

An Investigation into the Elements Influencing Cattle Producers' Preference for Specific Information Sources

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An Investigation into the Elements Influencing Cattle Producers' Preference for Specific Information Sources

Abstract

Cow/calf producers in Oklahoma, like their counterparts in other agricultural sectors, depend on a variety of information sources to navigate the complexities of their operations effectively. However, research on the specific reasons producers prefer some sources over others remains sparse. The purpose of this study was to investigate the elements influencing cow/calf producers' preferences for information sources and to identify the motivations underlying these preferences. By applying the Uses and Gratifications Theory, this research aimed to provide practical insights into how producers meet their informational needs and how communication channels can better serve this audience. This study employed a qualitative approach, using a semi-structured interview approach to collect data from 14 cow/calf producers in Oklahoma. Participants of this study were recruited using homogeneous sampling, identified through collaboration with county Extension educators and specialists. Participants were purposefully selected based on differing levels internet accessibility and geographic diversity. Data collection continued until saturation was reached. Findings indicate producers determine the importance of a source based on consistency, ease of access, experience, relevance, and transparency. Producers also indicated a desire for production and financial improvement from sources with a proven track record of success. Furthermore, research and data serve as a foundation for decision-making, but producers validate this information through peer discussions to assess its practical application. Future research could explore how Extension and other information channels can better integrate the expertise of producers in the field, positioning them as subject matter experts.

Keywords

Uses and Gratifications Theory, Information sources, diffusion of innovation, cow/calf producers

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Introduction

Producers operate in a dynamic environment where timely and relevant information significantly impact decision-making and overall success (Naile & Cartmell, 2009). They rely on a variety of sources, including print publications, Extension services, digital platforms, and peer networks, to gather information on topics such as market trends, animal health, and regulatory changes (Rhoades & Aue, 2010). With the rapid evolution of digital media and continued reliance on interpersonal networks, it is imperative to reassess the factors influencing producers' reliance on various information sources. In addition to building upon the existing knowledge of information sources, an understanding of the reasons producers seek information from these sources is essential to shaping future communications efforts (King & Baker, 2017).

Furthermore, identifying gaps in the current communication landscape can help address producers' unmet or underserved needs (Meyers et al., 2015). Existing studies highlight how producers often encounter conflicting recommendations from different sources, making it difficult to determine which guidance to follow (Meyers et al., 2015). Research suggests producers navigate these challenges by using a multi-faceted approach, combining traditional and digital media, as well as relying on trusted individuals, such as veterinarians and fellow producers, to interpret and validate complex information (Meyers et al., 2015; Rhoades & Hall, 2007). Findings from King and Baker (2017) supported this, concluding producers process information using past personal, community, and familial experiences, as well as visual observations.

Several factors influence cow/calf producers' preferences for information sources, with content quality, accessibility, and reputation among the most prominent (Breiner et al., 2007). High-quality content tailored to the specific challenges and needs of producers plays a critical role in their decision to engage with a particular source (Naile & Cartmell, 2009). Accessibility is another important factor, as producers frequently operate in rural areas where internet connectivity can be unreliable (Holmes, 2018). Print publications, such as agricultural magazines and newsletters, remain popular because they do not require digital access and can be easily referenced at any time. Digital platforms also provide real-time updates, which are particularly valuable during time-sensitive situations, such as weather emergencies or sudden market shifts (Karan et al., 2016). Reputation also heavily influences producers' choices. Sources perceived as credible and trustworthy are more likely to gain attention and loyalty (Naile & Cartmell, 2009). Timeliness and relevance are key attributes of effective communication channels. Producers need information to help them respond quickly to external pressures, such as fluctuating market prices or sudden changes in weather patterns (Holmes, 2018). To address these needs, a multi-channel communication approach is often the most effective (Rhoades & Hall, 2007; Vergot et al., 2007; White et al., 2023). By leveraging both formats, agricultural communicators can meet the unique requirements of diverse producer audiences, thereby enhancing the overall efficacy of their outreach efforts (Rhoades & Aue, 2010).

Interpersonal communication also plays a significant role in decision making (Naile & Cartmell, 2009). Local Extension agents, industry experts, and peer networks often serve as trusted sources of information for producers. These individuals provide not only expertise but also tailored recommendations aligned with the specific needs of their operations (Rhoades & Hall, 2007). Organizations such as Extension services, industry publications, and private companies play a pivotal role in disseminating agricultural knowledge (Rhoades & Hall, 2007). As agricultural challenges, including market volatility and regulatory pressures, become more

pronounced, producers' access to reliable information is vital for informed decision-making (Rhoades & Hall, 2007).

Existing research in this area is relatively dated, but recommendations from recent studies support the need for updated insight. Pratt et al. (2021) recommended further research on the impact interactions with information sources, such as Extension, has on the adoption of new technologies. Similarly, Beethem et al. (2023) noted additional research regarding if farmers turn to public or private information sources for topic-based learning would be beneficial. Moreover, Ayoub (2023) highlighted the need for research expanding on their study to include other information sources, such as universities, as well as investigate interactions between knowledge sources. This study, although specific to the beef industry, expands on these recommendations and further investigates motivations for using specific sources.

