

EXPLORING SOCIAL MEDIA AND  
ONLINE COMMUNICATION USE OF  
DIRECT-TO-CONSUMER AGRICULTURAL BUSINESSES IN  
UPSTATE NEW YORK

By

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Abstract: The popularization of social media and an increased interest in local food has led to the need for an online presence of direct-to-consumer agricultural producers. The COVID-19 pandemic quickly pushed the transition from traditional marketing practices to digital marketing practices, further emphasizing the importance of an online presence for small businesses. To better understand the perceptions of direct-to-consumer agricultural businesses, this study sought to understand the current use of social media and online communication and the challenges faced, related to social media and online communication, among these producers. Ten direct-to-consumer agricultural business personnel were interviewed to examine their social media and online communication use. Direct-to-consumer agricultural businesses are using Facebook as a primary social media platform and finding time to focus on social media and online communication is a challenge for agricultural personnel. A website is important to direct-to-consumer agricultural businesses, however many do not currently have a website. Direct-to-consumer agricultural businesses believe social media and an online communication are important to the growth and success of the business and are interested in educational materials and professional support to improve their online presence.

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## CHAPTER I

### INTRODUCTION

The introduction of the internet in the early 1980s provided worldwide broadcasting capability for the first time in history and revolutionized communications like nothing ever before (Leiner et al., 2009). Since its introduction to the public in 1993, the world wide web has exploded to become one of the fastest growing and transformative technologies to exist (Roser et al., 2019). Over the last few decades, consumers have shown an increasing interest in local foods and foods marketed directly from producer to consumer (Feldmann & Hamm, 2015). The effects of the COVID-19 pandemic on the food supply chain have further increased consumer interest in local food (Schmidt et al., 2020). With the revolution of the internet, an increased interest in local food, and the COVID-19 pandemic, an online presence for direct-to-consumer agricultural producers has become more important than ever before (Katare et al., 2021).

#### **The Rise of Social Media**

Today, there are approximately 4.88 billion internet users around the world, which is approximately 70% of the global population (Kepios, 2022). In the U.S., internet use among adults has risen from only 52% in 2000 to approximately 93% of adults in 2021 (Pew Research Center, 2021). Following the introduction and popularization of the internet, social media quickly began to thrive (Maryville University, n.d.). Starting in the 1980s and '90s, users began communication through email, bulletin board messaging, and instant messaging through online communication services including CompuServe, America Online, and Prodigy (Maryville

University, n.d.). In 1997, the earliest social media networks began to appear, with short-lived networks like Six Degrees, a profile uploading service (Maryville University, n.d.). Social media networks continued to grow and evolve over the next decade with sites such as Friendster in 2001, LinkedIn in 2002, Myspace in 2003, Facebook in 2004, and Twitter in 2006 launching and gaining popularity among users (Maryville University, n.d.).

Since the early 2000s, many of these platforms have grown rapidly, including Facebook, the largest social media platform today with 2.4 billion users (Rosner et al., 2019). While many of the platforms launched in the early 2000s have remained the most used, other platforms launched in more recent years have also become widely popular including TikTok, launched in 2016. By mid-2018, TikTok reached half a billion users (Rosner et al., 2019).

Today, 72% of the U.S. public uses some type of social media, compared to only 5% in 2005 (Pew Research Center, 2021). In 2021, approximately 84% of 18 to 29-year-olds and 81% of 30 to 49-year-old Americans use at least one social media site (Pew Research Center, 2021). Of those users, about 70% use Facebook daily and an additional 17% use Facebook on a weekly basis. Snapchat and Instagram are both used daily by approximately 59% of U.S. adults and used weekly by 21% of U.S. adults according to the Pew Research Center (2021). Other popular platforms, according to the Pew Research Center, include Pinterest, LinkedIn, Twitter, YouTube, WhatsApp, Reddit, and TikTok (2021). With the rapid evolution of the internet and social media, consumers are more dependent on the internet for information than ever before and social media has become an integral part of marketing for all business operations (White et al., 2014).

## **Digital Marketing**

Digital marketing, or online marketing, encompasses all marketing efforts using the internet or an electronic device (Desai, 2019) With the development and popularization of the internet and social media, a shift from traditional to digital marketing has occurred (Desai, 2019).

Digital marketing methods include search engine optimization (SEO), search engine marketing (SEM), content marketing, influencer marketing, social media marketing, e-mail marketing, text message marketing, and more (Desai, 2019). While digital marketing technically began in the 1990s, it has become much more sophisticated over the last decade (Desai, 2019).

Today, digital marketing is vital to the success of businesses and there are many benefits to having an online presence (Alexander, n.d.). Using digital marketing allows businesses to reach a much larger audience compared to the audience reached through traditional methods (Alexander, n.d.). Digital marketing is more cost-effective than traditional marketing and evens the playing field, giving smaller businesses the opportunity to compete with larger brands (Alexander, n.d.). Digital marketing is also easier to adapt and change and allows businesses to engage with their audience significantly more (Alexander, n.d.).

While digital marketing was already growing and a shift toward the use of digital channels for marketing had occurred, the COVID-19 pandemic forced marketers to adapt faster than ever before (Abramovich, 2021). With consumers transitioning to online platforms due to COVID-19 shutdowns, many companies were able to remain successful due to their use of digital channels, especially companies that had a strong online presence and digital strategy prior the pandemic beginning (Abramovich, 2021). The impacts of the COVID-19 pandemic also caused the personalization of marketing to become increasingly important and there has been a transition toward direct-to-consumer models, with many companies targeting consumers directly online (Abramovich, 2021). Since it began, the COVID-19 pandemic has caused the outlook of digital marketing and anticipated trends to evolve (Abramovich, 2021).

In addition to the transition toward more meaningful, personalized, and direct-to-consumer marketing models, businesses are also working to improve and build consumer trust by eliminating the use of the third-party cookie, trackers on websites created by a company other than the website owner (Abramovich, 2021). Companies are also continuing to focus on their digital transformation, improving their ability to quickly respond with their marketing and

communications in times of crisis, and investing more in digital marketing channels (Abramovich, 2021).

### **The Internet and Digital Marketing in Agriculture**

The internet has significantly changed the way agricultural producers communicate with consumers and get their information (White, 2014). The popularization of social media revolutionized how people involved in agriculture could engage with people outside of the industry, providing a channel for two-way communication between consumers and agriculturalists (White, 2014). As consumer preferences have moved towards an interest in where food comes from, transparency from producers, and local food, a connection and relationship between producers and consumers has become vital. According to White (2014), the internet, social media, and all forms of online communication have had a greater influence on U.S. agriculture than any other channel in the last century.

Producers now have the opportunity to connect with consumers to build relationships and build trust in their practices and the agriculture industry as a whole. In addition to having the opportunity to build a relationship between producers and consumers, there has also been an increase in consumers' interest in local food (Adams, 2010). Many direct-to-consumer producers have taken advantage of the public's increase in social media use to connect with current customers and to reach new customers (Adams, 2010).

When small agricultural operations are marketing directly to consumers, the social media presence is often managed by the farmer themselves, or an employee who also works in the field, rather than an individual hired specifically to manage the online communication (Abrams & Sackmann, 2014). Personal and farm business social media also tend to be intertwined, indicating personal use of social media may lead to farmers adopting social media for business purposes (Abrams & Sackmann, 2014).

Social media and the internet have provided agricultural producers with mass influence for the first time, one of the most beneficial attributes of an online presence (Varner, 2018). Consumers now have more access to information about food production and rather than only learning about agriculture through face-to-face conversations, many consumers are now using social media to educate themselves about agriculture (Varner, 2018). Social media provides agricultural producers with access to a large audience of consumers to educate and promote their products to (Varner, 2018). In addition, social media has provided producers with the ability to share information and communicate with millions of other producers (Varner, 2018).

### **Overview of New York Agriculture**

According to the 2020-2021 New York Agricultural Statistics Annual Bulletin, published by the National Agricultural Statistical Service (NASS) and the United States Department of Agriculture (USDA), there are approximately 33,400 farms in New York State, covering nearly seven million acres of land. While the metropolitan of New York City is what comes to mind when most people think of New York, New York City and Long Island account for only one million of the 32 million acres making up New York State (USDA Forest Service, 1999). For this study, Upstate New York is defined of all counties in New York State except the counties making up New York City and Long Island. The counties excluded from this definition of Upstate New York include Westchester, Bronx, Kings, New York, Queens, Richmond, Rockland, Nassau, and Suffolk counties. New York agriculture contributes roughly \$5.4 billion in market value of agricultural products sold to the state's economy, and agriculture also employs 55,363 people in the state, with dairy and milk production accounting for almost 26,000 of those jobs (NASS, 2017).

New York's top 10 agricultural products include milk, corn for grain, hay, cattle and calves, apples, floriculture, cabbage, sweet corn, potatoes, and tomatoes (New York Farm Bureau, n.d.). In 2017, the value of dairy products and milk sold totaled \$2.7 billion, and the

value of apples sold totaled \$343 million (New York Farm Bureau, n.d.). New York State is a top producer in a variety of fruit, vegetable, and livestock products in the U.S. and is the top cottage cheese and yogurt producer in the country, producing 28.2% of creamed cottage cheese, 30.9% of low-fat cottage cheese, and 16% of yogurt produced in the U.S. (NASS, 2021). New York State ranks second in apple, cabbage, snap bean, sour cream, and maple syrup production (NASS, 2021). Other top rankings include fourth in milk production, eighth in sheep and lambs (butchered), and 12<sup>th</sup> in honey production (NASS, 2021). The 2017 Census of Agriculture found 77% of farms have internet access, 4% of farms farm organically, 17% sell directly to consumers, and 96% of farms in New York State are family farms.

### **Direct-to-Consumer Marketing/Sales**

Direct-to-consumer marketing in agriculture includes marketing arrangements in which producers sell agricultural products to the consumers without intermediaries, such as sales to consumers through farmers' markets, community supported agriculture (CSAs) or farm stands, according to the USDA Economic Research Service. Direct farm sales include fresh and processed or value-added products including bottled milk, cheese, meat, jam, cider, wine, et cetera. (LFMPS, 2015).

Two of the primary benefits of direct-to-consumer marketing for agricultural producers include the opportunity for farmers to improve the economic viability of their operation and allowing farmers the opportunity to establish personal connections with customers (Adam et al., 2016). Agricultural businesses can improve their economic viability with direct-to-consumer sales by capturing a larger percentage of each dollar rather than incurring costs of the "middleman," for example, processors and distributors (Adam et al., 2016).

The 2015 Local Food Marketing Practices Survey reports direct-to-consumer sales accounts for 35%, or \$3 billion, of direct farm sales in the U.S. and on-farm stores and farmers' markets account for 67%, or \$2 billion, of direct-to-consumer sales (LFMPS, 2015). Other sales

avenues include roadside stands away from the farm, community-supported agriculture, online, pick-your own, and mobile markets (LFMPS, 2015).

Direct to consumer sales increased by 32% from 2002 to 2007 and the number of direct-to-consumer operations increased by 17% (Thilmany et al., 2020). Since 2007, direct-to-consumer sales growth has plateaued and the stagnation has been attributed to several factors (Thilmany et al., 2021). According to O'Hara and Low, the Great Recession contributed to this plateau (2016). Market saturation and new data disaggregation are two other important factors (Thilmany et al., 2021).

The 2017 direct-to-consumer sales growth is due in part to a definition change regarding processed foods sold directly from the farm to consumers. In the 2017 Census of Agriculture, these foods were counted as direct-to-consumer products for the first time, therefore 2017 sales are not directly comparable to earlier periods (Thilmany et al., 2021).

### **Direct Agricultural Sales in New York**

As the home of the largest U.S. city, New York State is a prime location for direct agricultural sales. According to the 2015 USDA Local Food Marketing Practices Survey, U.S. farmers produced and sold \$8.7 billion of edible food commodities directly to consumers, retailers, and institutions in 2015. New York State ranked third in top states in direct farm sales behind California and Michigan, with \$441,000,000 in sales in 2015 (NASS USDA, 2015). New York ranked second in direct-to-consumer sales in 2015, with \$237,000,000 in sales, behind only California (NASS USDA, 2015).

