





FOOD RETAILING AND PRODUCTION ARE CHANGING AROUND THE GLOBE. FROM HOW FOOD IS DESIGNED AND WHERE IT'S GROWN, TO HOW IT'S CONSUMED AND WHO IS CONSUMING IT. THE FOOD **INDUSTRY WILL SOON LOOK NOTHING** LIKE ITS FORMER SELF. THE OUTLOOK PRESENTED HERE POINTS TO MORE **CHANGE IN THE FOOD INDUSTRY IN THE NEXT 10 YEARS THAN IN THE LAST 50.**

Underlying these rapid changes are macro forces that influence the way the world produces, distributes, buys, sells, and consumes food. Global population growth, expected to exceed 20 percent, and the shift from rural to urban life will increase demands for future food-stocks and shorter, more efficient supply chains.

In addition, wealth inequality continues to widen, creating disparities in access to healthy food amongst socioeconomic and income groups. Consumers will continue to seek ways to improve their diets to manage health and wellness, to counteract escalating obesity and non-communicable diseases.

Food production will continue to be vulnerable to the impacts of rising global temperatures, with water stress and drought becoming more common.

Advances in technology and open access to capital will fuel an explosion of business model innovation. New competitors will redefine consumers' expectations, offer uniquely different value propositions, and rapidly disrupt global competitive landscapes.

All is not bleak; on the contrary, this is an exciting time for consumers and those responsible for bringing food to us. The rise of technology and Artificial Intelligence (AI), as well as new scientific discoveries and innovation, offer solutions to the food scarcity challenge. The promise of new levels of food manufacturing efficiencies to counter declining production forecasts provide hope for the future of food production. In addition, tremendous investment in new retail commercial models will improve the ways consumers can personalize what and how we eat food.



THE OUTLOOK
PRESENTED
HERE POINTS TO
MORE CHANGE
IN THE FOOD
INDUSTRY IN THE
NEXT 10 YEARS
THAN IN THE
LAST 50.

GLOBAL FORCES AFFECTING THE FUTURE OF FOOD



6 in 7 people to consume

>3000

calories per day by 2030¹



Today, more than 50% of the world's population lives in urban areas



expected to rise to

66% by 2050⁵

The global population is forecasted to grow from

7.3 BILLION IN 2015

9.7 BILLION IN 2050°



Adoption rates of new consumer technologies is faster than ever²

of the US population are farmers⁴





GLOBAL FORCES AFFECTING THE FUTURE OF FOOD

THREE MAIN AREAS OF CHANGE ARE WORTHY OF FURTHER DISCUSSION. WE CALL THESE NEW REALITIES.

FIRST,

the battle for the food marketplace continues, with consumers as the ultimate winners. New models bring a level of convenience consumers have not yet seen.

SECOND.

changes in consumer desires are coming fast, and require nimble companies and commercial models to support innovation. Consumer desires reign supreme—and the food industry is changing itself to meet them.

the food production system is likely to look very different in the future, lessening waste and expanding our food base.



NEW REALITY #1:

A CHANGING MARKETPLACE BATTLEGROUND

The battle for the food marketplace is not new. What is new is the pace and number of disruptors. Consumers are more rapidly adopting the plethora of new platforms, brands, and retail models available to them, from subscription services to brand cafés. These new models are being introduced and expanded at such a rapid pace that in just a few years we expect the market to look nothing like it does today.

Let's look at how we got to where we are. Traditional food retailers reigned supreme for many years. They still hold their own: the top 10 established US grocery retailers claim 50 percent of the US market. With large, loyal customer bases and high transactional frequency, they enjoy a strong cash flow and a foundation from which to innovate. However, digital retailers and platform businesses are testing their competitive strength, wooing consumers with low prices and speedy access to desired goods. Like mega-grocers displaced smaller chains by leveraging scale, these same businesses are now threatened by digital platforms that are purpose build for innovation, speed, and customer experience design. They are designed to disrupt along all parts of the experience with unique offerings that solve for friction in the consumer's journey. In other words they are improving on things we "love" in our food experiences and fixing the elements we "hate".

To food retailers, pressure from competitors is par for the course—new formats, private labels, and upstart brands, have challenged food retailers and producers for decades. And, unlike more easily disrupted single-category retail models like books and shoes, that succumbed in prior e-commerce epochs, multi-category food retailers have been protected somewhat from true disruption by strong local consumer food tastes, complex supply chain requirements, and strong supplier relationships.

