California's Direct Market Farmers' Use of Online Sales and Marketing During the COVID-19 Pandemic



Authors: Sasha Pesci, Geography Graduate Group, University of California, Davis, spesci@ucdavis.edu.

Ryan E. Galt, Department of Human Ecology and Agriculture Sustainability Institute, University of California, Davis,regalt@ucdavis.edu.

Emily Reyes, Undergraduate Student, University of California, Davis, ekreyes@ucdavis.edu.

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PROJECT OVERVIEW

This study explores California's direct market farmers' use of online sales and marketing during the COVID-19 pandemic. The pandemic caused market disruptions that accelerated online sales and marketing trends. In this report, we highlight findings based on 364 responses to an online survey and 28 interviews of direct market farmers in California. In addition, we conducted 5 interviews with technical assistant providers and participant observation at farmer workshops. We found that online technologies were an important tool for overcoming the disruptions caused by the pandemic. However, many farmers lacked the appropriate resources to use these tools. We argue that farmers need reliable access to the internet, financial support, and training to access and benefit from online sales and marketing.

HIGHLIGHTS

- Direct market farmers have increased their use of online sales and marketing since March 2020.
- Online sales and marketing helped farmers access markets during the pandemic in 2020.
- Having a website or social media presence helps farmers increase sales
- Online sales can be helpful for certain direct market farmers, but they are not the right fit for all farmers.
- White, female, and younger farmers were more likely to have an online presence.
- Farms with higher gross farm incomes and those not growing vegetables were more likely to use online sales.
- Farmers need reliable internet, money, and training to use online sales and marketing.



KEY TERMS

Direct market farmers: farmers who sell at least a portion of their production directly to consumers (e.g., at farmer's markets, CSAs, farm stands), retailers (e.g., supermarkets, restaurants), and/or institutions (e.g., hospitals, schools).

Online sales and marketing technologies: internet-based communication and information technologies that can be used for sales, advertising, and/or outreach.
Online presence: the use of any public-facing sites where farmers share information about their farm business.

Online sales: using internet-based sites to sell products, which may involve home deliveries, deliveries to neighborhood pick-up spots, or preorder systems.

ONLINE SALES AND MARKETING TOOLS FOR DIRECT MARKET FARMERS

CATEGORY	DESCRIPTION	EXAMPLES		
Online sales platform for direct market farms	Farms display a profile on the website, and customers can choose from various farms.	1000Ecofarms Barn2door Food4all Harvie WhatsGood		
Farm-specific website	Companies that design websites specifically for direct farm sales or CSA subscriptions.	Cropolis CSAware (By LocalHarvest) EatFromFarms Farmers Web Farmigo Grazecart Grownby Harvesthand Local Food Marketplace Local Line Local Orbit MyRealFoods Open Food Network Online Farm Markets		
Generic website	Companies that offer website building (not specific for farms).	Squarespace Wix WordPress (and WordPress plugins such as WooCommerce)		

Across these different categories, some platforms incorporate payment systems (where the website collects payment information from the consumer) and others require that the farmer pair the transaction with an outside Point-of-Sales (POS) system, such as Square or Venmo.

ONLINE SALES AND MARKETING TOOLS FOR DIRECT MARKET FARMERS

CATEGORY	DESCRIPTION	EXAMPLES	
Social media	Social media-based sales and marketing through pages or groups.	Instagram Profile Facebook Page Facebook Groups Twitter Reko (consumer buying club online that uses Facebook groups)	
Online Farm Directory	Online directories of direct market farms.	LocalHarvest CAFF Farm directory (California) USDA Local Food Directories	
Virtual Food Hub/Aggregator	An online product delivery service that combines products from multiple farms to sell directly to consumers.	Good Eggs Farm Fresh to You	
e-commerce or classified advertisement sites or apps	Farms post items for sale or announcements without needing to set up a website or profile.	eBay Craigslist Nextdoor App Facebook Marketplace	

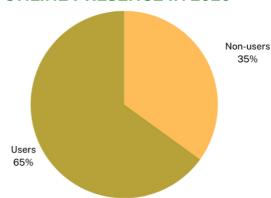
Across these different categories, some platforms incorporate payment systems (where the website collects payment information from the consumer) and others require that the farmer pair the transaction with an outside Point-of-Sales (POS) system, such as Square or Venmo.

