UNIVERSITY OF COLORADO BOULDER LEEDS SCHOOL OF BUSINESS



A publication of the Business Research Division Volume 86, Number 2, 2020

IN THIS ISSUE

- PAGE 1 Natural Products Ecosystem Helps Disrupt Mature Food Company Dominance
- PAGE 4 Why Colorado is the Good Food Capital
- PAGE 6 Colorado's Food Advantage
- PAGE 8 Viewing the Food System Through Different Lenses
- PAGE **10** Do You Know How to Market Food? How About in a Pandemic?
- PAGE **13** Resilient Food Systems, Entrepreneurship, and Experiential Education



Natural Products Ecosystem Helps Disrupt Mature Food Company Dominance

John Grubb

A remarkable dynamic has unfolded in the food and beverage industry where small, disruptive brands have accounted for a disproportionate amount of overall industry growth. This is an unusual set of circumstances wherein classic competitive strategy has failed to predict actual outcomes - large-scale, public companies with tremendous manufacturing scale, highly experienced and well-compensated executive ranks, vastly superior purchasing power, and a symbiotic relationship with the nation's largest retailers have failed to insulate the incumbent industry leaders from the external threats posed by much smaller, modestly resourced, disruptive brands.

What are the reasons that the established, high-margin, branded food companies – with their theoretically large competitive moats and impenetrable fortress walls – have defied classic competitive strategy by failing to keep small, less well-resourced competitors at bay? And what can explain the capitulation – whereby these dominant players pay unprecedented premiums to acquire their often-diminutive and disruptive competitors?

Macro Trends

 In the 40+ years since the original natural and organic food companies got their scrappy and

TWENTY-YEAR TRANSFORMATION OBESITY IN THE UNITED STATES entrepreneurial start (Whole Foods was founded in 1980), a quiet but steady following has grown for wholesome, nutritionally dense, and clean-label foods.

- 2. Meanwhile, the commercialization of genetically modified food ingredients has dominated the increasingly monocultural agricultural supply chain (notably corn and soy), making food both plentiful and inexpensive.
- A somewhat simultaneous (yet gradual) public health crisis has developed as America has continued down the path of weight gain and obesity. This phenomenon

1990 1995 2000 2005 2010





Leeds School of Business UNIVERSITY OF COLORADO BOULDER

FROM THE EDITOR

While the good food industry offers a myriad of health, wellness, and environmental benefits, it also makes a substantial economic impact. The articles in this issue were primarily written by business leaders working in, and supporting, the natural and organic food industry. This issue quantifies the size of the agriculture industry and the food and beverage manufacturing industry in Colorado, describes the disruptive nature of natural products, celebrates restaurants committed to good food, illustrates the difficulty marketing new products through a pandemic, and highlights the University of Colorado's service to food-based economies.

Our next issue will present a review of the Colorado economy midway through the year. Look for it this summer in your inbox.

> Please contact me directly at 303-492-1147 with any comments or questions.

-Richard Wobbekind



Year (each data point represents a rolling 7-year average of average lifespan) Source: CB Insights; Standard & Poor's.

has certainly reflected and highlighted our mainstream dietary choices (See CDC obesity data on page 1).

- Rightly or wrongly, "big" has increasingly been affiliated with "bad" – be that big government, big banks, big pharma, or big food and ag.
- 5. As the rate of change in technology and culture has increased, disruptive business models have dislodged incumbent predecessors—and overall corporate lifespan has decreased.

A Natural Products Ecosystem

As many of the pioneering natural and organic food companies have gradually been acquired by large companies (Celestial Seasonings, White Wave, Horizon Organic, Stonyfield Farm,

INVESTMENT ECOSYSTEMS

Honest Tea, to name a few), many of the founding entrepreneurs have reinvested capital proceeds and hardwon experience to mentor and grow the next generation of natural and organic brands and companies. Nowhere is this dynamic more apparent than in Boulder, Colorado. A virtuous cycle has emerged – fueled by abundant equity capital, inexpensive debt, an increasingly rich talent marketplace, and a culture of collaboration.

As leading incumbent food and beverage companies continue to look externally for growth and disruptive innovations, this dynamic has deepened and accelerated. With resources resulting from successful exits at handsome valuations, many natural and organic brand champions and company leaders have formed their own angel investor networks, venture capital firms, and



Source: Summit Venture Management.

private equity funds. In Boulder, a few examples include Sunrise Strategic Partners, BIGR, Boulder Food Group, CAVU Venture Partners, Sonoma Brands, Powerplant Ventures (several of these are shown on the investor landscape graphic on page 16).

This has occurred as established incumbents formed their own corporate venture capital groups to fund participation in this entrepreneurial ecosystem. A highly successful initial public offering by Annie's Homegrown in 2012, followed by their acquisition in 2014 by General Mills, set a new highwater mark for valuations and enthusiasm in the natural and organic sector. (General Mills paid \$825M for Annie's – then with about \$200M in sales and only modest profitability).

