White Paper

Global Food and Beverage Industry Trends and Strategic Insights, 2021

Sponsored by: Aptean

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INTRODUCTION

In a time of accelerated disruption fueled by global events and challenges such as trade wars, environmental changes, epidemics, trade across borders, and ever-changing and increasing regulatory pressures, to name but a few, global manufacturing supply chains face unprecedented pressures. Nobody understands this better than companies in the food and beverage (F&B) industry, as these organizations already have to deal with rapidly changing customer expectations and evolving regulatory requirements, all while keeping prices competitive. On top of that, they are dealing with the complexity that their end-to-end supply chain brings, entailing shipping and storing perishable goods within strict temperature parameters and information requirements about the origin and ingredients of products. Excelling in this complex business environment has never been more challenging — which is why digital transformation (DX) must be viewed as imperative.

To explore the state of the food and beverage industry and uncover the strategic priorities of successful organizations as well as the impact of digital transformation, IDC conducted a study of over 700 food and beverage companies. This IDC white paper, sponsored by Aptean, explores the results of this study, highlighting industry trends in the food and beverage industry and the impact of digital transformation, supply chain management, Industry 4.0, and traceability on organizations globally. The key findings and insights in this paper are based on a survey that was completed in August 2021.

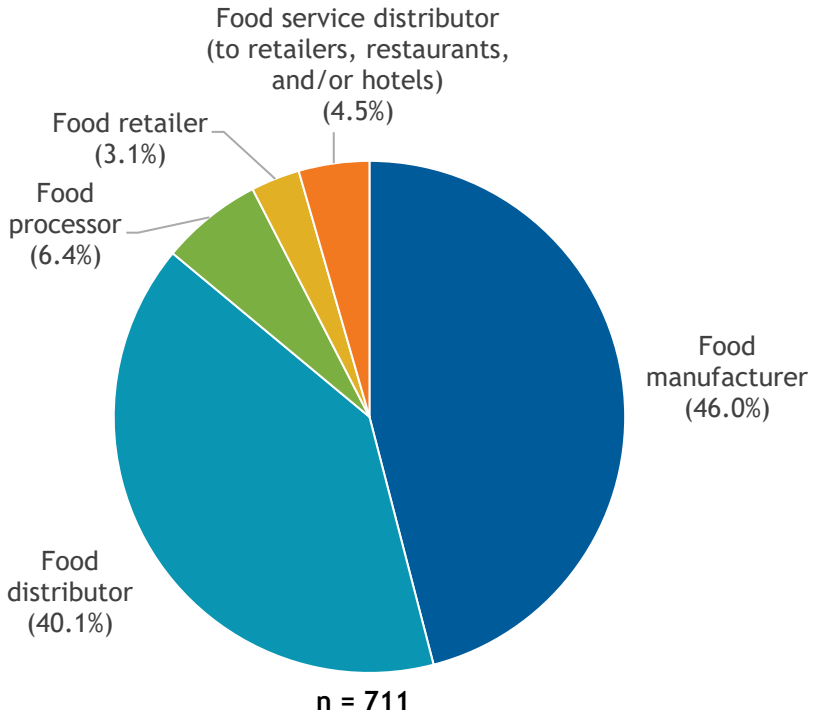
METHODOLOGY

Survey Demographics

The survey was conducted in July and August of 2021 and included 711 respondents across 13 countries and 5 different subsegments within the food and beverage industry, including food processors (processing raw goods into ingredients), food manufacturers (combining raw goods/ingredients into more complex products), and food distributors. The splits by subsegment are illustrated in Figure 1.

FIGURE 1

Industry Demographics



Source: IDC/Aptean's *Food and Beverage Survey,* July 2021

Key demographics include:

- The 13 countries represent all four major regions of North America, Europe, Asia/Pacific, and Latin America.
- 5% of respondents were from larger enterprise companies (revenue above $1 billion), 68% from medium-sized companies (revenue from $100 million to $1 billion), and 27% from small companies (revenue below $100 million).
- Respondents were split between senior executives (36%) and more junior supply chain operators (64%).
- All respondents are either the primary decision makers or are part of the team that makes decisions associated with supply chain management, enterprise resource planning (ERP) systems, Industry 4.0, or food safety for their organization.