But, several emerging trends, along with the advent of digital technologies, change that scenario.

Before we examine the future, let's examine the shakeup currently underway.

Direct-to-consumer (D2C) models. In a world where consumers want what they want, when they want it, with speed, Big Brands are moving to cut out the middleman. Bypassing chain retailers, one major CPG manufacturer launched a subscription service for its detergent. Additionally, consumers can now buy another CPG manufacturer's products, from cereal to sandwiches, at the company's downtown cafe. 12

Concierge convenience. The bounty of new community-sourced and prepared meal solutions pose a huge challenge to traditional models. Consumers can easily bypass retailer doors and instead have food delivered directly to their pantry or refrigerator whenever they choose.



IN THE FUTURE....



I MEET WEEKLY

with my "Cook Club" via livestream. We share recipes and new techniques



I PROPOSE A "CONDIMENTS CLASS."

My grocer finds a local chef to lead the lesson



WE TOUR A LOCAL FARM

with the chef and pick fresh tomatoes to make ketchup



WE GO TO OUR GROCER'S "TEST KITCHEN"

for the lesson. I take it home, along with additional ingredients, to make a great dinner New channel and formats. Four out of five shoppers visit three or more channels to fulfill their food and household shopping needs. These include entirely new businesses based on providing services with food. They differentiate themselves based on new digital capabilities that help consumers connect with their new sets of needs. This situation stands in stark contrast to even just several years ago, when supermarkets were necessary one-stop shops.

Deep pockets for innovation. New entrants, traditional grocers, venture capital, established CPG brands, and private equity funds all have big war chests. In total, consumer goods companies are the third largest sector (by market cap) globally—behind only Technology and Financial Services, giving them a wide, deep base from which to experiment.¹⁴ With these resources, they can fund innovation and place bets on many new retail and product alternatives for years before they run low.

Even startups in this industry belie the struggling new venture stereotype. Grocery and meal delivery companies raised \$781 million globally midway through 2017. And, in 2016, one of the biggest meal delivery players in the global market secured a \$1.25 billion investment from a major e-commerce company. Beyond these are micro-investments in thousands of small businesses experimenting with capital-light business models—in 2016, crowdfunding platforms raised more money for these startups than the venture capital community—which makes the new competitive landscape significantly wider.



IN THE FUTURE....



MY PRIMARY CARE PHYSICIAN

prescribes a diet and loads it into my personal diet app



MY GROCER'S AI BOT

builds a recommended menu for the month, week, day, meal, and snack



I APPROVE AND ORDER

dinner as "Ingredients" so i can cook, and breakfast as "Prepped" to save time



WHEN I ARRIVE HOME.

the ingredients are waiting in my fridge, along with my favorite bottle of wine As challenges grow, retailers will team with nontraditional partners. For instance, local farmers' markets are joining forces with grocery outlets to offer locally grown meal kits with minimal packaging. Consumers can pick them up at the market or the grocery partner's store—or have them delivered to their home. A major consumer electronics company also offers traditional grocers an opportunity to partner, with its new refrigerator. 16 Wi-Fi enabled and camera-equipped, it provides an updated view of what's missing from the family

fridge. It can then connect to the local grocery store to place

an order automatically to replenish necessary items.

Many grocery stores have focused on improving the experience of food retailing, adding grocerants (a dining area/restaurant within the store) to their footprints to serve consumers' needs for prepared food and dining out. A Houston market draws the neighborhood crowd in with an acclaimed culinary school featuring beer and wine classes, as well as hard-to-find gourmet foods and a full-service kitchen.¹⁷ Expect to see grocers and restaurants blur even more, as more micro food halls crop up. These multi-faceted marketplaces punch up the experience by combining grocery shopping with restaurants and communal dining spaces.

As micro food halls and grocerants change where we eat, tech companies may also change how and what we eat. As we look to the future, we expect tech companies to have more of an impact on the industry, challenging norms. For example, a major consumer high-tech company patented a system that uses Radio-Frequency Identification (RFID) to help track the calories in restaurant orders. Apps now offer food-logging and personalized recommendations to wearable devices. As startups find their sweet spot in the food space, they will continue to change the way consumers view and interact with their food.