Innumerable high-growth natural and organic brands have subsequently enjoyed financially lucrative sales to incumbent consumer product company leaders, further fueling investment in disruptive start-up brands.

Growth vs. Profitability

A rather pronounced polarity first emerged in the food and beverage space in 2012-2013. About one year after General Mills acquired the highgrowth Annie's Homegrown company, the Brazilian private equity group 3G Capital teamed up with Berkshire Hathaway

LOCAL BRAND ACQUISITIONS



to acquire the H.J. Heinz Corporation. In 2015, they added Kraft foods in a mega-merger to create Kraft-Heinz, which became a public company. 3G laid-off more than 7,000 employees in the combined companies - including many senior executives - and closed many factories. This cost cutting enabled a significant near-term boost in earningsper-share. Wall Street loved their early results and richly valued the company, and by extension, their approach of radical cost-cutting. As Kraft-Heinz became a darling of Wall Street, their public company peers quickly emulated the priority of cost-cutting - and in many cases emulated 3G's utilization of zero-



Kraft-Heinz chart above shows a high of over \$96/share 3 years ago to a low of under \$25/share just prior to a small consumer-staples Covid-19 bounce. Kraft Heinz market capitalization has declined by 70%.

Source: Yahoo! Finance.

based budgeting (ZBB).

While many functions suffered in this radical cost-cutting, none suffered more than longer-term initiatives in research and development and in marketing. At the same time, layers of senior management throughout the industry were also cut. Over time, the virtues of short-term cost-cutting proved very damaging in the long term as growth in core categories was either negative or neutral. And the innovation engines (R&D and Marketing) had been decimated in the process.

On the other end of this polarity spectrum, venture capital and private equity investors prized high growth at virtually any cost in an increasingly winner-take-all paradigm.

As impressive acquisition valuations continued to dot the food and beverage landscape, more and more investment capital flowed into the sector in search of high-growth products and brands. The acquisition logic was rather simple: Brand X has demonstrated great consumer appeal and high growth despite marginal profitability. When we plug this into our supply chain and manufacturing capacity, we can fix the margin structure and profitability.

While this logic proved to be only occasionally true, ample rewards for investors and entrepreneurs have sustained the virtuous cycle supporting disruptive challenger brands and an ever

Why Colorado is the Good Food Capital

Sara Brito

Colorado. Good skiing. Good sun. Good fun. Good food.

Colorado is the good food capital of the country. Yes, food that tastes good for sure. Award winning chefs and restaurants abound in this great state. But Colorado has also shown its commitment time and time again to food that is good for every link in the food chain. That means the environment; plants and animals; farmers, ranchers, and fishermen; purveyors; restaurants; and eaters.

"Good Food is food that is produced with integrity and an eye toward the health of the land, animals and humans," said Caroline Glover, chef/owner of Annette in Aurora, CO.

The Colorado culinary community knows that food is about more than just dollars on an invoice, spreadsheets, or P&Ls. Chefs care. They know their purchasing practices have the power to change lives. The power to change the lives of farmers, ranchers, fisherman, and purveyors here in Colorado and across the nation.

"Good food means knowing and caring about where your food comes from and how your choices in sourcing impact the environment, culture, guests, and end result on the plate," said Alex Seidel, chef/proprietor of Fruition and Chook Charcoal Chicken in Denver, CO. In May of 2009, Seidel purchased a 10-acre farm just south of Denver in Larkspur, CO, with a vision of creating a learning center and a sustainable relationship between farm and restaurant. He was a leader in helping to teach the community and local restaurants the fundamentals of farming produce, animal agriculture, and the creation of artisanal products.

At the Denver-based Good Food 100 Restaurants[™], we celebrate the people and businesses who are creating a more sustainable food system by analyzing and measuring their impact. Carefully curated



Photo courtesy of Jane Cavagnero.

based on the quantitative measurement of chefs' purchasing practices, the annual list (https://goodfood100restaurants. org/2019list/) and industry impact report (https://goodfood100restaurants.org/ economic-assessment/) measures chefs and restaurants' purchasing practices and spotlights the restaurants that are helping to build a better food system by positively supporting every link of the food chain.

The impetus for Good Food 100 Restaurants began in 2015, when I undertook a first-of-its-kind economic impact analysis with seven Denver-area restaurant owners to examine the impact of chef purchasing power on the local economy. The study found that those seven chefs alone were responsible for a combined \$7.4 million economic impact in Colorado, just from the foods they purchased within the state.

As the Good Food 100 Restaurants launched nationally, Colorado continued to lead the way in good food. In 2019, the plurality of responses from the survey came from restaurants in Colorado (29%). Of the 137 respondents, a total of 341 individual restaurant locations were represented with 129 in Colorado.