### **Impact of COVID-19 on Direct-to-Consumer Sales and Digital Marketing**

In March 2020, the COVID-19 disease was quickly spread across six continents (Aday & Aday, 2020). On March 11, 2020, the rapidly spreading disease was officially declared a

pandemic by the World Health Organization (Aday & Aday, 2020). COVID-19 quickly spread in the U.S. and led to the closing of businesses and schools across the country, and heavy restrictions on travel (Bartik et al., 2020). While COVID-19 did not directly affect production by spreading through livestock or agricultural products, the pandemic did have a significant impact on the food supply chain (Aday & Aday, 2020). With many processing facilities unable to remain in operation due to workers becoming infected with COVID-19, many producers struggled to find processors, and bottlenecks began to form in the supply chain (Aday & Aday, 2020). As these bottlenecks formed in the food supply chain and panic buying led to shortages in grocery stores, many consumers began looking toward alternative routes to purchase their food. Many farms and ranches that were selling their products direct-to-consumers prior to the COVID-19 pandemic increased their use of social media platforms and online communication, such as websites, that allowed customers to see product availability and order products (Goldy et al., 2020).

In response to the COVID-19 pandemic, many producers and businesses selling direct-to-consumers pivoted to online marketing and sales (Thilmany et al., 2021). Only 8% of farmers with direct-to-consumer foods sales had online marketplaces in 2015 (Thilmany et al., 2021). Online local food sales increased by 360% between April and May 2020, and there was a 63% increase in the number of producers who were first-time e-commerce users compared to 2019 (Thilmany et al., 2021). In addition, many producers who had slightly or unused e-commerce platforms previously, began actively selling through their profiles (Thilmany et al., 2021). Producers saw a 189% increase in number of online orders and a 71% increase in dollars spent per order (Thilmany et al., 2021).

### **Problem Statement**

Over the last decade, changes in consumer preferences and purchasing trends have led to an increase in direct-to-consumer sales of local food products (Martinez & Park, 2021). Between 2002 and 2007, direct-to-consumer sales increased by 32% and the number of direct-to-consumer



operations increased by 17% (Thilmany et al., 2020). With the rise of the internet and the popularization of social media, digital marketing and an online presence has become essential for businesses to be successful (White et al., 2014).

The slow transition from traditional to digital marketing strategies was catapulted forward by the COVID-19 pandemic (Abramovich, 2021). Companies began focusing their marketing dollars and efforts on digital channels, and moved toward more personalized, direct-to-consumer marketing models (Abramovich, 2021).

The COVID-19 pandemic also created disruptions in the U.S. food system and forced many businesses to adapt and overcome the challenges created. For direct-to-consumer agricultural producers, this included expanding to online avenues including websites and social media for the first time or using these platforms more than ever before (Thilmany et al., 2020). The impact of the COVID-19 pandemic on consumer behavior and the food supply chain, in conjunction with the rise of social media and digital marketing, has caused an increase in the need for small, direct-to-consumer agricultural businesses to have an online presence (White et al., 2014).

While there is robust research exploring direct-to-consumer marketing from the consumer's perspective, there is a lack of research exploring the effectiveness and use of online direct marketing by agricultural producers, especially small farmers (Abrams & Sackmann, 2014). Additionally, current research addressing online direct marketing tends to focus on direct marketing through a farm website rather than social media (Abrams & Sackmann, 2014) and there is a need for research exploring the social media and online communication use of agricultural producers post-COVID.

### **Purpose & Research Questions**

The purpose of this study was to explore the current use of online communication and digital marketing efforts of direct-to-consumer agricultural businesses in Upstate New York.

The following research questions framed this study:

RQ1: How are direct-to-consumer agricultural businesses in Upstate New York using social media and online communication to promote their business?

RQ2: What support are these businesses looking for to improve their social media and online presence?

## CHAPTER II

### REVIEW OF LITERATURE

#### **Local Food and Direct Marketing**

Over the last few decades, consumers have expressed an increasing interest in food production practices and have demanded greater transparency in the U.S. food supply chain (Feldmann & Hamm, 2015). Consumers are more concerned about attributes of production including animal welfare, traceability, and the environmental impact of the product (Grunert et al., 2018). Consumers are also prioritizing local foods and foods marketed directly to consumers, by the producer (Feldmann & Hamm, 2015). According to Feldmann and Hamm (2015), this transition toward local food was not initially due to an increased demand from consumers, instead, it was a result of government attempts to strengthen their local economies. Many state governments launched programs supporting local, small-scale farmer and programs to market state-grown products (Feldmann & Hamm, 2015). In addition to an interest in local food, consumers are also interested in products labeled “natural” or “organic” and products with these labels tend to convey positive health and environmental images to consumers, leading to a higher willingness to pay (Lim et al., 2018).

A literature review by Feldmann and Hamm (2015), reviewing 75 articles published between January 2000 and January 2014 relevant to consumer perceptions and preferences for local food, was conducted to summarize the main results and identify gaps in the research of this topic. A key finding was consumers believe local food is higher quality and healthier than

conventional options. Of the articles analyzed, better quality and taste of local food was mentioned most often by consumers when asked why they prefer local food (Feldman and Hamm, 2015). Consumers also perceived local foods to be safer and expressed a higher level of trust in local food producers and products because they are easier to trace back (Feldmann and Hamm, 2015).

The increased consumer interest in local foods is also connected to concerns related to sustainability and reducing the carbon footprint (Aprile et al., 2016). Consumers view local food production as an alternative food system based on the principles of social justice that will aid in rebuilding the link between producers and consumers (Aprile et al., 2016). With these concerns and preferences surrounding food purchasing, Aprile et al. (2016) found 95% of participants make an effort to find and buy local food products.

Direct-to-consumer sales is the most popular form of direct marketing and 69% of farms with direct sales use direct-to-consumer channels (NASS USDA, 2015). Direct-to-consumer channels include sales through farmers' markets, on-site farm stores, roadside stands, CSA arrangements, online sales, pick-your-own operations, mobile markets, and other avenues (NASS USDA, 2015).

Direct-to-consumer marketing channels, such as farmers' markets, are often used to market and sell local food products (Printezis & Grebitus, 2018). According to the USDA Agricultural Marketing Service (2018), the number of U.S. farmers' markets tripled between 2000 and 2018, rising from 2,863 to 8,718. Community supported agriculture is also a popular sales channel for local food that has seen drastic growth in recent years, increasing from only 761 programs in 2001, to 7,398 programs in 2015 (NASS, 2016).

There are factors that contribute to a higher likelihood an operation will engage in direct marketing, for example, farms using organic production methods are more likely to engage in

direct marketing (Monson & Mainville, 2008). Agritourism has also been found to contribute to an increase in an operation's income, through on-farm stores (Govindasamy et al., 1999). While there has been a significant amount of research exploring consumer preferences and perceptions of local food and direct marketing strategies, there is a lack of research focusing on producer behavior and the marketing and communications efforts, and specifically how they impact the financial success of operations using direct marketing strategies (Park et al., 2014).

### **Social Media and Online Communication**

Social media can be defined as websites and mobile applications enabling users to create content and participate in online social networking (Escobar-Viera et al., 2018). Examples of social media platforms include Facebook, YouTube, and Tumblr (Escobar-Viera et al., 2018). Today, over 90% of U.S. adults reported using at least one social media platform over the last 12 months (Escobar-Viera et al., 2018).

Online communication refers to the ways in which individuals and computers communicate with each other over a computer network, such as the internet (IT, n.d.). Examples of online communication include chat rooms, e-mail, forums, websites, and social networking sites (IT, n.d.).

### **In Marketing**

Social media and online communication can be used by businesses as a digital marketing channel that marketers can use to communicate with consumers (Appel et al., 2020). According to Appel et al. (2020), social media can be viewed more broadly, as digital places where people conduct significant parts of their lives, rather than specific technology services. The use of social media as a marketing tool has been more pronounced in business to consumer businesses and social media marketing focuses on improving customer relationships (Olanrewaju et al., 2020).

Social media has created a two-way dialogue between consumers and businesses (Rutasert et al., 2013). Prior to the popularity of social media, businesses were not able to

communicate directly with customers on a regular basis, and most communication was one-way. Social media platforms have allowed for businesses and customers to connect in ways that were previously not possible through building shared interests and values (Li et al., 2021). From a marketing perspective, virtually every part of a consumer's decision-making process is prone to social media influence, due to the transition from designated social media platforms to the "omni-social" nature of today's social media environment (Appel et al., 2020).

Social media not only allows businesses to interact with customers, but also provides businesses with a platform for storytelling and content marketing. While content marketing has been utilized for hundreds of years, dating back to John Deere's magazine *The Furrow*, social media has allowed businesses to use storytelling with fewer barriers to entry (Pulizzi, 2012). Prior to the popularization of social media, content acceptance, talent, and technology were the three major barriers to entry to content marketing (Pulizzi, 2012). In today's social media landscape, brands of any size are able to connect with customers and have customers accept and engage in their content (Pulizzi, 2012).

Although social media use has exploded over the last decade, there is a need for guidance on how to successfully use social media as a marketing tool to foster relationships with customers, increase customer engagement, and improve marketing performance (Li et al., 2021). Today, a comprehensive definition of social media marketing strategies does not exist and there is a lack of a framework to guide the development and analysis of social media marketing strategies (Li et al., 2021). Olanrewaju et al. (2020) found many recent studies on social media marketing calling for a more strategic approach to using social media as a marketing tool.

### **In Agriculture**

Research related to social media and online communication in agriculture has primarily focused on consumer behavior in the past (Abrams & Sack, 2014). There is currently a lack of research on agricultural producers' behavior related to social media and online communication.

Due to the rural location of most farms, accessibility to reliable internet service is one of the most important factors to consider when exploring the use of online communication among agricultural producers (Whitacre et al., 2014). According to Low and Vogel (2011), reliable internet access increases the likelihood a farm participates in direct-to-consumer sales and increases the farm's level of sales.

Social media can be an extremely useful tool to assist agricultural producers in marketing their products, especially Facebook (Balkrishna, 2017). Although it is clear Facebook can be an asset to the marketing efforts of agricultural producers, a study by King and Settle (2020) examining the social properties of Oklahoma agricultural Facebook page found about one-fourth of the Facebook pages did not make any posts in the six-month period. Of the pages examined, more than half of the pages had only 10 posts in the six-month period.

A primary motivating factor for agricultural producers using social media, is financial gain (Abrams & Sackman, 2014). Younger agricultural producers are more likely to use social media for their businesses (Telg & Barnes, 2012) and producers are more likely to use social media if they have prior experience. Regardless of producer age or experience, it is important for small farmers to receive education related to using social media for marketing purposes (Davis, 2017). According to Pratt (2018), there are currently some resources available to help producers establish an online presence, however the available educational resources often lack consistency.

Recommendations for a successful online presence range from suggesting producers post on a consistent basis (Pratt, 2018) to simply creating a page for the business (Culler, 2018). Bowman (2020) found it is best to take the individual needs and goals of operations into consideration when making recommendations on effective social media use.

According to O'Hara and Low (2020), rural farms that are new to direct-to-consumer marketing, and far from urban areas, were 7% more likely to incorporate online marketplaces than more experienced producers. In 2015, online sales accounted for 6% of all direct-to-consumer sales by U.S. farms (NASS USDA, 2016).

While agricultural producers are using social media for marketing purposes, another major contributing factor, is the desire to combat negative information about agricultural online (White, 2014). Producers are using social media on a personal level to share their stories, interact with consumers, and answer consumer's questions, in addition to marketing their products (White, 2014). According to Graybill-Leonard et al. (2011), it is in the best interest of agricultural communicators to use Facebook and other social media platforms to communicate about agricultural issue with the public. In addition, Abrams and Sackman (2014) found alternative farmers' use of online communication tools is positively related to their social capital and a positive relationship exists between their Facebook use and farm revenue.

### **COVID-19 Pandemic**

In March 2020, as the COVID-19 pandemic quickly spread across the U.S., hotels, restaurants, schools, and institutions shut down (Weersink et al., 2020). These closures led to a drastic shift in the demand of food products and revealed flaws in the U.S. food system (Weersink et al., 2020). With the closures across the country, grocery stores saw a drastic increase in volume of sales and the food system saw a shift in demand of size, form, and packaging of foods (Weersink et al., 2020). Consumer behavior also changed, affecting supply and demand (Weersink et al., 2020). Many consumers began baking more and stockpiling food products, especially meat and frozen foods (Weersink et al, 2020).

