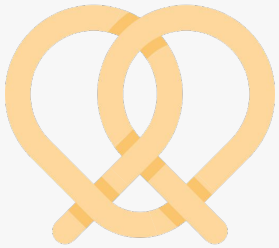
PRESCOUTER

Research Support Service
June 2020

How COVID-19 Is Driving Innovation In The Food & Beverage Industry



Prepared by:
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Intelligence Brief Question

How is the food & beverage industry adapting to the global COVID-19 pandemic and what are some of the best practices, lessons learned, innovations or realizations?

To date, there have been over 9 million confirmed cases and over 480,000 deaths due to coronavirus disease, COVID-19, worldwide. The contagious disease has caused disruptions to lives worldwide. Due to human population being immunologically naive to the disease, many governments have instituted physical-distancing policies that have impacted many businesses world-wide.

In this report, we highlight technology and strategies that different segments of the food and beverage industry can employ to ameliorate some of the effects of the ongoing global COVID-19 pandemic.

Executive Summary

PreScouter investigated a sampling of issues faced by the food and beverage (F&B) industry amidst the COVID-19 global pandemic as well as discussed solutions that companies have proposed to alleviate disruptions within the F&B supply chain.

Supply chain challenges:

Before the COVID-19 pandemic, a major question for F&B companies was how to effectively and accurately manage the supply chain. F&B companies are keen to learn how to quickly turn around inventory at competitive prices while maintaining both stock and supplier relations. With the ongoing pandemic, small, medium and big companies (Kroger, Danon, PepsiCo, Kraft, General Mills, Coca-Cola, etc.) have experienced an unprecedented disruption in the supply chain, specifically from sources supplying raw materials.

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Using AI to predict food supply and demand amid the Covid-19 pandemic

Executive Summary

Decreases in sales for wholesale food service providers:

The temporary closure of the foodservice industry (e.g., restaurants, schools, and cafeterias) due to COVID-19 have left dairy processors without immediate strategies to cope in front of a rapidly changing situation. However, there are few instances in which some companies have responded by switching from wholesale foodservice markets to retail grocery stores. With the dairy industry one of the industries hit the hardest, Tillamook County Creamery's strategy has been to offset decreases in foodservice sales by rerouting their products to grocers.

Tillamook

Repurposing products to supply grocery retailers instead

Panera Bread

SUBWAY

Currently sell grocery staples to customers. Products sold include fresh produce, bread, soups, salads and sandwiches, etc. with sales placed online. This strategy has been adopted by more than 200 Subway restaurants in California, Connecticut, Oregon, Tennessee, and Washington, and participant Panera Bread Stores nationwide.

Executive Summary

Non-essential business categories and forced closures:

Many businesses categorized as non-essential were forced to halt operations and temporarily close, due to COVID-19. To stay afloat, such companies resorted to identifying alternative sources of revenue that they may not have previously considered. One example we cover is Shine Distillery & Grill - one of the many liquor companies that shifted production from alcoholic beverages to sanitization products.

Shifting production from distilled spirits to hand sanitizers and gel

Continuing from an operational perspective moving forward:

Moving forward, we profile new temporary FDA regulations for the F&B industry as well as highlight best practices that have been adopted for the industry during this pandemic to help prevent a facility closure due to an outbreak.

Executive Summary

How the foodservice landscape will change in the future:

The National Restaurant Association's 2019 report titled "Restaurant Industry 2030" predicts that there will be a **significant increase in automation** in the food service industry by 2030.

We predict that COVID-19 will quicken the increase of automation that encourages physical distancing throughout the F&B supply chain **far ahead of 2030**.

More restaurants may opt to use robot waiters/servers as well as automated ordering kiosks and automated reservation management software. In addition to an increase in single-use and disposable serving consumer-facing materials to decrease potential fomites, food manufacturing plants and grocery stores may opt to use **automation in their day-to-day operations**.