Purpose and Research Questions

The purpose of the study was to investigate why cow/calf producers prefer information sources and to identify the motivations underlying these preferences. By applying the Uses and Gratifications Theory (UGT), this research aimed to provide practical insights into how producers meet their informational needs and how communication channels can better serve this audience. The study addressed the following research questions:

1. What attributes of information sources are most valued by cow/calf producers?
2. What are the primary goals of cow/calf producers when engaging with information sources?

Literature Review

Key Information for Cow/Calf Producers

Access to reliable and timely information is crucial for cow/calf producers to make decisions related to herd health, management practices, and market conditions. The ability to navigate challenges such as disease prevention, fluctuating market prices, and evolving industry regulations depends heavily on the quality of information producers receive (Vergot et al., 2007). The sources they rely on for this information vary, but veterinarians, universities, and peer networks remain central to their decision-making processes (Vergot et al., 2007).

Veterinarians serve as one of the most trusted and frequently consulted sources of information among cow-calf producers, particularly when it comes to herd health and disease management (Breiner et al, 2007). Their expertise extends beyond administering medical treatments to include advising on vaccination protocols, biosecurity measures, nutrition, and reproductive health. Veterinarians were found to be the most commonly used source for herd health decisions, surpassing other available channels such as university Extension services and producer associations (Breiner et al, 2007).

Beyond veterinarians, peer networks are a critical and often underappreciated source of information for cow-calf producers (Breiner et al., 2007). Informal conversations with other ranchers often serve as a supplement to more formalized sources of information, allowing producers to discuss practical applications of new strategies before implementing them (Breiner et al., 2007). Although peer-sourced information may lack the scientific rigor of university research, its practical applicability makes it highly valuable to producers who need real-world solutions tailored to their specific operational needs (Vergot et al., 2007).

University Extension services serve as another important source of information, particularly for producers seeking research-backed recommendations on herd management and market trends (Vergot et al., 2007). The confidence producers place in Extension services stems from agents' ability to establish long-term relationships within their communities (Comito et al., 2017). However, budget cuts and staff reductions have limited the ability of university Extension services to maintain comprehensive outreach efforts, particularly in rural areas where resources are already stretched thin (Robinson & Poling, 2017; West, 2006). Despite these challenges, online webinars, virtual field days, and email newsletters have become vital components of modern Extension strategies, enabling agents to connect with producers who might not otherwise attend in-person events (Diekmann et al., 2009; Robinson & Poling, 2017).

A Multi-Faceted Approach to Information Gathering

No single source of information is sufficient for addressing the diverse and complex challenges cow-calf producers face. Recent research has demonstrated producers often seek information regarding production risks (Boyer et al., 2024; Rourke et al., 2023; Waggle, 2020), practical operational needs (Wagner et al., 2017), and new technology (Greig et al., 2023; Piña et al., 2023). A one-size-fits-all approach is not suitable, instead a combination of veterinarian consultations, peer discussions, and university resources provides a well-rounded approach to decision-making (King & Baker, 2017; Vergot et al., 2007).

Print publications, such as agricultural magazines and newsletters, remain a staple for many cow/calf producers. These sources are often viewed as credible and authoritative (Naile & Cartmell, 2009). Producers value print for its tangible nature, ease of reference, and curated content. Print media's appeal also lies in its ability to provide in-depth analysis and visually engaging content tailored to the agricultural audience (Vehige, 2021). Furthermore, print media offers producers a sense of reliability and permanence not always associated with digital formats (Naile & Cartmell, 2009). Unlike social media or online articles, which can quickly disappear or be revised, print publications serve as a static resource for later reference (Vehige, 2021).

Although traditional media maintains a significant role, the influence of digital platforms continues to grow, offering advantages such as immediacy, accessibility, and dynamic content (Makinde et al., 2022; Williamson, 2012). Despite these advantages, digital adoption among producers varies significantly. Many cite digital fatigue, a phenomenon driven by constant exposure to online content, as a barrier to embracing these platforms fully (Makinde et al., 2022; Ytre-Arne, 2011). The rise of digital platforms represents a complementary supplement rather than a replacement for traditional media. Although traditional formats provide depth and credibility (Naile & Cartmell, 2009), digital platforms excel in delivering timely, interactive, and accessible content (Williamson, 2012).

Recent studies have highlighted an increase in the adoption of podcasts as valuable tools in agricultural communication. Podcasts offer the advantage of being longer and more detailed than other forms of traditional or digital media. Their convenient form also allows listeners to engage in multitasking while absorbing information (Chivers et al., 2021).

Elements Influencing Source Preferences

Ease of access plays a critical role in shaping the media preferences of agricultural producers. Print magazines and newsletters, for example, offer significant advantages by being physically available without the need for internet connectivity or advanced digital literacy (Naile & Cartmell, 2009). The tangible nature of print media also allows producers to engage with the

content at their own pace, making it easier to revisit articles and reference specific information when needed (Naile & Cartmell, 2009). In contrast, digital platforms provide unparalleled immediacy and flexibility, enabling producers to access the latest updates on market trends, weather conditions, and industry news. However, producers in remote areas often face significant barriers to using digital resources due to unreliable internet infrastructure, high connectivity costs, and limited digital literacy (Holmes, 2018).