In addition to impacting the supply and demand of food products, COVID-19 also directly affected the supply chain by infecting plant workers. At least 54,036 workers throughout the food supply chain, including meat packaging and food-processing workers and farmers, were infected with COVID-19 in the U.S., leading to the closure of many facilities (Aday & Aday, 2020). The closures of food plants throughout the country created a ripple effect in the food supply chain, forcing producers to cull livestock, as they were unable to find processors (Aday & Aday, 2020). With the disruption of the food supply chain and greater consumer demand, grocery



stores were left with empty shelves and the decrease in supply and increase in demand resulted in a rise in the price of meat products (Aday & Aday, 2020). Some stores even implemented limits on the number of meat products customers could buy (Aday & Aday, 2020).

With restaurants closed for dine-in service and offering limited service for to-go orders, demand shifted from the food service industry to retail (Aday & Aday, 2020). Consumers were making fewer visits to grocery stores, however the amount of money spent per visit increased (Aday & Aday, 2020). Consumers also began purchasing products with a longer shelf life including shelf-stable milk and milk substitutes, dried and canned beans, canned tuna, pasta, and frozen foods (Bakalis et al., 2020). In addition to the change in grocery store purchasing habits of consumers, consumer practices also changed as a result of social distancing (Bakalis et al., 2020).

There was an overall increase in the use of online platforms to order food, share recipes, and replicate or replace social interactions surrounding food (Bakalis et al., 2020). In May 2019, roughly 13% of U.S. households shopped for groceries online (Thilmany et al., 2020). In May 2020, that number rose to 33% (Thilmany et al., 2020). As a result, many producers who sold products direct-to-consumer prior to the COVID-19 pandemic adapted and began selling products online (Thilmany et al., 2020). With the meat shortage in grocery stores, many consumers turned to local producers and between April and May 2020, online local food sales increased by 360% (Thilmany et al., 2020). This increase in total sales was a result of an increase in the number of sales, a 189% increase, and a 71% increase in dollars spent per transaction (Thilmany et al., 2020).

Prior to the COVID-19 pandemic, online sales of grocery products were steadily growing worldwide (Dominici et al., 2021). While e-grocery shopping was growing in popularity, Dominici et al. (2021) found only 2% of participants were purchasing food online and there is little research exploring why the food industry was experiencing such an apparent lag. Socio-demographic characteristics and situational factors were the most significant factors affecting individuals' decision to purchase groceries online.

## **Theoretical Framework**

### **Diffusion of Innovation Theory**

Diffusion of Innovation Theory is a theory rooted in agriculture. Dr. Everett M. Rogers first became interested in the diffusion of agricultural innovations by observing farmers in his home community who failed to adopt new ideas, even when the innovations could be profitable to them (2003, p. xv). Everett (2003) questioned why farmers did not adopt innovations and concluded the economic benefit was not the only factor these farmers were taking into consideration (2003, p. xv).

As Rogers originally noted, it can be difficult to get a new idea adopted, even with obvious advantages, and it can take many years for an idea to be widely adopted (2003, p.1). Due to the lengthy process of a new idea diffusing through a social system, many individuals and organizations are interested in how to speed up the diffusion of an innovation (Rogers, 2003, p. 1).

Diffusion can be defined as “the process in which an innovation is communicated through certain channels over time among the members of a social system” and communication can be defined as “the process in which participants create and share information with one another in order to reach a mutual understanding (Rogers 2003, p. 5). According to Rogers (2003), diffusion is a special type of communication, because the messages being communicated are new ideas, or innovations (p. 6). The newness of an innovation also contributes to some degree of uncertainty surrounding diffusion (Rogers 2003, p.6). Rogers (2003) stated diffusion is a kind of social change, because of the impact diffusion can have the structure and function of a social system (p. 6). Social change often occurs when new ideas are invented, diffused and adopted or rejected, which leads to certain consequences (Rogers 2003, p. 6).

When analyzing the diffusion of an innovation, there are four main elements to be taken into consideration (Rogers, 1962, p. 1). The first element is the innovation, or an idea perceived as new by the individual (Rogers, 1962, p. 1). Communication of the innovation from one

individual to another is the second element, because this is how the innovation spreads, and diffusion is the process by which innovation spreads (Rogers, 1962, p. 1).

The third element is the social system in which the innovation diffuses (Rogers, 1962, p. 2). According to Rogers (1962), social system a social system is a population of individuals who are functionally differentiated and engaged in collective problem-solving behavior. Examples of a social system Rogers provides include all the farmers in a county, the physicians in a community, or the members of an aborigine tribe.

The final element is the time at which the innovation is adopted by individuals in the social system (Rogers, 1962, p. 2). Rogers (1962) also provides additional definitions, including adoption, which is a decision to continue full use of an innovation; innovativeness, which is defined as the degree to which an individual is relatively earlier to adopt new ideas than the other members of his social system (p.2). Rogers also notes, individuals do not all adopt an innovation at the same time (p.2).

The innovation-decision process is a process in which an individual or organization makes the transition from initially gaining knowledge of an innovation, to implementing the new idea, and confirming the decision (Rogers, 2003, p. 168). The innovation-decision process consists of five stages: knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003, p. 216). In the knowledge stage, individuals are exposed to the innovation and understand how it functions (Rogers, 2003, p. 216). In the persuasion stage, individuals begin to form a positive or negative attitude toward the innovation and in the decision stage, individuals adopt or reject the innovation (Rogers 2003, p. 216). In the implementation stage, the individual utilizes the innovation, and finally, in the confirmation stage, individuals seek reinforcement for the decision made, and may reverse the decision if conflicting messages are received (Rogers, 2003, p. 217).

As a major innovation, the internet has impacted the innovation-decision process (Rogers 2003, p. 215). The internet allows for information to travel around the world almost instantly and

for some innovations, diffusion through the use of the internet significantly increases the innovation's rate of adoption (Rogers 2003, p. 216). The popularization of social media has especially contributed to an increased rate of diffusion of innovations (Kocak et al., 2013).

The degree to which an individual is relatively earlier in adopting a new idea compared to other members of a social system is referred to as innovativeness and members of a social system can be grouped into adopter categories, based on their innovativeness (Rogers, 2003 p. 22). Adopter categories include innovators, early adopters, early majority, late majority, and laggards (Rogers, 2003, p. 22). The distribution of adopters follows a normal distribution with 2.5% being innovators, 13.5% being early adopters, 34% being the early majority, 34% being the late majority, and 16% being laggards (Rogers, 2003, p. 281).

Members who share an adopter category tend to have many similarities (Rogers, 2003, p. 22). Earlier adopters tend to have higher social statuses, larger-sized units (e.g. large farms, schools, companies, etc.), more years of formal education, greater empathy, greater rationality, and more intelligence than later adopters (Rogers, 2003, p. 289). When compared to later adopters, earlier adopters also tend to have a more favorable attitude toward change, are more highly interconnected through their interpersonal networks, and more contact with change agents (Rogers, 2003, p. 291).

When discussing the diffusion of innovation in agriculture, agricultural producers tend to be strongly influenced by opinion leaders (Veil, 2010). A study by Veil (2010) revealed a national animal identification system was not being widely accepted throughout the social system of the North Dakota Stockmen's Association (NDSA). Veil (2010) determined the NDSA leadership served as opinion leaders among agricultural producers in North Dakota. Due to NDSA leadership promoting the rejection of the innovation, the diffusion of the innovation through the NDSA membership was slowed down or even halted, due to the influence of the NDSA leadership as opinion leaders (Veil, 2010).

A study by Seeger and Wilson (2019) supports Veil's (2010) findings, suggesting agricultural producers are strongly influenced by opinion leaders, however opinion leaders in this study were supportive of the program. Seeger and Wilson (2019) examined the diffusion of a public communication campaign referred to as the 4R Nutrient Stewardship Program. The program aimed to educate agricultural producers about best practices in fertilizer application and determined "opinion leaders seem to be particularly important in facilitating the adoption of innovative 4R practices." Seeger and Wilson (2019) found crop advisors and consultants to be opinion leaders within the social system. Crop advisors and consultants are individuals who advise farmers about seed selection, pest and disease management, and fertilizer use, and tend to have advanced education and certifications (Seeger and Wilson, 2019). Seeger and Wilson (2019) also found results consistent with previous research that has found the Farm Bureau plays an important role in agricultural diffusion networks.

A study examining grain farmers' attitudes toward organic and non-organic farming practices found Ohio grain farmers preferred gathering information through interpersonal communication sources when seeking information about whether or not to adopt a farming practice (Hall & Rhoades, 2010). Hall and Rhoades (2010) found farming neighbors and suppliers to be important sources of information related to adoption or non-adoption of farming practices. These findings support Rogers' (2003) statement that interpersonal communication sources are most important for persuading individuals and mass media is useful in individuals gaining knowledge (Hall & Rhoades, 2010).

White et al. (2014) specifically explored social media use for marketing among agriculturalists. The study found the desire to use social media indicates agriculturalists recognized the relative advantage (Rogers, 2003) of using social media to communicate agricultural information (White et al., 2014). White et al. (2014) also found participants were using many different social media platforms. This finding demonstrates Rogers' (2003) concept of technology clusters. Technology clusters are "one or more distinguishable elements of

technology that are perceived as being closely interrelated” (Rogers, 2003, p. 14). White et al. (2014) suggested additional interviews including participants from other geographical regions and agricultural commodities would be beneficial for future research.

## CHAPTER III

### METHODS

The purpose of this study was to explore social media and online communication use of producers and other stakeholders in direct-to-consumer agricultural businesses in Upstate New York to better understand the challenges faced by these businesses in relation to their digital marketing strategies.

The following research questions framed this study:

1. How are agricultural direct-to-consumer businesses in Upstate New York using social media and online communication?
2. What support are these businesses looking for to improve their social media and online presence?

These research questions required a deep understanding of the perceptions of agricultural producers and stakeholders selling direct-to-consumers, therefore a qualitative research study, utilizing semi-structured interviews, was necessary to answer the research questions. This chapter will further explain the methods used in this study. The research design, participant selection, data collection and analysis, measures of trustworthiness, and research subjectivity will be presented, in addition to a further description of qualitative research and the semi-structure interviews conducted.

## Qualitative Research

Qualitative research is an “approach to inquiry that begins with assumptions, worldviews, possibly a theoretical lens, and seeks to understand the context or settings of the participants,” (Creswell, 2007, p. 51). When a detailed, complex understanding of an issue is necessary, qualitative, rather than quantitative research is used (Creswell, 20017). Qualitative research studies individuals in their natural setting, in an attempt to make sense of and interpret a situation, in terms of the meaning people bring to them (Denzin & Lincoln, 2005).

There are several characteristics dividing quantitative and qualitative research. A few examples of qualitative characteristics include exploring a problem and developing a detailed understanding of a central phenomenon; having a literature review play a minor role, but justifying the problem; stating the purpose and research questions in a broad manner to obtain participants views; analyzing data for descriptions and themes using text analysis and interpreting greater meaning of findings; using emerging structure and evaluative criteria in writing of the report; and accounting for researcher subjective reflexivity and bias (Creswell, 2018 p. 19).

A qualitative approach was used for this study because it is especially useful when studying social relations and allows the researcher to empower the individual to share their story and hear their voice (Creswell, 2007; Flick 2018). Using interviews to collect data for this study allowed me to better understand the specific perspective of each participant and collect detailed and specific data. Using qualitative research, specifically interviews, allowed me to gather rich data and a gain a deeper understanding of each participants perceptions and perspective regarding their use of social media and online communication (Flick, 2009).