IN THE FUTURE....



MY HEALTH PROVIDER

recommends recipes that can be made with seasonal produce from near my home



MY FOOD PURVEYOR **HOSTS FARMER WORKSHOPS**

for my community to swap seeds and share growing techniques



LOCAL FARMERS

sell their produce from within my local grocer's store



ARE GROWN

in the store that I can pick, bag and make for dinner

SO WHAT DOES THE FUTURE HOLD?

The future of the food marketplace will offer limitless options and painless convenience.

This future caters to consumer desires, and is fueled by technology that vastly expands choices in every direction but operates in the background. For example, personal assistant services will more often recommend and make dining choices for us.

AI bots will work together, sharing vast quantities of data to optimize inventory, maximize delivery efficiency, handle customer interactions, drive recommendations, and more.

The consumer experience, as a result, becomes increasingly seamless and painless.

With millions of dollars invested and hundreds of startup companies all racing to solve for things we love and hate in the customer journey today, the future marketplace will feel very different. We expect a complex set of interconnected platforms to emerge allowing for:

Diet and health services. Connecting our eating habits to our medical well-being through doctor-prescribed diets and physical health routines. Technology will help us choose "healthy for me" options—and make them easily available.



IN THE FUTURE....



MY IN-HOME SENSORS & APPS

created a grocery list to restock my fridge and pantry



MY DIGITAL AGENT

shopped for the best prices on those items and purchased them at my preferred retailers



PERSONAL CONCIERGE SERVICE

delivered the groceries right to my fridge (and walked my dog) while I was at work



NEXT WEEK I NEED

to save money, so I will pick up my groceries from the autonomous, self-driving locker van in the parking lot at work

Community and social platforms. Consumers will be better able to connect in physical and virtual communities around their common food priorities. Whether it's local and organic, or gluten-free and paleo, technology will provide consumers new options to commune with their "tribe" and personalize their food identity.

"Mise en place" as a service. Consumers will have access to products at different stages of preparation, from raw ingredients, to chopped and diced, to hot and ready to eat.

Delivery and concierge services. Products come to consumers where and when they need them, with an array of value-added options—delivery curbside, to work, to front door, or inside their pantries and refrigerators.

With a plethora of new models, the food marketplace is truly changed already. Expect the pace and number of changes to grow as companies experiment to find their place in the ecosystem and satisfy consumer demands.



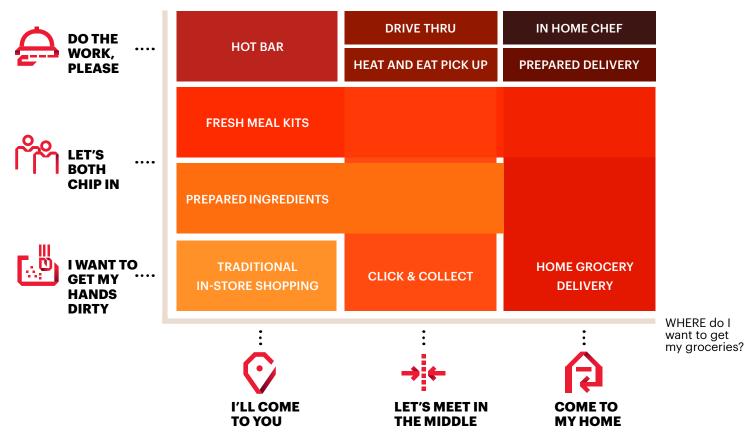
AS STARTUPS FIND
THEIR SWEET SPOT
IN THE FOOD SPACE,
THEY WILL
CONTINUE TO
CHANGE THE WAY
CONSUMERS VIEW
AND INTERACT
WITH THEIR FOOD



WHAT IF YOUR CHOSEN FOOD PURVEYOR ASKED YOU EVERY DAY:

WHAT DO YOU WANT FOR DINNER? AND HOW DO YOU WANT IT?

HOW MUCH work do I want to do?



FUTURE OF FOOD: ALL TO ACTION

WITH NEW SERVICE AND BUSINESS **MODEL**

Retail's value proposition is transitioning from location convenience and product curation to service-centric value. New business models will be essential to customer acquisition and retention that deliver competitive differentiation, customer lifetime value, and shareholder profits that traditional models will be challenged to produce.