Credibility is a critical component in determining the adoption and effectiveness of information sources among agricultural producers. Lindell & Perry (2004) emphasize individuals often seek information from sources perceived as reliable, particularly when making decisions involving risk. Cattle producers often turn to reliable sources like Extension services, livestock associations, and peer networks due to their reputation for providing credible and actionable information. Such sources are often perceived as accessible and attuned to the specific needs of agricultural producers, enhancing their overall credibility (Rhoades & Hall, 2007).

Reliability is a crucial factor in agricultural communication, influencing how information is disseminated, received, and trusted among stakeholders. Borrelli et al. (2018) found producers placed the highest trust in local farmers and agribusiness crop advisors when seeking guidance on production practices. In contrast, university Extension services were considered reliable but ranked lower than peer sources, particularly for production-related information (Borrelli et al., 2018).

The consistency of information sources plays a crucial role in agricultural communication, influencing how producers evaluate and apply knowledge in their decision-making processes. The extent to which these sources provide consistent and reliable information directly impacts their perceived trustworthiness (Vergot et al., 2005). Producers are more likely to rely on sources providing stable and continuous information over time. Without consistent communication, producers may become skeptical of the information provided, leading them to seek alternative sources that align more closely with their past experiences and expectations (Asare et al., 2018).

The Role of Interpersonal Relationships in Communication

Research emphasizes the critical role interpersonal relationships play in effective communication, particularly in agricultural contexts. Haynes et al. (2012) found decision-makers often prioritize face-to-face interactions with knowledgeable experts over impersonal sources like written reports or online articles. This preference underscores the importance of reliable messengers, such as Extension agents, veterinarians, and respected peers within the agricultural community. Community-embedded figures can serve as bridges between complex technical information and actionable practices. Peer networks are another cornerstone of interpersonal communication in agriculture. Producers view peers as credible sources, not only because of their expertise but also because their recommendations are based on firsthand experiences closely mirror their own operations (Holmes et al., 2020).

Theoretical Framework

UGT provides the theoretical foundation for this study, offering a lens to view and understand producers' preferences for specific information sources. UGT suggests individuals actively select media based on the gratifications they seek, such as acquiring knowledge, connecting with others, or achieving specific goals (Katz et al., 1973). In the context of cow/calf producers, UGT is useful for examining how producers engage with various types of information

sources. Producers may seek print publications for in-depth analysis and digital platforms for real-time updates, reflecting the diverse gratifications they aim to fulfill (Ruggiero, 2000). Research has shown UGT is adaptable to a wide range of media contexts, from traditional newspapers to modern social media platforms (Sundar & Limperos, 2013).

UGT revolutionized media studies by shifting the focus from how media affects audiences to understanding how audiences use media to fulfill specific needs. UGT has proven to be a versatile theoretical lens in agricultural communication research, offering insights into how producers engage with various information sources. Urista et al. (2008) examined how digital media satisfies the need for immediate, interactive communication, particularly among farmers seeking timely updates on market trends and weather conditions. Johnson and Kaye (2010) expanded on these insights by demonstrating different media channels fulfill specific gratifications, such as credibility, timeliness, and accessibility. Nonetheless, traditional media remains highly relevant in agricultural contexts. Naile and Cartmell (2009) found print publications, such as magazines and newsletters, continue to be valued for perceived credibility and depth of content. The relevance of UGT continues to expand as researchers continue to apply the theory to modern contexts. As audiences gain more control over media consumption through on-demand content and personalized recommendations, UGT provides a framework for understanding the motivations driving these choices (Whiting & Williams, 2013).

To further contextualize how producers adopt and share information, Diffusion of Innovations (DOI) Theory offers a complementary lens. First introduced by Everett Rogers in 1962, DOI explains how new ideas, practices, and technologies spread within a social system over time. The theory identifies five key attributes that influence the adoption of innovations: relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2003). DOI theory categorizes individuals into adopter categories—innovators, early adopters, early majority, late majority, and laggards—based on their willingness and speed to adopt an innovation (Rogers, 2003). In agricultural settings, these categories are especially relevant, as peer influence, risk perception, and economic factors often shape decisions (Läpple & Kelley, 2013). Integrating DOI into this study highlights how producers' information preferences are shaped not only by individual needs but also by their position in the adoption curve (Rogers, 2003). Early adopters may turn to formal sources like extension publications and webinars to stay informed, while those in the late majority or laggard groups may rely on interpersonal sources such as neighbors or veterinarians (Borrelli et al., 2019; Rogers, 2003).