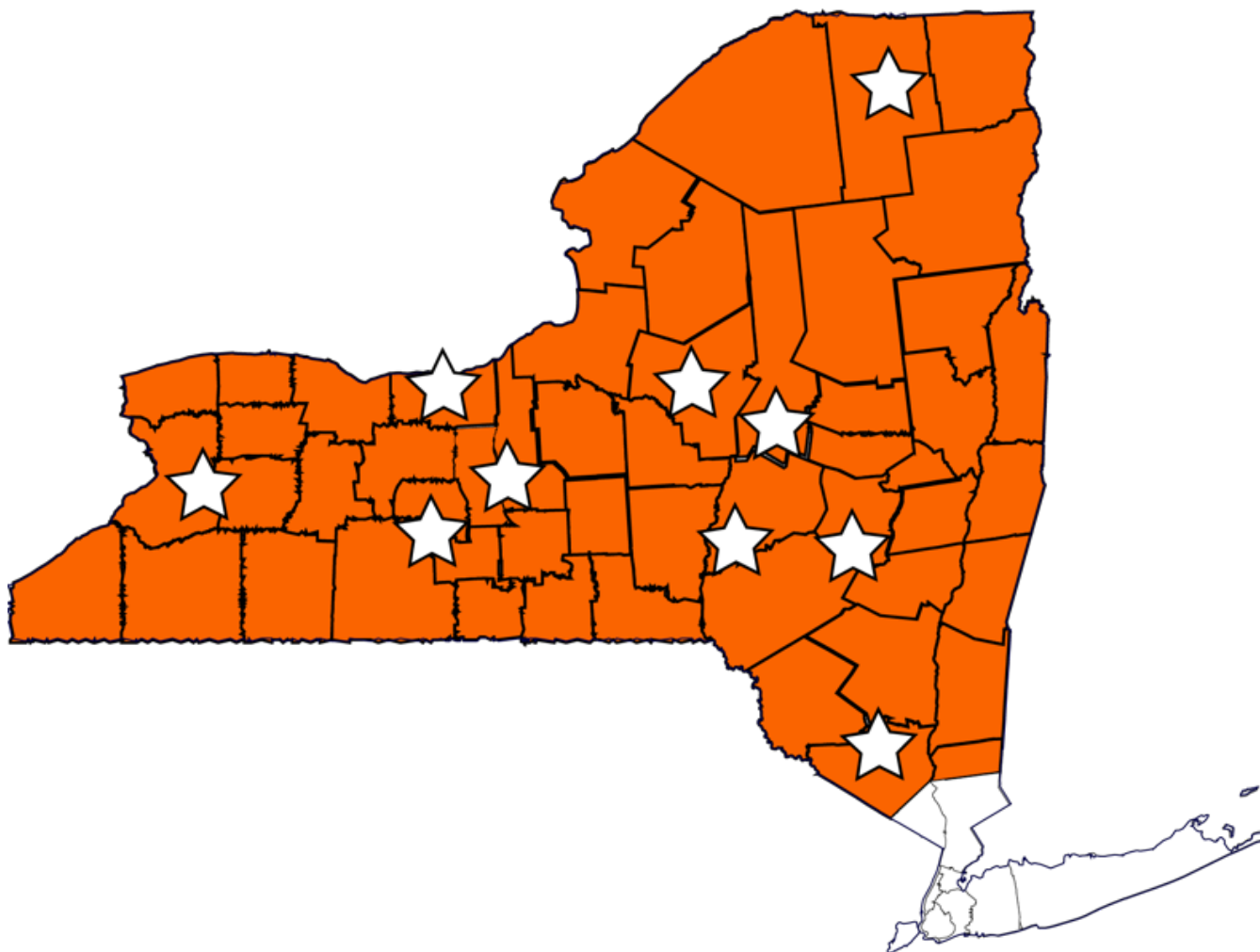
## **Population and Sample**

The population for this study included agricultural producers who sell directly-to-consumers, or the person responsible for maintaining the operation's social media, website, or other online communication efforts in Upstate New York. Purposive sampling was used to select 10 agricultural businesses from across Upstate New York (Creswell, 2007). For this study, Upstate New York will be defined as all counties in New York State, except Westchester, Bronx, Kings, New York, Queens, Richmond, Rockland, Nassau, and Suffolk counties. In addition to selecting operations from a variety of geographic locations across Upstate New York, operations were also selected from a variety of agricultural industries. Operations in the most popular agricultural industries in New York were selected. Figure 1 provides a map of counties included in the study, indicated by the orange fill, and the general location of participants, indicated by a white star, and table 1 provides a description of participants.

Participants were selected and interviews were conducted until the information collected became saturated and novel information was no longer being collected. After 10 interviews were successfully completed, I determined the information I was receiving was becoming repetitive and data saturation had occurred (Guest et al., 2006). All participants were over the age of 18, and all participants were either the owner of the operation or an employee of the business. None of the participants were an independent contractor or other outside source.

**Figure 1**

*Counties included in Upstate New York and geographical area of participants*



**Table 1***Description of Participants*

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Pseudonym	Description of Participant
Steve	Southern New York, dairy farmer bottling milk on farm and selling DTC since 2018, 30–35-mile sales radius
Emma	Central New York, organic beef, pork, lamb, and garlic producer, selling DTC since 2016, sales radius 50 miles or less
Charlotte	Finger Lake Region, winery, employee responsible for social media, selling DTC since 2000s, sales radius is nationwide
Noah	Western New York, chicken, goat, lamb, and beef producer, selling DTC since 2015, 300+ mile sales radius
Amy	Western New York, beef, turkey, chicken, and duck producer, selling DTC since 2020, approximately 30-mile sales radius
Mia	Central New York, turkey producer, selling DTC since 1980s, sales radius across New York State
Ella	Central New York apple and produce producer, selling DTC since 1940s, approximately 20-mile sales radius
Lily	Northern New York Maple Producer, selling DTC since 2015, sales radius is nationwide
Sofia	Western New York, produce producer, selling DTC since 2018, approximately 30-mile sales radius
Joe	Central New York, honey, mead, and somel producer, selling DTC since 2019, approximately 160-mile sales radius

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## Interview Guide

After reviewing current literature on social media use and online communication use in agriculture, direct-to-consumer marketing, consumer food preferences, social media and online communication in marketing, and marketing trends in general, I created a set of interview questions to guide each interview. To gain additional and more in-depth information, I asked follow-up questions pertaining to the primary questions in the interview guide (Flick, 2018). The initial questions were research questions asked in everyday language (Hermanns, 2004), and the follow-up questions were asked to keep the conversation flowing naturally and clarify information from participants (Flick, 2018).

My interview guide was reviewed by Quisto Settle, agricultural communications professor and thesis chair; Dwayne Cartmell, agricultural communications professor and thesis committee member; and Linnea Langusch, agricultural communications instructor and thesis committee member, before being sent to the Institutional Review Board (IRB) for final approval before participants were contacted. The interview guide used for this study can be viewed in Appendix A.

At the start of each interview, I began by asking participants if they had reviewed the document provided to them explaining the study. I then briefly explained the purpose of the study before asking permission to record the interview. After the introductory phase, I began by asking the participant to provide background information about their operation. This typically provided information such as where the operation is located, what products are produced, and how long the operation has been in business. If any of this basic background information was not provided in this answer, I asked specifically for that information.

I then asked each participant about the avenues they sell their products through, social media platforms they use, whether or not they have a website, how they currently market or promote their business and products, and how comfortable they are managing social media accounts and/or a website for their business. At the end of each interview I asked participants

about their opinion on receiving different types of support managing their social media, website, and online communication

### **Data Collection**

Prior to any data collection or contact with participants, IRB approval was obtained. The IRB approval can be viewed in Appendix B. Participants were selected through purposive sampling, specifically through personal contacts and searching the internet for businesses fitting the participant parameters. A copy of the recruitment message can be viewed in Appendix C.

Participants were provided with an informational document prior to the interview, outlining the purpose of the study, the confidentiality of the study, and by continuing with the research, the participant consented to voluntarily participate. At the start of each interview, I confirmed the participant had reviewed the informational document and requested permission to record the interview.

Due to the geographical challenge of meeting in person, all interviews were conducted via Zoom using my Zoom account. Computer-assisted interviews have become more widely used in qualitative research and do have some advantages, such as the automatic transcription of interviews by some video conferencing platforms, including Zoom (Brinkmann & Kvale, 2018). While there are some advantages to computer-assisted interviews, including the ability to safely conduct interviews during a pandemic and conduct interviews with participants who are geographically distant from the researcher, there are also drawbacks: Computer-assisted interviews omit cues from body language and spoken language, which can make it more difficult for researchers to generate rich and detailed descriptions (Brinkmann & Kvale, 2018).

Some participants did experience unstable internet connections, however all interviews were able to continue after reconnecting. During one interview, another employee attempted to use the business's shared Zoom account, removing the participant from the interview, however

shortly after, the participant was able to rejoin the meeting and the interview continued without any further issues.

Interviews were automatically transcribed by Zoom and I then cleaned up and reviewed for accuracy. Confidentiality of participants was ensured through assigning each participant a randomly created pseudonym and removing all identifying information. All transcripts, audio, and video files were downloaded to my password-protected computer. Interviews were conducted between December 21, 2021, and January 28, 2022.

### **Data Analysis**

Glaser's Constant Comparative Method (Glaser, 1965) and thematic analysis (Braun & Clark, 2006) were used in the data analysis of this study. In Glaser's Constant Comparative Method, data is broken down into "incidents" and coded using categories (Glaser & Strauss, 1967). When utilizing thematic coding to analyze data, the data is analyzed in a comparative way for case studies such as interviews (Flick, 2009). With constant comparative analysis, joint coding and analysis are used to generate theory more systematically than traditional emergent theme analysis (p. 437), however constant comparative analysis does not rely entirely on coding. The purpose of coding is for provisional testing of hypotheses, not discovering of hypotheses (Glaser, 1965). Thematic analysis is used to reveal themes or patterns within the data and organizes and "describes data in (rich) detail" (Braun & Clark, 2006, p. 81). Thematic analysis was used to understand "various aspects of the research topic" and to find patterns (Braun & Clark, 2006).

Semantic codes (i.e., expressed verbally) and latent codes (i.e., underlying meanings) were then applied to the data (Flick, 2018). The codes were used to sort, label, and compare data (Flick, 2018). After incidents in each individual interview were coded, they were compared with incidents in other interviews (Glaser, 1965) and sorted into themes.

MAXQDA, a coding management software, was used to organize and efficiently code each interview. MAXQDA and other coding management software programs are a useful tool in

the organization of files and efficiency of coding data, however MAXQDA did not conduct any analyses or draw conclusions (Trochim, 2020). MAXQDA also supports the transparency of this research study (Trochim, 2020).

### **Measures of Trustworthiness**

To better reflect the assumptions involved in qualitative research, Guba and Lincoln (1994) proposed criteria for judging the strength of qualitative research, including credibility, transferability, dependability, and confirmability. These alternative criteria are frequently used to describe the soundness of a qualitative research study.

The level of confidence in the accuracy of a study's findings is referred to as credibility (Lincoln & Guba, 1985) or how believable the results are (Trochim, 2020). Data triangulation is the combination of different methods, theories, or data sources to examine a phenomenon (Flick, 2009) and is a tool to help researchers establish credibility (Lincoln & Guba, 1985). To ensure the credibility of the interview guide for this study, the interview guide was reviewed by Quisto Settle, chair of thesis committee and agricultural communications professor, Dwayne Cartmell, member of thesis committee and agricultural communications professor, and Linnea Langusch, member of thesis committee and agricultural communications lecturer. A practice interview was also completed using the interview guide. Transcripts were compared to the interviewer's notes and the cleaned-up transcripts were sent to participants as a member check (Creswell, 2018).

Transferability refers to the degree the findings of the study can be applied to other contexts (Trochim, 2020). A detailed description of the methodology used for data collection and data analysis have been included in this study so the study may be repeated by future researchers. A detailed account of the methodology and protocols of this study are useful to future researchers in determining how applicable this study is (Lincoln & Guba, 1985).

Dependability refers to the consistency of the study's results and whether or not the study is repeatable (Lincoln & Guba, 1985). Dependability is checked through the process of auditing

and creating a document trail of the research process (Flick, 2009). All data was obtained from interviews using audio recorders and notes taken by the researcher to create an audit trail. Bree Elliott, an agricultural communications master's student reviewed and confirmed the results of this study were representative of the interviewees' responses rather than the researchers' bias.

Confirmability refers to the degree in which the results from the study can be confirmed by others (Trochim, 2020) or the extent the findings are affected by the participants interviewed and not the researcher's bias or motivation (Lincoln & Guba, 1985). MAXQDA was used in this study to assist with organization and maintain the quality of the data.

