



**SILVERWOOD PARTNERS**  
*Investment Bankers*

32 Pleasant Street  
Sherborn, MA 01770  
[www.silverwoodpartners.com](http://www.silverwoodpartners.com)

**CONSUMER**  
*The Future of CPG:  
Personalized Everything*  
March 2019

**Natural**  
**Products**  
**EXPO WEST®**

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# SILVERWOOD PARTNERS

***A specialized boutique investment bank focused on transaction advisory across three core industries***

- Sell Side M&A
- Buy Side M&A
- Strategic Alternatives Analysis
- Financial Advisor to Corporate Venture Investors
- Strategic Investments
- Growth Equity Private Placements (Series A, B, C)
- Financial Advisor to Family Offices
- Financial Advisor to Ultra-High Net Worth Individuals



## CONSUMER

- **Food and Beverage Products**
  - LOHAS
  - Natural
  - Organic
  - Functional
- **Active Lifestyle Products**
  - Performance Apparel
  - Sports Equipment



## TECHNOLOGY

- **Mobile & Wireless**
- **Internet of Things (IoT)**
- **Big Data & Analytics**
- **Augmented & Virtual Reality**
- **Artificial Intelligence**
- **Media & Consumer Technology**



## HEALTHCARE

- **HC Information Technology**
- **HC Information Services**
- **Technology Enabled Services**
- **Outsourced Medical Device Technology**
- **OTC/Consumer/Pharma**

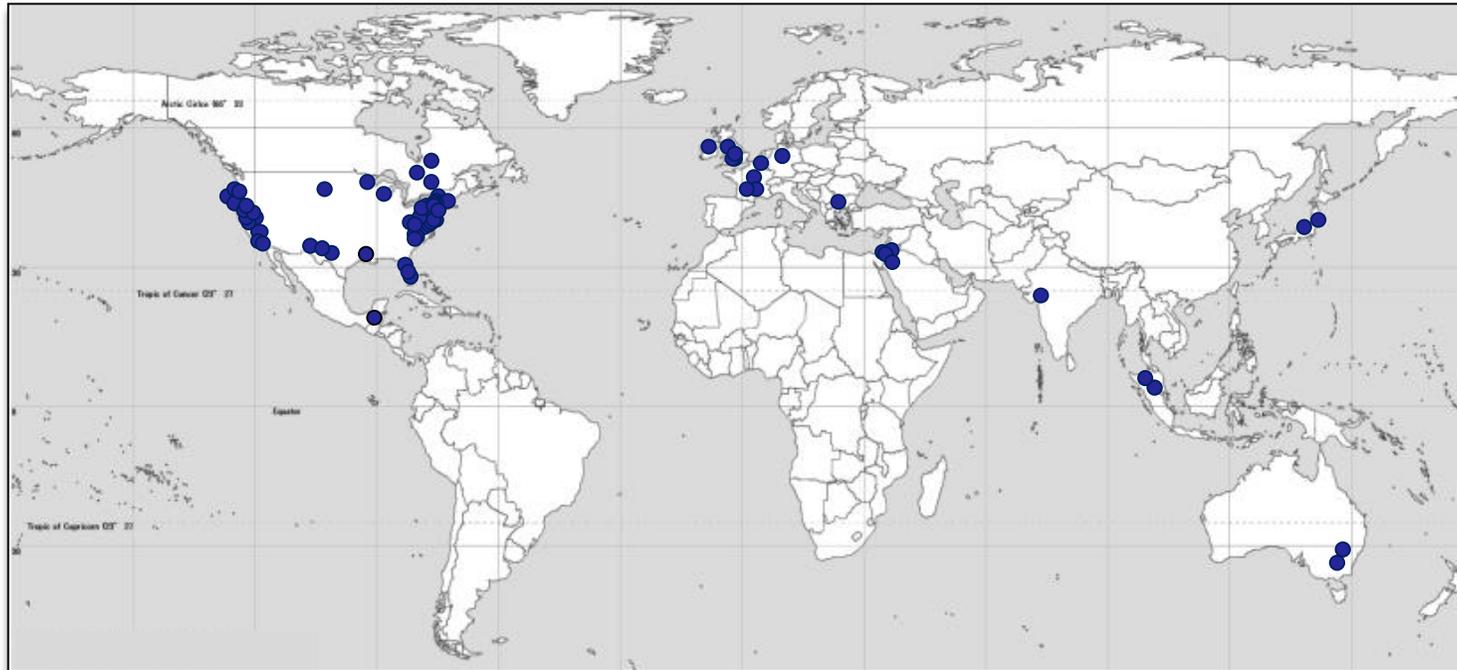


# SPECIALIZED INVESTMENT BANK – GLOBAL REACH

## Silverwood Combines Tier I Transaction Advisory Capabilities with a Global Reach:

- Clients and active contacts in the Americas, Europe and Asia Pacific
- Deep expertise in cross border transactions – understand the complexities and intricacies involved in executing complex, cross border deals

Representative Silverwood Engagements and Clients



# THE SILVERWOOD INVESTMENT BANKING TEAM

## Jonathan Hodson-Walker

Founder, Managing Partner



- 25+ years of investment banking experience in the US and Europe
- MD and Group Head at Gleacher & Co. (First Albany)
- Co-founded, co-managed IBD at H.C. Wainwright
- Corporate Finance VP at CS First Boston in New York and London (UK country desk)
- Fulbright Scholar with MBA from the Kelley School of Business at Indiana University

## Lars E. Hem

Managing Director



- Head of Silverwood's consumer practice
- Previous investment banking experience at J.P. Morgan, Valuefinder Group and Stonebridge Associates
- Founder and former Co-CEO of CATZ Sports Performance
- MBA in Finance and Strategy from The Kellogg School at Northwestern University

## Ned Montenecourt

Managing Director Advisor



- Founder and Managing Director of LaunchSail, a consulting group focused on strategic introductions and intellectual capital
- Previous roles as Director and Chief Compliance Officer of Risk-Distribution & Execution at BlackRock and Pierpont Securities
- BS and BA, Finance and Architecture from Lehigh University

## Bryan J. Prohm

Managing Director



- 12+ years of international technology industry experience in business intelligence, consulting, market research and strategy roles at Ericsson, Gartner and Motorola
- 8+ years of TMT equity research experience at Cowen & Company
- B.A. in International Studies from UNC Chapel-Hill and M.A., Russian & East European Studies from University of Michigan

## Gwendalyn S. Moore

Associate



- Consumer, Technology, and Healthcare coverage
- Previous experience in strategic business operations at VMTurbo and technology investment banking at AGC Partners
- BA, summa cum laude, and MS in Economics from Tufts University

## Chuck Slotkin

Managing Director Advisor



- He is also the Founder and Managing Director of Nature's Equity
- Focused on the sustainable consumer products sector since the early growth of the industry
- Former banker with Herzfeld & Stern, and Gruntal & Co.
- B.A. from Colorado College in Political Science, History and Economics, and an MBA from New York University's Leonard N. Stern School of Business



# INDUSTRY ADVISORS – CONSUMER



**Sharron Amin**  
*Industry Advisor*  
Project Accountant,  
Emerson Automation Solutions



**Carlos Barroso**  
*Industry Advisor*  
CEO at Compass Intelligence



**Steven Bock**  
*Industry Advisor*  
Former President and CEO of Rotobrush  
and Unger Software Corporation



**Lauren Clardy**  
*Industry Advisor*  
Founder and President of  
NutriMarketing Group



**Oswaldo da Costa e Silva**  
*Industry Advisor*  
Managing Director at InnoCres Consultancy  
Advisor at High Tech Grunderfonds



**Fred Coutts**  
*Industry Advisor*  
President and Founder of Waypoint  
Marketing Group



**Mark Denesuk**  
*Industry Advisor*  
President & Founder,  
Commerce House



**Greg Doherty**  
*Industry Advisor*  
EVP & Managing Director, Dietary  
Supplements, Bolton & Company



**Kevin Engholdt**  
*Industry Advisor*  
Founder of Infinitum Health



**Bill Feaster**  
*Industry Advisor*  
Managing Partner & Sales  
Director, Sellion LLC



**Leslie Freytag**  
*Industry Advisor*  
Founder, Freytag Group  
Strategic Partner, New Delta Capital



**Paul Fuegner**  
*Industry Advisor*  
President, CWS Partners



**Jim Garfield**  
*Industry Advisor*  
Chief Operations Officer,  
WHAM Media



**Robert Genco**  
*Industry Advisor*  
Founder, Della Terra LLC Supplements



**David Gilby**  
*Industry Advisor*  
Founder & CEO, Sage Brain



**Mark Haas**  
*Industry Advisor*  
Sr. Partner, Helmsman Group,  
Worked with: Annie's, Kashi, Hain Celestial



**Brad Hagen**  
*Industry Advisor*  
Board Member and Private Investor



**Carl Jorgensen**  
*Industry Advisor*  
Executive Vice President,  
Linkage Research and Consulting



**Saul Katz**  
*Industry Advisor*  
Founder & CEO, New Era Nutrition



**Josh Kohnstamm**  
*Industry Advisor*  
Founder & CEO, Kohnstamm  
Communications



**Jim Lamie**  
*Industry Advisor*  
VP Global Marketing, SMS Audio,  
Gillette Co.



# INDUSTRY ADVISORS – CONSUMER (CONT'D)



**Nils-Michael Langenberg**  
*Industry Advisor*  
CEO, Whole Health Marketing



**Alexe Law**  
*Industry Advisor*  
Founder, Art Science Group  
Executive Coach and Mentor



**Minna Levine**  
*Industry Advisor*  
CEO, Eco Commerce  
Founder, SMART Community Exchange



**Jeff Mandell**  
*Industry Advisor*  
Managing Director,  
Adept Resources Group



**Yadim Medore**  
*Industry Advisor*  
Founder & CEO, Pure Branding



**Carol Nicholson**  
*Industry Advisor*  
Founder & CEO,  
International Marketing Company



**John Pagliaro**  
*Industry Advisor*  
Founder, The Mexican Healthy  
Products Summit



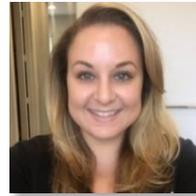
**Jeffrey Pandolfino**  
*Industry Advisor*  
Founder, Green & Tonic



**Ross Pascal**  
*Industry Advisor*  
Founder & Managing Partner,  
NewDelta Capital Partners



**Marc Philouze**  
*Industry Advisor*  
General Manager, Lesaffre Group



**Jessica Pratt**  
*Industry Advisor*  
VP Natural Sales & Food  
Service, Suja



**Sarah Priestnall**  
*Industry Advisor*  
President, Purple Pixel  
Consulting



**Michele Sawyer**  
*Industry Advisor*  
CEO & Founder Sawyer Design  
Consumer and Healthy Living Industry



**Risa Schulman, PhD**  
*Industry Advisor*  
Founder, Tap-Root



**Larry Siff**  
*Industry Advisor*  
CEO, Neptune Advisors



**Andy Stallone**  
*Industry Advisor*  
CEO, SAS Sales and Marketing,  
Executive Consultant



**Julia Stamberger**  
*Industry Advisor*  
Founder, Next BIG Thing Group  
CEO, GP Concept Labs  
CEO & CSO, GoPicnic Brands



**Philip Teverow**  
*Industry Advisor*  
Founder,  
Solid Brands Natural Products Consulting



**Michael Theodor**  
*Industry Advisor*  
President, MTC Organic and Natural  
Products Consulting



**Eugene Wang**  
*Industry Advisor*  
Managing Partner, Sophie's Kitchen



**David Woods**  
*Industry Advisor*  
Former National Sales Manager,  
Aripack



# SILVERWOOD – PRINCIPAL DIFFERENTIATORS

## EXPERTISE      EXCELLENCE      EXECUTION

### Industry Expertise

- Leading industry-focused boutique investment bank
- Understand consumer industry dynamics– no learning curve; immediately effective

### Industry Relationships

- Active dialogue with industry professionals
- Constantly refresh contacts
- Call from Silverwood implies competitive strategic deal

### Industry Commitment

- Active in focus sectors for almost two decades
- Senior level commitment to each deal
- Presence at all major industry tradeshows

### Results Oriented

- Focused on M&A and private placements – committed to achieving best available result
- Process expertise; negotiation expertise

### Worldwide Reach

- Experience in multinational deals
- Active contact with international companies and investors



# INDUSTRY ADVISOR PROGRAM – INTERESTED?

## Formal Consulting Affiliation with Silverwood Partners

- Personal Business Development Opportunity
- Revenue Opportunity
- Board Member Opportunities
- Investment Opportunities
- Networking Opportunities
- No Costs, Conditions, or Commitments

[Click Link to Learn More About Program](#)

## Contact Silverwood Partners to Discuss Interest and Approach

**Jonathan Hodson-Walker**

*Managing Partner*

508-651-2194

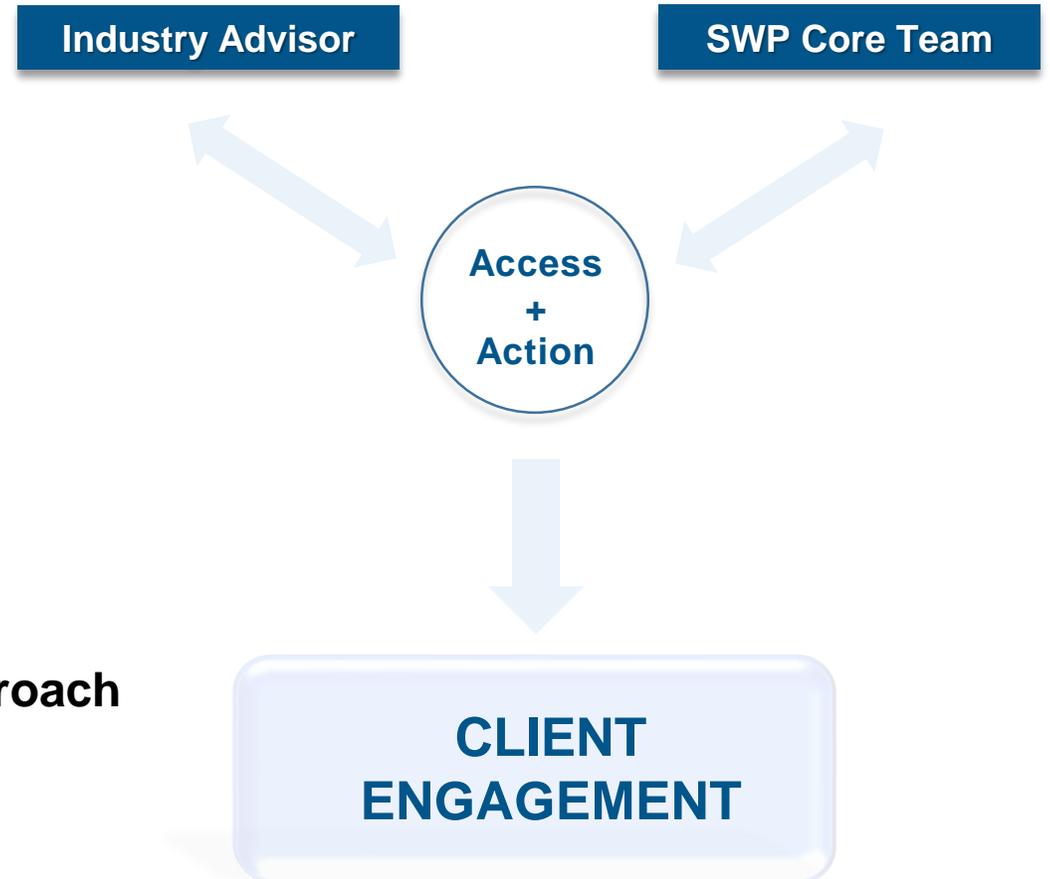
[jhw@silverwoodpartners.com](mailto:jhw@silverwoodpartners.com)

**Elaine Murray**

*Industry Advisor Liaison*

508-651-2441

[emurray@silverwoodpartners.com](mailto:emurray@silverwoodpartners.com)



# TEAM HAS BROAD CONSUMER EXPERIENCE



# REPRESENTATIVE TRANSACTIONS – CONSUMER

**PURPLE CARROT**

Has received an investment from



The undersigned acted as exclusive financial advisor to Progressive Gourmet, Inc. and initiated the transaction.

SILVERWOOD PARTNERS

**TIBERSOFT™**

Has been acquired by



An industry focused division of



The undersigned acted as exclusive financial advisor to Progressive Gourmet, Inc. and initiated the transaction.

SILVERWOOD PARTNERS

**Don't GO nuts**

NOT FREE FOODS

Has received financing from



The undersigned acted as exclusive financial advisor to Progressive Gourmet, Inc. and initiated the transaction.

SILVERWOOD PARTNERS

**KEVITA.**

Has been acquired by



The undersigned acted as exclusive financial advisor to Progressive Gourmet, Inc. and initiated the transaction.

SILVERWOOD PARTNERS

**PROGRESSIVE FARM™**

Has been acquired by



The undersigned acted as exclusive financial advisor to Progressive Gourmet, Inc. and initiated the transaction.

SILVERWOOD PARTNERS

**Zola**  
FOODS OF THE WORLD

Has been acquired by



The undersigned acted as exclusive financial advisor to Amazon Preservation Partners, Inc. (the Zola Foods of the World) and initiated the transaction.

SILVERWOOD PARTNERS

**SPINACH**

An investment holding of



Has been acquired by



The undersigned acted as exclusive financial advisor to The Spinach Corporation and initiated the transaction.

SILVERWOOD PARTNERS

**MEDITERRANEAN FOODS**

Acquired by American Hatz Co. Inc.



The undersigned initiated this transaction and acted as exclusive financial advisor to Mediterranean Snack Food Company, LLC.

SILVERWOOD PARTNERS

**BLAKE'S**  
ALL NATURAL FOODS

Has been acquired by



The undersigned initiated this transaction and acted as exclusive financial advisor to ConAgra All Natural Foods.

SILVERWOOD PARTNERS

**BRAD'S RAW FOODS**

A leading manufacturer and marketer of raw-wedding products has received funding from an investment group led by



The undersigned acted as exclusive financial advisor to Brad's Raw Foods, LLC.