DIRECT MARKET FARMERS' ONLINE PRESENCE IN 2020

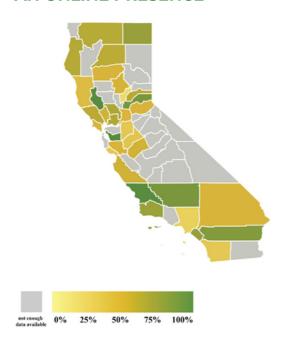
 65% (n=225) of direct market farmers had an online presence sometime in 2020

Farms with an owner, manager, or operator who identified as white, female, and under 55 years old were statistically most likely to have an online presence in 2020.

CALIFORNIA'S DIRECT MARKET FARMERS' ONLINE PRESENCE IN 2020*



GEOGRAPHY OF FARMERS WITH AN ONLINE PRESENCE*

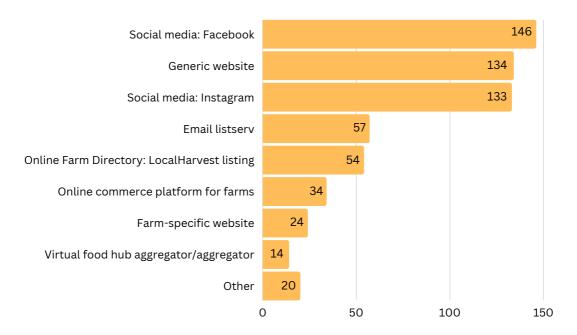


- **60%** (*n*=135) of farmers who had an online presence **increased** their use of online sales and marketing after March 2020, out of which 84% (n=114) associated this change with the pandemic.
- 34% (n=77) of farmers with an online presence did not change their online sales and marketing use during March-December 2020.
- **6%** (*n*=13) of farmers who had an online presence **decreased** their use of online sales and marketing during March-December 2020.

^{*}based on survey responses (n=364)

DIRECT MARKET FARMERS' ONLINE PRESENCE IN 2020

ONLINE TOOLS USED BY DIRECT MARKET FARMERS IN MARCH-DECEMBER 2020*



Instagram and Facebook were the most helpful tools:

The use of Instagram and Facebook were statistically significantly associated with increases in gross sales between March-December 2020.

This year, ... I wanna keep on getting more people following on Instagram so I can start posting, ... 'Hey, I'm over at this farmer's market, come check out my product.' ... maybe they'll come by and get my stuff before they go to the [grocery] store, and I can try to capture a few more dollars in sales (Farmer 15).

^{*}based on survey responses (n=364)

BREAKDOWN OF FARMERS' ONLINE PRESENCE IN DEMOGRAPHIC GROUPS CATEGORIZED BY NATIONAL ORIGIN, RACE/ETHNICITY, AGE, AND GENDER*

DEMOGRAPHIC GROUP	TOTAL (N)	USERS (N)	% OF GROUP	NON- USERS (N)	% OF GROUP
Total sample	346	225	65%	121	35%
U.S. national origin	303	203	67%	100	33%
Non-U.S. national origin	36	16	44%	20	56%
American Indian and Alaska Native	13	9	69%	4	31%
Asian	19	11	58%	8	42%
Black or African American	6	3	50%	3	50%
Latino or Hispanic	39	21	54%	18	46%
Native Hawaiian and Other Pacific Islander	1	1	100%	0	0%
White	263	177	67%	86	33%
Under 55 years old	185	126	68%	59	32%
Over 55 years old	149	90	60%	59	40%
Female	182	127	70%	55	30%
Male	157	92	59%	65	41%
Other gender (non- binary, trans, "other")	2	1	50%	1	50%

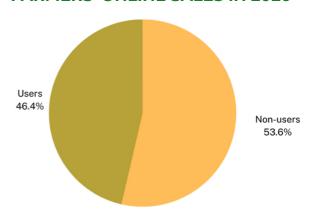
^{*}based on survey responses (n=364)

DIRECT MARKET FARMERS' ONLINE SALES IN 2020

• 46% (n=166) of farmers used online sales as one of their market channels sometime in 2020.