DOI has previously been applied to studies investigating agricultural producers' information-seeking behaviors. Underpinned by DOI, a study from Lavoie et al. (2021) concluded collaboration and information sharing would support cover crop expansion. Lavoie et al. (2021) found producers specifically suggested improving peer-to-peer communication and producer-driven research trials in collaboration with university researchers. Pratt et al. (2021) also applied DOI, supporting the conclusion behavioral factors, including the flow of information between individuals, impacts learning and the adoption of new technologies.

In the context of cattle producers, DOI complements UGT by focusing on how innovations spread and the role of social networks in that process. While UGT examines individual motivations for seeking information, DOI provides insight into the innovation characteristics that drive innovation adoption and decision making (Rogers, 2003). This combined theoretical lens offers a deeper understanding of how cattle producers seek, evaluate, and apply information in ways that align with both personal and social factors (Rogers, 2003).

Methods

To gain a deeper understanding of the gratifications sought by Oklahoma cattle producers through their media choices, this study employed a qualitative approach. This type of research allows for greater diversity of perspective and a variety of approaches to research (Flick, 2009). In comparison to quantitative instruments such as questionnaires, qualitative methods provide deeper understanding of research subjects due to an ability to ask for clarification and elaborate on answers (Flick, 2009). This study employed a semi-structured interview approach, which was rooted in phenomenology. Application of phenomenology means the “careful description and analysis of the subject’s life world and meaning making and understanding that life world” (Flick, 2023, p. 551).

To ensure the inclusion of relevant individuals, cow/calf producers in Oklahoma, homogenous sampling was used. Recruitment occurred in conjunction with county Extension educators and specialists. Individuals identified by county Extension educators were contacted via phone. The study aimed to capture a broad range of perspectives based on geographic distribution, variations in internet access, and differences in agricultural conditions. A key consideration in participant selection was ensuring representation from both high- and low-internet-access counties.

Geographic diversity was also a priority in participant selection. Producers were chosen from a range of counties, including Woodward County in the northwest, McCurtain County in the southeast, and Garvin County in the central part of the state. These locations reflect different agricultural environments, including variations in climate, forage availability, and production challenges. Other counties represented include Caddo, Hughes Payne, Ellis, Roger Mills, and Pawnee.

Table 1

Participants’ County and Internet Connectivity

Participant	County	Broadband Service
Lisa	Ellis	16.28%
Frank	Roger Mills	25.91%
Jenna	Hughes	34.89%
Dave	Pawnee	61.97%
Larry	Woodward	74.00%
Jim	Woodward	74.00%
Emily	Woodward	74.00%
Greg	Caddo	75.96%
Sally	Caddo	75.96%
Kate	Noble	76.26%
Joe	Garvin	78.88%
Keith	McCurtain	81.15%
Kyle	Kay	89.48%
Abby	Payne	92.98%

Note. *Connectivity percentages data adapted from Oklahoma Broadband Council.

One-on-one interviews were conducted in person between January 24, 2025, and February 8, 2025. Participants completed consent forms upon arrival. Interviews followed a pre-approved protocol reviewed by agricultural communications, education, and leadership faculty with qualitative research experience, as well as animal science faculty familiar with cattle producers, to enhance the study's credibility. An audit trail was maintained throughout the research process, documenting decisions related to interview procedures, data collection, and analysis to ensure transparency and dependability (Creswell, 2012). To protect confidentiality, all identifying information was removed, and each participant was assigned a unique pseudonym.

To ensure the trustworthiness of this research, verification was achieved through a systematic approach, including a thorough literature review, adherence to phenomenological methodology, bracketing of the researcher's own experiences, maintaining field notes, and using an adequate and purposeful sample (Creswell, 2012). In this study, credibility was established through multiple verification strategies, including audio transcriptions and fieldnotes recorded by the primary investigator during in-person interviews. The use of verbatim transcription ensured participant responses were captured without alteration; and fieldnotes provided additional context regarding nonverbal cues, setting, and participant interactions, further enriching data interpretation (Guba & Lincoln, 1982). Member checking involves asking participants to evaluate the accuracy and credibility of the researcher's findings and interpretations (Creswell, 2012). Lincoln and Guba (1982) describe this as "the most critical technique for establishing credibility" (p. 314).

Interviews continued until theoretical saturation was reached, meaning no new information emerged from the final interviews. Based on the depth and richness of the data, the recurrence of key themes, and the limited emergence of novel insights in the final interviews, data collection was considered complete after 14 participants (Creswell, 2012).

Interview questions were formulated based on the study's research questions and previous literature. The questions were asked in a logical sequence. The development of the interview protocol was guided by the Uses and Gratifications Theory and Diffusion of Innovations Theory, ensuring the questions specifically explored the motivations, preferences, and decision-making processes influencing cattle producers' selection of information sources (Katz et al., 1973; Rogers, 2003; Rubin, 1986).

The questions can be broken into sections based on the two established research questions. Participants were asked if they had anything else they would like to add we had not previously covered. After asking this question, the researcher summarized the key points and ensured participants felt as though all relevant topics had been addressed. During the one-on-one interviews, the researcher took detailed notes on factors unable to be captured in the transcript such as body language, facial expressions, and vocal tone.