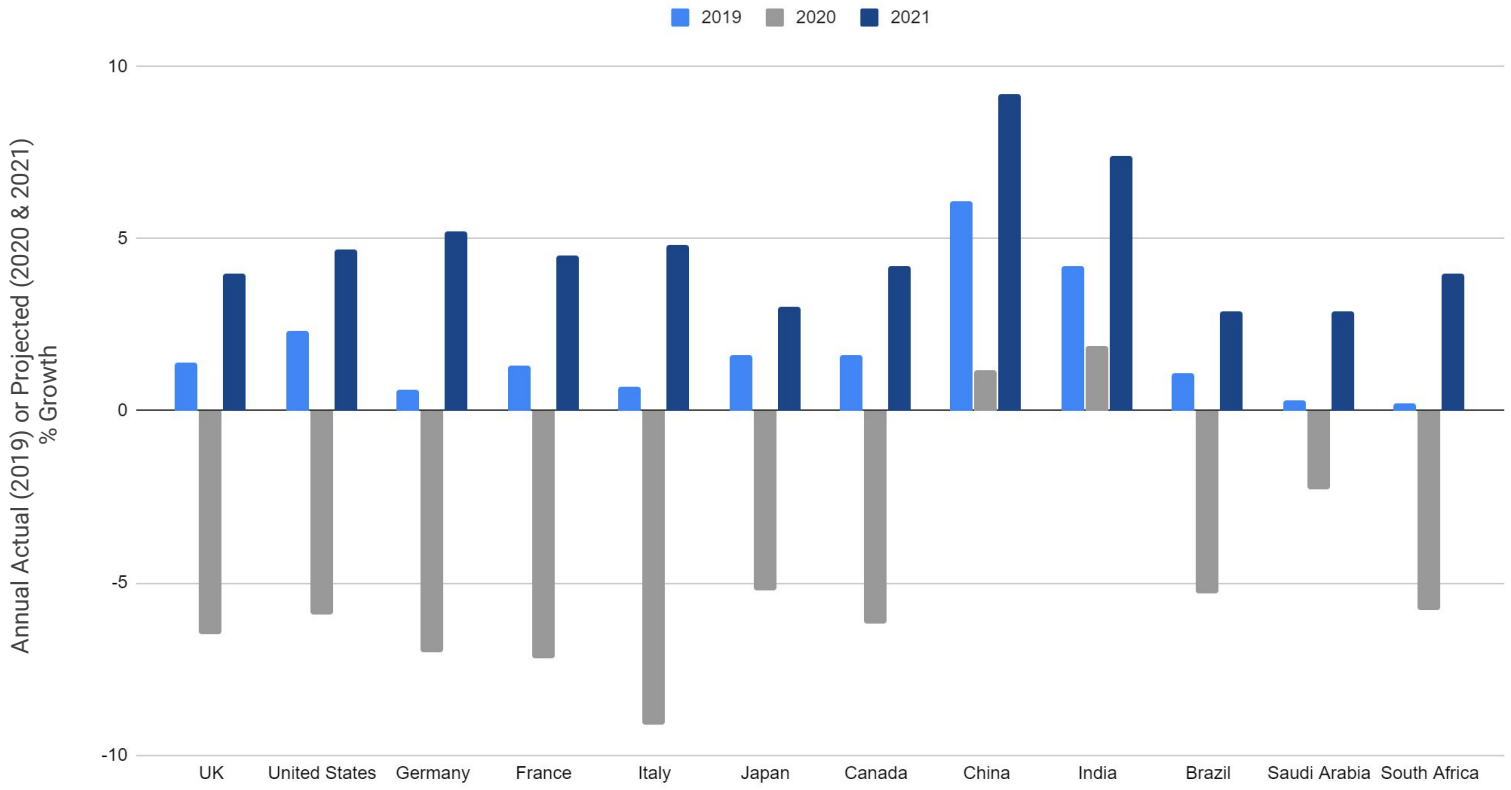
Grocers and food service groups were forced to retreat from self-service and prepared food operations, and need to examine strategies to return the facilities to profitable use. Retailers face an array of logistical challenges that will demand **creativity and innovation to maximize efficiency** in the new reality.

Across the F&B supply chain, **inventory management software** will need to be deployed by more companies in order to prevent food shortages that were experienced at the beginning of the pandemic. Many companies already use inventory management software. However, all should consider updating their software to take the entire F&B supply chain into account. Additionally, the ripple of supply chain hindrances will cause many groups to **consider alternate formulations and ingredients** to broaden the sources of options available.

Market Overview

Market Overview

The International Monetary Fund's (IMF) recent World Outlook Report indicates that most countries, both advanced economies or emerging and developing economies, are expected to suffer a reduction in their gross domestic product (GDP) in 2020 as a result of the COVID-19 pandemic and most likely go into a recession within the next year.



Source: IMF

Market Overview

Unfortunately, the F&B industry will not be spared from the projected global economic downturn. One market report indicates that COVID-19 associated disruptions will have varying impact on different sectors of the F&B supply chain. As a result, companies must actively strategize to adjust their operating procedures, supply chains, and product offerings to stay afloat in these market conditions. A summary of the impact of COVID-19 can be found in the table below.