Farms with higher annual gross income and those not producing vegetables were statistically most likely to sell products online in 2020.

CALIFORNIA'S DIRECT MARKET FARMERS' ONLINE SALES IN 2020*



GEOGRAPHY OF FARMERS WITH ONLINE SALES*



- 42% (n=69) of users started using online sales after March 2020, out of which 26% (n=18) started using online sales specifically due to the pandemic.
- **58%** (n=97) of online sales users already used this market channel before the pandemic in March 2020.

*based on survey responses (n=364)

BREAKDOWN OF ONLINE SALES USERS AND NON-USERS IN DEMOGRAPHIC GROUPS CATEGORIZED BY NATIONAL ORIGIN, RACE/ETHNICITY, AGE, AND GENDER*

DEMOGRAPHIC GROUP	TOTAL (N)	USERS (N)	% OF GROUP	NON- USERS (N)	% OF GROUP
Total sample	358	166	46%	121	35%
U.S. national origin	303	144	48%	100	33%
Non-U.S. national origin	36	13	36%	20	56%
American Indian and Alaska Native	13	8	62%	4	31%
Asian	19	7	37%	8	42%
Black or African American	6	2	33%	3	50%
Latino or Hispanic	39	18	46%	18	46%
Native Hawaiian and Other Pacific Islander	1	0	0%	0	0%
White	263	128	49%	86	33%
Under 55 years old	185	87	47%	59	32%
Over 55 years old	149	68	46%	59	40%
Female	182	89	49%	55	30%
Male	157	68	43%	65	41%
Other gender (non- binary, trans, "other")	2	0	0%	1	50%

^{*}based on survey responses (n=364)

ADVANTAGES OF HAVING AN ONLINE PRESENCE FOR DIRECT MARKET FARMERS

- Direct market farmers who had an online presence in 2020 were statistically more likely to increase their sales and profitability during Mar-Dec 2020 than farmers who did not have an online presence.
- Those who increased their use of online sales and marketing during March-December 2020 were also statistically more likely to feel less concerned about the pandemic and more able to adapt to its disruptions.



La mayoría de clientes, cuando empezamos con los CSA boxes las agarramos por redes sociales (Farmer 28).

(translation: We gained the majority of our clients for CSA boxes through social media when we started)

- Farmers commonly use social media to **attract customers to their farm** stands or farmers' market booths or to build community with CSA members.
- Many interviewed farmers (n=11) shared that social media outreach directly
 increased the number of customers that went to their farm stand or
 farmers' market booth, their number of CSA members, or the amount of
 product they sold.



I take a picture of a new melon patch that's coming on and a slice of melon, and then the next week at market people are like, "Hey, where's that melon?" ... It's a very direct relationship to how much I sell that type of melon. If I hype it up on Instagram and tell people what its name is and the origin of it, then they'll be excited (Farmer 22)

MAIN CHALLENGES FARMERS EXPERIENCE WITH ONLINE SALES AND MARKETING

Based on interviews (n=28), we found that farmers experience the following challenges in adopting or continuing to use online sales. and marketing.

- Learning and using online sales and marketing tools are very time-consuming (n=18).
- Many farmers have limited knowledge and skills of online technology (n=15).

Someone who is younger than I, with the same kind of talents that I have could do even better because they would do Instagram or they would do some kind of Twitter thing (Farmer 5).