### **Researcher Subjectivity**

I am currently an agricultural communications graduate student at Oklahoma State University. I was born and raised in a small town in Upstate New York surrounded by agriculture. I grew up involved in youth agricultural programs including 4-H and FFA, and I began raising and showing dairy goats as a 4-H project in 2009 when I was 11 years-old and have remained involved in agriculture since then. I received my undergraduate degree in agricultural business management from SUNY Cobleskill. I do not have a direct affiliation with direct-to-consumer agricultural businesses. I have learned of the difficulties and struggles these operations are facing with promoting their business and products online, and this inspired me to explore their current use of social media and online communication in order to gain a better understanding of what support is needed for this industry.



## CHAPTER IV

### FINDINGS

The results of the study were reported based on the study's two research questions:

1. How are agricultural direct-to-consumer businesses in Upstate New York using social media and online communication?
2. What support are these businesses looking for to improve their social media and online presence?

Findings were divided between the research questions and into themes under each question.

#### **RQ1: How are agricultural direct-to-consumer businesses in Upstate New York using social media and online communication?**

To better understand how agricultural direct-to-consumer businesses in Upstate New York are using social media and online communication, participants were asked how they are currently promoting their business and products; if they are using social media and if so, the platforms they are using and more specifically how they are using social media; and if they have a website and the type of content included on the website. The following themes were generated from participant responses: Facebook is the most popular platform, businesses are currently using a website or intend to in the future, finding time to focus on social media and online communication is a challenge, and social media and online communication are valuable to the

success and growth of the business.

### ***Facebook is the most popular platform***

When participants were asked about the specific platforms used for the business, participants often responded with having both an Instagram and Facebook accounts or only a Facebook account. While multiple participants responded with having both an Instagram and Facebook account, Facebook tended to be more popular, being used more consistently by businesses and having larger followings and more interactions from consumers compared to Instagram and other platforms.

When asked about how she specifically uses social media platforms, Lily said “We tend to use Facebook more often than Instagram, just because it works. I guess it’s a more practical way to reach our target, our target market. Our audience is more families rather than maybe your younger Gen Z’s and millennials that are using Instagram.”

Steve also uses Facebook more often than Instagram:

I mainly use Facebook. That’s been my, my clientele I believe is mainly on Facebook. My sister has an Instagram and made one [a business page] and posts some pictures on there. We don’t use it as often as Facebook. I mean, Facebook is more or less the mainstream of what we do for posting and sharing and kind of connecting people.

While explaining the social media platforms she uses, Ella said she finds Facebook tends to be more popular for her business. She said “So we have the Facebook page and then obviously linked it with Instagram. So, there is an Instagram page, but Facebook by far, has much more action, much more followers, that kind of thing.”

While some participants have both an Instagram and Facebook account for their business and tend to utilize Facebook more, others do not have an Instagram account for their business.

When asked if she has an Instagram account, Emma said “Not really. I haven’t ventured into that.” Mia said, “As far as social media, I only have a Facebook account. I don’t have all the others. Perhaps I should, but I don’t.”

While Facebook tended to be the primary channel used by small businesses, there are also challenges associated with using Facebook as a platform for advertising. Charlotte has experienced the challenges firsthand:

I have found in the 10 years that I have been doing this aspect of the business that it’s getting more and more challenging to market online and you would think it’s getting less and less challenging, but it’s not. I find it, it’s getting more and more you have to pay to play much more than you had to years back. So, that has been a real challenge, not just for me, but for other marketing directors, I know because I serve on a lot of marketing committees, that idea that Facebook is, love it or hate it, that is still one of the primary methods for reaching people right, I mean they can’t really deny it and so that’s been a challenge for us.

Mia has seen other benefits to using Facebook outside of her intentional marketing efforts on the platform. While talking about how she uses Facebook, she said,

Where I found a benefit to Facebook and I got some last year, but I really saw a difference this year and I think it had a lot to do with the greater turkey market in that it was hard to find turkeys in stores. So, the number of people in different groups, whether their community groups or just on their personal pages going “where do I get a turkey” and the number of people that would tag us. Current customers tagging us, as well as just people in the community that knew we had turkeys so, again, that’s your word of mouth, so it’s not just what I’m putting out there, it’s what other people are saying for me.

### ***Businesses currently have a website or plan to in the future***

Businesses are using websites for e-commerce and as a source of information for customers. Many participants currently have a website for their business, are in the process of creating a website, or intend to have a website in the future. Many participants also expressed interest in using an e-commerce platform to sell their products directly to consumers. The participants currently using their websites as a sales avenue have seen a significant amount of sales through their e-commerce platform and find it to be a very successful sales avenue.

Since launching a website to sell direct-to-consumers in 2020, Lily has seen a rise in sales across the country and added the website facilitated those sales and helped streamline the sales process for her operation:

The website was really helpful in just the logistics of getting the product out the door, because before we would, let's say make a sale on Facebook, but you had to have that conversation with the consumer, which was nice, but a lot of consumers just want to go on a website, click what they want, you put in your card information and be done with the sale. They don't want to sit there and have a conversation with the owner of the business that's going to take five or ten minutes to figure out shipping and your address, and this and that, so it worked and surprisingly had quite a few sales that way, but we just ultimately wanted something that was more convenient for the customer so, and it helped because before we were all the time running to the post office to drop orders in the mail, and then we were kind of estimating what shipping would be. So, the website was really helpful in just having you know those plugins already set, so were getting live shipping rates and it just made, I think that relationship with a customer a lot more smooth and then it gave me more time to focus on my marketing efforts and not necessarily the

logistics of getting the product out the door and having that conversation with the customer trying to sell the product I guess.

Charlotte, an employee responsible for managing a winery's marketing and social media, has also reached a large market by using a website to sell directly to consumers. Originally, the website did not receive a large number of orders, however after Charlotte set up a wine subscription program facilitated through a website, the winery was extremely successful with online sales. She said,

When [owners] bought it, we had a whole new website build and everything and put in a different type of e-commerce site. I'm not remembering what platform our website developer put in at that time, but people could order online. Orders would trickle in here in there. . . . Our first [wine club] shipment went out in January of 2018, so just actually four years ago this week that I sent the first shipment out. Our goal was to get 50 members the first year, because we're a small family-owned winery right, I sent out 76 shipments for the very first shipment. I had hoped for 50 for the year, right and I sent out 76. . . . So now four years later, we're just over 900 members.

While both Lily and Charlotte have used websites to facilitate online sales, others are using a website as an informational platform for customers, however they are interested in implementing an e-commerce platform. Joe said the website only provides information about the business and educational content due to restrictions related to selling alcohol online in New York:

There's some stuff about all three of our partners, just kind of a little bio. There's recipes, there's a whole, the process of distillation process is there from the honey bees, through kind of like, walking people through what we do. There's descriptions of our products. As far as direct-to-consumer, Cuomo, Governor Cuomo allowed it during the early part of the COVID, we could sell, send product to somebody, and they pulled the plug on that

this spring, and New York State distilleries are pushing for this to come back, it would help us all to do it.

Sofia also uses a website as an informational platform for her producer operation; however she does not update her website as frequently as her social media. She has also considered using an e-commerce platform in the future. She said,

Typically, on the website I don't do as much. I list all of our events so people can see what events are coming up. For the website, I try to update that probably, I don't know, every once or twice every week, so not as much as Facebook and I'll put on obviously my hours and the days we're open, interesting things that might be happening on the farm and then I do list somewhat of a comprehensive list of the things that we have at the farmers' market. I sort of thought about, haven't done it yet, maybe making it an e-commerce website where they can actually order stuff, but I'm sort of waiting until I got a few more items in the market before I started doing that.

The website for Ella's produce operation is also an informational website, and she said the website was outsourced and is managed by someone outside the business, which has presented some challenges. The website is not updated often, and the information is not always accurate, creating confusion for customers. She said,

We used to do, we had an in-house bakery, so we used to do apple pies and donuts and that was all on the website and then people, we stopped doing them, people were like, 'well you're still advertising on your website.' So stuff like that you have to keep up with, it has now been taken down, but yeah.

Although Noah does not currently have a website, he is also interested in selling his meat products directly to consumers through a website:

That's one thing that I've been actually working on getting going. It's in the works, it's just not finished... That is what I'm hoping will be our main place where we would sell our products and I feel like it'd be a lot easier for us.

Steve and Emma both do not currently have a website and are not actively working on launching a website, however both mentioned their interest in having a website in the future. When asked if she has a website, Emma said "No, it's on my long-term list." She mentioned it is "definitely one of my goals" to have a website with information about the farm, as well as the ability to sell products directly to consumers. While talking about what he is currently doing to promote his business and products, Steve said "I'd love to get a website." There are plans to expand the business, so Steve feels it would be beneficial to wait to launch a website, however he sees the value in having a website. He said,

The goal, for 2022, is to kind of work in some ag tourism into it and we kind of want to make a website when we have, not to say more to offer, but we don't want to be going back and redoing it three or four times... I really think that'll be, Facebook is great, it just seems like there's, everything's always moving. You put another post up, the next one gets squashed down and then it's people are looking for this information, where I think they'll have, having a website that we can say 'hey, if you want to know what we're doing this year, here's a calendar,' and whatever else, that's more, that's a lot more permanent information to me, rather than promotion.

### ***Finding time to focus on online communication is a challenge***

When asked about social media and online communication use, many participants stated they struggle to find time to focus on social media and online communication due to the nature of owning an agricultural business. Many participants noted they would like to spend more time focusing on their social media or website, but they do not have time.

Amy was the only participant not currently using social media to promote her business and products, and she said her primary challenge is finding time to focus on it:

I'm not to that point yet in the business, that business, where I have the time to sit down on the computer to do that. I'd love to. But yeah, it's a lot of time, I think a lot of the smaller niche people who do it have the time. [We have to] you know, milk the cows, we've got the mill.

When asked specifically about what is holding her back from social media, she said:

Time. The timeframe, because there's some part time help on the farm here, but not every day, and we usually don't get out of the barn, we start a little later, but I usually don't get in the house until at least 2:00 or 2:30. So, I want to make sure if I do social media or other stuff like that, I can give my time to it. I'd like to put on the pictures of the cuts, the animals, in the spring, the babies, the pastures, recipes, stuff like that. I want to make it, you have to do it wholeheartedly, I don't want to do it halfway.

While Emma does use social media for her business, she does not currently have a website, and that is primarily due to her lack of time to work on it. When asked about how comfortable she is creating a website, she said,

The website, definitely not very comfortable with that, like that's kind of why I haven't done it yet, because I don't truly, I have to like self-educate myself or like learn from someone. I don't want to pay someone to do it because I feel like that would be an expense we don't really need on the farm. So, I guess that's part of the reason why I haven't done it yet, because I just know, not to blame them, but with young kids, I just don't have much time to just sit and work on something like that.



Joe is responsible for managing the businesses Facebook and Instagram accounts and tries to make sure everything he posts is interesting and has “some sort of artistic value,” however he feels there are aspects of social media he is not utilizing, but he does not have time to figure out those features. He said,

There’s things that I don’t know, such as reels and story, I play with those once in a while to try to figure them out. So it’s, I don’t have enough time to be doing that, so if somebody can teach me how to do that, and then I was more confident with it, then it would be easier.

When asked about how comfortable she is managing social media and a website for the business, Lily said she feels pretty comfortable with content and the diversification of posts, she feels she can be convincing when necessary or be more educational, depending on the nature of the post. The struggle she faces is balancing other responsibilities with the responsibility of managing social media and the website. She said,

The only issue I really have with I guess doing that is just the time that I can devote to it because, of course, the dairy farm is my main job, so of course, I would like more free time to be able to focus on those things a little bit more.

While time was an issue for many, a couple of participants mentioned how important it is to them to make time for unique opportunities related to social media and online communication. While talking about her marketing strategy, Sofia said “I also try to, any time I’m asked to do any kind of media type interviews, that sort of thing, I get very involved.”

Charlotte said she also struggles with finding the time to focus on social media and online communication because she has many responsibilities. She added she is unhappy with her current social media usage and is hoping to improve this year. She said,

What I do on social media, and what I want to do on social media, are generally two very different things and that's unfortunate and my goal this year is to get my social media in line with what I want it to be, not what I can manage to do. I wear a lot of hats, I do the taxes here, I did, like I do a lot of stuff and social media, if it's done well, it's very time consuming, because it's not just about posting. It's about interacting... I don't always have a lot of time to think up posts that are, they just get people to connect to us personally, without them feeling like I'm trying to sell them something, and this totally, like I said, on me because I just don't have the time.