IMPACT ON DIFFERENT SEGMENTS OF THE F&B INDUSTRY ON THE VALUE CHAIN

FOOD SERVICE BUSINESSES
- Due to the widespread lockdown orders and physical distancing measures in place, food service businesses such as restaurants, school cafeterias, etc. have had to either completely shut down and/or experience low patronage.

FOOD GROCERS
- Fear caused food retail customers to stockpile food and beverage products at grocery stores.
- Grocers have found it difficult to keep up with the high demand that panic customer buying has caused and are continually faced with F&B shortage issues since COVID has affected many food production facilities worldwide.

MANUFACTURING
- Meat & poultry product manufacturers are experiencing a sharp decline in product sales due to COVID-generated disruptions. This has caused delays in procuring raw materials for processed food products.
- Manufacturers of processed food products have seen a rise in sales due to an increase in consumer demand. However, they may face a food shortage problem in the future.

DISTRIBUTION, TRADE & LOGISTICS
- Lockdown orders and closures of some manufacturing plants has affected food trade and logistics
- Tightening of transportation and port capacities have led to an increase in shipping and freight costs
- The demand for e-commerce options will continue to be high as long as restrictions on mobility continues to be limited either due to government policies or personal choice.

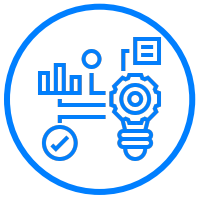
CONSUMERS
- Due to government initiated restrictions, consumers have been forced to primarily eat at home.
- Lockdown orders led consumers to panic buy raw materials as well as processed food and cleaning items.
- The current focus on health may lead to a significant increase in demand for health food.

AGRICULTURE
- The agricultural sector has suffered a decrease in available workers to harvest crops. This leads to a possible shortage of raw materials for those further down the F&B supply chain.

Market Overview

Another current market report provides predictions on the immediate to long term effects of COVID on major F&B companies. Companies such as Danone, Ingredion, and Kerry are expected to be impacted favorably in the next 1-2 years while companies such as Tyson and Smithfield are expected to be impacted negatively as a result of COVID-19.

	IMMEDIATE IMPACT (0-6 MONTHS)	INTERMEDIATE IMPACT (6 MONTHS TO 1 YEAR)	LONG-TERM IMPACT (1-2 OR MORE YEARS)
POSITIVE IMPACT	• AmeriColor • Preferred Freezer Services • Lineage Logistics • Cloverleaf Cold Storage • AGRO Merchants Group • Nichirei • Frialsa	• Burris Logistics • Neogen • Evonik • General Mills • Solvay • Stepan S • Kraft Heinz • Swire Cold Storage • Conagra • Nestle	• Ingredion • Beyond Meat • SGS • Eurofins • Danone • Blue Diamond Almonds • Kerry • Hain Celestial • Bureau Veritas • SunOpta • GEA • Corbion • Bühler Group
NEGATIVE IMPACT			• Tyson • JBS • SmithField • Marel • JBT • Vion • Bettcher Industries



Innovative Technology

Noodle.ai - Athena Insights

noodle.ai

Founded: 2016

Headquarters: San Francisco Bay Area, USA

Website: http://noodle.ai/

Contact: hello@noodle.ai

Noodle.ai is an American company of 200 employees and an annual revenue of USD 44 million. Noodle.ai provides business solutions in enterprise artificial intelligence and artificial intelligence technologies (e.g. machine learning, predictive data analytics, data science). Noodle.ai's Athena Insights software is being used by companies such as Danone S.A to navigate the disruption in the food supply chain since the beginning of the COVID-19 pandemic.

At a glance			
Challenge:	*Disruption of food supply channels, especially the supply of raw materials*	**Key Technology/ Strategy:**	*Use AI to predict food supply and demand amid the Covid-19 Pandemic*
Affected F & B Segments:	*Supply chain, manufacturing, retailers.*	**Stage of Technology Development:**	*Technology deployed in 2019*
Companies using this tech or strategy:	*Danone S.A.*	**Is there a post COVID-19 use for this?:**	*An outgoing issue, likely to be adopted broadly since more data is needed to help AI to make stronger predictions.*

Athena Insights

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Athena Insights is built upon its **'Enterprise AI Platform'** that connects enterprise data stores to Noodle.ai applications.