Of the participating Colorado restaurants in the 2019 Good Food 100 Restaurants, their good food purchases totaled \$14.7 million. That translates to an economic impact of \$29.4 million on Colorado's economy. The math is simple—every dollar spent on good food had double the economic impact.

Sustainability at the Source

Restaurant sustainability begins with sourcing. Good food restaurants wouldn't be where they are without having access to good food. It's that healthy supply chain that allows the good food movement to exist. Chefs owe a great deal to the farmers, ranchers, fishermen and fisherwomen, purveyors, and distributors who are dedicated to sustainability, transparency, and advancing good food. People like Clint Buckner of Boulder Lamb or the Croft Family Farm, each who have been honored as a "Good Food Farmer and Purveyor of the Year," help keep good food moving forward. It is their foresight, their labor, and ultimately their ingredients that help determine and shape the plates of the Good Food 100 Restaurants.

COLORADO CONTINUES TO LEAD THE INDUSTRY

40 Colorado restaurants (29% of 2019 participants)

\$14.7MM

Good Food Purchases

\$29.4MM

Impact on the Colorado Good Food Economy

COLORADO ECONOMIC CONTRIBUTION OF IN-STATE GOOD FOOD PURCHASES BY COLORADO RESTAURANTS, 2018

Impact Type	Employment	Labor Income (\$millions)	Value Added (\$millions)	Output (\$millions)
Direct Effect	65	\$3.0	\$3.8	\$14.7
Indirect Effect	57	\$2.8	\$4.1	\$9.3
Induced Effect	38	\$1.7	\$3.1	\$5.4
Total Effect	159	\$7.6	\$10.9	\$29.4

Note: Sum may differ from total due to rounding.

What's to Come?

Restaurants are the backbone of our country and community. The culinary industry accounts for 4% of the nation's gross domestic product. As we hit incredibly challenging and unprecedented times in the country with the COVID-19 pandemic, the chefs and restaurants, producers and purveyors, and the entire food community are making incredibly difficult decisions that ultimately are for the greater good of our health and society. We know the impacts are going to be deep, and for many, even devastating.

According to the Independent Restaurant Coalition, the industry directly employs over 13 million people across the country and indirectly employs hundreds of millions of workers up and down the food supply and delivery chain. Growers, packers, fisherman, linen services, delivery people and more all depend on the continued revenue of restaurants to stay in business. There is an opportunity that more people (including policymakers) will realize we're all connected: no one link in the food chain can be healthy until every link in the food chain is healthy. I'm confident that once we make it to the other side, Colorado will stand strong and continue its reign as the good food capital.

Sara Brito is co-founder and president of the Good Food Media Network, and publisher of the Good Food 100 Restaurants List. She may be reached at sara@goodfoodmedianetwork.org.

Colorado's Food Advantage

Brian Lewandowski

Colorado's food industry includes a rich supply chain of farmers and ranchers, food and beverage manufacturers, wholesalers, grocery stores, and restaurants. Each of these value-adding cogs in the supply chain produce economic value for their businesses, workers, communities, and end consumers. Most of Colorado's agricultural production occurs along the Eastern Plains, while the manufacturing and wholesale activity is concentrated in the urban corridor, and the grocery stores and restaurants are spread across the state based on where people live and visit. All told, there are nearly 400,000 jobs along the supply chain in the state (agriculture, manufacturing, wholesale, and retail).

Farming

Nationally, there are fewer farms and fewer acres devoted to farming. Data from the United States Department of Agriculture (USDA), National Agricultural Statistics Service (NASS), shows the number of farms in the U.S. decreased 7% over the past decade, 33% over the past 50 years, and 70% from the peak in 1935. Farm land has also fallen, decreasing 2% over the past decade

County	Ag Percent of GDP		
Cheyenne	26.1%		
Conejos	21.3%		
Yuma	20.0%		
Kit Carson	18.1%		
Sedgwick	17.9%		
Prowers	17.6%		
Washington	17.3%		
Rio Grande	13.3%		
Bent	12.9%		
Saguache	10.2%		

Source: Bureau of Economic Analysis.



and 19% over the past half-century. In 2019, there were just over 2 million farms nationally, totaling 897 million acres, or 444 acres per farm, on average (compared to 213 acres in 1950). In Colorado, there were 38,700 farms in 2019 (1.9% of the U.S. total), and 31.8 million acres (3.5% of the U.S. total), ranking the state 23rd for number of farms and 9th for number of farm acres.

Just over two-thirds of the value of agriculture production in Colorado is derived from livestock; crops comprise the remaining 32%. The Agriculture sector represented 0.7% of overall state nominal gross domestic product in 2018 (compared to 0.8% for the nation), illustrating that Colorado is slightly less ag-intensive than the national average. However, agriculture makes up 17% to 26% of GDP for six of Colorado's (mostly eastern plains) counties, illustrating the regional importance of the industry in select communities. Nearly 80% of GDP from Agriculture is derived in counties east of the Rocky Mountains in Colorado. Weld County records the largest amount of agriculture GDP in the state, accounting for 39% of the state's total.

