

Food Technology: Growth on a Platter

indxx

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Executive Summary

This report analyzes how the steady growth of the US food industry is well poised to offer a broad range of opportunities in the years to come.

Some key points of the report are as follows:

1. The US food industry is expected to expand at a compounded annual growth rate (CAGR) of 2.9% CAGR by 2022ⁱ.
2. The US organic food market is expected to reach \$70.4 billion by 2025 as a result of increased consumer demand for organic foodⁱⁱ.
3. The US market for food processing equipment is expected to achieve a value of \$70.5 billion by 2022, growing at a CAGR of 6.7% between 2017 and 2022ⁱⁱⁱ.
4. The US online food delivery market, worth \$17.5 billion in 2018, is expected to achieve sales of \$32.7 billion in 2024, thereby exhibiting a CAGR of 11% between 2019 to 2024^{iv}.

Introduction

Although many take it for granted, food is an inseparable component of our daily human lives. It is omnipresent and omniscient in the real-world and increasingly online (think of a typical millennials online posts). People around the world seem to want to satisfy their thirst, sorrow, passion, hunger and even financial distress with food. In addition, the food technology space is hot with investors these days for a number of reasons, some of them being:

1. Food is a massive market and everyone eats food multiple times a day. This allows for innovation in various food related industries.
2. Food tech industries generally have high margins, thereby creating room for a fundamentally strong and attractive businesses.

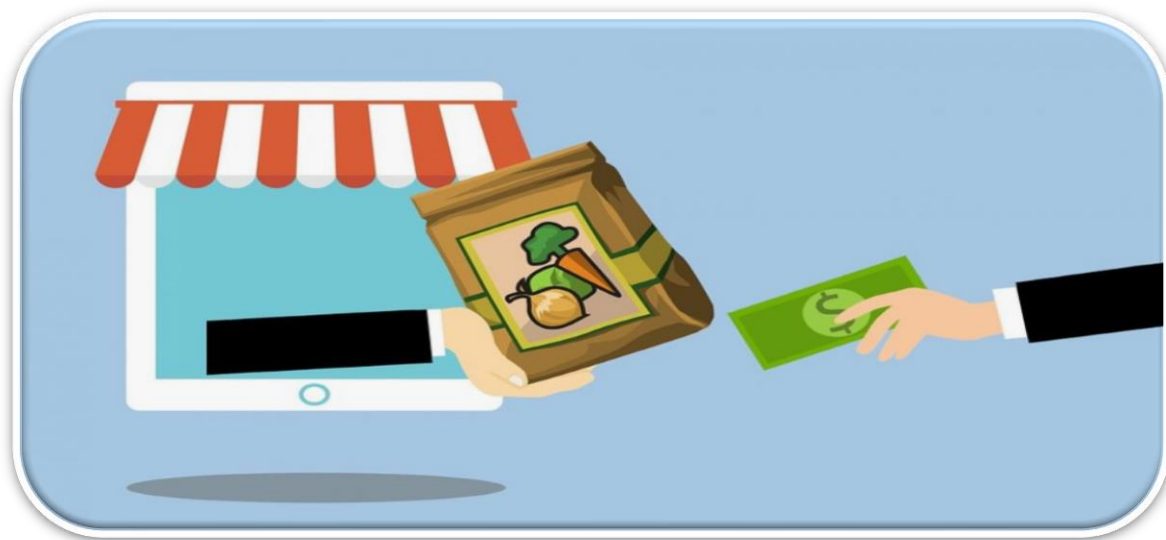
Food technology is generally defined as the application of food science to the selection, preservation, processing, packaging, distribution, and use of safe food.

Technology is increasingly contributing towards food's journey from farm to fork. The food industry is a crucial link in that process. The competitiveness of food industry enterprises is closely linked to their ability to implement new technologies.

Food tech covers all technological applications in the food industry. Innovations in robotics, data technology and processing techniques create new application possibilities in food production. As a result, more and more technology is involved in both primary production and food processing.

Compared to the above core technologies, the application of nanotechnology, 3D printing and cell technology is still at a very nascent stage. As more people around the globe jump onto the online ordering bandwagon, the food delivery market continues to grow and evolve at a steady pace and as more players continue to proliferate this segment, and we are witnessing fresh online food ordering trends.

The advent of new food processing methods is a direct consequence of increasing consumer demand for chemically preservative-free fresh and healthy products. This leads to the growth of more energy-efficient processing methods capable of maintaining the quality of structure, function and product.



Food technology is changing the way millennials eat and perceive food, and technology may have a role in this. Investors are fascinated by the combination of food and technology and, at the same time, see the countless possibilities that this market has to give and the market potential this industry has.

The food delivery business in particular has not just enhanced the way food is delivered but has also created a level playing field for underdogs, for example new entrants operating through virtual kitchens/restaurants. And with an ecosystem that brings vendors together, entrepreneurs are also doing their part for society by introducing the likes of food waste applications (which allow users to either give away or sell surplus food and avoid wasting it).