SILVERWOOD PARTNERS

**SCIVATION**

A marketer and supplier of nutritional supplements has received mezzanine funding from



Mezzanine Debt Security with Warrants

The undersigned acted as exclusive financial advisor to Scivation, Inc.

SILVERWOOD PARTNERS

**yasso**

The #1 Frozen Greek Yogurt Brand in the United States has received \$2.55M in funding from an investment group led by



Convertible Note

The undersigned acted as exclusive financial advisor to Yasso, Inc.

SILVERWOOD PARTNERS

**essentia**

Has raised \$18.2 million of growth capital led by



and with participation from



The undersigned acted as exclusive financial advisor to Essentia Water, Inc.

SILVERWOOD PARTNERS

**Kevita**  
delicious vitality™

Manufacturer of certified organic, sparkling probiotic beverages has received an investment from



Private Placement of Series D Preferred Shares

The undersigned acted as financial advisor to Kevita, Inc. in connection with this transaction.

SILVERWOOD PARTNERS

**spindrifft**

A marketer of sodas and softeners made with 100% juice has received funding from an investment group led by



Private Placement of Series A Preferred Shares

The undersigned initiated this transaction and acted as exclusive financial advisor to Spindrifft Soda Company.

SILVERWOOD PARTNERS

**Switch**

Has been acquired by



The undersigned acted as exclusive financial advisor to The Switch.

SILVERWOOD PARTNERS

**essentia**  
hydration perfected

Has raised a \$3.28M Convertible Note from a syndicate, including participation from



And other selected investors

The undersigned acted as exclusive strategic financial advisor to Essentia Water, Inc.

SILVERWOOD PARTNERS

**Healthy Brands**

Has acquired



The undersigned acted as exclusive financial advisor to Living Harvest Foods, Inc. in connection with this transaction.

SILVERWOOD PARTNERS

**tempo**

Has been acquired by



The undersigned acted as exclusive financial advisor to Living Harvest Foods, Inc. in connection with this transaction.

SILVERWOOD PARTNERS

**Kevita**  
delicious vitality™

Manufacturer of certified organic, sparkling probiotic beverages has received an investment from



Private Placement of Series B Preferred Shares

The undersigned acted as financial advisor to Kevita, Inc. in connection with this transaction.

SILVERWOOD PARTNERS

**neuro**

A functional beverage company has received an investment from



Private Placement of Series A Preferred Shares

The undersigned initiated this transaction and acted as exclusive financial advisor to TSG Consumer Partners.

SILVERWOOD PARTNERS

**balance**

A functional, non-flavored beverage company has received an investment from



Private Placement of Series A Preferred Shares

The undersigned initiated this transaction and acted as exclusive financial advisor to Balance Water, Inc.

SILVERWOOD PARTNERS

**function:**

Has been acquired by



The undersigned acted as financial advisor to MS Unice, Inc. in connection with this transaction.

SILVERWOOD PARTNERS

**Zola**  
BRAZILIAN SUPERFRUITS

Manufacturer of all natural and organic superfruit beverages, supplements and food service purées

Private Placement of Series B Preferred Shares

The undersigned acted as financial advisor to Amazon Preservation Partners, Inc. in connection with this transaction.

SILVERWOOD PARTNERS

**Cherrybrook Kitchens**

Has been acquired by



The undersigned acted as financial advisor to Cherrybrook Kitchens, LLC.

SILVERWOOD PARTNERS

**Maine Cottage**

Has been acquired by



The undersigned acted as financial advisor to Maine Cottage, Inc.

SILVERWOOD PARTNERS

**MAVERICK BRANDS LLC**

**Sunkist** **COCO LIBRE**

Manufacturer of all natural, flavored beverages and soups

Private Placement of Series B Preferred Shares

The undersigned acted as financial advisor to Maverick Brands, LLC in connection with this transaction.

SILVERWOOD PARTNERS

**COBA**

Has been acquired by



The undersigned acted as financial advisor to Hiba Corporation in connection with this transaction.

SILVERWOOD PARTNERS

**COBA**

Manufacturer of all natural beverages infused with hibiscus flower extracts.

Private Placement of Series A and Series B Preferred Shares

The undersigned acted as financial advisor to Hiba Corporation in connection with this transaction.

SILVERWOOD PARTNERS

**OFFER CREEK BREWING**

including



Has been acquired by



The undersigned acted as exclusive financial advisor to Offer Creek Brewing.

SILVERWOOD PARTNERS

**ON A ROLL SALES**

Has been acquired by



The undersigned acted as financial advisor to On a Roll Sales, Inc.

SILVERWOOD PARTNERS

**Brighams**

Has been acquired by



The undersigned provided financial advice in connection with the sale of the business.

SILVERWOOD PARTNERS

**Whitings**

Has been acquired by



(Netherlands)

\$23,400,000

The undersigned acted as exclusive financial advisor to Whitings' Old English Bake Shop, Ltd.

SILVERWOOD PARTNERS

**POLYMEDICA CORPORATION**

has divested its Women's Health Products Division to



A portfolio company of



\$45,000,000

The undersigned initiated this transaction and acted as exclusive financial advisor to PolyMedica Corporation.

SILVERWOOD PARTNERS

**NoCrunch**

The Yohim Company, a division of the Breyers Yogurt Company is a leading producer of yogurt in the U.S. and a portfolio company of



Valuation Analysis

The undersigned provided valuation services to The Yohim Company.

SILVERWOOD PARTNERS

**STONEWALL KITCHEN**  
Creator of *Spicy Tails*

A high end specialty food and related products manufacturer and distributor.

Valuation Analysis

The undersigned provided valuation services to Stonewall Kitchen, LLC.

SILVERWOOD PARTNERS

**MINIX**  
LONDON, TAMPA, NORTH AMERICA

Private placement financing with affiliate of



The undersigned acted as financial advisor to London Tampa North America, Inc. for this transaction.

SILVERWOOD PARTNERS

**ansa med**

Has been acquired by



A portfolio company of



The undersigned acted as exclusive financial advisor to AnsaMed Ltd.

SILVERWOOD PARTNERS

**ESSEL PROPACK**

Has divested to



subsidiary including



**CREGANNA**

The undersigned initiated this transaction and acted as exclusive financial advisor to EsselPropack Limited.

SILVERWOOD PARTNERS

\$6,400,000

**CORNOVA**

Private Placement of Series B Preferred Shares

The undersigned acted as financial advisor to Cornova, Inc. in connection with this transaction.

SILVERWOOD PARTNERS

# THE FUTURE OF CPG: PERSONALIZED EVERYTHING – KEY THEMES

**The D2C Revolution: CPG Continues to Transform**  
**Personalization in CPG goes Mainstream to drive the Ecosystem of the Future**

**Grocery goes HIGH-TECH**  
**Agriculture Technology: The Next Wave of Innovation**

**Rapid Growth of Sustainable Packaging**  
**Regulation Update: The Argument for Stricter Labeling**

**O A T S - the New Almonds?**  
**Demand for Egg Replacements Grows**

**Proliferation of CBD Products**

**Nutrigenomics: Personalized Diets for Gene Profiles**  
**The Future of Brick & Mortar**



# THE D2C REVOLUTION – CPG CONTINUES TO TRANSFORM

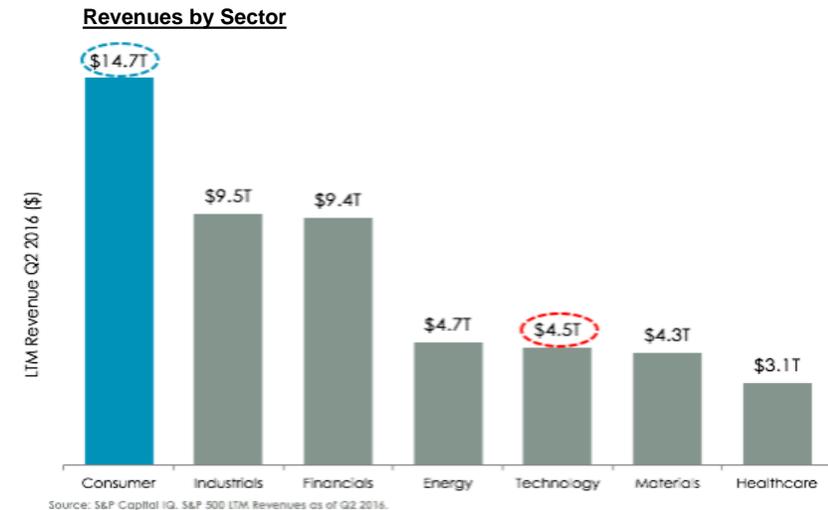
## With a Trillion Dollar Market Opportunity, Successful D2C CPG Initiatives Must Offer Personalized Recommendations, Value Centric Options, and Instagrammable Packaging

- Some CPG manufacturers are getting into the direct-to-consumer (D2C) game by scooping up fast-growing new entrants (see Unilever's \$1B acquisition of Dollar Shave Club), betting on start-ups (Campbell Soup's \$10M investment in meal-kit company Habit, which was recently acquired by Viome), or launching their own D2C initiatives.
- D2C can provide companies with a great way to build customer relationships, instead of going through a middleman. However, D2C efforts in the CPG sector are still in their early days, lagging far behind D2C juggernauts in other categories, such as apparel (Nike, for example, already generates more than \$9B in D2C sales).
- D2C may not make sense for certain products. Manufacturers should study how consumers typically shop for its products and brands, and how a manufacturer's product characteristics would affect online fulfillment.
- The D2C channel will not alter the underlying fundamentals of what makes a successful CPG company. Aside from margins and team, brand, distribution, and differentiation remain key. Further, while differentiation is necessary, it is not sufficient, for success. The product must be unique relative to other offerings, and in a way that matters to people.

### KEY FACTORS FOR D2C SUCCESS

- ✓ Subscription Model
- ✓ Personalized (but flexible)
- ✓ Value Centric
- ✓ Instagrammable

\*the most successful D2C CPG initiatives rely heavily on AI technology to support their business models



# D2C SPOTLIGHT: “THE SMARTEST BEAUTY COMPANY IN THE WORLD”

function — of beauty

PERSONALIZED HAIR CARE

- ✓ D2C Subscription
- ✓ Personalized
- ✓ Value-Centric
- ✓ Instagrammable

- Function of Beauty is manufacturer of customized shampoos and conditioners created to enable user to choose a scent and describe their own hair type.
- Customers can take a hair quiz through the Company’s website which allows them to share information including hair type, and scalp moisture, then pick hair goals.
- The Company subsequently uses an algorithmic process to manufacture personalized hair care formulations for each customer based on customers’ inputted hair type and desired results.

Function of Beauty raised \$12M of Series A venture funding in a deal led by GGV Capital on March 7, 2017, putting the pre-money valuation at an estimated \$68M. Y Combinator, Bessemer Venture Partners, SoGal Ventures and other undisclosed investors also participated in the round.



**3**

**ANIMAL-FRIENDLY**

Our products are cruelty-free (no animal testing ever), 100% vegan, and never contain any ingredients made or derived from animals. We also ensure all of our suppliers meet these same high standards too.

**1**

**EACH PRODUCT IS AS UNIQUE AS YOU ARE**

We do the opposite of big beauty companies – we ask you for your unique profile and what your hair goals are, and then we individually formulate and make unique products just for you!

**7**

**NEVER RUN OUT OF SHAMPOO & CONDITIONER AGAIN**

With our free-shipping subscription, you can get automated shipments as often as you’d like. You can always adjust your formulation, frequency of delivery, or next delivery date to ensure you get it when you need it.

8

## THE SMARTEST BEAUTY COMPANY IN THE WORLD

It’s taken years of research and development from world-class MIT engineers and data scientists to build our unique AI-driven algorithm and customized manufacturing – our one-of-a-kind production line is so precise that we pull from hundreds of ingredients at precise dosages to make your perfect blend.

**4**

**HAVE IT YOUR WAY**

You get the freedom to personalize everything – the color (5 gorgeous choices or dye-free), the fragrance (6 amazing choices or fragrance-free), and even the name you want on your bottle!

PERSONALIZE YOUR FORMULA

MADE IN THE USA

FREE SHIPPING WITH SUBSCRIPTIONS

HAPPY HAIR GUARANTEE

**PARABEN, SULFATE AND TOXIN FREE**  
free of parabens, sulfates, and GMOs

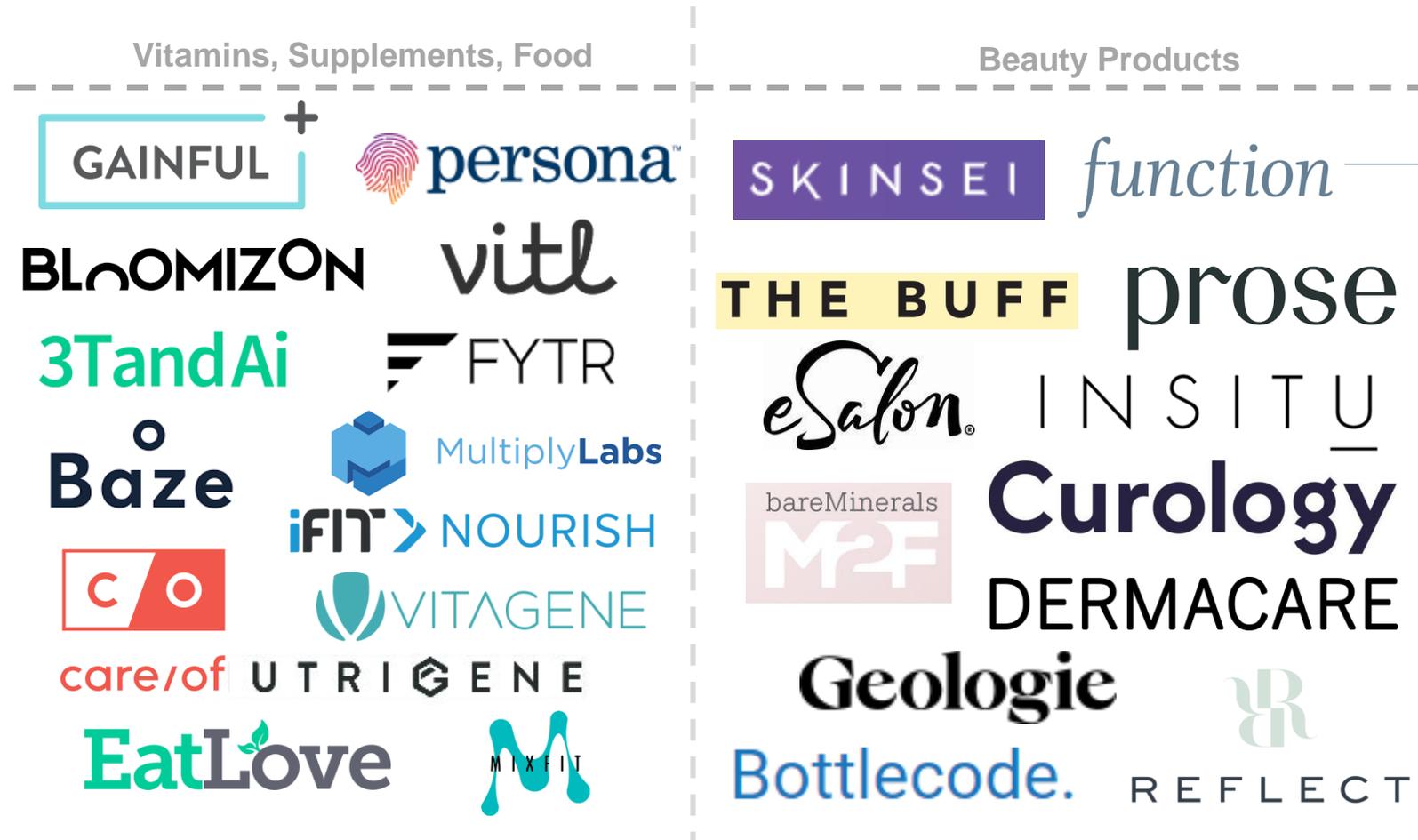
**PERSONALIZED FOR YOU**  
individually filled and customized just for you with your name directly printed on the bottle

**CRUELTY FREE**  
never tested on animals and handmade in our own production facility

# PERSONALIZATION IN CPG GOES MAINSTREAM

## Brands are Using the D2C Channel to Create Personalized Products for Consumers

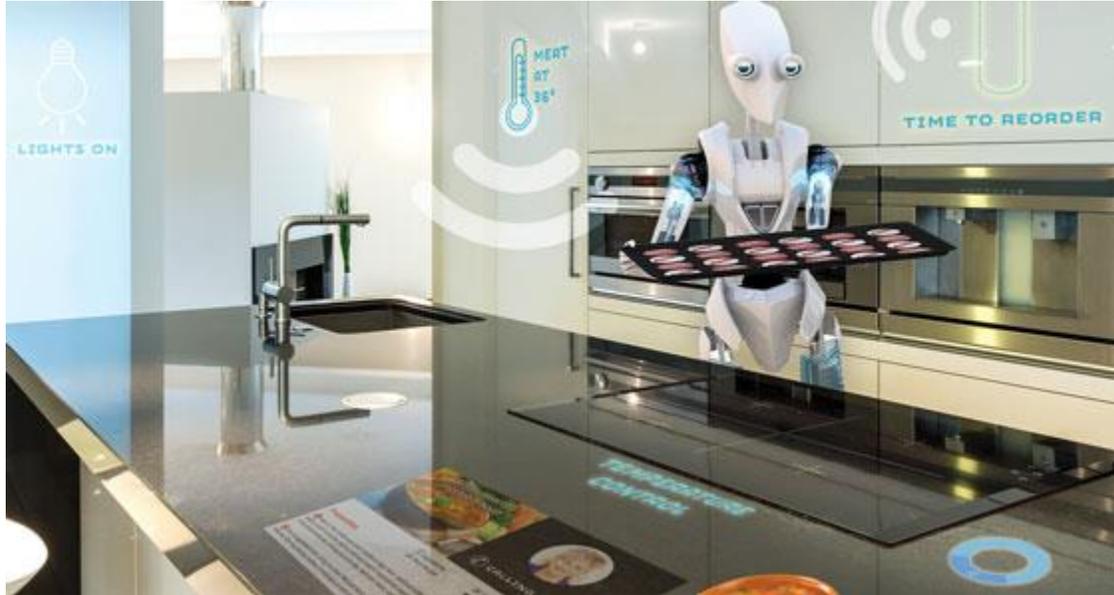
- **Consumers look for solutions, not ingredients. Successful products are framed around lifestyle needs:**
  - By framing products as solutions to specific lifestyle problems, companies can help people feel like they're being personally served.
  - For example, vitamin startup Olly sells "wellness boosts" with product names like "Goodbye Stress," "Restful Sleep," and "Vibrant Skin." This branding feels more personal and compelling than traditional vitamins.
- **The products themselves aren't personalized, but the curation is. Companies should guide shoppers toward specific products:**
  - This model generally uses online quizzes that ask people about their attributes and preferences in order to suggest specific products.
  - Some startups focus on this style of personalization as their main value proposition, such as wine subscription service Winc. Others offer this curation alongside direct product listings, as with Tata Harper (skincare) and Blue Bottle (coffee).
- **Fully personalized products involve designing and manufacturing from the ground up, for each individual shopper:**
  - The manufacturing process is complicated.
  - Personalized haircare startup Function of Beauty, a leader in this segment, had to build its own manufacturing facility to create individualized shampoo and conditioner blends into bottles based on each shopper's online assessment.
  - Other startups selling fully personalized products include haircare startup Prose and skincare startup Curology.