Manufacturing and Wholesale

Colorado is not an intensive food manufacturing state—its comparative advantage is in beverages. Overall, with over 23,000 jobs in food manufacturing, Colorado has a 20% smaller share of food manufacturing employment compared to the national average while the 8,700 beverage manufacturing jobs represent a 72% greater share of beverage employment compared to the nation. Both food and beverages have been growth sectors of the Colorado economy, growing faster over the last

County	Percent of State Food Mfg Employment	County	Percent of State Beverage Mfg Employment
Weld	22.5%	Jefferson	22.3%
Denver	21.0%	Denver	21.1%
Adams	13.5%	Larimer	17.4%
Morgan	12.1%	Boulder	10.9%
Boulder	8.9%	Arapahoe	5.6%
Larimer	4.2%	El Paso	4.7%
Montrose	2.4%	Adams	2.6%
Arapahoe	2.2%	Mesa	2.2%
El Paso	1.8%	Summit	1.5%
Jefferson	1.3%	La Plata	1.4%
Other	10.1%	Other	10.3%

Source: Bureau of Labor Statistics.

CONSUMER PRICES

Percent Change



decade than overall employment in the state. Eight Colorado counties represent 87% of food manufacturing and beverage manufacturing employment in the state. There are regional strengths in food manufacturing-Weld and Morgan counties with companies like Cargill, JBS, and Leprino; Boulder County with the natural and organic food cluster; and the more rural areas of Prowers, Montrose, Kit Carson, and Delta counties, with mills and small manufacturers. Another 19,700 jobs in Colorado are devoted to food wholesale (grocery and related product wholesalers, farm product raw material merchant wholesalers, and alcoholic beverage merchant wholesalers).

Restaurants and Grocery Stores

The largest employment sectors in Colorado's food system are the consumer-facing sectors (e.g., grocery stores, liquor stores, restaurants, brew pubs, bars), representing over 287,000 jobs, or 10.7% of the total jobs in Colorado. Because they are consumerfacing, they are less concentrated in few counties, and are instead spread more representative to population and visitation in the state.

Food Prices

For decades, Americans have experienced the phenomenon of relatively cheaper food, borne from industry consolidations, technology, and productivity. Based on the Consumer Price Index, food at home (e.g., groceries) has risen at a slower pace than the basket of all goods over the past 40 years (2.7% vs. 3%, respectively). Over the past decade alone, food at home increased 14.1% versus 18.7% for all items. Said another way, relative to overall consumer spending, food has gotten cheaper over time.

COVID-19 Impact

The impact of the COVID-19 pandemic has raised questions about the food system in America. Dairy farmers are dumping their milk, meat packing plants are facing COVID-19 outbreaks, and grocery stores are rationing meat, eggs, and many other goods while consumers resort to panic-buying and hoarding (grocery store sales spiked 27% from February to March). There will be greater scrutiny of the food supply chain to not only protect consumers, but producers and their employees alike.

Brian Lewandowski is the Executive Director of the Business Research Division at the Leeds School of Business, University of Colorado Boulder. He may be reached at Brian.Lewandowski@ Colorado.EDU.



Photo courtesy of Jane Cavagnero.

Viewing the Food System through Different Lenses

Catherine Walsh



Photo courtesy of Jason Walsh.

With the rapid onset of the coronavirus, much has been said about the new normal. People have mused about whether we will shake hands ever again. What about flying in an airplane? Returning to the classroom? Going to a restaurant? The natural products industry thrives on relationships that typically involve flying cross country to have faceto-face meetings and attending large trade shows several times a year. We like to see one another, discuss challenges, and share information. It is a close-knit community rich with camaraderie and genuine fellowship. It is not uncommon for someone new to the industry to reach out to an industry veteran seeking and receiving support. We thrive on these connections. While there is no crystal ball to predict the future, it is an inescapable fact that certain parts of life will change, and we may be doing business differently moving forward.

Not surprisingly, every food and

beverage company is viewing the global crisis through its own lens. Most brands experienced strong sales through mid-April, but sales are tapering off now that consumers have loaded up their pantries with grocery staples. Even large companies have experienced issues with their supply chains with all handson deck. Having said that, most large consumer package goods (CPG) brands seem to be pulling through since they tend to control their manufacturing. Smaller brands are having a tougher time since they are at the mercy of co-packers who have reached their capacity and are reserving line time for their larger clients.

