely accepted by most of the farmers in this study, except the deviant cases.

The findings and analysis are of particular significance because of the very few research studies conducted about this niche group and their media uses. The findings in this study can help professional communicators better understand farmers and their media behaviors, and better help strategize marketing plans. The findings may also indicate which media channels communicators should focus more time, money and tactics on.

It is also important to understand the limitations of this research. This qualitative, single-case study examined and collected data from one business organization during a three month period with four FGDs consisting of 20 corn farmers. Although the methodology and research design were robust, future studies should undertake analysis based on more FGDs and from a variety of farmers to gain more insights and understandings of media channel usage behaviors.

The many findings in this study offer opportunities for more in-depth understandings about word-of-mouth marketing to farmers, YouTube usage, how magazine usage among farmers have changed, and more. The study is also limited because of its qualitative nature as it cannot be generalized. Future research could take the findings from this qualitative study to develop a quantitative survey questionnaire and generalize to the population of corn farmers.

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