Sources: CBInsights



# PERSONALIZATION WILL DRIVE THE ECOSYSTEM OF THE FUTURE



## A.I. Enables Mass “Market of One”

- The increase in demand for preventive health measures, the rising trend for customization in the food sector, focus on healthier eating, and rising ongoing activities in nutrigenomics have strengthened the development of personalized nutrition products.
- Marketers know that tailoring content, products and services for each individual customer is the best way to win them over and keep their loyalty. 73% of consumers prefer to do business with brands that take into account their personal information. 86% of customers state personalization plays a role in their purchase decision.
- The introduction of artificial intelligence-based algorithms to better track health data on a routine basis has prompted medium-sized as well as well-established food and soft drink manufacturers to design and develop various customized programs for people's health and well-being.
  - The global personalized retail nutrition & wellness market size is expected to reach USD 50B by 2025, exhibiting a 9.1% CAGR over the forecast period.
  - We haven't yet seen the model take off in food, likely due to the difficulties in manufacturing. In the future, 3D printers for food could support the sale of fully personalized food products. Shoppers could submit their needs and preferences, and printers could pump out foods with appropriate nutritional proportions.
  - Nestle recently launched a pilot program for DNA-based, personalized smoothie capsules in Japan. Users take an at-home DNA test, and Nestle sends them beverage capsules personally formulated for their needs. If the pilot program is successful, it could pave the way for further research and development.
- A.I. enables even mass-market brands to practice 'market of one' retailing; however, this implies brands have to be more creative than ever since essentially any company can now interact with customers on an individual, personalized level.
- Interconnected smart appliances, 3-D printers, and touchscreen controls are just a few of the technological tools that the next generation of home cooks will use to simplify food preparation, create customized meal solutions, and produce far less waste.
  - In the kitchen of tomorrow, connectedness is key: the trend of appliances being controlled by phones is now a reality as phones get smarter and become more integrated into personal lives.
  - By offering new ways to monitor and control things that are important to consumers, be it managing health and wellness, personal finance, home energy consumption—even preheating an oven, homeowners can assume greater control over their homes from anywhere, including a command center in their home, on their phones or other devices in the home, or remotely.

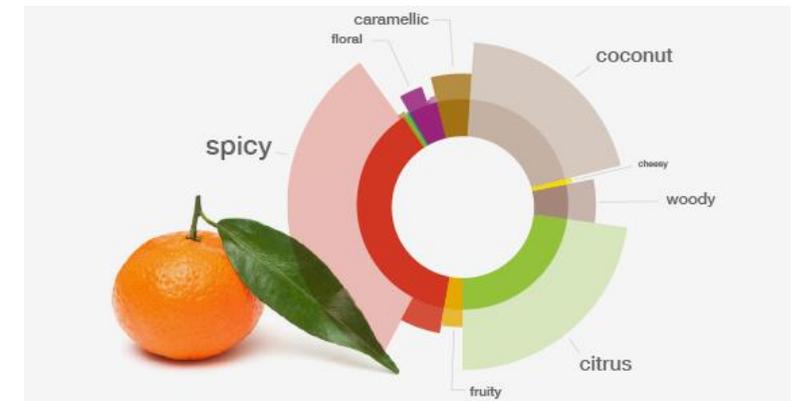
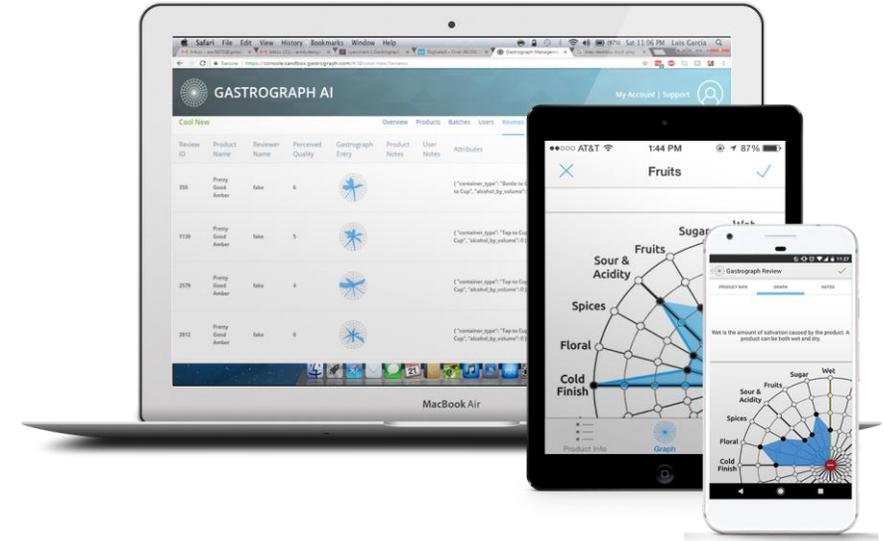
Sources: The Spoon; Food Business News



# TASTE ANALYTICS - A.I. WITH A DASH OF FLAVOR

## A.I. + Big Data Will Drive Product Development in the Future

- Mass-market snacks and drinks are designed to appeal to as wide an audience as possible, resulting in shelves of products that most people like, but few people really love.
- Big food manufacturers already rely on something called “sensory science” to develop addictively crunchy potato chips or the perfect cookie, but the development of such products relies largely on collecting data from consumer testers — and people are notoriously unreliable and unpredictable.
- Launching a new food product is risky, costing the food industry an estimated \$20B annually, but relying on artificial intelligence and huge quantities of data could be a more reliable way for food companies to figure out what people want to eat.
  - Over the past five years PepsiCo UK has been working with prediction marketing startup Black Swan, using open online data to pinpoint which ingredients are tickling consumers’ palates.
  - Black Swan has a suite of tools which use everything from weather, to search, to government, to social data, to help brands design products and glean value from their media and retail buys.
- Additionally, up to this point, PepsiCo has been using its social prediction tool Trendscape – which looks to give brands a first mover advantage by aggregating publicly available consumer conversations and insights across billions of touchpoints – with its own figures to decide which products to bring to market.
  - PepsiCo stated the strategy is helping it turn data that would otherwise be a “maelstrom of chaos” into something that’s a lot more practical for the brand to act against.
  - The product strategy has already led to the development of snacks like salted rice and pea chips or humus, garlic, basil and tomato crisps, with concept to development taking “half the time” it usually would. The taste of its next range of Sensations crisps – a brand that’s already experimenting with flavours like wasabi and ginger – will be informed by Trendscape.
  - PepsiCo hinted it could emulate this approach when it comes to assessing its media and marketing investments.
- Big food and drink manufacturers currently conduct consumer taste tests as part of their product development process; however, the consumer groups are often homogenous. This makes them ill-suited to develop products for a large and diverse demographic.
  - Solutions to homogeneity of consumer data rely heavily on A.I. and big data to collect and analyze large sets of personalized data.
  - For example, the AI platform Gastrograph collects highly specific data from individual users, with the goal of “giving food and beverage companies the information they need to develop products optimized for more and more specific sensibilities.”



Sources: The Spoon, Eater



# PERSONALIZATION SPOTLIGHT: TASTE ANALYTICS

## FOODPAIRING®



- Scientific, aroma-based approach to finding new and creative food and alcoholic drink pairings.
- Aromas are extracted from foods and then artificial intelligence and machine learning algorithms are leveraged to analyze and create novel edible pairings.
- This algorithmic approach to food pairing is used by chefs and bartenders looking to bring their customers new and exciting pairings based on aromatic- science.

- Plant-centric virtual cooking assistant platform that allows users to create great-tasting and well-balanced meals.
- The platform uses artificial intelligence to suggest combinations of vegetables to create a dish that can be tweaked using the company's "Gastro Wheel". The wheel allows the user to select how the user wants their meal to taste (soft, aromatic, spicy, umami, etc.)
- With a bottoms up approach to meal crafting, users get a better understanding of how vegetables pair with one another and learn to create great meals with a variety of vegetables.
- Raised \$190K in seed funding from SEED Capital and Gustum Capital in August 2017.



## SPOONSHOT

- Personal food discovery platform designed to serve the online food industry.
- Artificial intelligence utilizes food science and rich dish data to understand and predict people's taste preferences.
- These predictions help the food industry with key challenges including recommendations & personalization, menu and product development and insights and current trends, enabling diners to make great meal choices and enjoy food that is personalized for their palate.
- Raised \$400K of Pre-Seed funding from Arts Alliance, The Syndicate Fund and Zeroth.ai on July 30, 2018.
- Techstars, Sven Hensen and Artesian Capital Management also participated.



- Machine learning and artificial intelligence platform for modeling human sensory perception and predicting consumer preference of food and beverage products.
- Helps producers model, understand, and optimize the flavor, aroma, and texture of their product for target consumer demographics and cohorts.
- Enables robust quantification of the underlying flavor profile of products and their raw ingredient components for predictive new product development, brand optimization, and cognitive marketing.
- Raised \$4M of Series A1 venture funding in a deal led by Leawood Venture Capital and Global Brain on November 8, 2018, putting the company's pre-money valuation at \$10M.

## FlavorWiki

- Provider of digital sensory technology to evaluate flavor, texture, aroma and mouthfeel simultaneously using regular consumers.
- The sensory and machine learning platform enables the food and beverage industry to research purchase drivers, create products based on consumer sensory insights, equip sales teams with reports that support formulation decisions, and lastly monitor the created products to determine their acceptance in the marketplace.
- The crowd data approach allows food and beverage producers to gain next level insight into their target market in hours, not weeks.



# GROCERY GOES HIGH-TECH

## In Response to the Threat Posed by D2C, Retailers Increasingly Becoming Tech-Enabled

Grocers focusing on developing, employing or expanding mobile-centric shopping experiences, voice ordering, shoppable recipes, boosted searches for CPG partners. In particular, grocers are proactively lining up partnerships with automation, robotics, and AI or machine learning providers. Below are some of the top trends to watch in tech-enabled grocery:

### 1. CASHIERLESS, SCAN-FREE SHOPPING

- Amazon debuted the Amazon Go format to the public in Seattle and has since expanded it to several stores in such cities as Chicago and San Francisco, with 3,000 locations planned to open over the next few years.
- The chain uses “just walk out” technology, which employs computer vision, sensor fusion and deep learning to automatically detect when products are removed from, or placed back on, shelves. Shoppers scan in via a dedicated app, just walk out upon taking everything they wish to buy, and then receive a digital receipt afterward.
- Other similar grab-and-go stores that have opened in recent months include Standard Market, powered by artificial-intelligence company Standard Cognition, and a concept powered by the Zippin checkout-free software platform, both in San Francisco.

### 2. AUTOMATED FULFILLMENT

- Automation was pioneered in ecommerce fulfillment centers using tools like Kiva Systems.
- Today, providers like Alert, Takeoff and Commonsense Robotics are bringing small-footprint mini fulfillment centers that can be placed within an existing store. This is enticing because it offers a bricks-and-clicks option just as grocery click-and-collect ramps up in the market.”
- Albertsons revealed a plan to automate and save ecommerce fulfillment costs by embracing robotics and artificial intelligence. The grocer is partnering with Waltham, Mass.-based grocery technology company Takeoff Technologies to help simplify the online grocery shopping experience through a “hyperlocal” automated fulfillment center, which also helps lower order-assembly and last-mile costs. The news follows similar announcements from the Kroger Co. and Walmart.

### 3. ROBOTS

- Midwestern grocer Schnuck Markets expanded to at least 15 locations its in-store autonomous-robot pilot in which Tally, an innovation from Simbe Robotics, traverses the store to detect out-of-stocks, pricing errors and even hazards. This frees up time for in-store associates to handle more important, customer-facing tasks. Other grocers employing similar technology include Ahold at its Food Lion, Giant and Martin’s stores, and Target.
- In August 2018, Walmart revealed a partnership with North Billerica, Mass.-based Alert Innovation to launch Alphabot, a robot that assists in the order-picking process, starting in its Salem, N.H., supercenter.
- In Fall 2018, Takeoff Technologies (Waltham, MA)., made headlines by creating the so-called “world’s first automated hyperlocal robotic supermarket” with Miami-based Hispanic retailer Sedano’s. Albertsons and Ahold USA banner Stop & Shop have also begun working with Takeoff.

### 4. AUTONOMOUS DELIVERY VEHICLES

- Kroger began piloting a grocery delivery program that uses autonomous vehicles to fulfill online orders, teaming with autonomous-vehicle provider Nuro to make the convenience of grocery delivery accessible and affordable for customers everywhere. Through the partnership, which began in Scottsdale, Ariz., customers using Kroger’s ClickList grocery ecommerce system and Nuro’s mobile app place same-day delivery orders, which are fulfilled by the latter’s fleet of on-road autonomous vehicles.
- Other grocers entering the autonomous delivery space include Walmart, through a partnership with Ford; AI-powered Bay Area “micro-grocer” Farmstead; Oklahoma City grocer Buy For Less; and Robomart, another Bay Area ecommerce grocer.



Sources: Progressive Grocer



# SPOTLIGHT: KROGER & NURO / UNMANNED GROCERY DELIVERY

**Nuro, a startup created by two Google Self-Driving Car Project veterans, debuted its autonomous vehicles with plans for an on-demand grocery delivery pilot program with Kroger.**

- In early 2019, Nuro emerged from stealth mode with a \$92M fundraising announcement, and the first project for its miniature robot van
  - The pilot program begins late 2019 in a city to be named. With no investment by Kroger, this is a “pure partnership play .”
- Unlike autonomous vehicles being tested by Alphabet’s Waymo and General Motors’ Cruise to haul human passengers and travel at highway speeds, Nuro’s idea is battery-powered models, about half the size of passenger cars, that haul only goods. These models also operate at lower speeds, and only on urban and residential streets.
  - These limitations should make them much cheaper to build and deploy as they don’t need sensors that are as sophisticated as those for human ride services, or other occupant-oriented safety equipment.
- While the project gives Nuro a chance to promote its technology, it also represents an opportunity for Kroger to stay ahead of Amazon
  - Since it acquired Whole Foods, Amazon has applied for a patent for a sidewalk rolling delivery robot.
  - However, unlike Nuro’s vehicles, Amazon’s patent is for an “autonomous ground vehicle” that carries items from a delivery truck to a person’s front door.
- “Partnering with Nuro...will create customer value by providing Americans access to fast and convenient delivery at a fair price.”
  - Customers can pay a \$5.95 flat rate for same-day or next-day delivery. There is no minimum order requirement.
  - Customers in the test city can place same-day delivery orders using Kroger’s ClickList online system and Nuro’s app. When a delivery arrives, the Nuro vehicle’s container compartments can be opened using the app.



*“Unmanned delivery will be a game-changer for local commerce, and together with Kroger, we’re thrilled to test this new delivery experience to bring grocery customers new levels of convenience and value”*

*Dave Ferguson, Nuro’s cofounder*

Sources: Forbes; USA Today



# SPOTLIGHT: GROCER OR TECHNOLOGIST?

**Farmstead's online platform uses artificial intelligence powered algorithms to predict how much food to order from local sources, enabling its clients to receive food through a reduction in food wastage**

- The online grocery industry is expected to reach \$100 billion in US sales and share approximately 20% of the market by 2025.
  - Farmstead's CEO, Pradeep Elankumaran, told Business Insider that the company's goal is to reinvent the supermarket model. He believes the future of grocery is on-demand delivery.
- Farmstead calls itself a technology company rather than a grocer, underscoring the focus on its sourcing model, which uses artificial intelligence to precisely determine product sourcing based on customer orders. In an industry that's integrating more customer data and cutting-edge software into its merchandising and supply operations, this seems particularly well-timed.
- Cutting costs by limiting supply allows Farmstead to keep its prices and delivery fees low. The startup matches local supermarket prices on all of its products, and its \$4.99 fee for one-hour delivery is better than many e-commerce competitors.
- There are other ways the startup is saving money, too. Like other pure-play online grocers that have come onto the scene recently, including Thrive Market, MoveButter, and Brandless, Farmstead offers a limited assortment of high-demand products. The company also frequently tests products in order to keep its lineup fresh, and its app quizzes customers on their eating habits in order to better hone its supply algorithms.
- With little brand recognition in a grocery market that includes many established players, including a surging Amazon, e-commerce startups are focusing on low prices and high-quality products in order to stand out. Growing demand for online shopping is also aiding growth, though research shows that many consumers still prefer to buy fresh products from their local supermarket.
- The company's dedication to food waste reduction is also a savvy move. The supermarket industry is incredibly wasteful, throwing out an estimated 10% of all food that hits store shelves, according to the U.S. Department of Agriculture. Tackling food waste will no doubt resonate well with Farmstead's eco-conscious consumers, and it also saves a lot of money.
- The company raised \$4.8 million of seed funding led by Resolute Ventures and Social Capital on March 19, 2018. Liquid 2 Ventures, SV Angel and Y Combinator also participated in this round. The company will use the new funds to scale operations of its service, continue building out its core AI technology, accelerate hiring, and expand its service beyond the Bay Area.