Working on the business development side, I've seen two responses or patterns of behaviors from food and beverage brands. One group is laying low, reluctant to spend on product innovation and delaying decision-making on all fronts except for the immediate day-to-day needs of the business. The second group is taking this time to think about growth. Growth can come from product innovation that relates directly to products that are currently experiencing strong velocity (e.g., immunity-boosting products). The other growth mindset is the group that is considering what their business will look like once the stayat-home orders end. They are trying to get ahead of the situation and think strategically. They are trying to use this time wisely. It is an understatement to say that decision-making can be challenging when there are so many things competing for our attention at work, at home, and on a global scale.

After we feel safe to leave our homes. it will be interesting to see how our relationship with food will change. We used to take it for granted that our grocery store shelves will always be full. We live in a culture where we tend to undervalue food, meaning we are always searching for quarterly promotions, BOGO (buy one, get one free) offers, or EDLPs (everyday low prices). As consumers, we have been trained to shop on frequent promos of which even I am guilty. We eagerly buy the \$1 hamburger even though a hamburger should probably cost substantially more. For some people, the reality is that they cannot afford to spend half of their paycheck at the grocery store and, as a result, have fewer healthy food options.

In the last several weeks, we have seen grocery stores and their employees be the subject of many news articles. Grocery store workers are being lauded for putting their health at risk by going into work and being in contact with the public. They are, and should be,



Photo courtesy of Jason Walsh.

considered front-line workers. We owe this essential group of workers a tremendous amount of gratitude since the closing of our grocery stores would devastate our food system and this period of quarantine would be vastly different for our society as a whole. In addition to grocery store workers, there are many more unseen people who make our food system run to ensure that we can put food on the table farmers, warehouse workers, distributors, truckers, and manufacturers to point out just a few. When this is over, will we have more awareness of our food system and the people who make it all happen? Will we consider things beyond just price, but also issues around labor, food waste, sustainability, organic standards, regenerative agriculture, and food justice?

Especially now, I consider myself fortunate to work in the food and beverage industry due to its resilient nature. I am reminded everyday of how this industry can't stop or even take a break. On a personal level, our household is never able to be fully in quarantine since my husband goes into work at least five days a week to his canning facility. The other food manufacturing companies in his building also all report to work every day.

It may be hard to imagine life resuming to normalcy again, but it will, albeit an altered one. The question is: How and in what ways will our food system be permanently transformed?

Catherine Walsh is Director of Brand Development at Moxie Sozo. She can be reached at catherine.walsh@moxiesozo. com.

Do You Know How to Market Food? How About in a Pandemic?

Joe Dobrow



Photo courtesy of Jane Cavagnero.

One of the great challenges of being a marketing executive is that everyone else thinks they understand how to do your job.

This is not the case with, say, an accountant or a lawyer. Their disciplines seem like specialties that exist in their own realms, beyond the layman's comprehension. But since we are all daily consumers of marketing – some studies estimate that the average American is exposed to more than 5,000 ads per day, infiltrating our lives at every hour and every turn – naturally, we think we are all good marketers.

But on a July day in 2018 at CU Boulder's Food Industry Executive Leadership Development (FIELD) program, that illusion quickly evaporated for three dozen food executives – many of whom actually *were* marketing executives. There, at the end of an afternoon-long class about the "art and science of food marketing," filled with useful but familiar lessons in branding, storytelling narratives, and segmentation/ targeting/positioning strategies, the topic turned to e-commerce – and specifically, how to navigate the complex world of selling your food products on Amazon.

Kevin Weiss of the marketing agency Amplio Digital explained to the executives that in today's world of the "omni-channel journey," you aren't just competing with the other brands in your vertical but with the "I-want-it-now mentality." The marketing funnel, said Weiss, doesn't end with the purchase, but must go on to include retention and advocacy strategies. And although online grocery shopping (pre-pandemic, of course) only represents 5% of all food sales, Amazon must still be reckoned with because 55% of online product searches start with them, and 43% of all online dollars go through them. To a room full of increasingly furrowed brows, Weiss talked about using e-commerce not just to sell but to conduct market analytics through tools like the AMZScout Chrome extension and "sentiment studies."

He reminded the executives: If you don't win or own the buy box, you don't get the sale. You don't get



Photo courtesy of Jane Cavagnero.

to measure that. What I would argue is that you want there to be a massive amount of demand for your products. It shouldn't be hugely important whether a consumer buys the product from your Seller Central account, or your Vendor Central account, or another account, provided that the customer experience is somewhat consistent. So we don't strive for 100% buy box ownership—that would be ideal, but 80-90-95%, that's really good; you want to control as much as you can because you get the data of how much you are actually selling, you get to control more of the customer experience, and you can also run sponsored product ads on it.

At that moment, anyone who thought they knew how to be a good modernday marketer threw in the white towel.