How it works:

The enterprise platform captures data and process information from any type of system that relies on IoT, including sensors, devices, SCADA systems and enterprise software. The data is then combined with external data streams before presenting optimized recommendations into existing workflows.

The platform provides Athena Insights with a **Deep Probabilistic Decision Machine (DPDM)** framework. DPDM is a patent-pending technology that combines deep learning, Bayesian statistics and a continuous learning to identify relationships in large datasets, assess outcomes probabilistically, and generate and refine recommendations.

Athena Insights are organized into two products:

1. **The Manufacturing AI Suite**, which includes Asset AI (predictive maintenance), Quality AI (quality control) and Production AI (scheduling and product mix)
2. **The Supply Chain AI Suite**, which includes Inventory AI (fill rate), Demand AI (demand forecasting) and Logistics AI (continuous moves).

Athena Insights

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Key features and application details for **the Supply Chain AI**, which offers key market signals, enabling companies to make better pricing, trading, and planning decisions, and avoid missed sales with improved fill rates (Image source: Noodle.ai).

Key Features

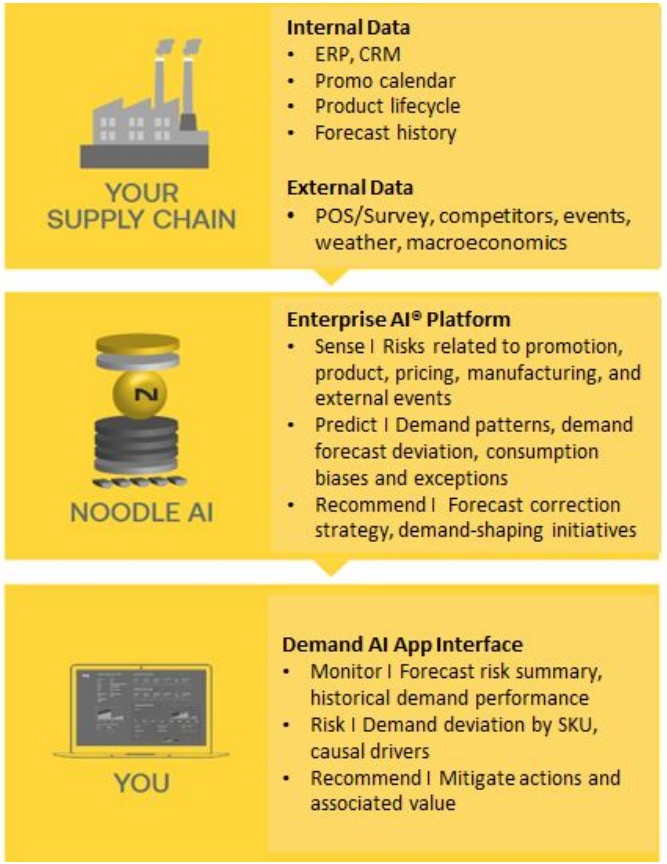
Real-time Recommendations
Ability to rapidly update forecasts and take actions via Sense-Predict-Recommended model

Causal Investigation and Confidence Measurement
Event attribution, illustration of key drivers, and transparency into model confidence

Early Detection
Detect risks and opportunities around unexpected demand deviation

Predictions Powered by AI
Predictions based on advanced machine learning and algorithms and deep data science

Simulation and Scenario Testing
Leverage model's knowledge about a market to test various actions and understand consequences