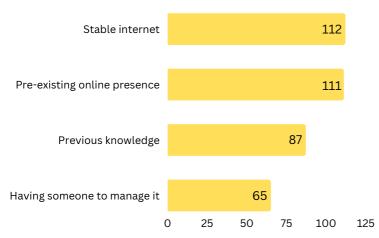
- Managing online sales and marketing can be **tedious**, **stressful**, **and exhausting** for farmers (*n*=15).
 - Farmers who have a farm website through a generic (non-farm-specific) platform (e.g., Wix or Squarespace) expressed challenges associated with technical glitches.
 - When the website template does not have all the features they need, farmers need to "farm hack," particularly when they want to offer online ordering and payment systems.
 - Some websites and online sales platforms require **expensive fees** and farmers who offer shipping or deliveries have to deal with the cost of packaging, shipping, or fuel (n=7).



One thing that I'm not too happy about is all the fees. **Every time you turn around, there's a fee,** and it's easy to forget all those when you're doing your cost estimates (Farmer 10).

FACTORS AND RESOURCES THAT ENABLE FARMERS TO USE ONLINE SALES AND MARKETING

TABLE ENABLING FACTORS FOR FARMERS' USE OF ONLINE SALES AND MARKETING IN 2020*



I feel like a cheater because I was a website designer in my past jobs. And so I've been in graphic design and website design for years (Farmer 18).

During interviews (n=28), farmers identified three main factors or resources that enabled their operation to use online sales and marketing (see below).



Knowledge or skill (n=13)

- Having a background in technology, communications, or related fields (n=7).
- Identifying as "tech savvy" (n=6).
- Associated their skills with their age or generation (n=4).
- English fluency (n=1).



Having a stable internet connection (*n*=9)



Receiving help (n=8)

- A relative (partner, younger child/grandchild) (n=4).
- An organization created a website (n=2).

^{*}based on survey responses (n=364)

SOME FARMERS CHOSE NOT TO USE CERTAIN ONLINE SALES AND MARKETING TOOLS, BUT OTHERS EXPERIENCED BARRIERS THAT PREVENTED THEM FROM USING THEM

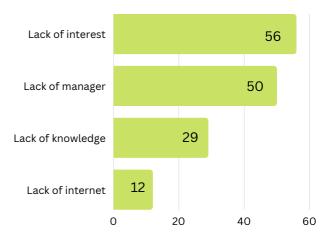
Several farmers were not interested in starting a social media page for their farm and some farmers chose to limit how much time and energy they put into their social media presence. In some cases, farmers preferred to invest more time and energy into in-person relationships at the farmers' market or in their local community than on social media. Some interviewed farmers mentioned their age or generation as the reason they were less familiar or comfortable with certain tools, particularly social media.



I'm not such a big fan of social media. I don't understand it. I'm just not an Instagram person. My daughter is 19 and she's a freshman. She's like the generation that grew up on social media and it's a part of her life (Farmer 13).

 The two most common barriers for interviewed farmers (n=28) to use online sales and marketing tools were lacking knowledge or skills (n=7) and lacking funds (n=7)

WHY FARMERS DID NOT USE ONLINE SALES AND MARKETING IN 2020*



*based on survey responses (n=364)

I checked out one of those [online sales] services. It was 50 bucks a month. No way, dude. That's way too much. So at a certain scale, yeah, we'll start looking at an option like that. But for now, I'm just doing it all the old-fashioned way to

minimize those fees (Farmer 10).

We did reach out to those companies in the past just for information because we thought, oh yeah, that ... would be probably easier than Farmer's Market ... and we did consider it. And then we thought, but the reason we do farmer's market is the social aspect of it (Farmer 15).

RECOMMENDATIONS FOR DIRECT MARKET FARMERS

• Having an online presence can help farms **increase sales and build community** with their customers.