- ✓ D2C Subscription
- ✓ Personalized
- ✓ Value Centric
- ✓ Instagrammable



Source: Business Insider, Food Dive

# THE NEXT WAVE OF INNOVATION: FOOD AND AGRICULTURAL TECHNOLOGY

## As Software Continues to Consume the World, Technologists are Now Seeking to Reshape Worldwide Cultivation, Production, and Procurement of Foods

- The global food technology market is expected to grow over \$250B by 2022, at a CAGR of 5.8%<sup>1</sup>
- The Amazon/Whole Foods merger has permanently altered the grocery landscape by forcing traditional brick-and-mortar grocery retailers to adopt technological solutions in order to remain competitive. To guarantee future success, operators must allocate more funds into technological infrastructure and channel partners, internal training to support increased demand for delivery and takeout, and development for menu items which will specifically hold up well to travel.<sup>2</sup>
- Agriculture Technology (AgTech) has seen advancements with the implementation of IoT, drone surveillance, and predictive analytics to combat declining crop yields and the detrimental effects of climate change. Crop yields have decreased enough that current production would only be able to meet 50% of projected 2050 consumption. In 2017, Indogo Agriculture (microbial crop technology) and Plenty (vertical farming) raised \$200M each – double the entire AgTech investment spent in 2012.<sup>3</sup>
- As of October 2018, the total capital invested in AgTech for 2018 was \$1.6B across 209 deals in the sector. Median deal size rose to \$10M at the late stage. Capital intensive AgTech subsectors saw the highest median deal size.<sup>4</sup>
- A current sizeable area of growth in food technology is that of meat substitutes. Demand for alternative proteins is expected to double by 2024 with soybean, pea and oat proteins emerging as the leading alternates<sup>5</sup>
- Continued advances in genetic engineering and plant-based innovation will enhance taste, flavor, and health benefits to incentivize consumption. However, the primary challenges producers face and barriers to mainstream adoption are cost and scale. Innovators must find ways to lower production costs and find economically viable ways to produce their substitutes at high volumes if they want to see their products move from novelty purchases to kitchen staples.

Sources: 1. Research & Markets 2. Forbes 3. Forbes 4. PitchBook 5. Lux Research

## Select AgTech Companies

Water Management



Drones



Soil Analytics



Predictive Analytics



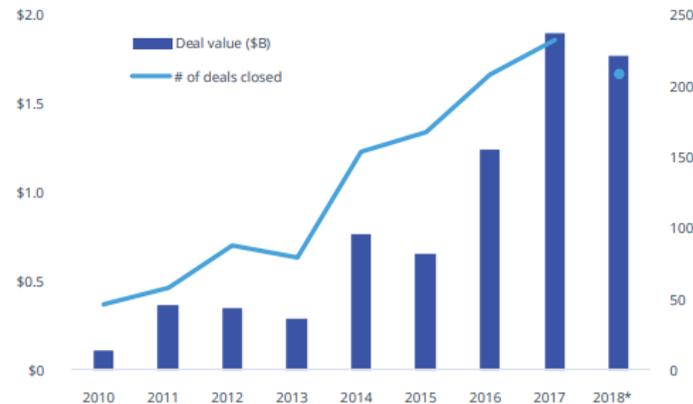
IoT Sensors



Tech-Enabled Machinery



## Global AgTech Venture Capital Deal Activity



\*as of October 31, 2018



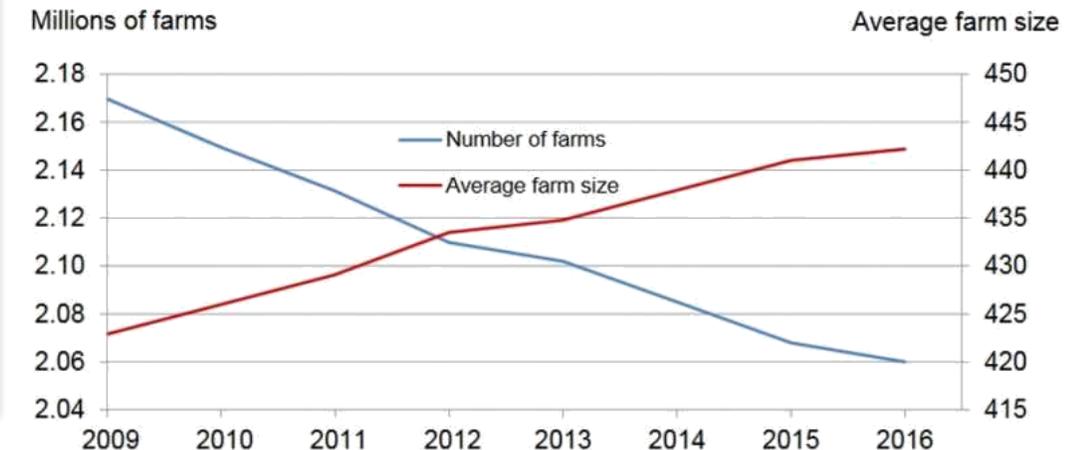
# REGENERATIVE AGRICULTURE

## Regenerative Agriculture Could Provide a \$1.9T Financial Return by 2050 on an Investment of \$57B.

- Also known as regenerative farming, regenerative agriculture is a concept is at the forefront of many new sustainability initiatives in the food and beverage industry.
  - Regenerative agriculture enhances and sustains the health of the soil by restoring its carbon content, which in turn improves productivity (the opposite of conventional agriculture).
- The science backing regenerative agriculture is centered around soil health and productivity. Often tied to organic farming, the practice aims to reduce or eliminate synthetic fertilizers, increase crop productivity and yields, promote biodiversity, conserve water, and sequester carbon in soil.
  - It is estimated that at least 50 percent of the carbon in the earth's soils has been released into the atmosphere over the past century. Bringing that carbon back home through regenerative agriculture is one of the greatest opportunities to address human and climate health, along with the financial well-being of farmers.
  - The World Resources Institute's Atlas of Forest and Landscape Restoration Opportunities estimates that worldwide there are approximately 2.2 billion hectares (5.4 billion acres) of degraded low-carbon landscapes suitable for regenerative agriculture and ecosystem regeneration, primarily in the tropical and temperate climate zones. This is an area larger than the continent of South America.
- Regenerative practices are frequently focused on soil health- including crop rotation, elimination of (or at least decreased) pesticide use, and rotational livestock grazing, among others.
  - Some regenerative agriculture programs propose going a step further and developing a certification that encompasses animal welfare and social responsibility, in addition to soil health and related practices.
  - These same programs see the certification as a way for companies to go a step beyond traditional organic certification, participating in a more comprehensive sustainable agriculture scheme.
  - Some of the prominent companies recently engaged in this space include Rainforest Alliance partners Patagonia and Justin's Nut Butter, and large multi-brand companies such as General Mills are beginning to invest in soil health best practices on farms.



## Number of Farms and Average Farm Size – United States: 2009-2016



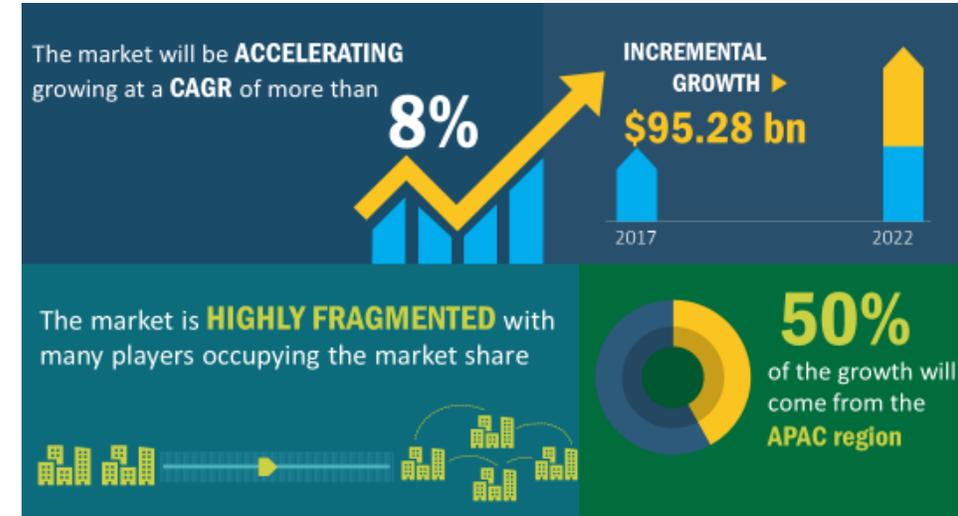
Sources: Phys; DrawDown; Stonepier Press



# DEMAND FOR ECO-FRIENDLY PACKAGING EXPANDS

## Spurred by Environmental Concerns and Effective Regulatory Policies, Demand for Eco-Friendly Packaging is Growing

- The green packaging market is expected to grow to grow by \$95.3B from 2018-2022, at a CAGR of more than 8.0%.
- Renewable bio-based resins including starch, polyglycolic acid, and cellulose are part of green packaging which helps businesses to minimize their reliance on fossil fuels and consequent costs.
- Businesses will need to ensure they are compliant and avoid fines by checking local regulations regularly and giving themselves ample amounts of time to prepare before the laws go into effect.
  - Beyond being in compliance, businesses should adopt suitable technology solutions such as AI and blockchain, and take the lead in areas that can make an impact.
  - Showing leadership in sustainability will not only benefit business operations but also earn crucial support from consumers and the public that could translate into benefits for years to come.
- The food industry held the largest green packaging market share in 2017, accounting for over 55% of the market. This end-user segment is expected to dominate the global market.
- A regional analysis shows that the United States continues to lead the way in adoption of eco-friendly policies. Approximately 36% of 2017 market share, with several companies leading the charge to make them more palatable to the industrial and manufacturing sectors. Several nations in the Asia-Pacific region are also considered to be among those offering solutions to the green packaging arena.
- The perception of retailers and consumers about packaging materials is changing in emerging economies, because packaging waste accounts for a large share of plastic waste, polluting the environment.
- The rise in the number of landfills with plastic waste is increasing the emission of greenhouse gases, which affects the environment.
- The higher production costs associated with producing eco-friendly packaging will have a negative impact on profit margins, which in turn will hinder innovation for the sustainable packaging market for the foreseeable future.



Sources: Food Navigator; BusinessWire; Technavio

# REGULATION UPDATE: THE ARGUMENT FOR STRICTER LABELING

## In the Face of Outperformance by Non-Dairy Alternatives, Big-Dairy has Escalated its Pushback

- The National Milk Producers Federation (NMPF) filed a citizen petition [February 21, 2019](#) with the U.S. Food & Drug Administration outlining a labeling solution to the use of dairy terms on non-dairy products as the agency considers public input from a recently concluded comment period.
- **CONSUMER CONFUSION:** The petition reinforces current FDA labeling regulations, with some additional clarification, to show how marketplace transparency can be enhanced and consumer harm from confusion over nutritional content can be reduced. It also addresses several arguments raised by marketers of vegan foods as part of the ongoing debate on dairy labeling, such as the false idea that creating consistent, clear labeling of non-dairy products would somehow limit the use of dairy terms on products that clearly aren't marketed as dairy substitutes, such as peanut butter.
- **NUTRITIONAL EQUIVALENCY:** In its petition, NMPF urges FDA Commissioner Scott Gottlieb to: "Take prompt enforcement action against misbranded non-dairy foods that substitute for and resemble reference standardized dairy food(s), (e.g., milk, yogurt, cheese, ice cream, butter), yet are nutritionally inferior to such reference standardized dairy foods." Under existing FDA rules, such foods are required to use the word "imitation" if they reference a standardized dairy food but do not have the same nutritional value.
  - Earlier this month, the American Farm Bureau Federation (AFBF) told regulators in formal comments to FDA that the mislabeling of nut- and plant-based beverages as "milk" confuses consumers from a nutritional equivalency standpoint. FDA expects to issue a rule on the use of the names of dairy foods in the labeling of plant-based products later this year
  - AFBF told regulators that consumers know the nutritional value of products labeled "milk" and likely infer that any product bearing this term possesses the same, or at least an equivalent, nutritional profile. However, this is not the case. For example, one serving of traditional milk contains 8 g of protein, while many plant- and nut-based beverages have a lower protein content.
  - A recent survey conducted by IPSOS and commissioned by Dairy Management Inc. found that 53% of respondents stated that they believe plant-based food manufacturers label their products "milk" because their nutritional value is similar – although it is not.
- **IMITATION LANGUAGE:** The petition also points to long-standing rules that provide for using the words "substitute" or "alternative" in conjunction with a dairy term when such products are deemed nutritionally equivalent to the dairy products they reference.
  - "Marketers of plant-based foods that are designed to resemble standardized dairy foods actually have several labeling options under current FDA regulations, as we point out in this petition," Balmer said. "The unfortunate reality today is that many of them are playing fast and loose with the labeling rules to mask their nutritional inferiority to real dairy products."
  - The NMPF petition notes that any manufacturer not wishing to use modifiers such as "imitation," "substitute" or "alternative" may simply eschew the use of dairy terms altogether – an approach that's already common in the rest of the world and practiced by some companies in the U.S., including Chobani, Trader Joe's and Quaker.
- **NOT A "BAN":** NMPF also addresses First Amendment arguments that have been raised by opponents via a thorough discussion of relevant case law on commercial speech rights. The petition explains how NMPF's proposed solutions focus on disclosure requirements narrowly tailored to improving labeling transparency and promoting informed consumer choice – and are emphatically not a "ban" on the use of dairy terms by plant-based products.
  - "Our approach does not advocate for any so-called 'bans'...it simply relies on proper disclosures that allow for appropriate, truthful, non-misleading messaging. In the end, products that are 'milk-like' or 'yogurt-like' are not actual milk or yogurt, and the nutritional distinctions are critical to informed consumer decision-making."



*"The FDA comment docket gave us the chance to explain why there is a compelling need to resolve this labeling issue to address consumer confusion over nutritional content...this petition lays out a constructive solution to the false and misleading labeling practices existing in the marketplace today and provides clear, truthful and understandable labeling options for marketers of plant-based imitation dairy products."*

*-Tom Balmer. NMPF executive vice president*

Sources: Food Navigator; Feedstuffs

# OATS ARE THE NEW ALMONDS

## Oat Drinks Market to Register a CAGR of 8.2% During 2018 - 2022

- Although dairy alternatives such as almond, soy, and coconut milk have been around in the market for several years, oat drinks, a category of plant-based beverages that is produced from steel cut oats or whole oats, have only recently gone “mainstream.”
- **ETHICAL:** The propensity of consumers to spend more on organics has played well in favour of oat drinks, resulting in a projected growth of organic-certified oat drinks by 8.4% in revenue terms over the forecast period. Consumers expect that their product is produced in an ethical manner with a positive background story. Producing it as 'organic' provides one such positive background story of production.
  - Consumers associate organically certified oat drinks with something that is produced and processed in a chemical-free manner. This develops a major selling point, despite the higher price point.
- **SUSTAINABLE:** The process of making an oat drink is relatively simple and requires far less inputs, especially water, compared to that required by other plant-based dairy alternatives therefore producers of oat drinks are highlighting the sustainability in production as a unique selling point.
- **NUTRITIOUS:** Weight conscious consumption is driving consumers’ preferences for reduced fat or fat-free products as compared to the whole or full fat versions. This has favourably influenced the oat drinks market for its reduced fat oat drinks, which is expected to experience a growth of 9.6% in terms of value over the coming years.
- **VERSATILE:** Oat drinks are suitable for use in lattes and cappuccinos, smoothies, creamy soups, baked goods, and pre-workout energy drinks. Baristas have favorably adopted oat drinks as an excellent alternative to milk due to their unique consistency that brings creamy texture and thickness in addition to froth in the coffee.
  - Apart from natural and traditional oat drinks, and premium Barista oat drinks, companies are offering flavoured oat drinks as well to cater to consumer preference for particular flavours such as chocolate, vanilla, and different fruit flavours.
  - One of the major producers of oat drinks, Oatly, is also planning to introduce the mocha flavour into their oat drink repertoire.
  - Though oat drinks only account for a tiny share of the overall plant-based dairy market, their entry has been facilitated by innovative marketing strategies employed by companies such as Oatly by specifically targeting cafés as part of their product launch strategy in the U.S.

## Recent Product Introductions



Sources: Reuters; Globenewswire

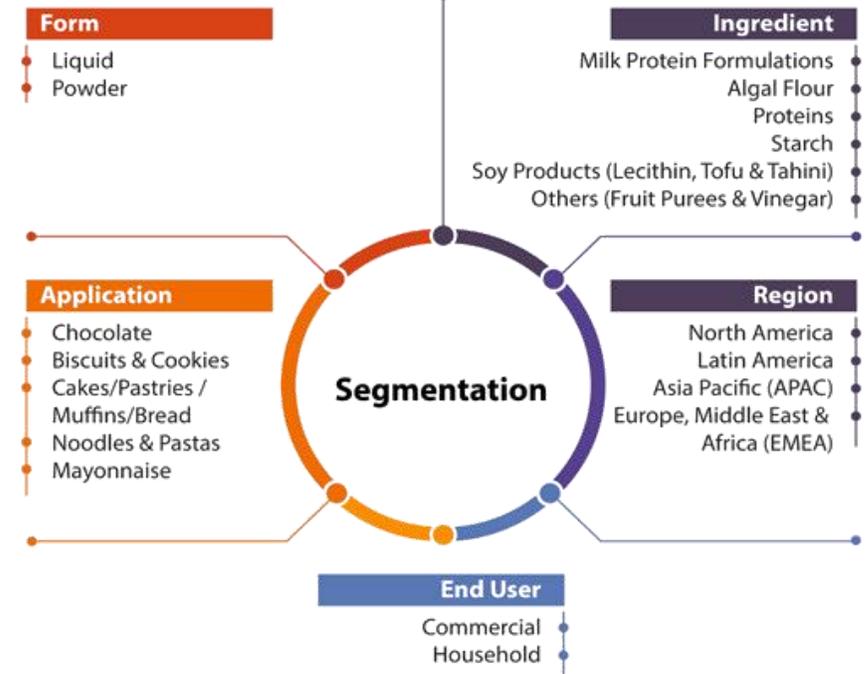


# DEMAND FOR EGG REPLACEMENTS GROWS

## Recent Supply Shortages are Driving Innovation for Egg Replacements

- The global egg replacement industry will be worth \$1.6B by 2028—up from \$980M in 2018
- **Egg Shortage Crisis:** The outbreak of avian influenza and its subsequent prevalence among birds, primarily in the North America region, has led to egg supply challenges.
  - Poultry producers across several countries are witnessing huge losses in the wake of a highly pathogenic strain of avian influenza. This epidemic has, in turn, persuaded producers to cull millions of chickens and turkeys. Consequently, food manufacturers have been on the lookout for egg substitutes to include in various products.
  - This shortage could lead to an increase in the prices of eggs, encouraging producers and consumers to opt for egg substitutes at an affordable cost. Thus, multiple producers are vying for reducing costs by using egg substitutes, spurring companies to introduce products onto the market.
- **Mayonnaise is a Leading Application:** Mayonnaise is poised to lead in terms of revenue as compared to other application segments such as chocolates, biscuits and cookies, cakes/pastries/muffins/breads, and noodles & pasta.
  - Cakes/ pastries/muffins/breads is expected to have the fastest growth.
  - Given the decline in egg supply due to avian flu, several manufacturers of mayonnaise dressings have been receiving requests for introducing stabilizers to replace eggs in mayonnaise.
  - Though manufacturers in the egg replacement ingredients market find it challenging to restore the functionality of eggs in mayonnaise-type dressings, they are persistently formulating stabilizer systems for replacing the necessary texture and emulsification properties.