While Charlotte explains she doesn't always have time to dedicate to social media or online communication, she noted she makes an effort to always take advantage of opportunities that she encounters. For example, the winery has been featured on a local news channel, a well-known wine magazine, and will be featured in a movie, all because of saying yes when asked to participate. She said,

We had a guy that randomly reached out to us, he's on, he does a show on local news, on Spectrum's local news, and he reached out and said "Hey, I think I'll come down and do a thing about your cabins" and I said "Okay, cool." It didn't cost us a cent, it was seen, it was fed to over a million households by the time it was said and done, never cost us a cent, so a lot of times, other marketing directors that I talked to here, or other winery owners are like "Oh yeah, I heard from that guy too, we don't have time for that stuff." We make time.

### ***Using social media to educate consumers and for marketing***

When asked about social media use, many participants said social media is often used to educate consumers about their industry or products. While most participants said they use their social media for educational purposes, many also noted they do also use their social media to

market their business or products. Some participants also found their educational content and marketing content sometimes blend together, and their educational content can sometimes contribute to their marketing.

Emma said she does not do much advertising because she does not need to, due to selling out of most of her products. When asked about who she markets her business and products she said “I don’t really advertise much per se. I don’t really need to, like right now, we’re selling pretty much everything that we’re raising.” When asked whether she uses her social media for educational or marketing purposes she said,

Definitely more education, I don’t really push like our products and such... Like in the summertime when we start mowing, I’ll like take a little video of like my husband mowing and you know, just be like “Oh, we’re starting our first cut”.... Like during lambing season, I’ll post pictures of the lambs being in the jugs with their moms and kind of what’s going on, what we’re doing.

Noah also finds he is currently using his social media more for educational purposes, but he would prefer to transition to more marketing in the future. As a new and growing business, he feels it is important to educate consumers about the livestock industry. He said,

I would say more on the education side, but I also try to use it for marketing. I would like it to be more marketing, but right now with like, how we’re just starting to get into it, I’m just more or less wanting to educate people on how it’s not bad, and what we’re doing is good for society.

When asked whether she uses social media more for educational or marketing purposes, Lily said she uses it for both. She finds the educational posts have also contributed to an increase in sales. She said,

I guess it's 50/50. During our big sales, like during the holiday season our social media is used more for marketing versus like during sugaring season, it's used more for educational purposes and it kind of, I'm learning that the educational pieces, as people are learning about what's going on and how we're making the product, that, in turn, is generating sales for us, so I guess it's kind of like an educational, but it kinda doubles as a marketing type post as well, even if it's not explicitly like "Hey buy our product," it's still I guess capturing engagement from our customers and our followers.

Mia also said her social media content typically consists of about half educational posts and half marketing posts. She admitted she probably does more marketing in the fall when her turkeys are ready for harvest, however she believes educating consumers about how she raises her turkeys is also an important part of marketing her product. She said,

I'd say about 50/50. About both, yeah. I do definitely [try] to share more than I sell, but I probably sell more than I realize, especially towards the fall, but I definitely try to use it as an education, I think that's probably even more important than the sales because sales will come if people feel connected to you, they understand what you're producing, they understand what your, how you're producing, they feel confident in what you're doing. So, I think customers grab on to the, customers kind of know what they want, or they think they know what they want, and so now, you know, and that's my job as a farmer, to educate them on what I do, so that they can decide if I'm the right provider for them.

Joe also said he uses social media for both education and marketing. He finds people are in need of education about honeybees and also uses social media to provide other information including recipes, events, and to market the products. When asked about the specific content he typically posts, he said "Just things, cocktails, and events that we're going to be at and things

about the bees and things about our product.” When asked about whether he uses the platforms more for education or marketing he said,

Both, especially the bees... I used to tell my kids, if something stung you, it was always a bee. Usually, it was a wasp or hornet, and wasps, hornets, and bees are totally different things, and people don't know. Over time, over [the] years [we] have taken honeybee hives out of people's houses that are in the walls, or in the floor, or in barns. I've had many a call where “I have honeybees in my house, can you please come take them away?” and 90% of the time, they're hornets or wasps, so people don't really know the difference between those things, so I think part of what we do besides the marketing, is I try to educate them in terms of honeybees.

Charlotte said she learned about a strategy for digital marketing that suggests in terms of the number of social media posts from a business, 30% should be inspirational, 30% should be educational, 30% should be informational, and only 10% should be promotional. She said she would like to utilize this advice, but her current social media usage does not align with this suggestion. She noted the lack of time to focus on her digital strategy causes her to post far more promotional content than she would like. She said,

My 10% promotional is like 50% and I hate that and that is because promotional is very quick to do, “Hey, we've got wines on sale, stop on by.” I feel like way more of our content is trying to sell something than I would like it to be. So, the ultimate goal is to sell something, but the other ultimate goal is to not have people know that that's what you're trying to do.

While she tends to promote more than she intends to, Charlotte added there are times of the year it is easier to post educational material. She also mentioned her goal in the future would

be to post more educational, inspirational, and motivational content, because those types of content attract customers and generate sales. She said,

There are times of the year that it's easy to do educational social media posts, for instance, we harvested our ice wine last week and that's something that people don't know a lot about, right, so I would, it was five degrees outside in the vineyard, but I was out there, and buzzing in for a 30 second live video on and off throughout the morning. Those things are more my goal, to do that education or inspirational, motivational things, because the bottom line is that the people are still going to buy the ice wine when it comes out, because they watched the video about it, right.

When asked whether she uses social media for education or marketing, Ella was the only participant to answer with "Marketing, hundred percent." Ella was also the only participant who stated she has used social media for hiring purposes, she said "I did utilize it [Facebook] for the last two season for employment."

### ***Online communication is valuable to the success and growth of the business***

Most participants believe their use of social media has contributed to the current success they are experiencing and believe social media will be valuable to the growth of their business in the future. Many participants also noted they find social media to be one of the most effective ways to connect with customers.

When asked if she believes her social media and the use of a website in the future would be valuable to the growth of her business, Mia said she absolutely thinks so. Mia believes social media is one of the most cost-effective methods to market her business and sees potential to better utilize social media for her business in the future. She said,

Yeah absolutely. Absolutely, to me that's the most cost-effective way to promote it at this point and cost effective, as well as our responses, I mean that's how we've gotten the most response. We've tried print advertising and we don't get the same response as we do with social media and that's just, we've never paid for any social media ads or even done any ads, it's just simply been on our page, so we haven't even ventured in the world of ads and all the other things social media could do for us.

Mia also said she has already seen the impact social media can have on her business and has contributed to the success she has seen. When asked if she believes her social media has contributed to her success, she said "Absolutely, yep. Yeah, we actually sold out and I had to turn customers away for Thanksgiving and yeah, it was crazy and I definitely, is a social media thing, especially this year, the number of new people I had that came through social media. Absolutely."

Noah believes his social media and website will be vital to his business in the future, especially as he is growing the business and attempting to reach a larger audience. He said,

I think that'll be like, our main way for it to grow. Especially with COVID, people not wanting to get out, so they surf the web, and they might come across our website and just be willing to try homegrown products versus going to a store and something like that, shopping local. But I think that'll definitely be our main source of reaching out to people.

Steve also sees social media as the best way to reach his target market. He said,

Definitely, because I don't, because people are on their phones, there's really, I mean, there's no other way to really put it. That yeah, I think my clientele is on Facebook, but that was more of an age thing, we kind of present more information on Facebook than pictures and Instagram seems to be, in my opinion, more for the social side of [social] media, than the media and information gathering on Instagram, but yeah, the business stuff mostly on Facebook yeah. I think it's a must, there really isn't, if you're not doing it,

I think you're getting left behind and I'm sure there's other stuff that people are saying about me because it's like "Oh, well you're not doing this, so you're missing out on this," or you're going to get left behind in case, unless you have a website or unless you do this, and I think all that stuff's common but no, I definitely you, I think you got to be out there and doing it. I would be challenged, I would really doubt we would have the commonality of our brand name without [it], you can, it's insane the people that you meet and the people you talk to, and you go out on the road and chat with them and they're like "Oh I didn't know that," and it's like "How did you not you know?" We'll post something about "Oh check out our milk and this bagel shop blah blah blah." We've been in that place for a year, and people are like "Oh I gotta try this" and I'm like, haven't you guys been going there for a year, how can, it's one cooler door over and you would have just seen it, but it's just, it's really just kind of sad sometimes. You really got to spoon feed these people to get them to you know, but like I said, they're always on their phones, so they always will see it.

Lily also believes social media and her other online communication efforts will be valuable for the businesses continued growth. She said,

Yes. Absolutely, I think it's a good easy way for us to connect with consumers, especially as we're trying to grow our business in areas outside of New York State and it's been really handy in that.

Joe believes it is important to have an online presence as a new and growing business. When asked if he believes his social media, website, and other online communication efforts will be important to the growth of the business he said,

I do. I think when somebody hears about, so we're still very brand new, when somebody hears about us, what's first thing they do, what do they do? You will check us out on



Instagram or Facebook and our website, and so I think you need to have that presence there, if you can't find somebody like that, then you lose interest and why don't they have presence, you know it's like you should have presence.

Both Amy and Ella also agreed social media and an online presence are important for the growth of the business. Amy does not currently have any online presence and when asked if she believes using social media in the future would assist her in growing her customer base, she said “Yes, I do. Yes. I think it would immensely.” Ella does have an online presence, social media and a website, and when asked if she believes social media and online communication will be valuable to the growth of the business in the future, she said “100%.”

Sofia also believes online communication and social media in particular are an important piece of her success and will continue to be in the future. She said,

Yeah, I believe it's a key component, especially, as the next generation starts to come and research what things they want to do and have fun doing it. They're all, I have a daughter who's 11, is all about the phone and she doesn't, I don't think she's ever picked up a paper, so she's all about the phone. Reading articles on the phone, looking at Facebook, looking at Instagram, all of that kind of stuff, so I believe, especially now and going into the future, probably Facebook and the social media side is more than even the website, to be honest. I mean I feel like when I talk to people about where did you see me online, so to speak, it's always Facebook.

While most participants agreed social media, websites, and an online presence has played an important role in their success and will continue to in the future, Emma disagreed. When asked if she believed her social media use has contributed to her success she said,

Not necessarily. I feel like more people that are already of our customers will find us and then just, to see kind of, because we're pretty open with our customers like, we tell them

all the time, if they want to come see the farm, they're welcome to come, we'll give them a tour or I tell them at the market like, check out our Facebook page to see pictures of our farm. So, I feel like it's more the people that do like it, are people that know us already. I don't know, I don't think a ton of people find us and then are our customers, at least I don't notice, that.

**RQ2: What support are these businesses looking for to improve their social media and online presence?**

***Minimal training, experience, and education related to marketing, social media, and online communication***

When asked about any previous training, education, or experience prior to taking on the management of social media, a website, or other online communication methods, many participants responded by saying they had little to none. Most participants said they have learned by doing, rather than through formal training or education.

Mia said she has attended a few workshops focused on marketing with some social media incorporated. When asked about her previous experience managing social media, she said she has previously only managed her personal social media. When asked about the workshops she has attended, she said “Yeah, social media has been incorporated into a couple like, marketing courses or marketing workshops, I wouldn’t even call them courses, but workshops that I’ve done through Cooperative Extension.”

Emma has also attended a workshop briefly covering social media, but she does not have any further experience. When asked if she has any education or training in marketing or social media, she said “No. Through the New York Beef Producers a couple years ago at the conference, they did a workshop on it, but aside from that, no.”

Noah does not have previous experience or education, however he plans to participate in a course in the future with a well-known influencer who specializes in teaching direct-to-consumer producers how to market their meat products and reach a large audience through social media. He said “So, I signed up for one of the Five Mary’s courses, so that’ll be my first step to like, just learning a little bit about entrepreneurship and how to reach out to people.”

When asked if she has had any training or education related to marketing, Charlotte said she has participated in a few courses and tries to take advantage of opportunities to further her education. She said,

I enrolled in a couple of online classes which was fine and good and I learned a lot from them, but really we're very fortunate here, that the New York Wine and Grape Foundation, the Cayuga Lake Wine Trail that we're a member of the Finger Lakes Wine Alliance, we're a member of, all of those organizations, those partner organizations provide, I could sit in a webinar every single day if I wanted to and their all free and they're good, many of them are very good, some of them are paid, and I'll see, when I want to, I'll say, “Hey, can I have 100 bucks and go to this webinar?”