- Farmers should **consider how much time and money they can feasibly invest** in their online presence or online sales before deciding which tools to use.
- Farmers should **consider their target audience and business goals** before they decide how to invest their time, energy, and money.
 - For example, using and posting on social media can be particularly helpful for direct market farmers who sell at a farm stand, farmers' market, or through CSA subscriptions. It can also be a helpful tool to connect with restaurant accounts. Social media may be less effective for farmers who primarily rely on wholesale, farm-to-school, or other directto-institution market channels since these clients are less likely to connect with farmers through social media.
 - Online sales are not the right fit for all farms. Farmers should **consider their farm's production, capacity, and technological skills** when assessing whether they should adopt online sales.
 - When it comes to online sales, **there are many different options** for farmers, and not all of them require home deliveries. Farmers can offer preorder systems for the farmer's market or farm stand.
 - It is normal to feel overwhelmed. Many direct market farmers who have felt overwhelmed by all the available options, including not knowing how to choose the right one, have successfully learned how to use them.
 - Identifying the right online tool and learning how to use it **takes time**. Establishing an online store is a particularly complex process that takes a lot of time to set up and learn how to use. If this is a goal, it will require time and patience which will save you money and time in the long run.
 - There are free and low-cost ways to increase a farm's online presence. For example, creating a website through Google Sites, a Google Business Profile, or a Facebook or Instagram page.

RECOMMENDATIONS FOR TECHNICAL ASSISTANCE PROVIDERS (PART 1)

• **Not all farmers are interested** in using online sales and marketing. Farmers have diverse values and attitudes toward digital technologies and some may prefer to invest more time and energy into direct relationships with their customers.

- Not all online tools are the right fit for every farmer. Farmers should consider various factors when trying to decide which online tools are worth using for their business model. While online sales platforms can help some farmers increase their sales and profitability, they are not always the right sales model for farmers.
- Farmers have varying levels of technology literacy and comfort with digital technology.
 - When planning a workshop or training session, it is important to first assess the level of technology literacy of the participating farmers and then determine whether farmers should be divided into different groups according to their skill level. While some farmers are able to learn how to use online tools through a virtual webinar on Zoom, many farmers require direct support in person. In addition, some workshops might require a high ratio of facilitators to farmers so that participants who cannot easily follow during a workshop can receive support from one of the facilitators.
 - Peer-to-peer learning opportunities where more knowledgeable farmers teach online tech skills to more novice farmers can be very effective.
 - Simply setting up a website or social media page for a farmer who does not have the knowledge or capacity to maintain and update it may not be helpful. Many farmers lack the skills to access a website design platform and make updates to their website. This can cause issues when a website includes specific pricing or contact information that can change over time. A possible solution to this is to set up a website or social media page that requires minimal updating (excluding prices and sales locations). Alternatively, a service provider could train the farmer on how to edit the website or social media page or identify a farmer's relative to train on it who is likely to be available to support the farmer with these updates in the future.

RECOMMENDATIONS FOR TECHNICAL ASSISTANCE PROVIDERS (PART 2)

- Many farmers do not own or use computers or have the same level of access to a reliable internet connection. Many farmers exclusively use their smartphones for business purposes. Most farmers spend most of their day on the field, so they rely primarily on their smartphones for any administrative tasks. Many also feel less comfortable with computers and do not regularly use them.
- Lack of English fluency can be a prominent barrier for farmers who predominantly speak another language. One important benefit of online sales platforms for farms is that they offer customer support and work with the farmer to set up their online store. However, most of these platforms only offer customer support in English. Technical assistance providers can act as mediators and translators between these companies and farmers.
- **More research** is needed to understand how to best support direct market farmers with their use of online sales and marketing.
 - Future research could parse out the different online sales methods and identify a more refined typology to better understand how farmers use them for sales. Future research should also collect data on how these online technologies intersect other market channels and how those intersections impact farm sales and profitability.
 - Since farmers often feel overwhelmed by all the options for online sales and marketing tools, a cost analysis of the different tools for different types of farming operations could greatly help farmers make decisions for appropriate technology adoption. In addition, a flowchart that guides their decisionmaking could be a helpful resource.
 - Since our sample only included English and Spanish speakers, future research could directly target farmer communities who are non-English and non-Spanish speaking.
 - Research that involves collaborations among multiple actors associated
 with small-scale agriculture (e.g., farmers, non-profit organizations that
 support farmers, companies that develop online platforms for farms, and
 academic researchers) would ensure that findings are relevant and applicable
 to the communities researched.

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