## Egg Replacement Market Segmentation



In May 2017, JUST raised \$150M of Series E venture funding from Blue Horizon (Zurich), Veginvest and KBW Ventures, putting the company's pre-money valuation at \$1.1B. Other undisclosed investors also participated in the round.

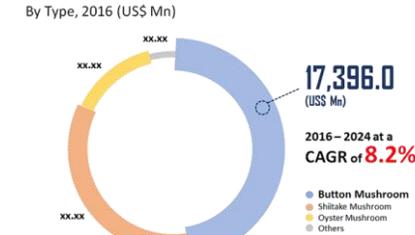


# MUSHROOMS – HEALTHY & HIGHLY FUNCTIONAL

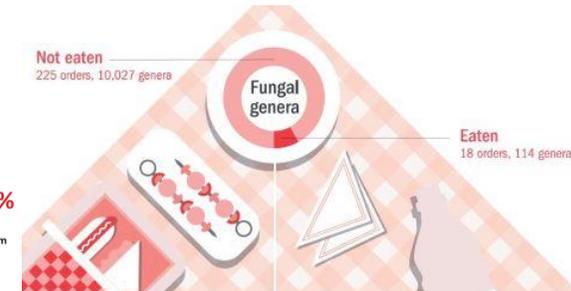
## As Plant-Based Consumers Increase, Mushrooms Are An Increasingly Popular Meat Replacement

- Americans are eating far less meat - dollars typically spent on meat are going towards innovative substitutes and plant-based alternatives. In 2018, sales of plant-based foods increased by 20%, reaching a total of \$3.3B, and overshadowing the 8% growth seen in 2017.
- Most meat replacements, while tasty and useful as transitional foods, have yet to be refined into healthy alternatives. Mushrooms, by contrast, are a high-protein alternative to meat which can serve as entrees on their own (e.g. portabella steaks, curries, tacos, soups and sautés).
- Mushrooms are also a functional food, promising health benefits that supersede basic nutrition. In fact, fungi have been used in traditional medicinal practices for millennia. They contain over a dozen vitamins and minerals and an unusually high amount of antioxidants. Notably, they are the only source of vitamin D available in the produce aisle.
  - The mainstream emergence of myco-supplement brands like Four Sigmatic, Om, and Mud/Wtr underscore a growing acceptance of mushrooms as medicine.
- Mushrooms have been a staple food in international cuisines for thousands of years. Though most people are only familiar with a handful of varieties, there are at least 350 species of fungi collected and eaten around the world. These species represent only a fraction of what ultimately rolls up to be a whole scientific kingdom of potential.
- In this era of food tribes and fad diets, mushrooms offer something for every consumer. Whether one is vegan, vegetarian, paleo, low-carb or kosher, mushrooms are on the menu. From Jean-Jorges' mixed wild mushroom pizza to Shake Shack's shroom burger, mushrooms are moving up on the menu. You can see evidence of this on Pinterest, where food is the top category among the platform's 250M global users. Last year, searches for mushroom recipes grew by 64%.
- The functionality of fungi extends beyond the straightforward transfer of nutrients. AgFunder portfolio company Chinova Bioworks uses mushroom extracts to manufacture a natural preservative. MycoTech, a food technology startup that just raised \$30M in Series C funding, develops taste-altering products using mycelium. Their flagship innovation, ClearTaste, allows companies to reduce the amount of sugar and salt in their products by blocking bitterness.

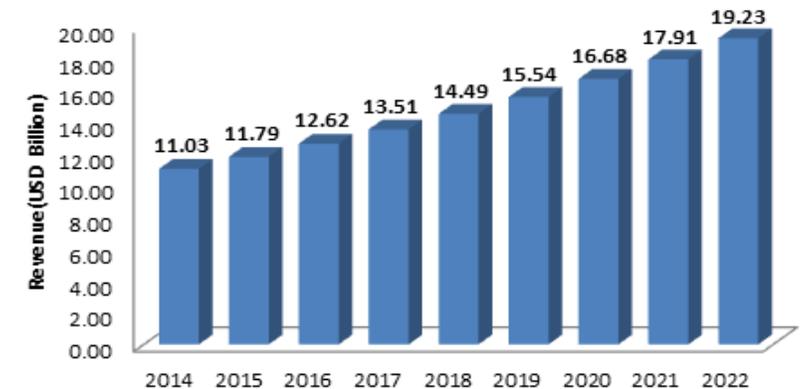
### Global Mushroom Market Revenue



Source: Transparency Market Research Analysis, 2017



### Global Button Mushroom Market, 2017–2022 (USD Billion)



Sources: Transparency Market Research

# SPOTLIGHT: “THE BLEND” (MEAT + MUSHROOMS)

4 oz of medium ground beef has **376 CALORIES**



Blend with  
30% Mushrooms

**270**  
Calories\*\*

that's a savings of  
**28%**  
per serving.

\* Meat Type: Medium Ground Beef (70/30). \*\* For meat and mushroom blend only.  
Mushroom and meat nutrition and caloric information is based on data from The Blend Calculator and USDA. Calculated savings are estimates only.



Blend with  
40% Mushrooms

**235**  
Calories\*\*

that's a savings of  
**37%**  
per serving.

\* Meat Type: Medium Ground Beef (70/30). \*\* For meat and mushroom blend only.  
Mushroom and meat nutrition and caloric information is based on data from The Blend Calculator and USDA. Calculated savings are estimates only.

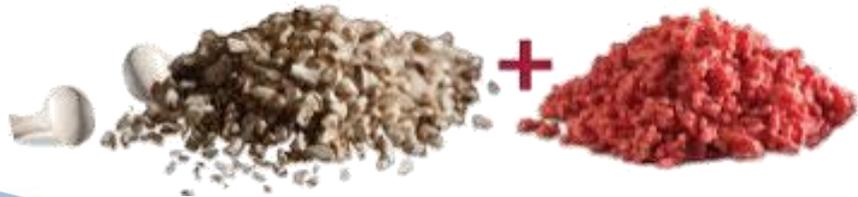


Blend with  
70% Mushrooms

**130**  
Calories\*\*

that's a savings of  
**65%**  
per serving.

\* Meat Type: Medium Ground Beef (70/30). \*\* For meat and mushroom blend only.  
Mushroom and meat nutrition and caloric information is based on data from The Blend Calculator and USDA. Calculated savings are estimates only.



## Meat-Mushroom Mixes Recently Popular With Consumers Who Don't Want to Give Up Meat Entirely

- Meat consumption in the U.S. averaged 216.9 pounds per capita in 2017, according to data from the Department of Agriculture. The agency expects 2018 consumption to reach 222.2 pounds per capita, breaking a record set in 2004.
- Producing all that meat is taking a toll on the planet: Beyond fossil fuel-guzzling farms and factories, the U.S. meat industry only thrives with massive amounts of pesticides, fertilizer, feed and water.
- The meat industry is a large producer of greenhouse gases, manure and toxic waste. Greenhouse gas emissions for red meat are 10 to 40 times more than those of grains and vegetables, according to a lifecycle analysis from the Environmental Working Group that looked at the production and distribution of 20 common agricultural products.
  - Growing U.S. livestock feed alone requires 149 million acres of land, 167 million pounds of pesticides and 17 billion pounds of nitrogen fertilizer. Livestock care contributes to air and water pollution, soil degradation and climate change.
- Sustainable ranching methods mean red meat production has eco-friendly potential, and organizations like the Global Roundtable for Sustainable Beef are working toward an environmentally sound industry.
- Going vegetarian isn't the only option. An innovative cooking technique which blends ground mushrooms and ground meat lets omnivores have their cake and eat it, too.
- The Blend is essentially a beef-mushroom hybrid. It was created as an educational initiative of culinary leaders called The Healthy Menus R&D Collaborative, the result of a partnership between the Culinary Institute of America and the Mushroom Council.
- The Blend incorporates finely chopped, potassium-packed mushrooms with ground meat to make flavorful dishes — think extra-juicy burgers and savory tacos. By cutting red meat with hearty veggies, you'll simultaneously shrink your carbon footprint and improve your health.
- A number of chefs have hopped on board with The Blend's unique flavor, and Menus of Change, an initiative focused on public health, has voiced its support of the technique. Fast food chain Sonic even added a blended burger to its menu, calling it a healthy option that tastes “like you're getting away with something.”



# SPOTLIGHT: MYCO TECH RAISES \$30M SERIES C

## MUSHROOMS REDUCING SUGAR

Creating products for today's consumer is no easy task. The desire for fewer and more functional ingredients contributes to formulation challenges.

## MUSHROOMS TRANSFORMING PLANT BASED PROTEINS

Gone are the days of choosing between taste, functionality, allergenicity, sustainability, clean label, and nutritional value. Mushroom fermentation unlocks the full potential of plant based proteins.

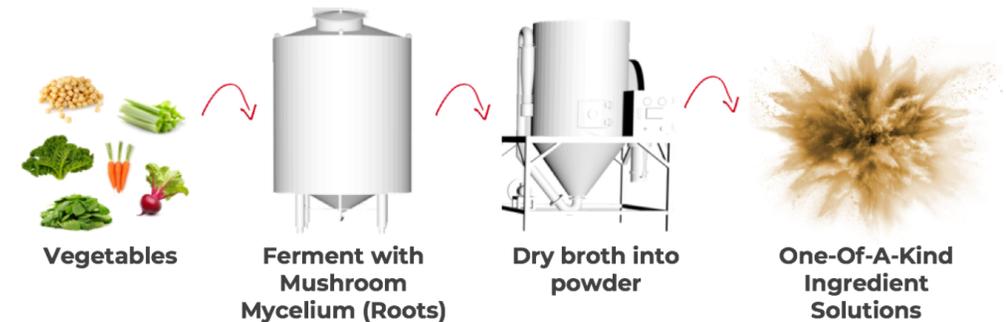
## MUSHROOMS FIXING FLAVOR DEFECTS

Taste is the number one factor in consumer acceptance of a food product. See how we can help you fix even some of the most challenging ingredients.



Founded in 2013, MycoTechnology (MycoTech) focuses on solving the biggest challenges faced by the food and beverage industry by utilizing mushroom fermentation to develop novel ingredients.

- Their first product, ClearTaste®, is the world's first certified organic bitter blocker, which helps companies reduce the sugar content in their products.
- After the commercialization of ClearTaste, MycoTech is taking on the challenges faced by the protein industry with their Shiitake fermented vegetable protein, PureTaste.



The Company raised \$30M of Series C venture funding in a deal led by S2G Ventures (Seed 2 Growth), Middleland Capital and ADM Capital on January 30, 2019, putting the company's pre-money valuation at \$100 million. Eighteen94 Capital, Continental Grain Company, Tyson Ventures, Bunge Ventures, Kellogg Capital Group (Specialist Operations) and DNS-Hiitake LLC also participated in the round.





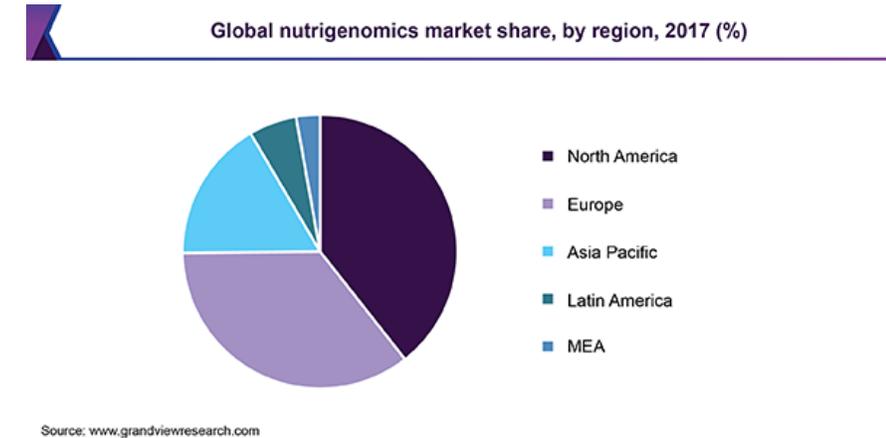
# NUTRIGENOMICS – PERSONALIZED DIETS FOR GENE PROFILES

## Building The Bridge Between Genetics & Personalized Nutrition

- The global nutrigenomics market size was valued at \$252.2M in 2017, and is expected to reach \$850.6M by 2025 growing at a CAGR of 16.8% during 2018 to 2025.
- Nutrigenomics is often viewed as an advanced field of research focused towards human genome, nutrition and health. Most companies specializing in nutrigenomics actively study and analyse the effects of food and their constituents on human genes to improve dietary patterns using specific products that are personalized based on an individual's nutritional need.
- Nutrigenomics helps build a bridge between genetics and their response to the diet taken. For instance, the development of lactose- and gluten-free food can be considered as changes made according to the specific gene variants that might result in lactose and gluten intolerance.
- A number of top manufacturers are shifting their focus on the development of tailor-made food to match a particular gene profile, such as strengthening of weak immune system and decreased intake of cholesterol compounds. However, significant evidence is yet to be found to prove that it actually works.
- Increasing awareness among consumers around health and nutrition, along with increased prevalence of obesity, is expected to be a key factor driving the market.
  - Cancer research based on individual nutrition is increasing, as many scientists point out that diet regulation can reduce the susceptibility to cancer.
- The growing trend of personalized diet among athletes is also likely to contribute to the market expansion.

### Recent News

 <p>ADVANCING NUTRITION WITH SCIENCE</p>	<p>In April 2017, Genomix launched a 55 gene nutrigenomic testing platform. The Company believes that this test will provide an in-depth understanding of an individual's genetic makeup and how that impacts their overall health and wellbeing. Additionally, Genomix acquired San Antonio Nutrigenomic laboratory for genetic testing. This acquisition will help the company to deliver quicker test results to patients and will improve operational efficiencies.</p>
 <p>Health. Reimagined.</p>	<p>Hong-Kong based genetic testing / digital health company Prenetics recently announced the acquisition of a U.K. based genetic information provider DNAfit for \$10M.</p>
 <p>At the forefront of Nutrigenomics</p>	<p>Leading healthcare company LifeVantage Corporation is entering the Taiwan market with two of its popular skincare flagship brands Protandim Nrf2 Synergizer® and TrueScience® Beauty System.</p>



# SPOTLIGHT: VIOME ACQUIRES HABIT

VIOME



habit  
FOOD, PERSONALIZED®

**Synopsis:** In February 2019, Viome announced it had entered into an agreement with Campbell Soup Company to acquire Habit, a leading personalized nutrition company that “takes the guesswork out of eating right.” Operating as one, the two industry pioneers will become the most comprehensive solution on the market for personalized nutrition. For the first time, consumers have complete insight into what is going on in the body, and how to translate those insights into powerful recommendations to address “whole-body” health.

**Acquisition Thesis:** The acquisition of Habit allows Viome to expand its core offering by tapping into Habit’s robust insights for consumer behavior modification. With this, Viome and Habit will be able to provide a richer consumer experience and deepen personalized recommendations with nutrition plans and engagement tools.

*“With the advent of big data and computational biology, I believe it’s possible to provide everyone in this country and around the world a personalized blueprint to achieve their health and wellness goals... Viome analyzes the gut microbiome at a molecular level with advanced technology from the Los Alamos National Lab, which is a great competitive advantage and great foundation for creating the ultimate whole-body nutrition solution.”*

– Neil Grimmer, Habit Founder & CEO

*“With Habit now part of Viome, we have the perfect articulation of personalized health... I have always admired Habit’s ability to engage and motivate the consumer. Combined with Viome’s deep insights from the microbiome, we are able to see the complete story our body is telling us about our overall health.”*

– Naveen Jain, Viome CEO

**About Habit:** Habit, founded in 2015, is the first personalized nutrition company offering a whole body approach, with an at-home test kit and individual nutrition plan identifying the right foods for you. The Company is challenging the multi-billion-dollar diet industry by providing custom nutrition plans based on an individual’s own biology. The test measures over 70 nutrition-related blood, metabolic and genetic biomarkers, collected through a DNA cheek swab, fasting blood test, a mixed meal metabolic challenge beverage, body metrics and a behavioral survey. Habit customers can access digital tools, recipes, meal ideas, and tips from Habit chefs and coaches in their dashboard.

**About Viome:** Viome is a new kind of healthcare company that uses artificial intelligence to understand what is going on inside the body at a molecular level. Viome specifically addresses issues in the body related to the Microbiome. Viome targets the bacteria, viruses, yeast, fungus and mold in the system that work symbiotically with the body to provide the nutrition needed to feel energetic and stay healthy. Through these insights, Viome provides consumers with personalized diets, nutrition and lifestyle recommendations for healthy living.