TO DIGITAL PLATFORMS

With margin pressure mounting on commoditized categories, digital (and physical) transformation will be essential to the food marketplace. Grocers need to create platforms that enable multi-sided networks, supplier collaboration, and integrated services to capture revenue outside traditional categories of goods. These platforms will need to prototype and deliver new technology, business processes, and ultimately customer experiences fast; in weeks, not months.

ALL FORMS OF **CUSTOMER PAIN**

Successful companies will start every strategic discussion with the customer journey and work backwards to design the required changes. They will create differentiated experiences by tirelessly removing customer pain in both physical and digital environments with a combination of services and new in-store experiences.

AN ECOSYSTEM AND EMBRACE **PARTNERS**

The definition of convenience is no longer location based. Convenience now demands an ecosystem of products, technologies, and services that enable easy interactions. Partners will add, accelerate, and support new customer-facing and back-office capabilities - learning how to identify and stand these relationships up quickly will be a highly valuable competency.

E2E OPERATIONS

To free up cash to invest, fend off unwelcomed acquisitions, and improve asset leverage, traditional grocers need to modernize operations from Supply Chain, to Field Ops, to IT. This is no easy task while also reinventing customer value propositions and business model innovation. Regardless, efforts will include automation, spend optimization, inventory rationalization, and entire new technology and supplier delivery models.

NEW REALITY #2:

THE CHANGING CONSUMER

Myriad factors have shaped an evolving, changed consumer. From education rates and urbanization, to increased health consciousness and consumer technologies, consumers are more empowered than ever to vote with their pocketbooks.

An overall shift by consumers toward health through food, transparency, and 24/7 social access pushes food to the forefront our cultural awareness. In the age of an increasingly social consumer, trust is a competitive lynchpin in the battle for food dollars.

Health-enhancing foods. Many consumers are trying to change their diets, preferring healthy food. "Food with a Function" was one of Google's top five food related search trends in 2016. And Euromonitor estimates that global sales of healthy food products will reach \$1 trillion in 2017. These trends point to a continued rise in the connection between food and our health. We expect food will become more highly tailored to our unique heath needs and institutional health organizations will look to food to help control disease and modern pandemics. Health as the Holy Grail means consumers are willing to pay more for healthier foods.

Transparency and sustainability. More than half of consumers (55 percent) are willing to pay more for products and services from companies committed to positive social and environmental justice. And nearly two-thirds of consumers agree that "large changes are needed in the way food is produced and consumed." Technology is catching up to consumer demands, allowing for more granular traceability into the food journey from source to consumption. In North America, more than \$4 billion has already been invested in food traceability technologies—and the number continues to grow



"FOOD WITH A
FUNCTION" WAS
ONE OF GOOGLE'S
TOP FIVE FOOD
RELATED SEARCH
TRENDS IN 2016

rapidly.²³ Transparency may become a key non-price purchase trigger: 9 in 10 consumers globally rate ingredient transparency as important or very important for companies to address.²⁴

Social consciousness. As younger generations come into their purchasing power and start families, their preferences grow in impact. Millennials now outnumber Baby Boomers (75.4 million versus 74.9 million).²⁵ Nearly 9 in 10 Millennials say they are more likely to buy from companies that support solutions to specific social issues.²⁶ And overall, 73 percent of consumers would actively switch to a brand with a social purpose.²⁷ It is no coincidence that the market trend toward "responsible products" is growing, capturing 15 percent of US grocery sales in 2013, representing 70 percent of all growth.²⁸

Trust. One-third of US consumers rank trust as a top-three purchase driver, for both private labels and big brands.²⁹ 6 in 10 consumers refuse to buy products and services from companies they do not trust. With trust in a company increasingly becoming table stakes, brands and retailers will need to look hard at their value system and how it is communicated to the end customer.³⁰ New, purpose-driven food companies begin with this value system, giving them an advantage. For instance, one startup has \$183 million funding backing its inspirational mission to "transform the global food system by inventing better ways to make the foods we love, without compromise."³¹

Tribal influencers. Nine out of 20 consumers trust a member of their "tribe" more than a celebrity.³² With 500 million people logging into Facebook daily³³ and 175 million tweets every 24 hours,³⁴ brands and retailers have to understand how they will be invited to participate in the tribe and thereby influence purchase decisions.