Athena Insights

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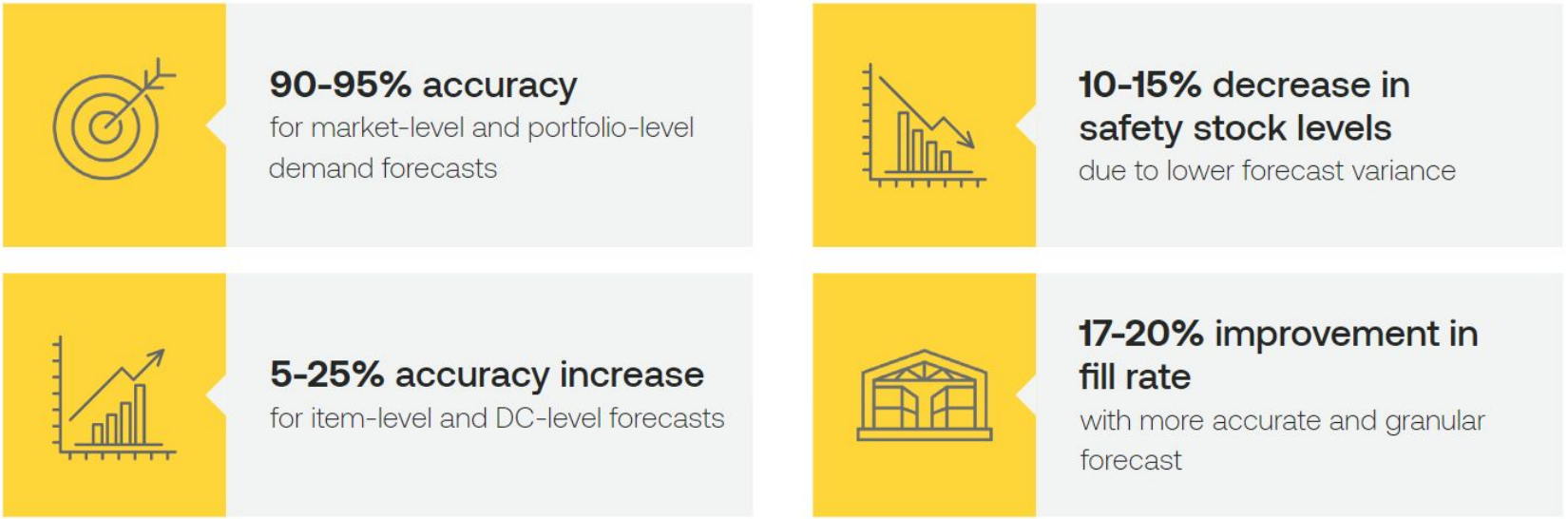
Benefits for **the Demand Signal AI**, which analyzes daily sales data, promotion, marketing, and product data, as well as any other internal signaling mechanisms (Image source: Noodle.ai).



Athena Insights

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PreScouter Insights:

A major lesson learned as a result of the COVID-19 pandemic is that a majority of companies still lack "the technology," and therefore, the ability to track activity and trends in the supply chain. This means being able to track data representing selection, procurement, transfer, quality assurance, warehousing/storage, data management, transformation, monitoring, and distribution that could supply new insights and help businesses to stay ahead of the curve.

Noodle.ai's AI-based platform, Athena Insights, emerges as an example of how technology is becoming essential to generate, curate, and ingest data in order to provide real-time improved models that can be used to help make optimized decisions.

Overall, it is quite likely that this and other technologies are here to stay and help F&B companies remain afloat even during catastrophic events similar to the this current pandemic.

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6. https://www.foodonline.com/doc/how-artificial-intelligence-can-help-f-b-supply-chain-management-0001

Repurposing Products

Tillamook County Creamery Association - Rerouting Products to Grocers

Founded: 1909 **Headquarters:** Tillamook County, Oregon

Website: https://www.tillamook.com/ **Contact:** 1-503-842-4481

Dairy businesses that were structured to serve wholesale foodservice markets (e.g., restaurants, schools, cafeterias, etc) are being hit hardest by the COVID-19 pandemic. In response, organizations such as Tillamook County Creamery Association, who provide wholesale cheese, ice cream, yogurt, sour cream, and butter to foodservice businesses across the U.S have started “repurposing” and selling products meant for foodservice operations to grocery retailers who are experiencing sharp increases in demand for grocery products.

At a glance			
Challenge:	*Closure of wholesale foodservice markets impacted dairy businesses*	**Key Technology/ Strategy:**	*Repurpose products to supply grocery retailers instead*
Affected F & B Segments:	*Supply chain and manufacturing.*	**Stage of Technology Development:**	*Already being fully implemented by some affected companies*
Companies using this tech or strategy:	*Tillamook County Creamery Association, Panera Bread, Subway*	**Is there a post COVID-19 use for this?:**	*No, however, unclear whether it created an additional production line.*

Rerouting Products to Grocers

Tillamook, a century-old dairy cooperative, has started gained distribution of their dairy products across thousands of grocery stores throughout the U.S. by repurposing products meant for foodservice into products for grocery retail. In particular, Tillamook's cheese and ice cream have started covering the current existing demand toward larger pack sizes which offer more storable formats (e.g., block of cheese rather than shredded and sliced cheese formats). Following this switch in format, Tillamook has experienced a 50% increase in sales during March and April.

The picture on the left below shows cheese production at Tillamook cheese factory. The cheese will later be cut to meet the demand for the wholesale industry or into consumer size blocks for retailers. The picture on the right shows Tillamook's new product packaging for retailers. **Picture sources:** Cheese factory (Left); Tillamook products (Right).