# THE FUTURE OF BRICK & MORTAR: “RETAIL-AS-AN-EXPERIENCE”

## Connectivity is Key for Retail's Future

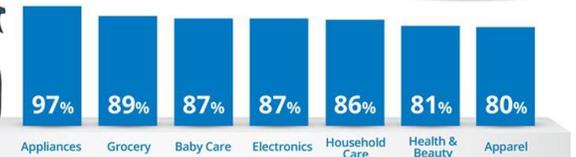
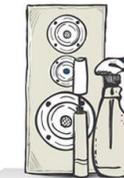
- AI has great relevance to CPG in its ability to act as “the missing link” among three variables: massive data stores, mass personalization of products and customer experiences, and the ability to navigate and win in today’s complex business environment.
- Through sophisticated AI, retailers are diving deeper into personalization by building solutions that suggest the best products for a user to purchase bolstered by data-driven insights.
- Thanks to powerful AI-driven supply chain management, retailers can easily track what’s in store, what’s being shipped and what’s in the warehouse; ensuring customers can get what they want when they want it. But to create a more personalized shopping experience, retailers are also putting together better product collections, embracing trends like “showrooming” and crafting entirely new ways of shopping.
- The old model of in-store (and even online) retail strictly focused on products being sold. However, consumers have slowly but surely been moving away from strictly shopping for products, instead seeking a more engaging experience.
  - The “retail as an experience” trend has been driven largely by millennials and their preference for experiences over things
  - Simply remodeling a store isn’t enough. Nearly 3,800 stores are expected to close their doors by year’s end, and the brands that do survive will have done so by creating engrossing experiences.
- The emergence of virtual reality, augmented reality, and improved mobile technology will continue to push retail brands to add layers and new experiences to their traditional retail models.
  - Stores like Sephora, for example, have rethought their stores by combining traditional elements with mobile apps and activities that are completely unrelated to making a purchase.
  - Samsung unveiled a \$43M “pop-up” that features its products, but doesn’t have any for sale. Personal care brands like St. Ives and Dove, for example, have launched pop-up destinations to grow product affinity through interactive and creative “in-store” experiences.
  - For organizations without their own dedicated stores or a robust e-commerce business, these types of campaigns offer significant value. Critically, though, they allow CPGs to deliver on the demand for experiences we increasingly see from millennials and Gen Z.
- Many retail “experiences” that have become popular in recent months depend on a plethora of connected hardware. Smart IoT devices such as beacons and smart shelves offer retail companies the efficiency to ensure their staff are effectively utilized, but physical IoT technology that is not secured properly can leave networks accessible to threats.



**79%** of smartphone owners are ‘smartphone shoppers’

**84%** of smartphone shoppers use their phone to help shop while in a store

*in-store smartphone use by category*



# AI SPOTLIGHT: BRICK & MORTAR RETAIL



- Retailers long maligned the trend of “showrooming”—that is, trying out a product in-store only to make an eventual purchase online.
- AI-driven supply chain management has allowed omnichannel retailing to alleviate some of these fears, but new retailers like b8ta have embraced this trend even further by building new stores around the showrooming concept.
- Offering retail-as-a-service, b8ta is an open-concept store that offers companies a flexible way of selling through brick-and-mortar locations. Companies can showcase products in b8ta stores from online brands that desire a physical presence.
- Combined with AI-gathered data for personalized product targeting, a manufacturer could take advantage of b8ta by offering a small sample of their most popular products that customers wish they could try out in real life.
- For consumers who wish to purchase something online but also want to see it in person, b8ta changes the game.
- For online retailers with a wide range of SKUs or a limited desire to expand into physical retail, b8ta offers the best of both worlds by showcasing products for limited amounts of time.



- Amazon’s star rating system is the core concept behind the company’s newest retail store in New York City: Amazon 4-star. Carrying a curated selection of products that have all received large amounts of four-star ratings, Amazon uses its sophisticated product recommendation engines to bring its bestselling, most popular items into physical stores.
- By offering a hand-picked selection of products that are beloved, trending or hidden gems, the service allows customers to shop from a collection of highly personalized recommendations in a brick-and-mortar setting.
- Considering 35% of Amazon’s revenue comes from its AI-enhanced product recommendations, it’s a profitable shortcut to give customers what they already want.
- Selling only the top-rated products might also be the right approach for adjusting an existing retail strategy. In early 2018, home furnishing retailer Crate & Kids shuttered all physical locations of its children’s furniture chain. The Land of Nod, and began offering a smaller, curated collection of the same products under its in-store label. For Crate & Kids, it became clear that offering a more personalized selection of products to its customers was more valuable than propping open an under performing retailer that featured wider selections.



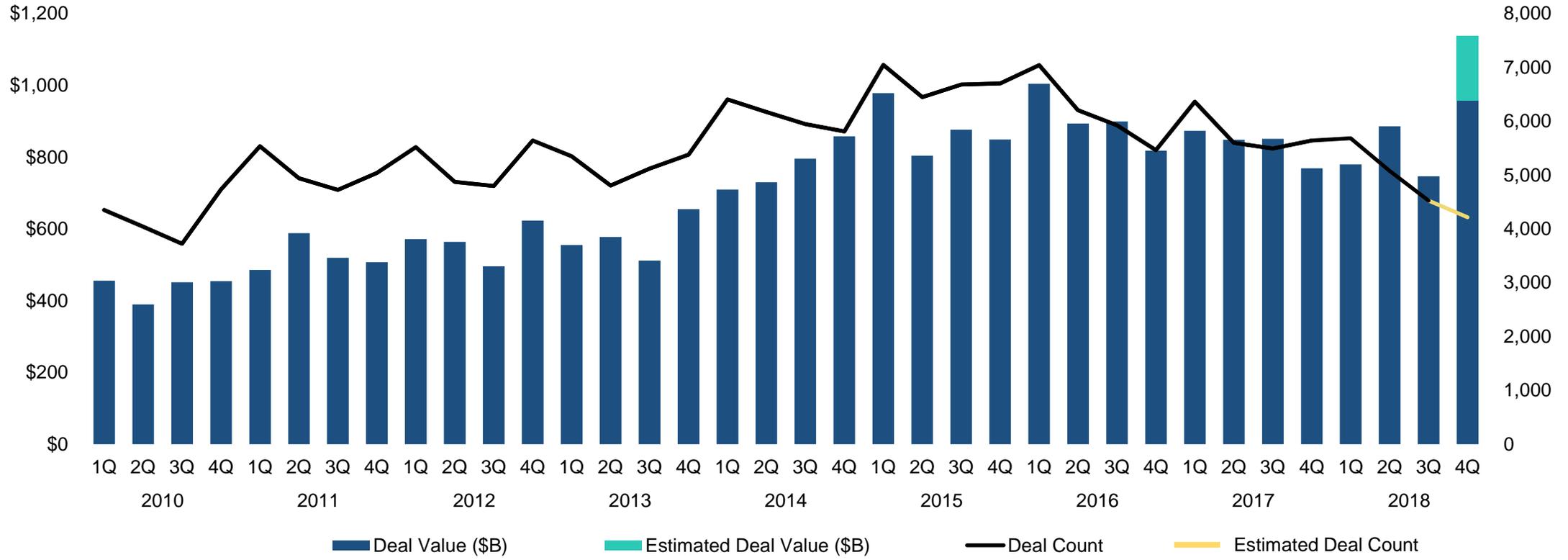
- AlgoFace is making the makeup purchasing process simpler and less messy/more sanitary through its virtual-makeup SDK, which is available for makeup retailers to build into their apps.
- Shoppers can virtually apply an endless array of makeup shades to a live video of their face. Their AI-driven augmented reality interface makes it look like users are actually, physically wearing the makeup they’re thinking about buying.
- The result is a highly personalized experience that lets users try out makeup combinations with no mess along with an incredible way to cut down on costs by saving on makeup samples.
- In terms of experience, customers are able to try out different looks in both a mobile app as well as at physical locations.



# NORTH AMERICAN, EUROPEAN M&A ACTIVITY: FEWER DEALS; HIGHER VALUE

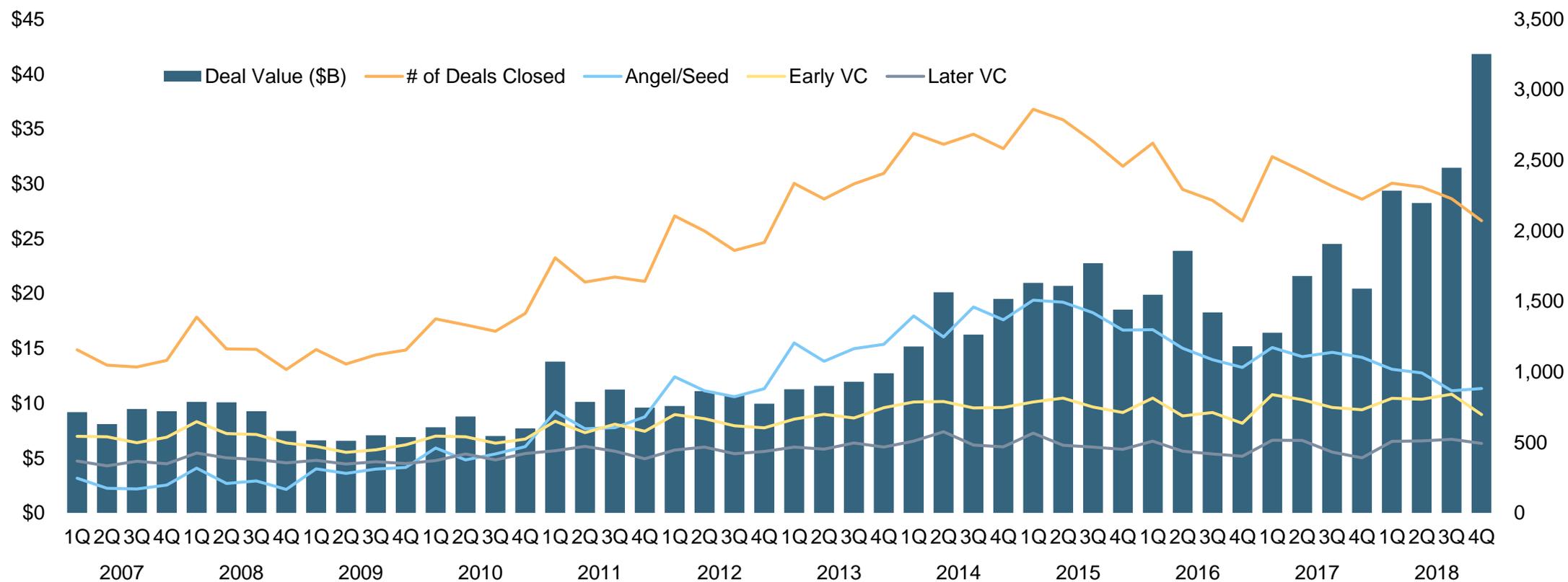
## M&A Market Perspectives

- North American & European M&A Deal Count declined 25% compared to Q4 2017
- Deal value hits record high in the last eight years



# UNITED STATES VENTURE CAPITAL ACTIVITY

- Private placement deal value is at unprecedented levels
- Large portion of deals taking place are in Early VC Stage



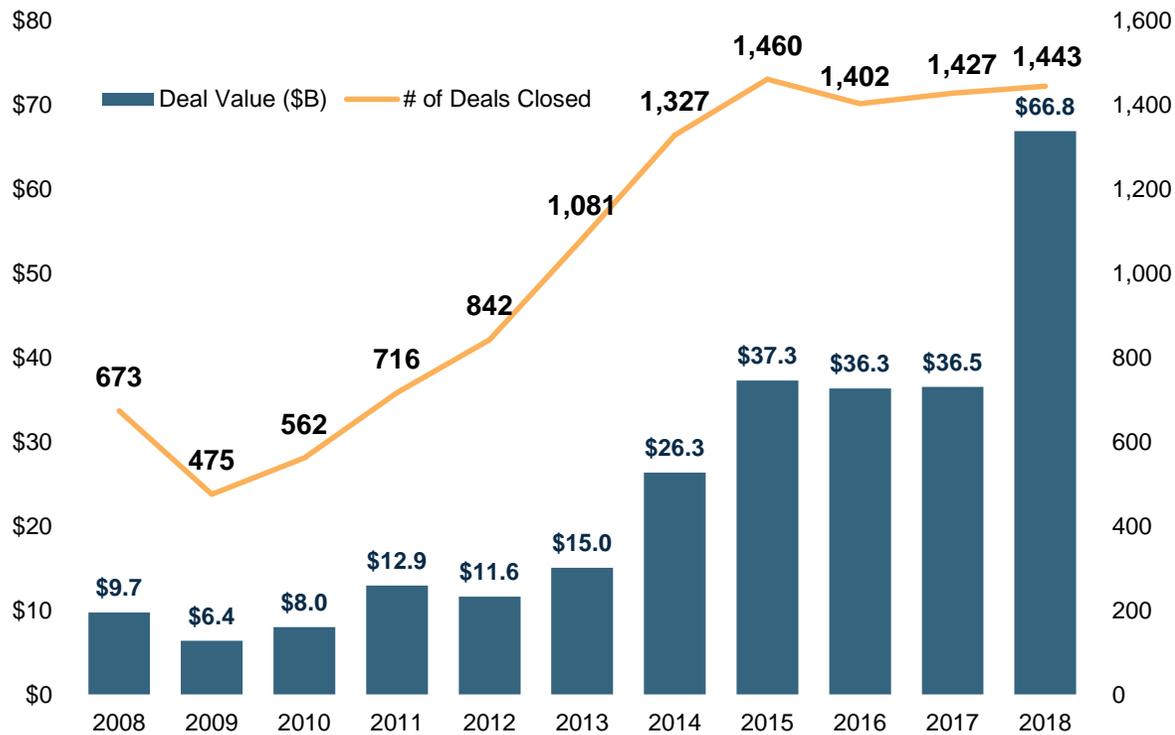
Source: PitchBook



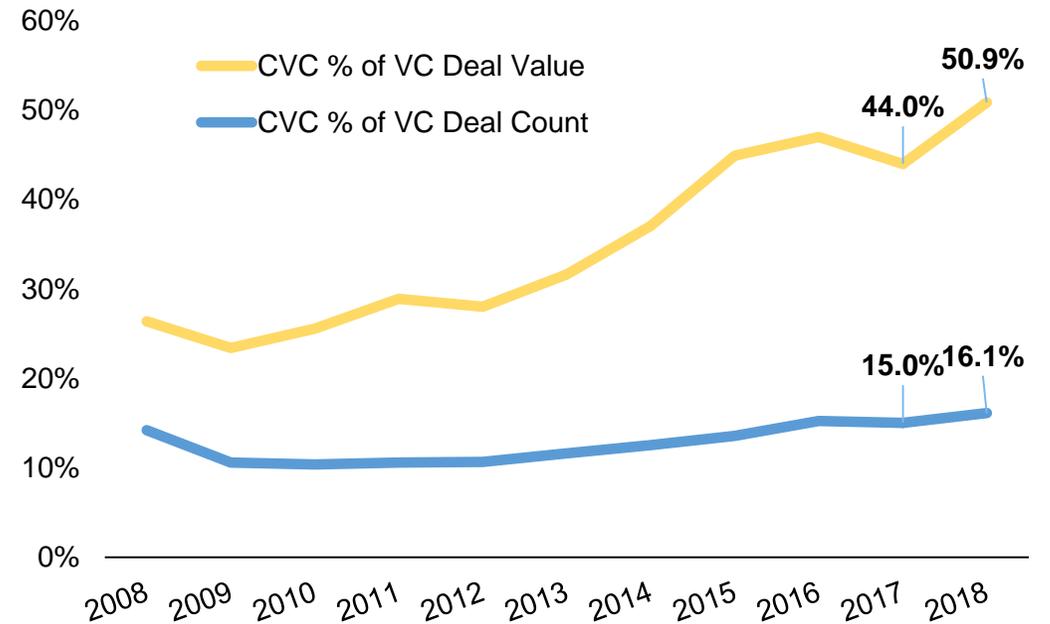
# RECENT UPTICK IN CORPORATE VENTURE CAPITAL ACTIVITY

Corporate Venture Capital investors are becoming increasingly active in private placements

## US CVC Activity by Year



## Percentage of US VC Activity that includes CVC



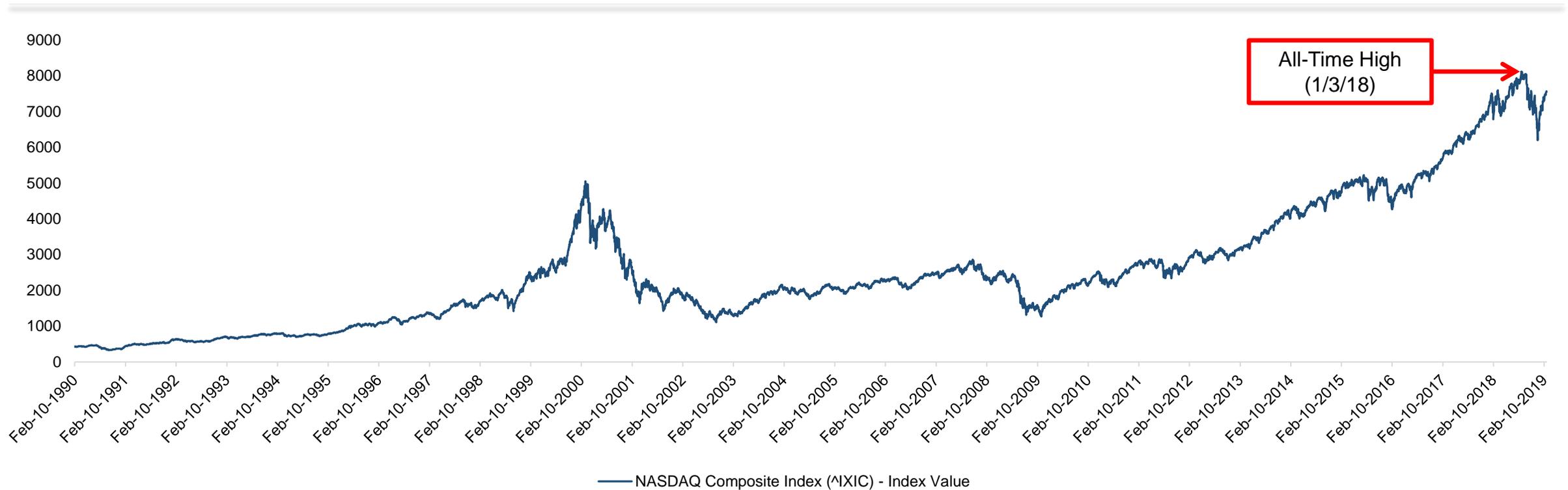
Source: PitchBook



# EQUITY MARKETS CLOSE TO ALL-TIME HIGHS

## Equity Markets in Decline with Market Volatility Increasing

- NASDAQ at 7,532 (2/28/2019)
- S&P 500 at 2,784 (2/28/2019)
- Dow Jones Industrial Average at 25,916 (2/28/2019)