The digital self. As AI personal assistants become more prevalent, brands and retailers will be dealing more and more with a consumer's digital self, versus the actual person. AI will earn the right to make decisions for individual consumers, who will trust their assistants to take the decision-making burden off of them. The usual points of influence and purchase levers may not apply when dealing with a bot.

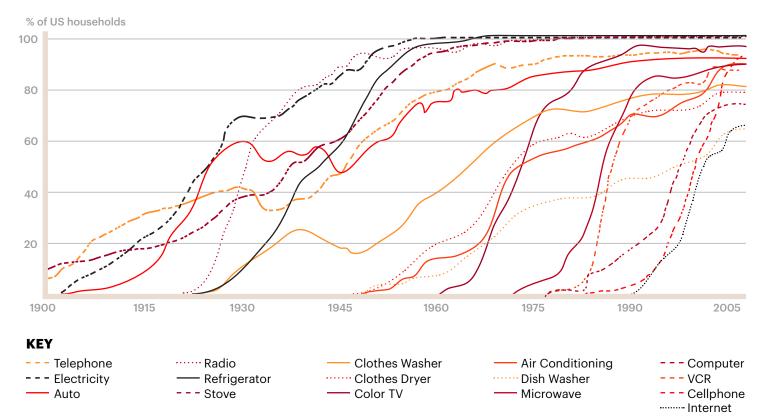


6 IN 10 CONSUMERS
REFUSE TO BUY
PRODUCTS AND
SERVICES FROM
COMPANIES THEY
DO NOT TRUST

The technology effect. Rapid advances in technology will continue to fuel consumers' expectations that retailers provide immediate and real-time response to their demands and needs. Adoption rates of consumer technology increase each time new options are introduced, which means the rate at which consumers are adopting new technology is faster than ever before.

The shift becomes apparent when reviewing the evolution in technology. The TV was introduced into homes in 1926. A few decades later, in 1995, consumers were introduced to email. Just four years later, on-demand streaming services hit the consumer scene, followed by high-speed internet in 2000, Facebook in 2004, the first iPhone in 2007, semi-live video platforms with Snapchat in 2013, and the unveiling of the first voice controlled intelligent home assistant—at the end of 2014.

CONSUMPTION SPREADS FASTER TODAY



Source: https://hbr.org/2013/11/the-pace-of-technology-adoption-is-speeding-up

The exponential pace of adoption and rapid introduction cycles of new consumer tech make trends hard to project, but the next 10 years will see the inventive adaptions of voice and video in food commerce. Voice interaction with technology is fueling a dramatic rise in voice assistants and "conversational commerce". Voice and video are already integrated in our daily lives; 55 percent of smartphone users already rely on their voice assistant regularly to handle everyday needs, and the number is growing. When we use voice over text, we provide much more context and insight to our needs and wants, which in turn allows retailers to not only tap into consumers' emotions but also allows them to understand the emotions, creating a new bond between the parties.

In addition, the impacts of tech advances like augmented reality (AR) and virtual reality (VR) have yet to be truly felt. Although, AR is also being used in a dramatic, imaginative way by one Asian grocery retailer.³⁵ They "opened 1,000 stores in the blink of an eye" using the technology to create virtual stores in physical locations such as landmarks and, brilliantly, in front of competitor supermarkets. To visit one of the stores, users physically travel to its "location", pull up the app on a mobile device, and look around through its screen at the "store shelves".

Innovations like AR and VR are essential for younger consumers, who just flat out expect an intuitive, on demand, always available experience. Accenture Strategy research shows half of all consumers like going to stores for technology-enabled experiences.³⁶ This generation's increasing use of technology creates a tune-in-or miss-out culture among some populations. Consumers demand a live, on-demand ecosystem, relying increasingly on technology to tell their stories and understand their needs.



BRANDS AND
RETAILERS WILL
BE DEALING MORE
AND MORE WITH
A CONSUMER'S
DIGITAL SELF,
VERSUS THE
ACTUAL PERSON

As consumer demands move in new directions, so goes the market. They will increasingly vote with their trips, clicks and purchase occasions. In addition, food companies will be dealing not only with human consumers, but with their online personas and Al-as-customer. And they will do this against the backdrop of the changing food marketplace, which only further complicates forward looking predictions, but makes the future exciting nonetheless.