Rerouting Products to Grocers

PreScouter Insights:

In the case of Tillamook, the success in adopting the “repurposing product strategy” was facilitated because, since 2018, the company went through a dramatic change in which besides providing wholesale food service markets they have aggressively pursued an entrance in the grocery channel. This somehow contributed to the company success to momentarily concentrate their production efforts on the most productive business channel at this moment: the retail market.

Tillamook is perhaps one of the few dairy cooperatives and companies that has not disrupted their manufacturing operations or supply chain as a result of the ongoing pandemic. The company announced that they still have more than 95 million pounds of cheese aging in their warehouses, and are constantly communicating with their suppliers and retail partners. In this way, Tillamook has successfully kept up with demands and are filling customer orders at more than a rate of 98%.

In sum, in contrast to the cases of Panera Bread and Subway, it is likely that the repurposing product strategy used by Tillamook will remain for a foreseeable future as an alternative business channel.

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Shifting Production

Shine Distillery & Grill - Liquor Companies Now Producing Hand Sanitizers

Founded: 2018

Headquarters: Portland, Oregon

Website: https://shinedistillerygrill.com/#

Contact: info@shinedistillerygrill.com

Shine Distillery & Grill is an example of hundreds of small businesses struggling to keep themselves afloat amid the COVID-19 pandemic. Besides food service, the company's other major source of revenue is obtained by making in-house distilled spirits such as vodka, gin, bourbon, and tequila.

After being categorized as a non-essential service, Shine Distillery & Grill was obliged to close their facilities. The company immediately reinvented themselves in order to avoid financial catastrophe. Since the demand for hand sanitizers and gels increased as a result of the pandemic, Shine Distillery remained open and started producing and supplying sanitizing products.

At a glance			
Challenge:	*All businesses classified as Non-essential establishments were ordered to close their doors temporarily*	**Key Technology/ Strategy:**	*Produce hand sanitizers and gel rather than distilled spirits.*
Affected F & B Segments:	*Food service and Beverage*	**Stage of Technology Development:**	*Already fully implemented by affected companies*
Companies using this tech or strategy:	*Shine Distillery & Grill and others across the world.*	**Is there a post COVID-19 use for this?:**	*Unlikely*

Liquor Companies Now Producing Hand Sanitizers

Small, local distilleries took the opportunity of the pandemic to find a temporary niche market for sanitization products that are in high demand. Instead of continuing to produce spirits, they have started producing hand sanitizers and gels.

Since early March, Shine Distillery has sold more than 4,000 bottles of its hand sanitizers that range in size from 6 oz to 16 oz. As a result of this temporary switch and support of the local community, the business generates as much as USD 6,000 a day, a figure amount that is fairly close to their pre-COVID-19 sales. Several other distilleries in North America and Europe have experienced an overwhelming request for hand sanitizers and are actively working to meet the demands of their local communities.

Bottling (left) and labeling (right) of hand sanitizers made by Shine Distillery & Grill in Portland, Oregon. Source: CNBC.

Liquor Companies Now Producing Hand Sanitizers

PreScouter Insights:

The "reinventing-themselves" approach utilized by small- and medium-sized distillery businesses has been based in the ability of their owners to create a new revenue stream with little to no new capital investment. Instead, the companies have developed an immediate business plan based on their existing inventory, distribution and supply channels. After the demand for hand sanitizers increased, most distilleries started making, selling and donating hand sanitizers.

These new streams of income are unlikely to be continued post COVID-19 since this strategy was put in place temporarily due to the widespread COVID-19 lockdowns. Once lockdowns are completely lifted, these businesses may resume their original business operations.

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Government Regulations & Prescribed Best Practices

COVID-19-Based Safety Inspection Practices

During the current pandemic, the U.S. **Food and Drug Administration (FDA)** is working closely with the food industry and with the U.S. Department of Agriculture (USDA) to address imbalances in the food supply chain by issuing temporary guidance that provides flexibility to various segments of the food industry (i.e., food manufacturers, restaurants, producers and retailers).

With these temporary guidelines in place, the FDA seeks to guarantee that the food supply chain meets consumer demands during the current pandemic. These changes are intended to remain in effect only for the duration of the public health emergency related to COVID-19 declared by the United States' Department of Health and Human Services. The FDA will most likely revert back to the old policies once all business and commercial activities resume nationwide unless there is strong lobbying against it.