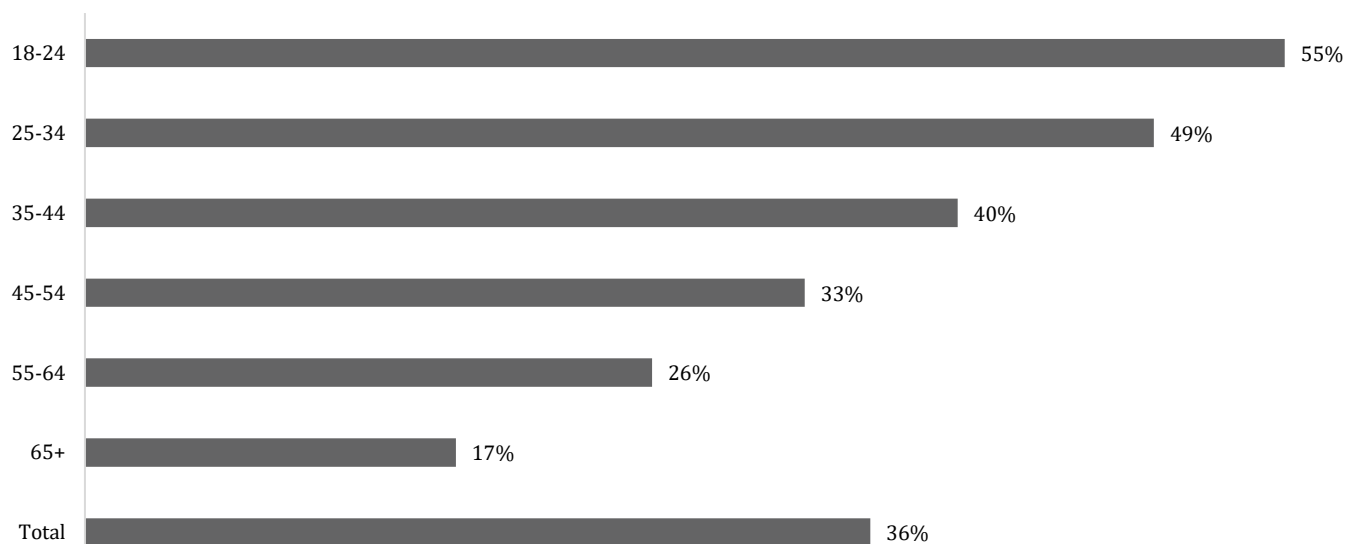
Outlook of the US Food Technology Sector

The food technology sector is at the threshold of significant change. The way we produce food and manage demand has been reworked by cutting-edge food techniques such as bio-innovation, robotics, gene editing, and AI.

Despite the major advances in the worldwide food technology industry, we would like to specifically concentrate on the various food technology components within the US markets.

1. **Organic Food Processing:** As organic food transforms into a profitable industry, a war is being waged among corporations to capture market share. Organic food sales in the United States totaled almost \$50 billion in 2018. Although organic food still accounts for only 5.7% of food sold in the US, its growth has been solid and steady over the years, expanding from \$23 billion in 2009 to \$50 billion in 2018, a CAGR of 8.56%.^v Taking a cue from conventional agriculture's mantra "Get big or get out,"^{vi} the size of the US organic food market is anticipated to reach \$70.4 billion by 2025 due to continuing increased demand for organic food from consumers.
2. **Food Processing Equipment:** The US food processing equipment market is likely to reach a value of \$70.5 billion by 2022, a CAGR of 6.7% from 2017 - 2022. This growth is due to the rising need of updating existing food processing equipment to make them more productive and energy efficient. Moreover, growing demand for convenience foods due to changing lifestyles and increasing consumers concerns related to food safety are expected to propel the growth of the market further.
3. **Online Food Delivery Services:** The US online food delivery market that was worth \$17.5 billion in 2018 is anticipated to reach \$32.7 billion in 2024 (a CAGR of 11%), owing to the numerous advantages offered by online food delivery services, from easy and fast ordering, less hassle, fewer misunderstandings and miscommunication to various cashback offers. In addition, online food delivery offers customers a broad range of food items on their smartphones and the comfort of having the food dropped off at their doorsteps. As a consequence, online food delivery in the United States, especially among the younger population, has become highly common.

US Internet Users Who Have Used a Food Delivery Service to Delivery Restaurant Meal, by Age, Feb 2018 *% of respondents in each group*



Note: over the past 12 months, Source: Market ForceInformation, "US QSR Benchmark Study", April 17,2018

With the US food industry projected to expand at a steady CAGR of 2.9% by 2022, the overall food technology industry should have a wide range of opportunities to capitalize on.

Indxx US Food Technology Index

The Indxx US Food Technology Index tracks the performance of companies listed in the United States in the food technology industry that are involved in organic food processing, innovative food processing, hi-tech food equipment and in online delivery services.