NEW REALITY #3:

A REINVENTED FOOD PRODUCTION SYSTEM

As the competitive landscape shifts in tandem with changing consumer desires, the food production system must change to meet new needs. It's already under natural economic pressures, struggling to keep pace with consumption needs. To battle scarcity, react to climate changes, and meet the consumption needs of a growing urban population, the food production system will be rethought.

That means the what, where, why and how of food production will be completely reinvented, and even stages of the food production system will shift. For example, product design will become more creative using new materials to create food; vertically managed portions of the system will convert to platform business models to improve efficiency; and distances between stages will decrease with technologically fueled step changes in the economics of small scale growing methods. All of these changes point to a very different food production system that evolves quickly to deliver on new production needs.

FUTURE FOOD PRODUCTION SYSTEM



DEMAND

Applying technology to the production efficiency challenge will help immensely. Population and per capita income growth (as well as biofuel use) mean world demand for staple crop products will grow by 60 percent from 2010 to 2050.37 Already, today technology is being applied to current and future challenges, and food producers are working with new ecosystem partners and platforms, employing innovative methods to better manage resources. For instance, using digital solutions and advanced data analytics improves yields, cuts costs and increases crop resilience. Precision agriculture uses digital solutions to improve monitoring and optimize inputs, boosting profitability in some cases by \$55 to \$110 per acre.³⁸ Partnerships like these are essential because productivity gains are projected to account for 80 percent of the crop output increase required to meet an increased demand for food.

Add drones and robotics to the mix, and the industry can further improve productivity as well as reduce energy intensity. Smart agriculture solutions will likely boost yields by 30 percent and potentially generate \$2 billion in additional revenue to companies.39

Food production can also become more efficient by reducing waste; one-third of global food production—2.9 trillion pounds of food⁴⁰—is lost in the agricultural chain. In the United States alone, 31 to 40 percent of post-harvest food supply is lost or wasted, at a cost of \$160 billion annually. Technology will help, but truly moving the needle and eliminating waste will also involve educating consumers on everything from eating "ugly fruit" to better utilizing "use by" dates. As more food producers deploy circular, sustainable business models such as food sharing platforms and upcycling, the innovations in lessening food waste will continue to improve efficiency.



SMART AGRICULTURE SOLUTIONS WILL LIKELY BOOST **YIELDS BY 30** PERCENT AND **POTENTIALLY GENERATE \$2 BILLION IN** ADDITIONAL **REVENUE TO COMPANIES**

Another trend tells us that by 2050, global protein demand will increase by 80 percent over today's levels, and traditional advancements won't be up to the yield challenge. Instead, the food base will change and broaden—genetically, biologically or through an expanded set of ingredients. 41 Meal replacement innovation is burgeoning also, today, roughly 17 percent of US consumers⁴² report using meal-replacement beverages in the past year.

As stated above, the future of the food production system will look different in the next 10-20 years.

Supply and demand will be closer together. Consumers increasingly want local food, but current methods cannot support the future production demands. Trends like urban farming brings farms closer to population centers, and experiments in "in-store farming" and local manufacturing of products are expected to grow quickly. Today, 200 million urban farmers supply food to 700 million people, approximately 12 percent of the world's population,43 which will grow significantly.

Entirely new sources of food. Alternative proteins such as peas, yeast, insects and algae offer substantial efficiency gains over animal-based ingredients. Meat and dairy products currently require large inputs of grain and other resources for relatively little caloric gain. In the US, animals consume 95 percent of oats produced and 80 percent of corn.⁴⁴ The production cycle energy runs too high. For example, a single chicken egg has an energy efficiency ratio of 39:1—meaning 39 units of energy are required to provide one unit of food energy output. 45 Researchers are looking at alternative methods of food designs, such as using yeast bacteria to create products that feel, cook and taste like eggs but use less production cycle energy. Look for the pace of innovation in all categories to guicken, as the market gets more funding and need grows.



GLOBAL PROTEIN DEMAND WILL **INCREASE BY 80% OVER TODAY'S LEVELS, BY 2050**

Digitization of food. Digital trends will have a tremendous impact on how food is produced. The "digitization" of plants is the process of measuring, calculating, deconstructing, and storing the optimal micro-needs of a plant in a digital medium which are then used to replicate those conditions to control production. For example, if we can capture the unique DNA, water/food/light requirements, disease resistance, and corresponding yield of a crop, we can transmit, study, optimize, and replicate that same yield every time. We will remove uncertainty from growing food, managing the inputs to maximize yield. Leveraging analytics and machine learning to harness the large amounts of data collected from remote farming sensors will unlock opportunities to automate functions that drive higher yields. These trends, combined with trends in urban farming, will dramatically improve the efficiency of growing food in small places.