At a glance			
Challenge:	*Disruption of food supply channels*	**Key Technology/ Strategy:**	*Flexibility in safety inspection practices*
Affected F & B Segments:	*Entire F&B supply chain including manufacturers, retailers, food transporters, etc.*	**Stage of Technology Development:**	*Fully implemented by the food industry*
Companies using this tech or strategy:	*All companies in F&B industry*	**Is there a post COVID-19 use for this?:**	*Unlikely*

COVID-19-Based Safety Inspection Practices

Panic buying due to COVID-19 increased the demand for food products across the country. Because food products from manufacturers and food service establishments are being diverted to grocers, the FDA issued temporary guidance that provides flexibility to various segments of the food industry.

The table below lists the relevant temporary regulations issued by the FDA amid COVID-19.

Regulation	Industry segment	Regulation Description
Nutrition Labeling	Restaurants and food manufacturers	Temporary flexibility regarding the enforcement of nutrition labeling rules for packaged food
Menu Labeling	Chain restaurants and similar retail food establishments	FDA issued new guidance providing flexibility to covered establishments that may not be able to meet menu labeling requirements for the duration of COVID-19
Shell eggs	Shell egg producers	Flexibility to reroute shell eggs intended for processing facilities to supermarkets and other food retailers
Imported Food	Remote Inspection	FDA will rely on the automated import screening tool and Predictive Risk-based Evaluation for Dynamic Import Compliance Targeting to identify higher risk products for inspection.

Best Practices for Food Industry Operations

With a record demand for food, it is critically important that manufacturers maintain operations with the highest standards and mitigate the impact of COVID-19 on workers at different food manufacturing facilities across the country. The governments of the U.S and Canada have put in place a set of best practices so the food industry can **protect their employees' health** as well as **maintain facility safety** in order to ensure undisrupted operations.

For a detailed overview on how to operate manufacturing facilities safely during the pandemic, refer to our recent white paper **here**.

At a glance			
Challenge:	*Disruption of food supply channels*	**Key Technology/ Strategy:**	*Put best practices in places in order to ensure undisrupted operations*
Affected F & B Segments:	*Supply chain, manufacturing, grocery stores, restaurants, and food pick-up/delivery services*	**Stage of Technology Development:**	*Already fully implemented*
Companies using this tech or strategy:	*All companies producing, distributing, and selling food products*	**Is there a post COVID-19 use for this?:**	*Likely to stay in place*

Best Practices for Food Industry Operations

The Food and Consumer Products of Canada and the U.S FDA are sharing their newly-developed best practices throughout the agriculture, food, and consumer goods manufacturing industries, including retail food stores, restaurants, and associated pick-up and delivery services.

The guidelines are resources directed to any type of business and to inform the public in general that the Food Industry is practicing the most rigorous hygiene and sanitation standards and implement new protocols for preventing the spread of COVID-19.

Facility Considerations

- ✔ Develop protocols and set-up quarantine rooms to use in the event som employees feel ill.
- ✔ Install hand sanitizer dispensers in high foot-traffic areas such as entrances, exits, and transition areas.
- ✔ Assess inventory of cleaning supplies and disinfectants.
- ✔ Consider more frequent cleaning schedules for commonly-touched surfaces and higher-risk equipment.
- ✔ Identify high-risk locations/surfaces in the facility and develop sanitation standard operating procedures to ensure these locations are routinely and adequately cleaned and sanitized.
- ✔ Identify frequently-touched surfaces throughout the facility and ensure these surfaces are routinely and adequately cleaned and sanitized.
- ✔ Where reasonable, leave doors open to avoid frequent touching of door handles

For Employees

- ✔ Ensure employees are aware of/understand and comply with infection prevention policies and practices in place in workplace/facility.
- ✔ Focus on the fundamentals of good personal hygiene
- ✔ Encourage employees wash hands often with soap and water for at least 20 seconds
- ✔ Avoid touching eyes, nose and mouth, cough or sneeze into the bend
- ✔ Avoid high-touch surfaces where possible and keep environment clean by disinfecting frequently touched surfaces
- ✔ Practice physical distancing of 2m/6ft feet between individuals
- ✔ Follow good manufacturing practices and standard operating procedures
- ✔ Grant access only to business-critical visitors and contractors at manufacturing sites and distribution centres and keep records of all visitors.
- ✔ Stagger shifts to avoid overlap, including break periods, lunch hours, etc.
- ✔ Encourage the judicious use of gloves and other PPE. Maintain adequate stock and replenish as necessary (but do not over-order)

Best Practices for Food Industry Operations

Below is the official Infographic depicting best practices to operate retail food stores, restaurants, and associated pick-up and delivery services during the COVID-19 pandemic to safeguard workers and consumers in the U.S.