Figure 1 Index Performance: Indxx US Food Technology Index v/s Indxx 500*

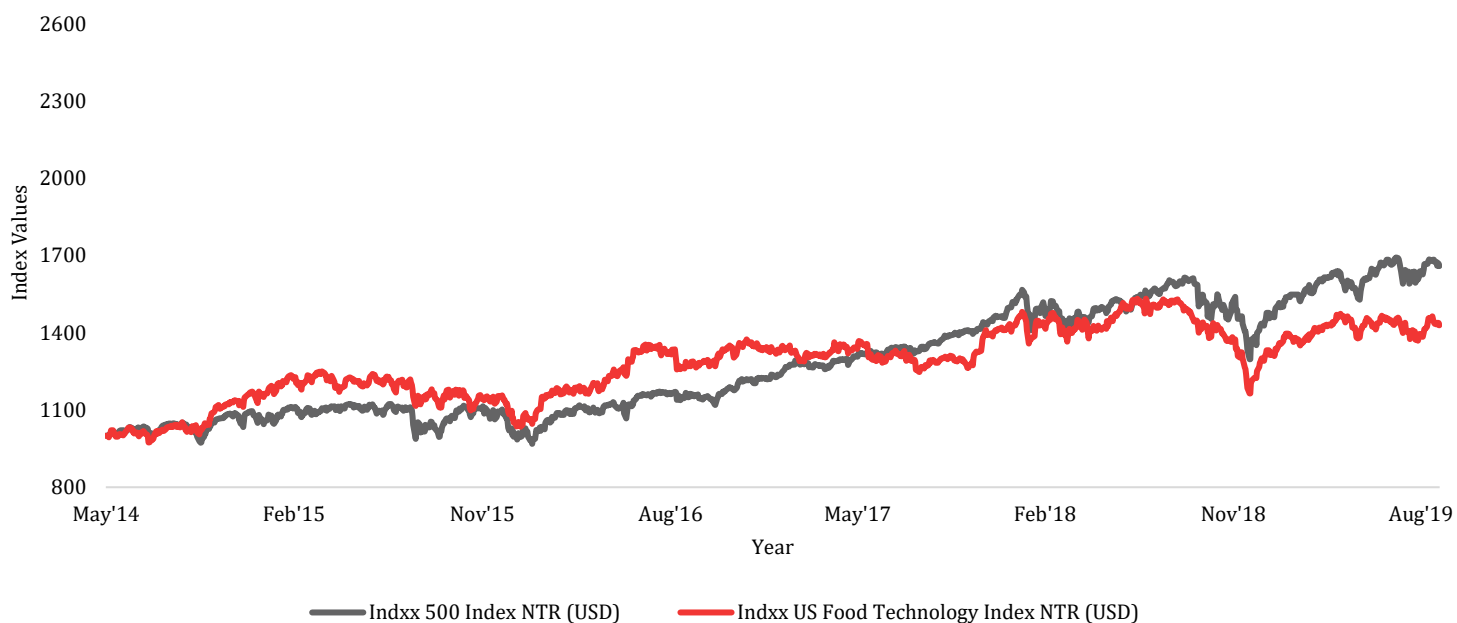


Table 2 Index Risk and Key Statistics: Indxx US Food Technology Index*

Statistic	QTD	YTD	1 Year	3 Year	Since Base Date
Beta	0.67	0.65	0.64	0.70	0.75
Correlation*	0.72	0.70	0.76	0.68	0.73
Returns	-0.56%	16.66%	-3.26%	3.90%	6.93%
Deviation	13.79%	12.17%	13.92%	12.79%	13.43%

*(Base date : 05/30/2014, Data as of 09/27/2019, Correlation is calculated with respect to the Indxx 500 Index)

Table 2 Indxx 500 Index (NTR) Risk & Key Statistics*

Statistic	QTD	YTD	1 Year	3 Year	Since Base Date
Returns	1.06%	19.83%	3.33%	12.75%	8.45%
Deviation	14.74%	13.24%	15.65%	10.96%	15.46%

*(Base date : 04/29/2005, Data as of 09/27/2019)

Table 3 Top 5 "Indxx US Food Technology Index" Constituents

S.No.	Name	Market Capitalization (\$ Bn)
1.	Fresh Del Monte Produce Inc.	1.82
2.	Lamb Weston Holdings Inc.	10.69
3.	Performance Food Group Co.	4.70
4.	Papa John's International Inc.	1.65
5.	Chipotle Mexican Grill Inc.	22.70

*(Data as of 09/27/2019)

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References:

ⁱ The Association for Packaging and Processing Technologies- 'Food Packaging Trends and Advances' report dated 2016

ⁱⁱ Hexaresearch- 'US Organic Food Market' report dated June 25, 2018

ⁱⁱⁱ Transparency market research- 'Food Processing Equipment Market (Equipment Type - Thermal Equipment, Depositors, Extruding Machines, Mixers, Refrigeration, Slicers and Dicers, Others; Food Type - Processed, Unprocessed; Application - Dairy Sector, Fruits and Vegetables, Meat and Poultry Processing, Fisheries, Bakery and Confectionery, Other Application; Operation- Semi-Automatic, Automatic) - Global Industry Analysis, Size, Share, Growth, Trends and Forecast 2017 – 2022' report dated June 12, 2019.

^{iv} iMarc- 'United States Online Food Delivery Market' report dated 2019

^v Organic Trade Association- 'Organic Industry Survey' dated 2019

^{vi} Organic Trade Association- '2019 Organic Industry Survey' released on May, 2019