Digital technology is helping the food industry reinvent the where, why and how of food production. Food producers will need to venture in new directions to manage the growing needs and worsening conditions for current crops.



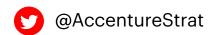
A BRIGHT FUTURE FOR FOOD

THE FUTURE OF FOOD IS FAST, FRESH, AND REQUIRES A NEW SET OF ANSWERS FOR A NEW SET OF QUESTIONS.

A battle for the food marketplace has begun, with consumers as the ultimate winners. Changes in consumer desires are coming fast, requiring nimble companies and platforms to support innovation. And there will be seismic changes in the food production system. It will look very little like it does today.

The good news is—the food industry is already rising to these challenges. We have some road to travel—and a host of innovations to deliver along the way—but in the end, consumers will benefit. A steady, reliable, varied food supply is well within our reach—aided by technologies of all sorts—within the decades to come.

JOIN THE CONVERSATION



in www.linkedin.com/company/accenture-strategy

CONTACT THE AUTHORS

Steven Pinder

Steven.Pinder@kurt-salmon.com

Pat Walsh

PWalsh@fmi.org

Michele Orndorff

Michele.Orndorff@kurt-salmon.com

Erica Milton

Erica.Milton@kurt-salmon.com

Jenna Trescott

Jenna.Trescott@accenture.com

NOTES

- www.fao.org/docrep/005/ac911e/ac911e05.htm
- hbr.org/2013/11/the-pace-of-technology-adoption-is-speeding-up
- ³ esa.un.org/unpd/wpp/publications/files/key_findings_ wpp_2015.pdf
- www.agcensus.usda.gov/Publications/2012/Online Resources/Highlights/Farm_Demographics/
- ⁵ esa.un.org/unpd/wup/publications/files/wup2014-highlights.Pdf
- ⁶ www.ifpri.org/blog/contributing-improve-crop-productivity
- www.fnbnews.com/Top-News/eradicating-hunger-rapidtransformations-of-farming-must-go-hand-in-hand-39660
- * www.ncdc.noaa.gov/sotc/global/201513
- 9 www.fao.org/docrep/015/an913e/an913e00.htm
- www.irishexaminer.com/world/world-health-organisationcalls-for-sugar-tax-on-childrens-soft-drinks-378224.html
- www.theatlantic.com/health/archive/2014/10/american-meat-has-more-antibiotics-than-ever/381100/
- Fortune "Here's Why Kellogg Is Opening an All-Day Cereal Café" June 29 2016
- www.foodbusinessnews.net/articles/news_home/Food-Service-Retail/2014/10/Channel_blurring_taking_a_grea.aspx-?ID=%7BDF00B69B-14CB-4B21-9811-765C8C0A271A%7D&c-ck=1
- 14 www.pwc.com/gx/en/audit-services/assets/pdf/global-top-100-companies-2017-final.pdf
- www.forbes.com/sites/jordyndahl/2016/05/31/grocerydelivery-startups-lead-financing-in-food-sector-for-firsttime/#628e1ad8250e
- progressivegrocer.com/fridges-dare news.samsung.com/us/2017-samsung-family-hub-refrigerator-announcement/
- Food Dive "H-E-B focuses on fresh and specialty foods with Central Market remodel" May 30, 2017
- www.thinkwithgoogle.com/consumer-insights/2016-food-trends-google/
- ¹⁹ think.storage.googleapis.com/docs/FoodTrends-2016.pdf
- ²⁰ Euromonitor, Health and Wellness the Trillion Dollar Industry in 2017: Key Research Highlights, 2012 blog.euromonitor.com/2012/11/health-and-wellness-the-trillion-dollar-industry-in-2017-key-research-highlights.html
- ²¹ www.marketingcharts.com/brand-related-60166
- Nielsen's 2015 Global Health & Wellness Report, 2015 www.nielsen.com/content/dam/nielsenglobal/eu/nielseninsights/pdfs/Nielsen%20Global%20Health%20and%20Wellness%20Report%20-%20January%202015.pdf