Best Practices for Food Industry Operations

PreScouter Insights:

The information presented by the FCPC and FDA has been shared with food and consumer goods manufacturers to inform development of their own practices. Both governments do not consider this a legal or professional advice, because businesses are responsible for consulting professional advisors to ensure their practices comply with applicable laws.

These recommendations/best practices are likely to remain in place because there is still uncertainty in how long the food industry will be affected by the pandemic.

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About the Authors

Next Steps

SOME POSSIBILITIES THAT PRESCOUTER CAN OFFER FOR CONTINUATION OF OUR RELATIONSHIP

- ☑ COMPETITIVE INTELLIGENCE
- ☑ TECHNOLOGY & PATENT LANDSCAPING
- ☑ TECHNOLOGY ROADMAPPING
- ☑ MARKET RESEARCH & ANALYSIS
- ☑ TRENDS MAPPING
- ☑ ACQUIRE NON-PUBLIC INFORMATION
- ☑ PATENT COMMERCIALIZATION STRATEGY
- ☑ DATA ANALYSIS & RECOMMENDATIONS
- ☑ REVIEW BEST PRACTICES
- ☑ SUPPLIER OUTREACH & ANALYSIS
- ☑ CONSULT WITH INDUSTRY SUBJECT MATTER EXPERTS
- ☑ INTERVIEWING COMPANIES & EXPERTS

WE CAN ALSO DO THE FOLLOWING

- ✔ **CONFERENCE SUPPORT:** Attend conferences of interest on your behalf.
- ✔ **WRITING ARTICLES:** Write technical or more public facing articles on your behalf.
- ✔ **WORKING WITH A CONTRACT RESEARCH ORGANIZATION:** Engage with a CRO to build a prototype, test equipment or any other related research service.

For any requests, we welcome your additional questions and custom building a solution for you.

About the Authors

Gareth Armanious

PreScouter

Gareth Armanious is one of PreScouter's Project Architects. He specializes in the Food & Beverage and Life Sciences industries. As an academic, he specialized in membrane protein biochemistry, working with an international research group assembled to study structural and functional aspects of these challenging targets in health and disease. Gareth graduated with a BSc in biochemistry, medical specialization, from the University of British Columbia, and is completing his PhD in Biochemistry at the University of Alberta.

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Gloria Wada

PreScouter

Gloria is a microbiologist and science writer with 6+ years of collaborative-interdisciplinary drug discovery research experience designing and modifying assays to determine the antifungal effects of plant extracts on fungal physiology. She has developed and optimized various microbiological assays and analytical chemistry lab protocols for the separation of plant products via HPLC and flash chromatography. She also has previous environmental toxicology and molecular biology research experience.

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Jorge L. Hurtado

PreScouter

Jorge is an evolutionary biologist with a MA and PhD in Conservation and Development, and Statistics, respectively. He has a comprehensive understanding of life sciences and the ability to utilize this knowledge across different scientific areas. Jorge provides support as a scientific writer for Prescouter. His academic and research experience relates to evolutionary biology, behavioral ecology and environmental ecology.

About PreScouter

PRESCOUTER PROVIDES EXPERTISE ON DEMAND, INCLUDING EPIDEMIOLOGISTS AND OTHER COVID-19 EXPERTS

During COVID-19, PreScouter is leveraging its network of experts to help clients respond to this pandemic appropriately. Our epidemiologists, infectious disease scientists, and biostatisticians combine advanced technical training with years of consulting experience to distill virology into strategies that make sense for a variety of businesses.

CLIENTS RELY ON PRESCOUTER FOR:

Reopening Planning: Experts can review and help craft reopening plans, examples of which include:

- Employee testing programs
- Workspace reconfiguration options
- PPE / sanitation / HVAC protocols

Supply Chain Disruption: When traditional resources or raw materials are not available during a pandemic, PreScouter helps clients find alternative solutions - uncovering connections around the world.

Customized Insights: Everything is customized to a particular business challenge. Clients don't pay for prepackaged reports - each project we do is bespoke and tailor made for each of our clients.

500+ CLIENTS WORLDWIDE

4,000+ RESEARCH REPORTS CREATED

150,000+ HOURS OF RESEARCH COMPLETED FOR CLIENTS

Disclaimer

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