Interviews were audio-recorded and transcribed using Otter.ai. After transcription, the researcher carefully reviewed the transcripts to ensure accuracy. In addition, participants were given the opportunity to review the transcript. At the conclusion of interviews, participants were contacted to perform a member check. This process ensured participants had the opportunity to correct any misinterpretations or inaccuracies, reinforcing the study's commitment to faithfully representing their viewpoints. Transcripts, along with interviewer notes, were imported into MAXQDA24 for analysis. Data were analyzed using Glaser's constant comparative method (1965), which involved coding transcripts to identify patterns and themes. Themes were refined through a three-phase coding process: open coding to generate categories, axial coding to

examine relationships, and selective coding to integrate themes. Triangulation was achieved by comparing data from interview transcripts, notes, and data from identified sources of information (Creswell, 2012).

Credibility, transferability, dependability, and confirmability are key criteria ensuring qualitative research is conducted with rigor and precision, meeting high standards of trustworthiness (Guba & Lincoln, 1982). To support transferability, data was gathered from a diverse group of cattle producers across the state of Oklahoma, representing varied geographic regions, operation sizes, and experience levels. To uphold dependability, a structured interview protocol was employed to maintain consistency in data collection (Creswell, 2012). All participants were asked the same core questions, ensuring uniformity while still allowing for follow-up questions to explore emergent themes. An audit trail was maintained, documenting each step of the research process, from participant recruitment and data collection to coding and analysis decisions. To establish confirmability, this study employed triangulation, incorporating multiple data sources to strengthen the credibility of findings. By implementing these trustworthiness measures, this study ensures findings are credible, transferable, dependable, and confirmable, reinforcing the rigor of the qualitative research process.

Researcher Subjectivity Statement

Callie Hanson grew up in the beef cattle industry and completed a master's degree in agricultural communications. She has an undergraduate degree in agricultural communications. This research was conducted as part of her thesis work. Audrey King is an agricultural communications faculty member who grew up in agriculture. She has undergraduate and graduate degrees in agriculture fields. Dwayne Cartmell is an agricultural communications faculty member who has an undergraduate and graduate degree in agriculture fields. David Lalman is an animal sciences faculty member and Beef Cattle Extension Specialist who has graduate and undergraduate degrees in animal science. Cassady Craddock grew up in the beef industry and is a graduate student in agricultural communications who has an undergraduate degree in animal science.

Findings

RQ1: What attributes of information sources are most valued by cattle producers?

Before exploring in-depth questions about preferences, participants were asked to identify their preferred sources of information for their cattle operation, which are summarized in Table 2. Following this introductory question, they were asked to share any sources they had tried but found unsatisfactory. To understand what participants valued most about their preferred information sources, producers were asked a series of questions to gauge what elements made an information source valuable to them. The following themes were generated from participant responses: consistency, ease of access, experience, relevance, and transparency.

Table 2*Participants' Preferred Sources of Information, by Frequency of Mention*

Information Source	Number of Mentions
Social media groups and pages	7
Peers (other ranchers and/or customers)	6
Extension	6
Podcasts	3
Feeder Flash	1
Publications/magazines	2
RFD Market Report	2
Cattle Market Mobile	1
Email from IRP Salesman	1
Reports	1
FSA text messages and emails	1
Breed associations	1
AgWeb	1
Drovers	1
Veterinarian	1
Email updates/newsletters	1
High Plains Journal	1
Oklahoma Farm Report	1

Consistency

Producers widely expressed a preference for information sources providing consistent and reliable guidance over time, as predictability allows them to develop trust in the information they receive. Many noted frequent changes in recommendations or conflicting advice from a source diminished their confidence in its credibility, making it difficult to know which guidance to follow. When information is inconsistent or constantly shifting, producers may hesitate to implement new strategies, fearing unintended consequences. Greg noted in his interview he was open to new or updated information but did not appreciate inconsistent information.

I don't want to listen to a podcast or read a market report when there's no consistency. One week, they emphasize the importance of negotiated cash on fat cattle, and the next, they're saying we should all be using marketing alliances. It's frustrating when the message keeps changing.

Several participants linked consistency to convenience, they explained receiving an email, newsletter, or market report at a predictable time made it easier to access and rely on. Knowing when and where to find information reduced the effort needed to stay informed, ultimately improving its effectiveness. Lisa, a producer with several beef-industry related jobs said she uses information sources to make decisions on a near weekly basis. Consistent and reliable information allows her to make decisions in a timely and informed manner.

You need to know the information will be there when you need it. I work for the beef industry in various capacities, so having everything in one place is important to me . . . whether it's an email that arrives every two weeks or a market report

every Monday morning, I need to know I can expect it in my inbox when I need it.

Several producers noted they heavily relied on the Feeder Flash by The Beef Wire. This market report is delivered consistently, providing timely and relevant updates on cattle prices, trends, and industry news. Interview responses highlighted cattle producers prefer consistency and accessibility in information sources, particularly in fast-moving market environments where up-to-date pricing and industry trends are essential. Cross-referencing these insights with the publication frequency and distribution of Feeder Flash confirms producers rely on sources providing timely, frequent, and easily accessible updates to support their decision-making.