Joe and Ella both said they have no education or training related to marketing or social media. When asked about their training and experience, Joe responded “None.” and Ella said “Yeah, I mean, I by no means is this a, my skill base, if you will. I did not go to school to learn anything about marketing.”

Both Steve and Lily do have some formal training. When asked about any formal marketing education, Steve said “Beyond a marketing class at [university], no.” When asked about her prior marketing education, Lily responded,

Well, I have a bachelor's degree in agricultural business and as part of that degree, I took numerous marketing classes and when marketing classes were available, those were kind

of the first options that I chose and actually through this degree, I had realized that in terms of agricultural business, I kind of gravitated towards the marketing side of things.

***Interested in educational materials or programs***

While many participants had no previous education or training related to social media, marketing, or other online communication tools, many participants expressed an interest in educational materials or courses to learn more about how online communication and social media can support their business goals. While many participants expressed an interest in educational materials or programs, some also indicated there are educational materials and programs available, however there are some problems with the current offerings.

Steve believes it is important for business owners to take advantage of any information available to remain competitive as a business, rather than getting left behind by competition.

When asked about his interest in educational workshops or materials he said,

I think so, even if it was just to reference there like I said, these other places that we get affiliated with have similar tools for dairy and stuff like that, so I don't see why I wouldn't take advantage of it, like I said, I think it circles right back to the social media and everything like that, if you're not taking advantage of that, if you're not doing that, you're leaving yourself potential to get left behind. Everybody else is doing it and you better be on par with them. If you're going to look at it from a competitive business standpoint just from a personal standpoint, yeah, I mean this is my business. I want to do everything that I can to make it thrive and if you're going to give me the information literally, I'm probably going to find a way to, I'm going to go and get that.

Lily also believes it is important to continue to learn, especially as a business owner.

When asked about her interest in educational materials or courses, Lily said,

Yes, and I think sometimes you just don't realize, I guess you get so set in your ways of like how you have been using social media that sometimes you don't think outside of the box of like 'Okay, I already have it, but now like how can I use it' so, I think more classes and workshops like that I think there's always something to be learned so yeah I can definitely see a benefit from those.

Sofia also has the business's best interest in mind and believes it is important for business owners to remain up to date on a variety of topics to stay relevant and grow. Sofia said she is always reading and believes educational materials specifically for businesses like hers would be beneficial. She said,

I'm always reading and interested to hear what others have to say about how to grow a business. I mean, I've obviously got my own views, but I am always looking to improve that as well. So yes, I would say, any of that type of stuff is very beneficial, something that, absolutely, if somebody had something out there on 'how to grow your business using Facebook', I'd be interested in taking a look at it, and the key for me with Facebook, is how can you get the maximum use out of Facebook without spending money and I know that sounds weird and I'm not opposed to it, I'm not opposed to using in some of the advertising, but how am I getting the most out of what I'm doing today. That's a question for me and I haven't been able to answer, just because I don't know Facebook probably as well as somebody that uses it every single day and that's their thing.

Emma was also quick to express her interest in educational support. She said "Yeah, I would definitely attend a course on like up setting up a website or better ways to utilize social media, I would definitely be interested in something like that." Emma also expressed she prefers

in-person instruction in particular. When asked about the specific type of support she would be interested in, she said,

I like things in person, a lot, like if there was a course where I could go and they could like either, step by step, tell me how to do it or help me do it, or like a document, so I could do it at home at night, sometime after the kids are asleep, like with exactly what X, Y and Z I need to do, I guess those two would be my preference.

Noah is definitely interested in the use of educational courses to grow and improve his business. He is currently signed up to participate in a course by a well-known influencer in the direct-to-consumer agriculture sector to learn more about entrepreneurship and how to reach more people through his business.

Mia and Amy both agree educational materials and courses would be beneficial to their business, however they believe there are problems with the current courses offered. When asked if she would be interested in participating in an educational course to learn more about social media or online communication methods, Amy said she had just received an email about an upcoming course hosted on Zoom, however, as a dairy farmer, the timing of the course was not ideal. She said,

Yes, I would and it's funny you say that, because I don't know if you get that Gmail, but we have a gmail that's sent to us and they're putting on one of these courses, let me look and I could tell you, you might get the same thing and I looked into it, but there again, the timeframe they're Zooming in, I'm not going to be here.

Mia feels there are multiple issues with the current offerings. She believes there are many courses offered that are not adequately promoted, meaning producers are not aware of the courses or workshops. She said,

Yeah and not only that, but I think there's a number of courses out there, like I just heard about one last night or yesterday, two days ago that was happening last night, I had no clue was out there, so I think there's organizations out there, doing those programs, but I don't think those programs are being promoted as well as it could be. Like that was through the Cornell Small Farms Program. I had no idea what's happening, the only reason, so being [university] girl, you probably know [professor], it was only because I picked up... some Extension course was coming up, and it was a [university] professor, so I actually reached out to [professor] and said, "do you know this person, do you know the content, is it worth it," and actually the course was on social media and she gave me her honest opinion, which is what I was looking for, and she said, actually I'm doing one tonight for the Small Farms, Cornell Small Farms Program. Like I've never heard that, so I think, I think there's courses out there, but they're not being promoted as well, so maybe there's a way to better coordinate how those courses are being out there, because [university]'s doing one, Extension, local Extension's doing one, Cornell Small Farm's doing one, why aren't we all, and are they all giving the same message? I don't know.

In addition to the lack of promotion of these workshops or courses, Mia has also wondered which courses are truly beneficial to farmers. While there may be multiple courses offered, she wonders which courses are conveying information that has been proven through experience and which courses are based more around academia. She said,

You know, who's teaching just from the book and who's teaching, this is what has really worked, and these are New York farms that have done what you want to do, and this is what really worked for them, not what will work for the general, but you know, the general public, reaching and you know that, the snowmobile ads are, all the other ads I see that just come automatically through my feed, that are really specialized, so I think any training course for farmers, you know farmers well enough to know how little time

they have to do this kind of thing, that needs to, any courses and things need to be very specific and prove to us that it works and make it very simple.

While many participants agreed they would be interested in educational materials, Ella felt she would probably not be interested. In her opinion, in the agricultural industry, there is not enough time to spend time on something like an educational course. She believes her business would be more likely to hire somebody to manage social media or other online communication efforts. She said,

Yeah, so as far as like educational courses for like myself, in this world? So, we're also in the lifestyle of like, we want it done, we want it done and we're all busy right? So, I think no. I mean, I would just, I would hire somebody, especially farmers. My dad would never try to attempt to post a darn thing so.

### ***Interested in support managing social media or online communications***

Many participants expressed their interest in hiring outside support to manage or assist with social media, a website, or other online communication efforts for the business. Due to the time intensive nature of the agricultural industry, many participants believe they would benefit from this support. Noah said he would definitely be interested in support:

I would definitely like to bring in someone, whether it's for that or I'd like to open up like, a farm stand eventually, so like maybe they could do something with the farm stand and the social media side of things, just because it is hard, working and trying to care for the animals, while taking pictures and remembering to post it and trying to get other work done, but eventually, like this, I'm planning on this being my full time job, just the farm, but I just got to expand a lot.



Amy was the only participant not currently using social media or any other form of online communication to promote her business and said time is the primary challenge she faces. When asked if she would consider hiring someone to manage or assist her in launching and maintaining social media and online communication, she said “Definitely, yes.”

Lily also saw the benefit of outside support or assistance managing online communication efforts of the business. When asked if she believed her operation would benefit from assistance or support, she said

“In terms of the ability to just have more, I guess like more posts and more stories yeah. Absolutely, and I think, just like someone that could do that full-time, I could definitely see the benefits from it.”

Ella was much more interested in hiring someone to manage social media and a website for the business than learning herself, especially because the business has a storefront about two hours from where she lives. When asked about her interest in hiring someone, she said,

Yes, I see this in all avenues of life, so just a small example, my sister is trying to start her own side business with a [program]. She has three children and has no time to make her website or to do her, to do her Instagram right, so I tell her there are people out there, this is their full time job and they know, how I learned, I picked up things here and there, like hashtags, like you need to have 30 tags on every photo in order to get more interaction and more clients, that kind of thing, so their knowledge base is much more and I definitely think if you brought someone on full time, number one, they could maybe physically be there more right, than myself being two hours away and kind of get more up to date, day of stuff... So yeah, I definitely think having a full-time person dedicated to that for any business right now is, I mean, most people, some people can just start a business through their social media platforms, which is wild.

Joe said he is currently in the process of applying to a local grant-funded program matching digital strategy professionals, content creators, and other professionals with local businesses. The program is coordinated by a private economic development organization. He said, “We're working, also working on another grant hopefully through [county name] that's gonna match us up with somebody that's going to be able to give us, someone who's done this for a living.” When asked more about whether he believes his operation would benefit from assistance or support managing the business’s social media, Joe added,

Oh by far. I mean, as I said, everything I've done through our social media is kind of trial and error, what I think is right, and it would be nice to have someone either confirm that or say no you really should be doing this. So, a professional, that would definitely help us a lot.

For some participants, they believe they can see their operation growing to a size in the future that would warrant hiring outside support to manage their online presence. While they feel they can currently handle the responsibility of managing the business’s online communication, some participants mentioned the financial and physical growth of the business in the future could change their ability to continue managing it on their own.

Sofia owns multiple businesses and has already seen the benefit of hiring someone to focus on managing social media and online communication for the business, however she believes her direct-to-consumer agricultural business needs to grow financially before it will be economically reasonable for her to hire someone in a similar role for her agricultural business. She said,

So, our [other business] is a bigger business financially, so it fit my strategy from a financial perspective if that makes sense. The farm we're just starting to grow, you know what I mean, so I'm kind of in that spot with the farm where, we're growing the business

and it's grown every year, since we purchased it and I don't know that I'm at the point where I'm comfortable from a financial perspective, to bring somebody on quite yet. But from a, if I look three-to-five year strategy, absolutely. Because I can't do it all.

Steve said he currently feels comfortable managing the social media and online communication efforts for his business, however he does see the business growing to a size that would warrant hiring someone specifically to manage social media and online communication efforts. He said,

Depending on the size that we end up being ultimately, I think that for the time, for right now, we can handle it ourselves... I think if you got larger and you got milks over here and milks over for the most part, right now, I do all the deliveries, so I know where the milk is, but if you start expanding and you're like 'Oh wow I didn't even know that our milk is there,' I think, at that point, you need to have somebody capturing those pictures and kind of sorting them, and if somebody's job is to get that picture posted and that information out there that, like I just said at that rate, even the owner of the company don't know where his product's ending up and I think it warrants having somebody out there to share that with the public, and put it out there into the world that 'Hey, this is what's going on, this is the direction, hey look at this.'

Mia had similar feelings about hiring support. She believed removing social media management from her list of responsibilities would be beneficial, however she also believed the business will need to grow before she considers hiring outside support. When asked if she believed her operation would benefit from assistance or support managing her social media, website, or other online communication, she said,

Sure, I mean yeah, I mean one less thing on my plate, so that I can focus on other things, if I had, yeah I could see us getting to the point and we are looking to grow this year

we've had people approach us about doing different avenues within the business. I'm doing custom growing and things like that. So yeah, and eventually we may get to a point, especially since we're not only growing this business, but we're growing other value-added avenues here on the farm, so it wouldn't be just managing just [turkey business], it would be managing social media and outreach for all the, when you look at the greater family farm picture and how those businesses tie together.

Emma was not as confident in the benefits of assistance or support managing social media, a website, or other online communication, especially from a financial perspective:

I guess I'm not sure, like for me I don't know if I, like it I'm sure to have that kind of supporter, you have to pay someone to do it and I don't know if the cost would outweigh the benefits, if it did I'd be interested in it, but I don't know how I figured that out or learn that.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### **Introduction**

The purpose of this study was to explore the current use of social media and online communication methods among agricultural direct-to-consumer businesses in Upstate New York and identify the needs of these operations, related to social media and online communication. This chapter will discuss the findings, provide conclusions, and provide practical recommendations, as well as recommendations for future research.