Once upon a time, marketing used to be a pretty straightforward discipline, especially in the food industry. There weren't many sales channels, there was no "journey," and the only thing approximating a "buy box" was the supermarket cash register. A small group of consumer packaged goods giants -General Foods, Kraft, Nabisco, Pillsbury, Hershey, General Mills, Campbell Soup - dominated pantries. They decided what Americans wanted, and they got up on their marketing soap boxes to explain it. The companies often stocked the grocery shelves themselves, or paid fees to get the best slots; they promoted their deals and prices through cheap one-size-fitsall "circulars" (free-standing inserts, or FSIs) in the newspapers; and from the 1950s through the 1980s, they built brand recognition and loyalty through the ubiquitous 30-second TV commercial, often backed by cloying but unforgettable jingles. Who over the age of 50 today cannot still hum the commercial tunes for the Oscar Mayer Wiener, the Hershey's great American chocolate bar, or Rice-a-Roni?

That was just the way things were – and to those at the General Foods headquarters in White Plains, New York, or to their muses a few miles south on Madison Avenue, it may have seemed like nothing would ever change.

But marketing always has an elusive quality to it, slipping out of control through new technologies or changing tastes without the marketers realizing it.

Hence, with shifts in attitude toward health and growing awareness about food ingredients, the once-laughable natural foods movement sprang to life in the 1970s and 80s through retail chains like Mrs. Gooch's and Alfalfa's, and through brands like Celestial Seasonings and Cascadian Farms. Then came the VCR, the first of a series of technologies that gave TV watchers the ability to skip ads altogether. When the internet came along a few years later, it afforded small brands the ability to mount impressivelooking marketing efforts through slick websites and a new form of advertising (remember the novelty of seeing the first online ads on Prodigy?).

How did the big brands react? They saw this as the creation of more soapboxes, not as a paradigm shift. So they mostly just tried to outspend their upstart rivals and amp up the volume to out-shout the other voices. In their minds, it was still a one-way monologue from brand to consumer.

But then e-mail became popular, and social media, and - importantly for the food industry - social sharing through Pinterest, Instagram, YouTube, and "influencers." With these tools the consumers were able to communicate with the brands (C-to-B) and with each other (C-to-C), and make their voices heard. The new world of changing tastes, different preferences, and food-with-aback-story exploded into mainstream news and public consciousness. The food brands that recognized that their marketing had to be authentic, purposedriven, a dialogue instead of a monologue (e.g., Whole Foods) thrived. Those who persisted in their old ways, like Campbell and Kraft-Heinz, entered into precipitous declines.

Today, amidst the pandemic, natural food marketers are faced with more upheaval, and the urgent need to adapt in real time. For example, in-store demos and sampling - a marketing staple for small brands and new products - have vaporized; few people want to be in a supermarket, let alone linger there, so marketers have had to rip that page out of their playbooks. Moreover, with surging unemployment and supply chains in turmoil, most consumers are falling back to big brands and comfort foods, so it is harder than ever for a new product or upstart brand to even be found, let alone break through. And those price promotions in FSIs (Sprouts Farmers Market, for one, was still sending out an estimated 20 million circulars a week in February) - there's simply no need anymore. With supplies limited and restaurants shuttered, customers will pay anything just to get food in their pantries.

As for that Minotaur's labyrinth of Amazon Seller Central, Vendor Central, and buy boxes that the food executives were learning about at CU in 2018 well, it's upon us. According to The Atlantic (April 17), there has been a sevenfold increase in downloads of the app Instacart, the largest independent grocery delivery service in the nation, and the company has seen its order volume increase by 150%. The New York Times reported on April 5 that orders for Amazon groceries have been as much as 50 times higher than normal. Things will eventually moderate, but there is no going back. Marketers who until this point have resisted playing Amazon's confusing game, or who have only scratched the surface of e-commerce and digital advertising, need to adapt fast.

Still, it wouldn't be surprising to see some clever marketers break out some old-school tricks. Can the first 30-second pandemic TV jingle be that far off?

Joe Dobrow is a lecturer at the CU Boulder Leeds School of Business, and is author of the books Natural Prophets – From Health Foods to Whole Foods, How the Pioneers of the Industry Changed the Way We Eat and Reshaped American Business (Rodale Books, 2014), and Pioneers of Promotion – How Press Agents for Buffalo Bill, P.T. Barnum and the World's Columbian Exposition Created Modern Marketing (University of Oklahoma Press, 2018). He may be reached at jdobrow@MBArk.com.

Resilient Food Systems, Entrepreneurship, and Experiential Education

Garrett Stoll and Nicole Civita



Photo courtesy of Jane Cavagnero.

Introduction

Food system planning involves engaging stakeholders across the food economy and surrounding communities in forward-looking activities that support positive economic, social, and environmental outcomes. Work by the University of Colorado Boulder's Masters of the Environment (MENV) program highlights the potential for clinical curriculum to engage in food system planning as a part of a broader rural economic development agenda. Findings of a recent Food System Assessment conducted in Delta County, Colorado, suggest that this approach can contribute to economic and social resilience in rural communities.