Ease of Access: Convenience in a Demanding Industry

Given the time-intensive nature of cattle operations, ease of access plays a crucial role in determining which sources producers turn to. Many participants expressed frustration with sources requiring too much time or effort to obtain information. Digital platforms, such as podcasts, social media pages, and mobile apps, were frequently mentioned as valuable due to their accessibility. Several producers noted they find high value in podcast formats as this allows them to multi task and continue to learn. Lisa highly values podcasts due to their convenience and ability to multi task.

In the winter, I spend four to six hours in the feed truck three days a week . . . I feel like I need to make the most of my time, but my options are limited. That's why ease of access is so important—it makes a big difference in how I can use that time productively.

Although podcasts were quite popular due to their ease of use, websites and other Extension services were reported to be difficult to navigate and disorganized. Several producers expressed frustration with Extension materials, saying they were often outdated, not regionally relevant, and difficult to navigate. One producer, Abby, explained she found great value in Extension information:

Occasionally, I visit the OSU website, not just for Extension but for other university resources as well. It's not always the most user-friendly . . . I consider myself pretty tech-savvy, but the information doesn't always seem well-organized. Is that enough to make me stop using it? I'm not sure, but it might be enough to turn someone else away.

Experience: Learning from Those Who Have Done It Themselves

Experience was a highly valued attribute among participants. Producers preferred information from those who have firsthand experience in raising cattle, rather than those who have only studied the industry academically. Sally, a first-generation producer, put it this way:

They've built their credibility through experience, and whether they're right or wrong, they at least understand what's happening and know what they're doing. They're not just repeating something from a book . . . I enjoy reading and applying new ideas—but practical application is essential if you want to make money.

Veterinarians, seasoned ranchers, and industry professionals with hands-on experience were seen as the most credible sources. Extension educators who also had backgrounds in cattle production were regarded more favorably than those without such experience. In addition to the expertise associated with experienced producers, the convenience of simply calling a neighbor was mentioned by several producers. While discussing his preferred sources, Jim said:

A lot of my neighbors are older . . . They are always eager to help, and I get a lot of advice from those who have built successful operations. Honestly, I probably don't use the Extension office as much as I should, even though it's a great resource. But since it's in town, it's just easier to call my neighbor and ask questions.

This preference for sources with “skin in the game” is evident in their reported engagement with Feeder Flash, as the platform is managed by Corbitt Wall, a well-known cattle market analyst with direct industry experience. Producers trust his reports because they believe his insights come from firsthand exposure to cattle sales, trends, and market dynamics rather than secondhand interpretations. This reinforces the theme that producers place their trust in sources demonstrating industry experience and those providing consistent, real-world insights relevant to their daily operations.

Relevance: Information Tailored to the Producer's Region

Another critical factor in source preference was regional relevance. Many participants noted information must be specific to their geographic area in order to be useful. Frank is a rancher in western Oklahoma, where the climate is dramatically different from even neighboring counties. Participants, including Frank, valued the information provided by local professional meetings and his peer network.

Over the years, I've learned my operation is unique—my ecosystem is completely different from someone else's, even if they're not far away . . . What works on my neighbor's ranch might not work on mine. That said, I still take away something valuable from industry meetings, whether it's Farm Bureau, Cattlemen's Association, or stakeholder meetings—they're always worthwhile.

Producers across the state noted their neighbors understand the specific realities of their land, forage conditions, and regional weather patterns, whereas generalized Extension materials often fail to account for these localized factors. This aligns with previous findings stating producers prioritize information from those with firsthand knowledge of their production environment, further reinforcing the importance of trusted, community-based information networks in cattle production.

Transparency: Honest and Unbiased Information

Transparency was mentioned as an essential factor in determining which sources producers find reliable. Participants valued unbiased, straightforward information and expressed skepticism toward sources they perceived as having an agenda. Some producers were particularly wary of information coming from companies selling a product, as they felt the recommendations might be profit-driven rather than producer-focused. Greg noted he has been burned on several programs and said:

Corporate pushes certain products hard because they pay to advertise and sponsor shows. I'm sure some of these things work for certain people, but not everywhere. You see the ads over and over, but that doesn't mean it's the right fit for everyone . . . A lot of these programs are designed to help producers hedge their risks, but once an insurance company gets involved, it changes things. They're not in business to lose money.

Producers expressed a strong preference for independent, research-backed sources clearly disclosing any sponsorships or industry partnerships. Many stated if a source is transparent about its funding and affiliations, they are more willing to consider the information it provides. Another producer, Keith, noted he appreciated when podcasts specifically share the source of their information so he can do his own research. During his interview he said:

Some podcasts do a great job of explaining where they get their facts, and that makes a big difference. I appreciate when they cite their sources, so I can look up the information myself . . . Providing reliable sources makes the information much more useful and credible.

RQ2: What are the primary goals of cattle producers when engaging with information sources?