- www.nielsen.com/us/en/press-room/2014/global-consumersare-willing-to-put-their-money-where-their-heart-is.html
- www.prnewswire.com/news-releases/global-food-traceability-market-tracking-technologies-to-reach-141-billion-by-2020---allied-market-research-240267801.html
- 25 globescan.com/consumers-rank-ingredient-transparency-among-most-important-issues-for-brands/
- www.census.gov/newsroom/press-releases/2015/cb15-113. html
- www.brookings.edu/blog/brookings-now/2014/06/02/11-fact s-about-the-millennial-generation/
- www.conecomm.com/research-blog/2015-cone-communications-millennial-csr-study
- ²⁹ www.bcg.com/publications/2014/consumer-products-sustainability-social-responsibility-leads-growth.aspx
- 30 www2.deloitte.com/content/dam/Deloitte/us/Documents/ consumer-business/us-fmi-gma-report.pdf
- 31 www.edelman.com/insights/intellectual-property/2015-edelman-trust-barometer/
- 32 www.nielsen.com/us/en/insights/news/2012/consumer-trust-in-online-social-and-mobile-advertising-grows.html
- 33 zephoria.com/top-15-valuable-facebook-statistics/
- 34 www.internetlivestats.com/twitter-statistics/
- www.crunchbase.com/organization/impossible-foods#/entity techcrunch.com/2017/08/01/impossible-foods-just-raised-75million-for-its-plant-based-burgers/
- ³⁶ Reality Technologies: How Reality Technology is Used in Shopping 2016
- 37 Accenture Global Consumer Pulse Research, 2017
- www.fao.org/agriculture/crops/thematic-sitemap/theme/spi/ soil-biodiversity/agriculture-and-soil-biodiversity/en/
- 39 Accenture analysis: www.accenture.com/nz-en/insight-accenture-digital-agriculture-solutions
- ⁴⁰ The Global e-Sustainability Initiative (GeSI) SMARTer2030 report smarter2030.gesi.org/
- 41 www.irishtimes.com/business/agribusiness-and-food/irelandwell-placed-to-ramp-up-food-supply-as-global-demand-rises-1.2972637
- www.mintel.com/press-centre/food-and-drink/two-in-five-usconsumers-are-replacing-their-breakfast-with-nutritional-andperformance-drinks
- 43 www.fao.org/docrep/014/i2454e/i2454e00.pdf
- 44 www.fao.org/docrep/x0262e/x0262e22.htm
- www.smithsonianmag.com/travel/is-the-livestock-industry-destroying-the-planet-11308007/

ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions – underpinned by the world's largest delivery network – Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With approximately 425,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at www.accenture.com.

ABOUT ACCENTURE STRATEGY

Accenture Strategy operates at the intersection of business and technology. We bring together our capabilities in business, technology, operations and function strategy to help our clients envision and execute industry-specific strategies that support enterprise-wide transformation. Our focus on issues related to digital disruption, competitiveness, global operating models, talent and leadership helps drive both efficiencies and growth. For more information, follow @AccentureStrat or visit www.accenture.com/strategy.

Copyright © 2017 Accenture All rights reserved.

Accenture, its logo, and High Performance Delivered are trademarks of Accenture.

This document makes descriptive reference to trademarks that may be owned by others.

The use of such trademarks herein is not an assertion of ownership of such trademarks by Accenture and is not intended to represent or imply the existence of an association between Accenture and the lawful owners of such trademarks.

ABOUT FOOD MARKETING INSTITUTE

Food Marketing Institute proudly advocates on behalf of the food retail industry, which employs nearly 5 million workers and represents a combined annual sales volume of almost \$800 billion. FMI member companies operate nearly 33,000 retail food stores and 12,000 pharmacies. FMI membership includes the entire spectrum of food retail venues; single owner grocery stores, large multi-store supermarket chains, pharmacies, online and mixed retail stores. Through programs in public affairs, food safety, research, education, health and wellness and industry relations, FMI offers resources and provides valuable benefits to almost 1,000 food retail and wholesale member companies and serves 85 international retail member companies. In addition, FMI has almost 500 associate member companies that provide products and services to the food retail industry. For more information, visit www.fmi.org and for information regarding the FMI Foundation, visit www.fmifoundation.org