Background

The MENV program launched in 2016 with the express purpose of equipping students with the knowledge, skills, and experience necessary to address the complex environmental challenges of the 21st century. Students in the professional graduate program are prepared for careers as leaders through times of tremendous change by applying a potent combination of interdisciplinary academic inquiry, systems thinking, and creative practice to real-world issues. The program focuses on renewable and sustainable energy, sustainability planning and management, environmental policy, and sustainable food systems.

In the fall of 2019, MENV piloted its Clinic for Sustainable Solutions. Modeled on the experiential and communityoriented learning environments of law or design clinics, the Clinic for Sustainable Solutions invites students to take part in many of the professional activities they will encounter after graduation. They get to use their newly acquired knowledge and skills in collaboration with, and in service of, communities with critical unmet needs for sustainability consulting services. For its inaugural project, the Clinic partnered with ENGAGE Delta County, a rural economic development initiative helmed by Shawn Gardner and Barry Pennell. ENGAGE works in the food and energy sectors of Delta County to build capacity for entrepreneurs, increase regional economic cohesion, and connect businesses to supportive resources. Clinical faculty viewed the partnership with ENGAGE as an opportunity for students to appreciate the challenges associated with supporting decent rural livelihoods while promoting wise resource management. This partnership also enables the exploration of more mutualistic urban-rural economic exchanges – those that do not merely extract resources from natural resourcerich rural areas to urban centers, but that share value across the divide. Such exchanges are built on recognition of the fact that rural ingenuity and urban innovation are close cousins and that each needs the other to thrive.



Photo courtesy of Jane Cavagnero.

In this first round of what is intended to be continuous engagement with the Delta region, the Clinic team produced a Food System Assessment to better contextualize and make more strategic efforts to promote innovation and entrepreneurship across agricultural production, processing, manufacturing, and consumer-facing food services. Ten students, supported by MENV faculty members Nicole Civita and Joel Hartter, engaged stakeholders, performed secondary data collection and analysis, and ultimately assembled a landscape view of the local food system and economy, inclusive of the encompassing socio-cultural and political context.

Findings

The MENV Clinic identified significant challenges facing the current food economy of Delta County. First, accessing markets in urban centers on the Front Range is a logistical and financial challenge for producers in this remote community, and markets closer to home do not necessarily offer the purchasing power or demand to support local brands. Second, growers

feel that labor, in terms of both quality and quantity, presents a major hurdle for production. Complaints from stakeholders about the lack of gualified and motivated employees were common. These complaints were sometimes tempered by a recognition that the work can be demanding and the pay low. This lose-lose combination is even less appealing given the rising cost of living in the region and increasing opportunities in the booming job market of Front Range communities. Simply stated, market rates for farm labor and food manufacturing do not incentivize the majority of local workers or attract significant in-migration. A shifting political and regulatory environment also affects the availability of, and cost to, employ foreign visa workers, who growers have come to rely upon. And finally, macro trends in commodity prices and consumer preference have introduced uncertainty in the risk/reward profile of many activities. For instance, growth in the natural and organic food segments could drive more value for regionally-produced goods. However, some producers are wary of selling

into this market for reasons ranging from the added regulatory burden of organic certification, the lack of dedicated organic processing infrastructure, the added complexity of marketing such products, and the perceived saturation of sales channels like regional farmers' markets.

Recommendations

For all these challenges, food and agriculture continues to be a central pillar of the Delta region, as well as a source of considerable opportunity for entrepreneurs and established businesses. The Clinic team identified several strategies that ENGAGE could pursue in furtherance of a key goal for the regional food system: resilience. A resilient food system is characterized by the capacity for its entities to absorb shocks, respond to stressors with flexibility, and thrive in spite of disruptions and uncertainty. The Delta food system possesses some hallmarks of resilience (e.g., considerable diversity, intertwined social and political support, and moderate awareness of resource limitations), but could further develop its ability to mitigate disruptions and generate communitywide benefits.

Strategic activities to build resilient capacity include:

- Involvement of stakeholders across the socioeconomic spectrum;
- Consideration of the ways in which municipal systems (e.g., government, critical service providers, institutions, informal networks, plus many others) interact;
- Allocation of natural and financial resources with longevity in mind; and
- Encouragement of robust, mutually beneficial urban-rural economic exchanges.

Fortunately, initiatives like ENGAGE are actively scanning for such innovations and developing the social capital required to disseminate new ideas. The Clinic's recommendations for ENGAGE included:

- Facilitating partnerships around proposed processing and manufacturing infrastructure;
- Deploying focused research on effective marketing and logistics;

- Brokering collaborative relationships between actors in the food economy with significant potential for synergy; and
- Developing program activities that help build an inclusive view of entrepreneurship across the community.