Cattle producers seek out information with clear objectives in mind, primarily focusing on production and financial improvement as well as learning new methods to enhance their operations. Although there was variability in the goals themselves, themes emerged surrounding a desire for production and financial improvement from sources with a proven track record of success.

Production and Financial Improvement: Maximizing Efficiency and Profitability

For many producers, the primary motivation for engaging with information sources is to improve herd productivity and financial returns. Participants frequently expressed a need for practical strategies to enhance herd health, increase reproductive success, and optimize grazing management. As his family's operation changed with time, Keith, a southeast Oklahoma cattle producer implemented rotational grazing practices on the basis of science-backed data:

We've focused on making our herd more profitable, and one of the biggest changes has been rotational grazing . . . The decision was based on scientific research that just made sense for us, even though we hadn't considered it before. It wasn't how we originally operated, but once we saw the benefits, it became a valuable part of our program.

Veterinarians, Extension specialists, and industry consultants were often cited as key sources for improving financial efficiency. Several producers noted they are more comfortable with making production decisions themselves, but financial and marketing decisions incite less confidence. Market trends were another significant focus, with many producers seeking information on cattle prices, input costs, and risk management strategies. Several producers heavily rely on their local sale barns to provide up to date market information to base their decisions. Jenna, a producer in eastern Oklahoma, relies almost exclusively on information shared by her local sale barn.

I keep up with OKC West almost every week to stay informed. I also watch other major livestock auctions nearby, especially those selling the same types of cattle I work with. While I like to know what's happening globally, I focus more on local markets, since they have the biggest impact on my operation and are dealing in the same types of cattle.

Relying on Proven Sources: Trust, Experience, and Results

Several producers indicated they were aware of their weaknesses and where their knowledge fell short. These producers were quick to point out the exact sources they turned to when they felt their own knowledge was not enough. Rather than relying solely on trial and error, they sought out trusted experts with proven experience. Although some producers sought expert guidance for production-related decisions, others looked for information to improve the business side of their operations. Marketing was a topic many producers felt the need to seek information about, specifically in terms of marketing effectively on social media platforms. With traditional word-of-mouth marketing no longer being enough, producers turned to new digital strategies to reach buyers.

Even producers who actively sought out research and Extension updates still valued firsthand experience from peers. Greg noted he enjoyed reading and keeping up with research and Extension news, but ultimately, he trusted those who had built their success through experience. In his interview, he said:

It all comes back to someone who has made a living with a cow/calf operation. I'm not dismissing education, but at the end of the day, that's what matters—having real experience in making a living in this industry.

However, producers also noted they still rely on traditional sources, such as veterinarians and trusted peer networks, when they need in-depth or highly specific information. In his interview, Joe noted although he uses a variety of sources to guide decision making, he continues to turn to sources such as his local veterinarian.

I had a strange case of sick calves coming through, and my vet suggested Endovac after attending a seminar on it, so I started giving it to every calf born here. It completely changed how I treat every calf I tag.

This preference influences which experts producers trust, with successful ranchers and consultants with proven success seen as the most credible voices. Through this research question, producers continuously emphasized the idea expertise is more than just academic knowledge—it requires a deep understanding of the day-to-day realities of ranching. The findings suggest producers are highly selective in the information they consume, prioritizing sources providing actionable insights for improving efficiency and profitability.

Conclusions

Cattle producers prioritized consistency when evaluating information sources. Predictable and steady information delivery builds trust, but fluctuating messages create skepticism. Under UGT, consistency relates to the audience's need for reliability and confidence in the information they consume (Palmgreen et al., 1985). When sources frequently change their recommendations or present conflicting advice, producers may hesitate to rely on them, making it harder to

implement new strategies with confidence. From a DOI perspective, consistency also contributes to the perceived reliability and compatibility of an innovation. Rogers (2003) explains compatibility with existing values and experiences increases the likelihood of adoption.

Ease of access is another critical factor due to the time-intensive nature of cattle operations. Digital formats such as podcasts and email newsletters are highly valued because they allow producers to absorb information while multitasking, such as working cattle or driving. Previous studies, including Chivers et al. (2021), emphasized formats such as podcasts enhance accessibility by providing a multitasking-friendly format, allowing producers to stay informed in a way that seamlessly integrates into their daily routines. In terms of DOI, accessible formats increase the “trialability” of information—producers can experiment with new ideas on a small scale without a significant time or financial commitment.

Producers place a high value on experience-based knowledge, favoring insights from those with firsthand involvement in cattle production over purely academic perspectives. Although they recognize the importance of research, they prefer to learn from industry professionals, veterinarians, and peers who have successfully applied the information in real-world settings. This reflects the UGT concept of ‘personal identity’ gratification, where audiences seek information aligning with their experiences, values, and perspectives (Rubin, 1984). This also reflects the importance of observability and social proof in DOI theory. When a trusted peer has already adopted a practice and seen positive results, the innovation becomes more visible and socially validated, encouraging others to follow (Rogers, 2003).