The following research questions guided the study:

1. How are agricultural direct-to-consumer businesses in Upstate New York using social media and online communication?
2. What support are these businesses looking for to improve their social media and online presence?

#### **Conclusions and Discussions**

To understand how direct-to-consumer agricultural businesses in Upstate New York are using social media and online communication, producers and employees were asked questions related to their current social media and online communication use, their perception of the success of their business, their previous experience with marketing and online communication, and their interest in support or assistance with social media and online communication. Themes

were developed using the responses of these questions. This section will discuss the application of this study to previous literature.

***RQ 1: How are agricultural direct-to-consumer businesses in Upstate New York using social media and online communication?***

The following themes emerged from this research question: Facebook is the most popular social media platform used by the businesses, businesses are currently using a website or plan to in the future, finding time to focus on social media and online communication is a challenge, social media is used for marketing and educating consumers, and social media and online communication has contributed to the current success of the business and will be valuable to the growth of the business in the future.

Participants mentioned having and using both an Instagram and Facebook page, but added they tend to use Facebook more often, and tend to see more engagement and a larger following on Facebook. The popularity of Facebook among participants aligns with the popularity of Facebook among U.S. adults (Pew Research Center, 2021). Participants mentioned the second most popular platform they use is Instagram and Instagram is used by about 40% of U.S. adults (Pew Research Center, 2021).

Participants are currently using a website, are in the process of creating or launching a website or have plans or intentions to launch a website for the business in the future. Participants currently using a website as an informational source also mentioned an interest in expanding to include an e-commerce platform. With the COVID-19 pandemic shutdowns and fear of infection, many consumers began purchasing local food online in 2020 (Thilmany et al., 2020). Online local food sales increased by 360% from April to May 2020 (Thilmany et al., 2020).

A lack of time to focus on social media and online communication was expressed by almost all participants. Participants who are currently using social media and online communication for their business mentioned they feel they do not have enough time to focus on

creating content and posting consistently. The participant in this study who is not currently using any social media or online communication, said time was the primary factor preventing them from using social media and online communication for the business. The stressful and time intensive nature of farming (Truchot & Andela, 2018) makes finding time to focus on social media and online communication a challenge for producers.

Participants mentioned they are using social media platforms to market their products, educate consumers, and connect with their current customers (Varner, 2018). Multiple participants mentioned they primarily use their platforms to inform or educate consumers because they cannot keep up with the demand they are experiencing, therefore they do not need to market their products online (Varner, 2018). Social media has provided agricultural producers with a channel to interact with consumers, provide a glimpse into the day-to-day life of producers, and answer questions from consumers (Allen et al., 2010).

When asked about their perception of whether social media and online communication has contributed to the current success of the business, participants said they believe their social media has contributed to the business's success (Olanrewaju et al., 2020). Many participants added they believe social media is a one of the best ways to market their business and connect with customers (Li et al, 2021). When participants were asked about whether they believe social media and online communication will be valuable to the growth of their business in the future, many participants said they do believe it will be important, including the participant currently not using social media or online communication for their business.

Producers tend to be aware of the relative advantages, including the financial benefits, of using social media and other forms of online communication to promote their operation (Rogers, 1962). Social media allowed for increased communication among producers, providing a channel for the diffusion of the innovation of using social media and the internet as a marketing platform for agricultural businesses through the social system of direct-to-consumer agricultural producers. The use of social media and the internet for marketing and promotional purposes is an innovation

that has been adopted by agricultural producers in general, including direct-to-consumer producers.

***RQ 2: What support are these businesses looking for to improve their social media and online presence?***

The themes associated with this research question include producers and employees having very little to no prior training or education in marketing, social media, or online communication, participants are interested in educational materials or programs to learn more about how to better promote their business online, and participants are interested in hiring outside support to improve their online presence. While social media does provide agriculturalists with a platform to market their business at no cost, many participants mentioned they often wish they knew more about how they should be using the platform to market their business and products (White et al., 2014).

When asked if they would participate in educational courses or utilize educational materials, participants said they would definitely be interested. Many participants acknowledged the importance of having an online presence for their business and for agriculture in general, however they mentioned they feel they could benefit from learning more about social media, website design and management, and marketing, aligning with the findings that there is a lack of information and resources surrounding social media marketing strategies for entrepreneurs (Li et al., 2021). Some participants have participated in workshops and courses, however flaws in those offerings were expressed, including the practical application of the information and the timing of the courses.

Participants also expressed interest in hiring an outside professional to manage their social media and online communication efforts. When the producer is primarily responsible for managing the social media platforms, pages often become inactive for long periods of time, as producers have many daily responsibilities and often forget to post content (King & Settle, 2020).



While participants are aware of the benefits of an online presence, the stress and burden of the agricultural industry makes it difficult for producers to find time to learn about and stay up-to-date on trends in digital marketing and online communication (Truchot & Andela, 2018). Due to the burden of agricultural life, many producers said they believe they plan to or are considering support managing their online communication efforts, especially as the business grows.

Many direct-to-consumer producers tend to be early adopters or early majority to use social media and online communication for marketing purposes (Rogers, 1962). These producers tend to recognize the advantages of using these platforms, however there are producers who are laggards of this innovation. The laggards of this innovation do also recognize the advantages of an online presence for their business, however the operations currently without an online presence are in need of guidance and assistance launching their online presence.

### **Recommendations for Practice**

This study helps provide an understanding of how direct-to-consumer agricultural businesses are using social media and online communications to promote their business. The findings of this study are most useful to communications professionals interested in assisting agricultural businesses in growing their business through online communication platforms. The findings suggest direct-to-consumer agricultural businesses are aware of the benefits of an online presence and are interested in improving their current efforts or establishing their online presence.

Communications professionals interested in assisting or supporting direct-to-consumer agricultural businesses should take into consideration the stressful and time demanding nature of the industry, especially when developing educational courses or materials. While many participants expressed an interest in educational materials, they also emphasized their lack of time to focus on social media and online communication, contributing to the stressful nature of farming (Truchot & Andela, 2018). Communications professionals working to create interactive or live educational courses should take into consideration the time constraints of agricultural

producers. Producers are interested in interactive educational courses, so synchronous courses should be offered, in addition to asynchronous course options to accommodate producers who are unable to attend an interactive session.

Communications professionals interested in developing materials should keep in mind the lack of time and keep materials as simple and concise as possible. Participants in the study also mentioned their concerns about the practicality of current educational offerings, especially from strictly academic sources. For both educational materials and courses, communications professionals should aim to show producers how the information has been successfully applied by other agricultural producers. In addition, communications professionals could consider offering free resources to producers such as simple educational materials, or creating a Facebook group for producers in specific regions or the entire state to create a community among producers and allow producers to ask questions and discuss topics related to digital strategy and online communication.

This study also reveals an interest in online communication support for direct-to-consumer agricultural businesses. While participants did express interest in educational materials and courses, they were also clear about their lack of time to focus on their online communication efforts. Communications professionals interested in supporting agricultural businesses should offer services to businesses to support their online presence. Services should include social media management, including establishing a digital strategy, content creation, and scheduling posts; designing and maintaining websites; and claiming search engine listings and ensuring search engine optimization. While there are opportunities for communications professionals to assist and support agricultural businesses, there are also some barriers expressed by participants that may prevent them from seeking out this kind of support. The financial investment to hire a communications professional and expected growth of the business in the future were the most common barriers for participants. It may be beneficial for communications professionals to remain aware of these barriers and provide agricultural producers with information explaining

how their support could help improve the financial viability business and increase the reach of the business.

### **Recommendations for Future Research**

Future researchers conducting a similar study should consider conducting interviews in person, rather than over Zoom. While there were not any significant challenges presented by conducting the interviews in this study over Zoom, many participants do not use Zoom regularly and may have been more comfortable during an in-person interview (Brinkmann & Kyale, 2018). An in-person interview, at the participant's farm, ranch, or business may increase the participant's level of comfort and help researchers gain a better understanding of the entire picture of the participant (Brinkman & Kyale, 2018).

Future research to further understand producer perceptions, use, and challenges related to social media and online communication would be valuable to communications professionals. Due to the lack of current research on producer behavior and perception of social media and online communication, a variety of studies could be conducted to gain a better understanding of this topic. Other research methods, for example a content analysis or focus group could be conducted to gain additional information about producer perceptions, use, and challenges with social media and online communication. A sample larger than Upstate New York, or a similar study in another state or region should be considered.

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## APPENDICES

### APPENDIX A

#### Interview Protocol

1. Operation background:

- a. Where are you located?
- b. How long have you been in operation?
- c. What products do you produce?
- d. How long have you been marketing direct to consumers?
- e. Why/how did you decide to sell direct to consumers?
- f. Is direct to consumer marketing your primary method of sales?

2. What avenues do you currently sell your products through? Farmers markets, CSA, roadside stand, on-farm retail store etc.

- a. How did you decide to sell through these channels? Or What helped you decide to sell through these channels?

3. What are you currently doing to market/promote your products/business?
  - a. Do you use social media?
    - i. Which platforms? How many followers do you have on each platform?
    - ii. Can you tell me a little bit more about how you use social media? For example, do you use stories, reels, ads? Do you tend to use your social media to interact with customers or just post content?
    - iii. In your opinion, is your social media currently contributing to the success of your business?
  - b. Do you have a website?
    - i. If so, what is included on your website?
    - ii. How frequently do you maintain/update your website?
    - iii. Do you sell products directly through your website?
4. How comfortable are you with managing social media accounts/websites for your operation?
  - a. What kind of experience do you have with social media?
  - b. Who is responsible for managing your social media/website?
  - c. Do you have any training or education in social media or marketing?
  - d. Do you feel social media/online communication is important for your operation to

be successful? Why or why not?

e. Do you see social media/online communication being valuable to the growth of your operation?

5. Do you have an estimated sales radius of your clients?

a. Is it important to you to reach more people in your current sales radius?

b. Would it be beneficial to your operation to reach clients outside of your current sales radius?

i. If so, are you currently targeting people through your social media or other online communication?

6. If you do not use social media/a website, what is preventing you from doing so?

7. Do you feel like your operation would benefit from assistance or support managing your social media, website or other online communication?

a. Why or why not?

b. Is that something you have or would consider for your operation?

8. Do you think educational materials or courses specifically for operations like yours to learn more about effectively using social media/websites to communicate with customers would be beneficial?

a. Why or why not?

b. Would you consider pursuing educational materials or courses like this in the future?

## APPENDIX B

### IRB Approval



#### Oklahoma State University Institutional Review Board

Date: 11/04/2021  
Application Number: IRB-21-471  
Proposal Title: Exploring the online communications of direct-to-consumer agricultural businesses in Upstate New York

Principal Investigator: Katerina Weingarten  
Co-Investigator(s):  
Faculty Adviser: Quisto Settle  
Project Coordinator:  
Research Assistant(s):

Processed as: Exempt  
Exempt Category:

#### Status Recommended by Reviewer(s): Approved

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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

**This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which continuing review is not required. As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.**

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any unanticipated and/or adverse events to the IRB Office promptly.
4. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744-3377 or [irb@okstate.edu](mailto:irb@okstate.edu).

Sincerely,  
Oklahoma State University IRB



## APPENDIX C

### Participant Recruitment

**Message to be sent from my personal social media accounts:**

I am a graduate student at Oklahoma State University and as part of my thesis research, I am interviewing agricultural business owners in New York State who sell their products direct-to-consumers. I would like to invite you to participate, because I feel you are a good fit for the study. If you are willing to participate or have any questions, please let me know. Thank you!

VITA

Katerina Weingarten

Candidate for the Degree of

Master of Science

Thesis: EXPLORING SOCIAL MEDIA AND ONLINE COMMUNICATION USE OF  
DIRECT-TO-CONSUMER AGRICULTURAL BUSINESSES IN UPSTATE  
NEW YORK

Major Field: Agricultural Communications

Biographical:

Education:

Completed the requirements for the Master of Science in Agricultural Communications at Oklahoma State University, Stillwater, Oklahoma in May, 2022.

Completed the requirements for the Bachelor of Technology in Agricultural Business Management at the State University of New York at Cobleskill, Cobleskill, New York in 2020.

Experience:

Employed as graduate assistant in Oklahoma State University's Department of Brand Management from August 2020 to May 2022.