Effective resilience-building activities begin with deep knowledge of the local context and use available resources to target leverage points-places in a system where a small change in one thing can produce big, multifarious changesfor magnified impact. To intervene in this spirit, the Clinic recommended, as just one example, that ENGAGE aim some of its entrepreneur-supportive programming at the challenge of succession planning. Virtually none of the stakeholders involved in the Food System Assessment use off-the-shelf business models. Indeed, the food economy of the region seems characterized by degrees of innovation across enterprises that appear similar only on the surface. Unfortunately, many owners and operators of these distinctive businesses are nearing retirement without a plan for passing on leadership. When these founding visionaries retire, the region stands to lose economic activity, shared infrastructure, major employers, and the kinds of businesses that embody the character of the area.

To build resilience in the Delta food system, ENGAGE could match apprentices from the local community college (or recruit from outside the region, if necessary) with business owners who lack a dedicated successor. Using resources at hand, this inter-generational intervention could address some of the food system's main challenges at once. It could extend the lifespan of businesses that generate jobs and provide key intermediary services. It could provide employment that motivates young people to keep their talent in local communities. It could foster an informal network of peer apprentices and business leaders who are more likely to collaborate and share knowledge. Perhaps most importantly, it could empower a new generation of entrepreneurs to enact their own

improvements across the food system without having to shoulder all the risk of starting from scratch.

Conclusion

ENGAGE Delta County and the Clinic for Sustainable Solutions enjoyed a collaborative and productive season of work. From the outset, the Clinic team saw that abundant creative energy and a purpose-driven work ethic permeate the Delta food system. There is also potent optimism that the work of ENGAGE and other entities can propel the food economy toward greater, sustained prosperity. Our initial assessment uncovered key actors and dynamics in the regional food system, but follow-up work is needed to enhance understanding. Thus, the Clinic plans to bring a fresh crop of MENV studentswho will have studied their predecessors' work with care and intention-to Delta County next fall to yet novel ideas and turn the most promising proposals into action. 💽

Garrett Stoll is a recent graduate of the Masters of the Environment program at the University of Colorado Boulder and can be reached at Garrett.Stoll@Colorado.EDU.

Nicole Civita is an instructor and the Sustainable Food Systems Specialization lead in the Masters of the Environment Graduate Program at the University of Colorado Boulder and can be reached at Nicole.Civita@Colorado.EDU.



more robust ecosystem of investment capital, entrepreneurial consumer insight, operational expertise, and the ability to scale companies beyond the proof-ofconcept stage.

In some cases and sectors, the growth-at-any-cost paradigm has led to unwarranted investment. Many spectacular failures in the meal kit space proved that costly customer acquisition and larger volumes cannot fix underlying economic flaws. While not as spectacular as examples such as WeWork and Casper, the growth-at-any-cost model is generally giving way to a more disciplined proof of concept and economic viability approach.

Global Pandemic: Consequences and Implications

The tremendous shock to both U.S. and global economies has been as extreme as it has been sudden. Consumer staples, while unsexy, have performed exceptionally well in our current stay-at-home environment as caloric consumption in the United States is largely inelastic. While recent history has shown that the foodservice market (away-from-home consumption) is equal in size to total grocery sales (for in-home consumption), the current circumstances naturally confer a significant advantage, for the time being, to grocery sales. As well, legacy brands have bounced and regained some market share during the crisis, benefiting from established supply chains, excess manufacturing capacity, and the out-of-stock situation that many disruptor brands have experienced.

The restaurant sector faces existential challenges as long as distancing norms keep the economy partially shuttered, but food and beverage as a whole are guaranteed to grow at least at the rate of population growth. While outsized growth will continue to be rewarded in the marketplace, healthy growth requirements only slightly exceed population growth (1-2%). For now, at least, the growth-at-any-cost model will be displaced by a highly disciplined cost and cash management perspective.

What is also likely to endure is the lush investment ecosystem enjoyed by the natural products industry where there has never been a better time for disruptive entrepreneurs to access the resources, talent, mentoring, and the cooperative networking needed to win.

John Grubb is Managing Partner at Summit Venture Management. He may be reached at

john@summitventuremanagement.com.

COLORADO BUSINESS REVIEW



Leeds School of Business

The CBR is a quarterly publication of the Business Research Division at CU Boulder. Opinions and conclusions expressed in the CBR are those of the authors and are not endorsed by the BRD, the Leeds School of Business faculty, or the officials of CU.

View our website: www.colorado.edu/business/brd

Richard L. Wobbekind, editor; Brian Lewandowski, assistant editor and technical advisor; Jacob Dubbert, associate editor; Shannon Furniss, design.

This report is not produced at taxpayer expense. The University of Colorado Boulder is an equal opportunity/nondiscrimination institution.

For information/address change:

Business Research Division 420 UCB, University of Colorado Boulder Boulder, C0 80309-0420 • 303-492-8227