Relevance is also a key factor in determining whether a source is useful. Producers need information applying specifically to their region, production system, and market conditions. This finding is consistent with Rhoades & Aue (2010), who noted producers seek out localized Extension meetings and publications for practical, region-specific advice. DOI theory supports this idea by highlighting the importance of compatibility. Innovations or messages reflecting a producer’s regional, environmental, and operational context are more likely to be adopted than those requiring major adjustments to established practices (Rogers, 2003).

A recurring theme among producers located in the farthest reaches of Oklahoma, including the Panhandle and southeastern regions, was a sense of being left out of Extension activities and resources. Participants from these areas consistently expressed their distance from the main Extension offices in Stillwater created a disconnect, leading them to feel available information and programming were not tailored to their specific regional needs. Despite Extension offices being in every county, they reported feeling underserved compared to producers in central Oklahoma, who have easier access to Extension events, specialists, and face-to-face interactions. Although these concepts can be supported by anecdotal evidence, this observed difference seems to be novel in formal research. The geographic divide between Extension services and remote producers may contribute to why some prefer alternate non-affiliated sources such as Feeder Flash, independent podcasts, and breed association publications, which they perceive as more readily available and applicable to their operations.

Finally, transparency is crucial in maintaining producer trust. Many are skeptical of sources they perceive as biased or influenced by commercial interests, particularly those affiliated with companies selling products. Producers prefer independent, research-backed information and value sources clearly disclosing their funding, affiliations, and potential conflicts of interest. Lindell & Perry (2004) assert credibility is a fundamental factor influencing the adoption of information, particularly in high-stakes agricultural decision-making.

Cattle producers primarily seek production and financial improvement, prioritizing content to assist them in maximizing efficiency and profitability. This aligns with the findings of Borrelli et al. (2018), who reported producers prioritize trusted, hands-on knowledge when making operational decisions. These findings also reflect the UGT principle of ‘instrumental media use,’ where audiences engage with content for practical, goal-oriented purposes rather than passive consumption (Whiting & Williams, 2013).

Producers rely on trusted, proven sources when making decisions, placing a strong emphasis on expertise gained through firsthand experience. Although they acknowledge the importance of research and industry studies, they give greater weight to sources with a track record of success in real-world cattle operations. This is consistent with Mooney (1991), who highlighted the role of peer networks in shaping producer decision-making.

Market trends play a crucial role in producers’ decision-making processes, with many relying on local sale barns and data-driven sources to guide pricing strategies and risk management. Access to timely, accurate market information is essential for making sound financial decisions in an unpredictable industry. The principles of UGT illustrate why producers actively seek real-time data sources to stay economically informed and manage financial risk. Rather than passively consuming generalized market reports, cattle producers selectively gather information to ensure they receive the most relevant and actionable insights (Urista et al., 2008).

These behaviors also align with DOI, which suggests producers are more likely to adopt innovations such as new marketing platforms or digital risk management tools when those tools demonstrate a clear relative advantage (Rogers, 2003). This reinforces how financial goals and observed results drive the uptake of innovations across the producer spectrum.

Recommendations

To improve the effectiveness of information sources for cattle producers, enhancing consistency across platforms is essential. As Vergot et al. (2007) noted, consistency in messaging from trusted sources such as veterinarians and Extension services increases producer confidence in adopting best practices. Improving accessibility is another key factor in ensuring information reaches producers efficiently. Rhoades & Aue (2010) highlighted digital access challenges in rural areas necessitate hybrid approaches integrating print and digital formats.

Many producers, especially those in remote regions, feel disconnected from Extension services due to geographic limitations and outdated digital resources. Limited access to in-person programming, combined with difficulty navigating Extension websites and chatbots, has led many producers to seek alternative information sources. By not reaching peripheral producers effectively, Extension may be missing opportunities to engage early adopters who could serve as opinion leaders or information bridges to their local communities (Rogers, 2003).

Facilitating peer-to-peer learning opportunities through producer-led discussion groups or mentorship programs can further strengthen knowledge sharing within the industry. Mooney (1991) and Holmes et al. (2020) highlight the role of peer networks as trusted sources for agricultural information, emphasizing the effectiveness of producer-led knowledge-sharing models. When positioning more experienced producers, or those who have completed programs such as Master Cattlemen, these individuals serve as early adopters or opinion leaders—critical roles in facilitating the broader diffusion of innovations (Rogers, 2003).

Establishing regionally specific advisory groups would ensure Extension research and recommendations reflect local challenges and production environments. Rhoades & Aue (2010) discuss the importance of localized Extension programming, noting region-specific guidance

increases producer engagement and trust in Extension services. This also supports DOI's principle of compatibility—innovations are more likely to be adopted when they align with the values, practices, and context of the user (Rogers, 2003).

Future research should explore how Extension and other information channels can better integrate the expertise of producers in the field, positioning them as subject matter experts. One potential area of study is the effectiveness of producer-led Extension programming, such as workshops, field days, and mentorship initiatives. Future research could assess whether producer-led sessions increase participation, improve knowledge retention, and lead to higher adoption rates of best management practices. By centering future research on leveraging producer expertise, Extension services and other agricultural information channels can develop more effective, trusted, and widely used resources.

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