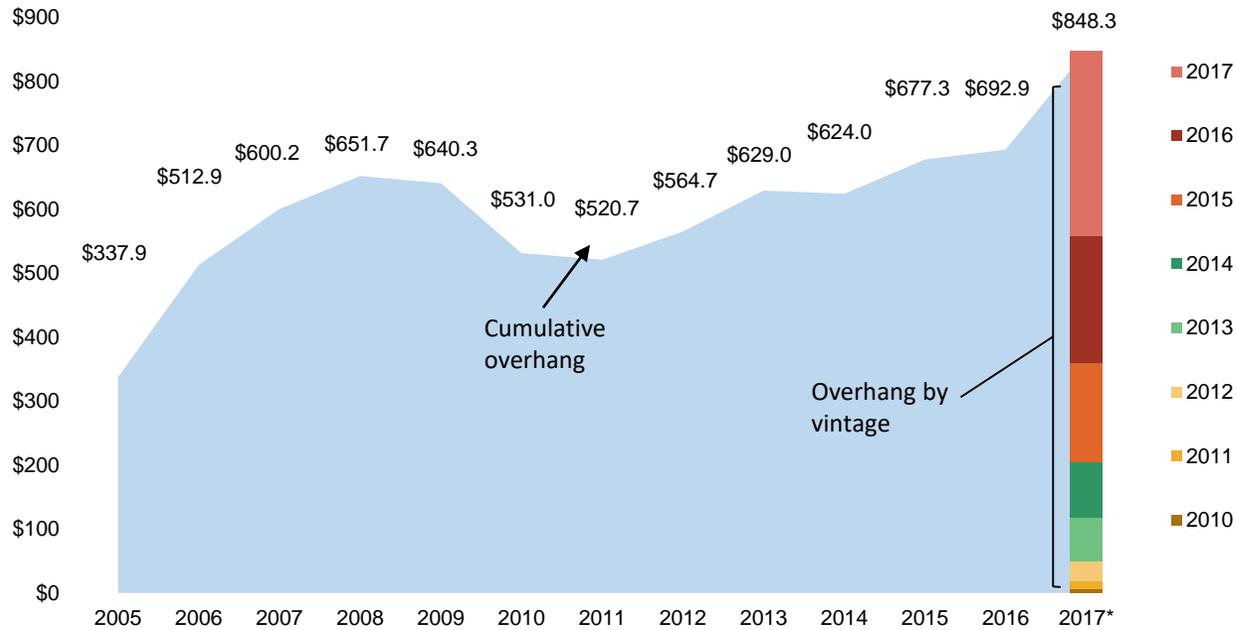
Source: Yahoo Finance



# SIGNIFICANT PRIVATE CAPITAL AVAILABLE

## U.S. PE Firms Aggressively Searching for Acquisitions

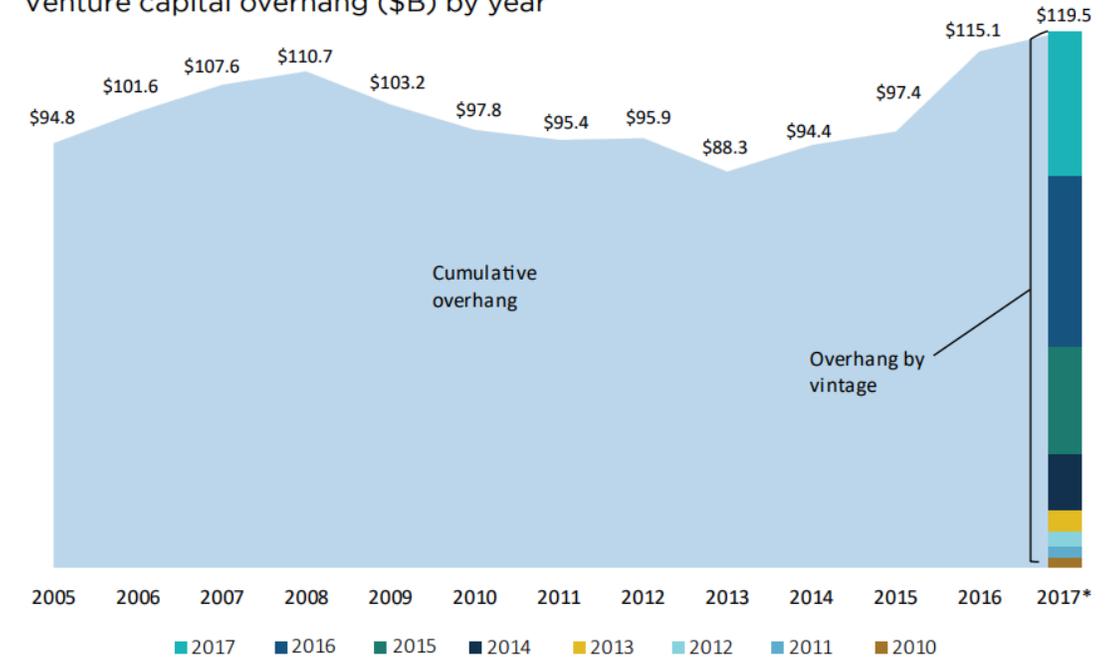
- Over \$800 billion of U.S. PE capital available for equity investment
- Purchasing power 2x to 3x this amount with leverage, reinvested equity
- Significant sector interest by PE buyers



## U.S. V.C. Firms On The Hunt for Investments

- Over \$100 billion of U.S. VC capital available for equity investment
- Significant sector interest by VC firms.

Venture capital overhang (\$B) by year

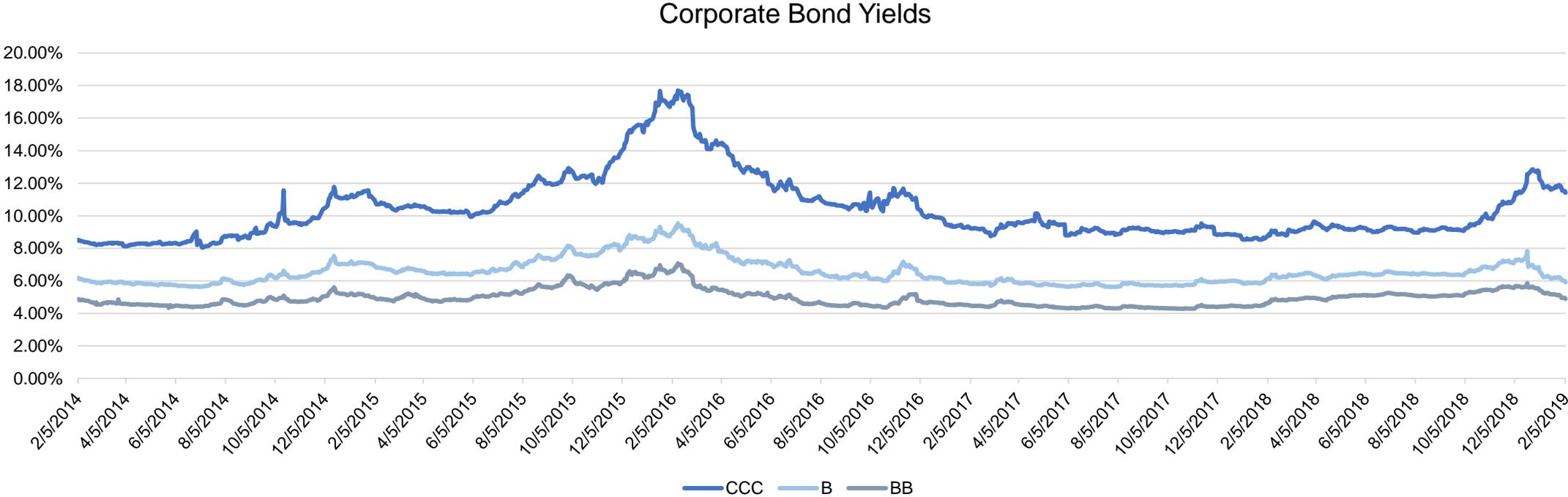


Source: PitchBook; As of 6/30/2017



# CHEAP MONEY PROMOTES INVESTMENT

## High Yield Corporate Bond Rates Remain at Historically Low Levels

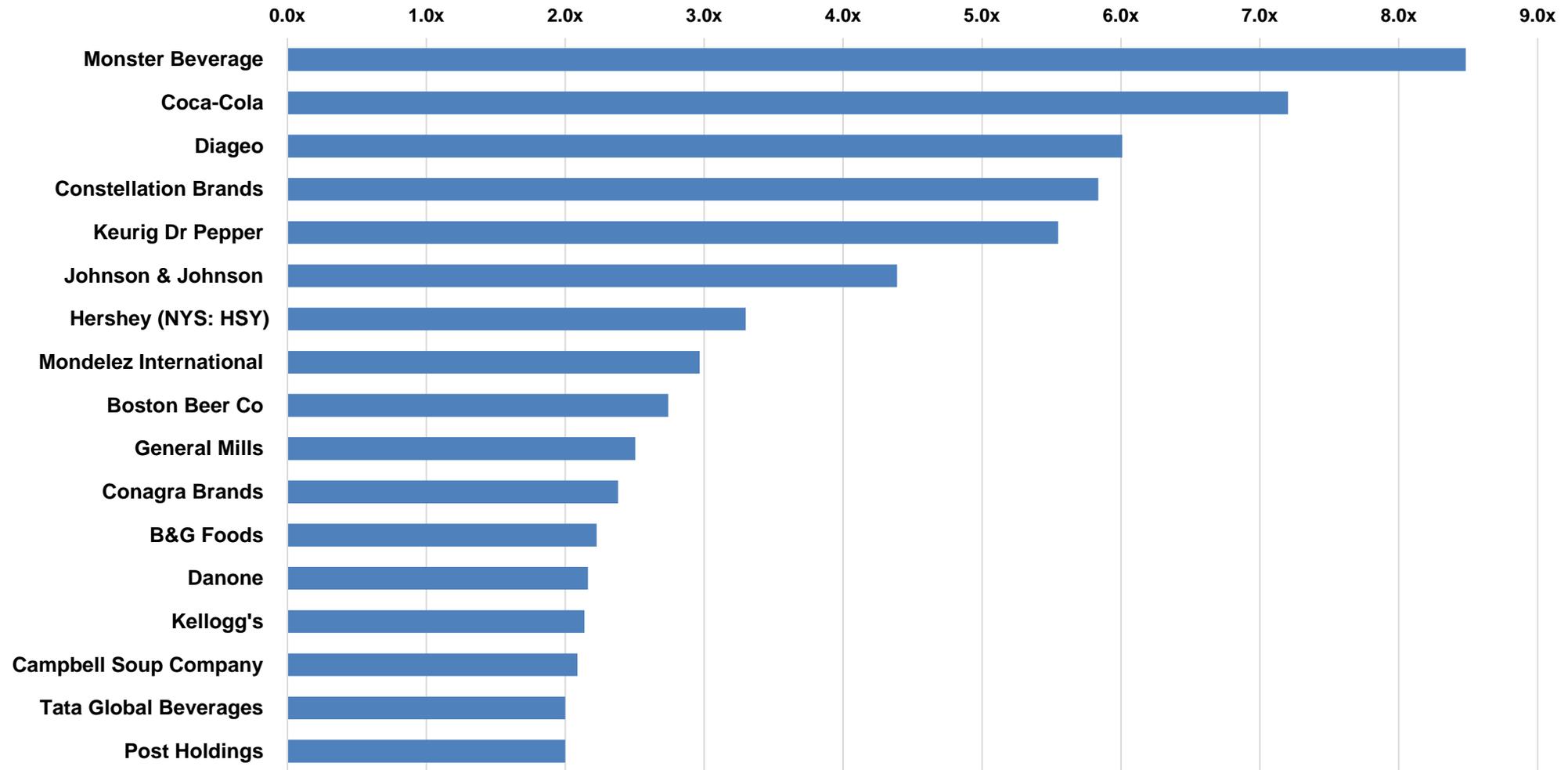


# WHAT IS THE EQUITY MARKET REWARDING?

TEV/Rev (LTM)



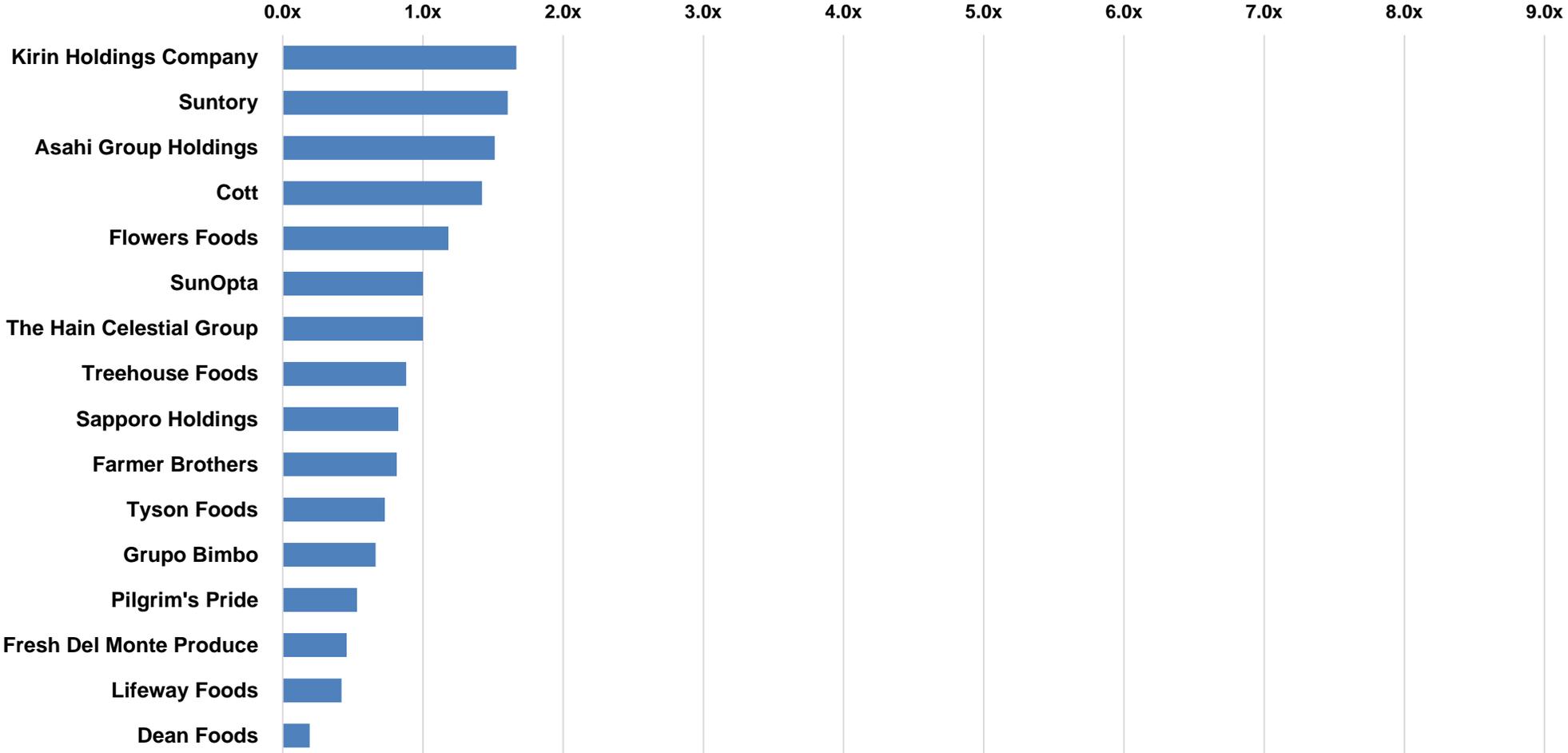
# PUBLIC COMPANIES – EV/REVENUE $\geq$ 2.0X



Source: Pitchbook Data as of February 25, 2019



# PUBLIC COMPANIES – EV/REVENUE LESS THAN 2.0X

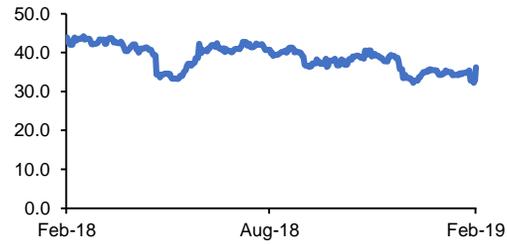


Source: Pitchbook Data as of February 25, 2019

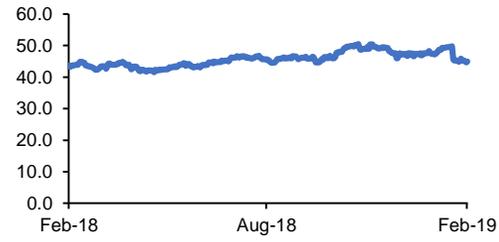


# SELECTED STOCK PERFORMANCE – TRAILING TWELVE MONTHS

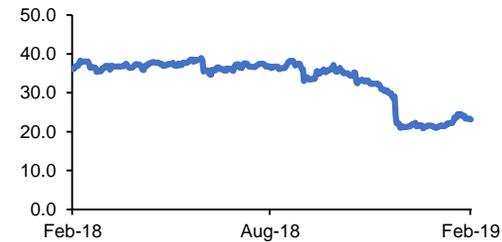
Campbell Soup Company (CPB)



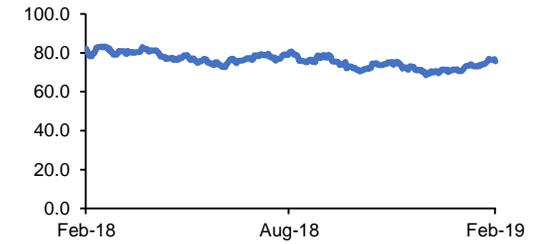
Coca-Cola (KO)



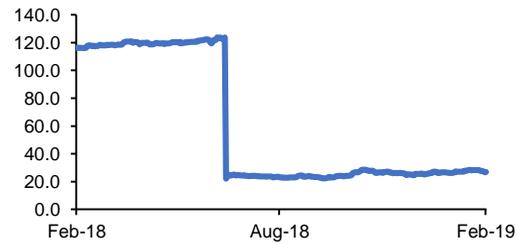
Conagra Brands (CAG)



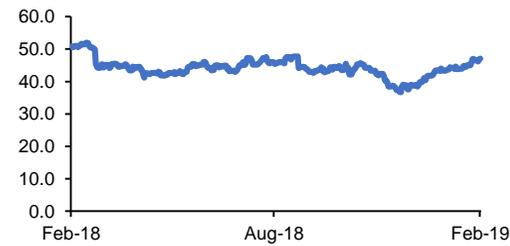
Danone (BN)



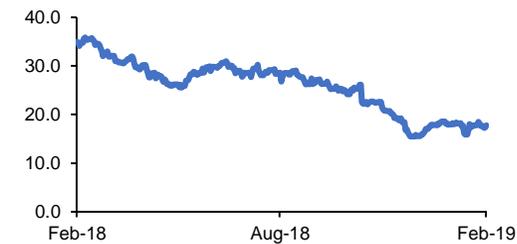
Keurig Dr Pepper (KDP)



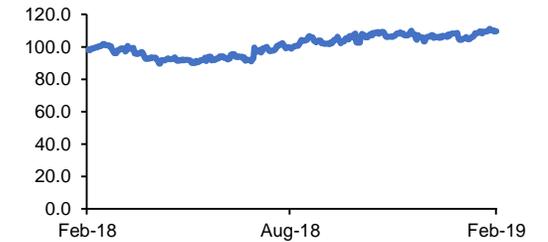
General Mills (GIS)



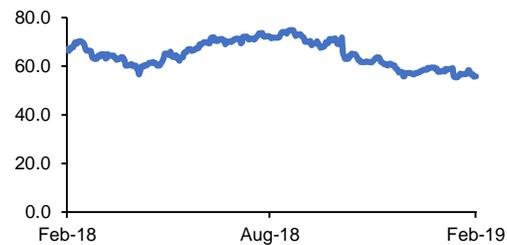
The Hain Celestial Group (HAIN)



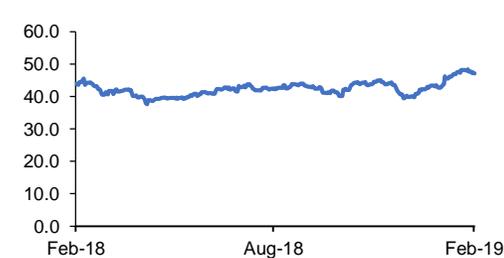
Hershey (HSY)



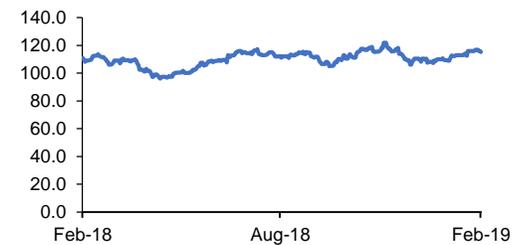
Kellogg's (K)



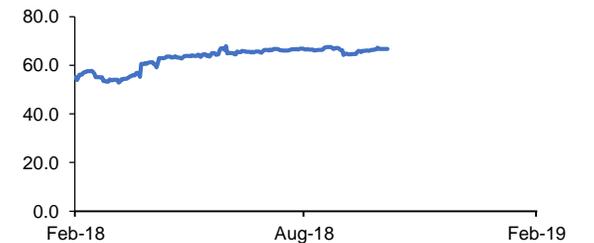
Mondelez International (MDLZ)



Pepsico (PEP)



Pinnacle Foods (NYSE:PF)



Source: Pitchbook Data as of March 3, 2017



# SELECTED M&A TRANSACTIONS – FOOD & BEVERAGE AND PERSONAL CARE

Date	Target	Target Description	Buyer	Transaction Value (\$MM)	Revenue Multiple	EBITDA Multiple
20-Feb-2019	Manitoba Harvest Hemp Foods	Producer and retailer of hemp-based food and oil.	Tilray	321.42	N/A	N/A
20-Feb-2019	Cytosport	Manufacturer of sports-oriented nutritional and dietary supplements.	Pepsico	465.00	N/A	N/A
28-Jan-2019	Bojangles' International	Bojangles Inc is a restaurant operator and franchisor.	Durational Capital Partners, GIC Private, The Jordan Company	815.00	1.43x	19.02x
18-Jan-2019	Bite Squad	Provider of an online restaurant food delivery platform.	Waitr	321.30	N/A	N/A
14-Jan-2019	Craft Canning + Bottling	Operator of canning and bottling plant.	Eastside Distilling	5.20	0.87x	4.33x
11-Jan-2019	Flotek (Florida Chemical business)	Manufacturer of flavor and fragrance based products.	Archer Daniels Midland	175.00	N/A	N/A
31-Dec-2018	Hans Kissle Company	Manufacturer of private label and branded foods.	KENKO Mayonnaise Company, Mitsui & Co.	108.00	N/A	N/A
20-Dec-2018	Food Labs	Provider of hemp and cannabis-based consumer products.	Isodiol International	12.00	N/A	N/A
10-Dec-2018	Pura Vida Tequila Company	Owner and operator of a liquor company.	Frontier Beverage Company	32.50	32.50x	N/A
05-Dec-2018	SodaStream International	Manufacturer of home beverage carbonation systems.	Pepsico	3,200.00	4.94x	23.72x
03-Dec-2018	Yucatan Foods	Producer and distributor of packaged avocado based food products.	Landec	80.00	1.39x	11.43x
03-Dec-2018	Morinda Holdings	Manufacturer of healthy lifestyles and beverages.	New Age Beverages	85.00	0.35x	4.25x
30-Nov-2018	F&A Dairy Products	Producer of cheese in a variety of formats and sizes.	Saputo	85.00	N/A	N/A
30-Nov-2018	Keystone Foods	Manufacturer and custom distributor of food products.	Tyson Foods	2,160.00	0.18x	3.08x
29-Nov-2018	Primal Kitchen	Provider of food products intended to keep people healthy.	Kraft Heinz	200.00	4.00x	N/A
20-Nov-2018	Hojeij Branded Foods	Operator of a chain of restaurants at the airport.	Lagardère Travel Retail	330.00	1.14x	N/A
19-Nov-2018	SlimFast	Provider of nutritional products intended for weight loss.	Glanbia	350.00	N/A	N/A
19-Nov-2018	Blommer Chocolate Company	Producer and supplier of cocoa and chocolate.	Fuji Oil Co.	750.00	0.83x	N/A

Source: Pitchbook Data as of September 7, 2018; Silverwood Estimates



# SELECTED M&A TRANSACTIONS – FOOD & BEVERAGE AND PERSONAL CARE

Date	Target	Target Description	Buyer	Transaction Value (\$MM)	Revenue Multiple	EBITDA Multiple
16-Nov-2018	Omni Baking Company	Manufacturer of baked products.	T. Marzetti Company	25.00	N/A	N/A
15-Nov-2018	Schwan's Company	Producer of frozen food products.	CJ CheilJedang	1,840.00	0.61x	N/A
07-Nov-2018	Canyon Bakehouse	Producer of great-tasting gluten-free bread.	Flowers Foods	205.00	N/A	N/A
06-Nov-2018	Kraft Heinz Canada (Natural Cheese Business)	Producer of natural cheese products in Canada.	Parmalat	1,242.73	N/A	N/A
02-Nov-2018	Senomyx	Developer of taste receptor technologies.	Firmenich	73.50	2.23x	N/A
01-Nov-2018	FIKA	Operator of a coffee and restaurant chain.	Apfel Holdings	11.40	N/A	N/A
26-Oct-2018	Pinnacle Foods	Producer and distributor of packaged consumer food products.	Conagra Brands	10,900.00	4.32x	22.46x
25-Oct-2018	Fleischmann's Vinegar Company	Manufacturer and distributor of industrial vinegars in North America.	Kerry Group	350.00	N/A	N/A
25-Oct-2018	Tapingo	Developer of a college campus food delivery platform.	GrubHub	150.00	N/A	N/A
22-Oct-2018	Bantam Bagels	Producer and retailer of stuffed bagel balls and pancakes.	T. Marzetti Company	34.00	1.70x	N/A
17-Oct-2018	Robert's American Gourmet Foods	Manufacturer and seller of instant snack foods.	Hershey	420.00	N/A	N/A
15-Oct-2018	Rivertown Brewing Company	Producer of craft beer.	Helltown Brewing	2.10	N/A	N/A
10-Oct-2018	Cisco Brewers	Operator of a small brewery in Massachusetts.	Craft Brewers Alliance	23.00	N/A	N/A
02-Oct-2018	Specialty Foods Group	Producer of meat products.	Indiana Packers	30.50	N/A	N/A
01-Oct-2018	Mars Drinks	Provider of workplace beverage solutions.	Luigi Lavazza	650.00	N/A	N/A
27-Sep-2018	Core Nutrition	Provider of bottled water and organic fruit infused beverages.	JAB Holding Company, Keurig Dr Pepper	525.00	N/A	N/A
21-Sep-2018	CIRQ Winery	Operator of a winery.	ND	200.00	N/A	N/A
17-Sep-2018	Insomnia Cookies	Operator of a chain of bakeries in the United States.	BDT Capital Partners, JAB Holding Company, Krispy Kreme	500.00	N/A	N/A
13-Sep-2018	Jamba Juice	Retailer of specialty beverage and food items in the United States.	Focus Brands, Roark Capital Group	200.00	2.44x	123.72x

<b>Median</b>	<b>1.43x</b>	<b>15.23x</b>
<b>Mean</b>	<b>3.93x</b>	<b>26.50x</b>

Source: Pitchbook Data as of September 7, 2018; Silverwood Estimates



# SELECTED INVESTMENTS – FOOD & BEVERAGE AND PERSONAL CARE

Date	Target	Target Description	Investors	Transaction Value (\$MM)
21-Feb-2019	DoorDash	Developer of a food delivery application.	Coatue Management, Dragoneer Investment Group, DST Global, GIC Private, Sequoia Capital, SoftBank Group, Temasek Holdings, Y Combinator	400.00
14-Feb-2019	Ripple (Beverages)	Producer of plant-based milk products intended to offer dairy-free milk.	ND	11.92
13-Feb-2019	GrubMarket	Provider of an online food marketplace.	ND	8.10
05-Feb-2019	Little Spoon	Operator of a direct-to-consumer baby food brand.	Interplay Ventures, Justin Mateen, Kairos, Kyle O'Brien, Sean Rad, SoGal Ventures, The San Francisco 49ers, Vaultier7	7.00
04-Feb-2019	Perfect Day	Provider of animal-free dairy proteins.	ADM Capital, Horizons Ventures, Temasek Holdings	34.75
04-Feb-2019	Siete Family Foods	Manufacturer of grain free Mexican-American food.	Stripes Group	90.00
31-Jan-2019	Disruptive Enterprises	Provider of food and beverages with high-fat alternatives and ketone therapies.	One Better Ventures	7.75
29-Jan-2019	Guayaki	Producer of organic beverages.	ND	31.68
24-Jan-2019	FoodMaven	Provider of an online grocery marketplace.	Tao Capital Partners, Walton Family Fund	10.00
24-Jan-2019	Caliva	Operator of a vertically integrated cannabis retailer.	Carol Bartz, Liquid 2 Ventures	75.00
23-Jan-2019	Your Superfoods	Provider of an online organic food powder marketplace.	Döhler Ventures, Oyster Bay, Powerplant Ventures	5.00
22-Jan-2019	Bevi	Developer of a collapsible and reusable water delivery kiosks.	Bessemer Venture Partners, Horizons Ventures, Trinity Ventures	35.50
21-Dec-2018	Caulipower	Provider of cauliflower based food products.	ND	8.19
14-Dec-2018	Hippeas	Producer of chickpea snack foods.	ND	12.00
13-Dec-2018	Instacart	Provider of an on-demand goods delivery application.	Coatue Management, D1 Capital Partners, Hironori Maeda, Tiger Global Management, Valiant Capital Partners	871.00
13-Dec-2018	Sustainable Produce Urban Delivery	Provider of online grocery shopping platform.	CIC Capital, Walter Capital Partners	11.00

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# SELECTED INVESTMENTS – FOOD & BEVERAGE AND PERSONAL CARE

Date	Target	Target Description	Investors	Transaction Value (\$MM)
12-Dec-2018	Back to the Roots	Operator of an e-commerce platform that sells gardening and organic food products.	Blue Scorpion Investments, Echo Capital Group, Revolution	6.08
11-Dec-2018	Four Sigmatic	Provider of an online platform that provides mushroom based drinks.	ND	5.38
10-Dec-2018	Drizly	Developer of an online liquor retail platform.	Baird Capital, Polaris Partners, Tiger Global Management	34.56
05-Dec-2018	Bowery Farming	Operator of a modern farming company.	Almanac Insights, ATEL Capital Group, Dara Khosrowshahi, First Round Capital, General Catalyst, GGV Capital, GV, Temasek Holdings	90.00
05-Dec-2018	Kitu Life	Producer of coffee products intended to offer organic health drinks.	ND	13.50
03-Dec-2018	Yerbae	Provider of a line of enhanced sparkling waters.	Canal Partners, Zenfinity Capital	5.00
01-Dec-2018	Kuli Kuli	Operator of a platform for selling food products.	Astia Angels, Next Wave Impact	5.00
29-Nov-2018	Aloe Gloe	Provider of organic aloe vera water.	ND	6.78
21-Nov-2018	Van Leeuwen Ice Cream	Provider of housemade ice creams provided via scoop trucks.	Blue Scorpion Investments, M3 Ventures, Strand Equity	5.75
20-Nov-2018	Teton Waters Ranch	Manufacturer and supplier of grass fed food products.	ND	5.99
19-Nov-2018	Wine.com	Operator of an online wine shop.	Baker Capital, Goldman Sachs Asset Management	34.00
14-Nov-2018	Saco Foods	Producer and distributor of packaged food products.	ND	6.00
13-Nov-2018	Sweetgreen	Operator of a farm to table chain of restaurants.	Evolution VC Partners, Fidelity Investments, Inside Capital, Revolution, Sand Hill Angels, T. Rowe Price	200.00
02-Nov-2018	Beyond Meat	Provider of animal-free meat products.	Evolution VC Partners, Sand Hill Angels	50.28
01-Nov-2018	Zume	Provider of robot-powered pizza delivery services.	Grishin Robotics, SoftBank Investment Advisers	375.00
01-Nov-2018	Wellness Shots Company	Producer and retailer of organic beverages in the United States.	Blueberry Ventures, Döhler Ventures, Powerplant Ventures	7.00
30-Oct-2018	Indus Holding (Food Products)	Producer of cannabis and cannabis infused products.	ND	46.00

Source: Pitchbook Data as of September 7, 2018; Silverwood Estimates



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Date	Target	Target Description	Investors	Transaction Value (\$MM)
24-Oct-2018	Imperfect Produce	Provider of an imperfect fruits and vegetables online marketplace .	Thirtyfive Ventures	30.00
23-Oct-2018	Koia	Manufacturer of plant-based protein beverages.	AccelFoods, Catalus Capital Management, KarpReilly	7.50
23-Oct-2018	Harmless Harvest	Provider of refrigerated premium coconut water.	AccelFoods, Danone Manifesto Ventures, Mousse Partners	30.00
19-Oct-2018	Kite Hill	Producer of plant-based dairy alternative products.	301, CAVU Venture Partners	40.00
17-Oct-2018	BeatBox Beverages	Producer and seller of alcoholic beverages.	ND	7.02
15-Oct-2018	Freshly	Developer of food delivery platform.	Monkfish Equity	35.00
09-Oct-2018	Goldbely	Operator of a specialty food online marketplace.	500 Startups, 645 Ventures, Union Square Hospitality Group	20.00
09-Oct-2018	Once Upon a Farm	Producer of cold-pressed organic baby foods.	Beechwood Capital, CAVU Venture Partners, S2G Ventures	20.00
08-Oct-2018	Kettlebell Kitchen	Provider of personalized, fitness-focused meal plan delivery service.	North Castle Partners, The Spring Bay Companies	26.70
04-Oct-2018	Huel (UK)	Provider of nutritionally complete powders.	Highland Europe	26.08
01-Oct-2018	Cheetah	Provider of an online restaurant depot platform.	BoxGroup, Hanaco Venture Capital	25.00
28-Sep-2018	Goodbites	Provider of raw organic gluten-free superfood snacks.	Bray Capital, M3 Ventures	5.00
26-Sep-2018	Revolution Foods	Provider of school meals and ready-to-eat meal kits.	Revolution	18.85
25-Sep-2018	Country Archer Jerky	Producer and internet retailer of gourmet jerky, meat sticks and meat bars.	Monogram Capital Partners	10.00
20-Sep-2018	Yumble Kids	Provider of a weekly meal delivery service for kids.	Apple Core Holdings, Danone Manifesto Ventures, LaunchCapital, Martin Lautman, RiverPark Ventures, Sonoma Brands	7.00
12-Sep-2018	Fresh Nation	Provider of an online supply portal connecting grocery stores and local produce.	Connecticut Innovations, Greycroft, RiverPark Ventures	7.01
07-Sep-2018	Drinks Holdings	Developer of a wine delivery platform.	Guillaume Cuvelier, Kayne Anderson Capital Advisors, NewRoad Capital Partners, Shea Ventures, Stable Road Capital	15.00

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