One important goal for the survey was to poll a broad audience to generate as rich and diverse a set of results as possible. This paper will focus on the overall findings while weaving in notable region-level, employee-level, and role-based insights.

KEY FINDINGS

The survey that underpins this white paper provided a wealth of data and insight for food and beverage companies, and we have identified four key findings that we will explore in greater detail in this paper:

- Although business disruption is top of mind for food and beverage companies, the breadth of that disruption is significant. Future global disruptions are viewed as the top overall threat, as one would expect with COVID-19, but that is quickly followed by supply/demand volatility, the challenge of true sustainability, changing consumer expectations, and labor/talent shortages. Food and beverage companies that will be successful in the future will need to grapple with all of these things.
- There are clear correlations between digital transformation and business performance, with both revenue and profit performance improving as companies advance their digital transformation efforts. While digital transformation efforts overwhelmingly led to key performance indicator (KPI) improvements across the business, the use of cloud-based ERP systems, specifically, correlates significantly with even stronger performance improvements than on-premises system adoption.
- While transformation is occurring across many areas of the business, when looking at initiatives like Industry 4.0, supply chain management, and food safety/traceability, there is a noticeable gap in perception between IT and line of business (LOB). IT was found to view its maturity across each initiative more favorably than the LOB. While technology is a key enabler of manufacturing transformation, if business process/organizational transformation does not occur as well, then value will be limited. A strategic approach that involves IT and the LOB in these initiatives is essential to success.
- The supply chain plays an outsized role today in managing and mitigating business risk through traceability, visibility, and sustainability efforts.

CHALLENGES AND OPPORTUNITIES IN THE FOOD AND BEVERAGE INDUSTRY

Although business disruption is top of mind for food and beverage companies, the breadth of that disruption is significant. Future global disruptions are viewed as the top overall threat, as one would expect with COVID-19, but that is quickly followed by supply/demand volatility, the challenge of true sustainability, changing consumer expectations, and labor/talent shortages.

Food and beverage companies have been struggling to adapt to the global COVID-19 pandemic. They have consistently been unable to map and match varying and variable demand to unpredictable supply without accurate contextual and actionable visibility both upstream and downstream. Over the last year, many products have experienced shortages or delays, and there is no sign that 2022 won't be any less challenging. Labor shortages and transportation/delivery delays have been the most impactful on the industry, especially for meat processors, and will continue to remain a thorn in the industry's side in 2022. Finding people to work in plants is still a struggle, limiting a company's ability to produce enough to meet demand. The shift, almost overnight, from a blended experiential/product economy to one

> "COVID-19 has made things very difficult and changed consumer demands; we have to find ways to adapt this. Times have changed, and people are expecting a different approach, which is why digital transformation is more important than ever."
>
> — Operations director, medium-sized food manufacturer

almost exclusively product has meant significant declines in demand forecast accuracy, and failures to control COVID-19 outbreaks across many countries have resulted in unreliable supply. In this environment, it is increasingly commonplace to see companies in reactive mode and constantly expediting to meet demand.

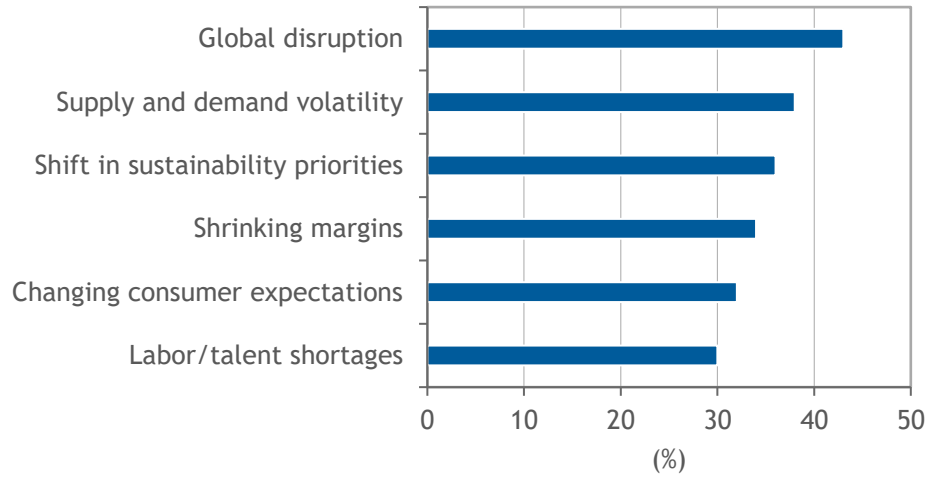
For food and beverage companies, four priorities stood out: **improving sustainability, ability to meet changing food regulations, protecting employee health and safety, and maintaining overall food safety.** Two things seem broadly true:

- First is that the business goals, and business problems to be solved, will depend heavily on the ability for food and beverage companies to adopt and adapt to modern digital technologies. Correlation studies that we have done at IDC show that companies that are more advanced in their digital transformation journey generally outperform those that are less progressed. In other words, there is a clear business advantage to the prudent adoption of technologies like cloud, Internet of Things (IoT), and artificial intelligence (AI), which is highlighted in the Digital Transformation Impact on Business Performance section. Figure 2 notes the main threats food and beverage companies face. Global disruptions and supply chain and demand volatility will benefit greatly from the business and supply chain resiliency that modern/emerging technology can provide.
- Second is the broad recognition that for food and beverage companies, sustainability must move from "posters" to "practice." In other words, it is no longer just corporate social responsibility lip service, but a key element of how we run the business. As younger consumers enter the market, they will often make purchases based on the sustainability reputation of a company. This has implications for traceability, visibility, and the ability for companies to accurately measure their carbon footprint, water consumption, and so forth. Consumer expectations are clearly shifting to be more attuned to sustainability as a purchase decision criterion. This is also true for employees. Food and beverage companies have noted to IDC that sustainability is something that prospective employees routinely ask them about. As labor and talent shortages grow as a threat, the ability to differentiate your company as an attractive and responsible place to work has clear advantages. Beyond brand image benefits, there are tangible ways to increase profits through sustainability initiatives. Reductions in energy/water usage and waste can add up to significant savings over time. For an industry like food and beverage that has to contend with shrinking margins, the ability for sustainability efforts to impact the bottom line should not be overlooked.

FIGURE 2

Top Food and Beverage Threats

Q. What do you think are the top threats to the food and beverage industry over the next five years?



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Source: IDC/Aptean's *Food and Beverage Survey,* July 2021

One other point to highlight on sustainability is its linkage to cost savings and operational efficiency. One of IDC's food and beverage clients operates factories in the western part of the United States, which has been suffering through a now 20-year drought and faces the prospects of water rationing. Its factory is a sizable consumer of water, so sustainability for the company also means finding ways to reduce water consumption so that the factory can remain operational. There are tangible business benefits that can be achieved through fostering sustainable operations; the impact around cost reductions or margin improvements cannot be overlooked.

The concerns among participants surveyed saw some noticeable variations, with the C-level being far more concerned with future disruption and sustainability mandates, while VP/director level reported higher concerns around profit/costs and labor. There were also differences by region that stood out when comparing the threats to the overall data in Figure 2 (see the Stand Out Threats by Region callout for more details), with North America and EMEA most concerned about sustainability, Asia/Pacific about changing consumer expectations, and South America about future disruption and shrinking margins. Also, if the United Kingdom is viewed separately with Brexit, sustainability and labor shortages stand out as higher concerns than the rest of the world.

Stand Out Threats by Region

North America:
Sustainability — 38%

EMEA:
Sustainability — 38%

United Kingdom:
Sustainability — 48%
Labor shortages — 37%

Asia/Pacific:
Consumer expectations — 38%

South America:
Future disruption — 47%
Margins — 35%

Implications for Food and Beverage Companies

Food and beverage companies now compete in a fast-paced, information-intensive world in which both successes and failures exist with complete transparency. In this context, the old ways of working simply aren't going to be sufficient. This doesn't mean an organization has to change tomorrow, but the pressures are clearly there to manage both intercompany and intracompany processes with greater alacrity. Standing pat is the surest way to fall behind. Companies must have a clear business strategy and end goal – what you want to be, when and how – in the context of creating market-altering customer and consumer experiences, as well as the extent to which your supply chain can support new business models.

DIGITAL TRANSFORMATION IMPACT ON BUSINESS PERFORMANCE

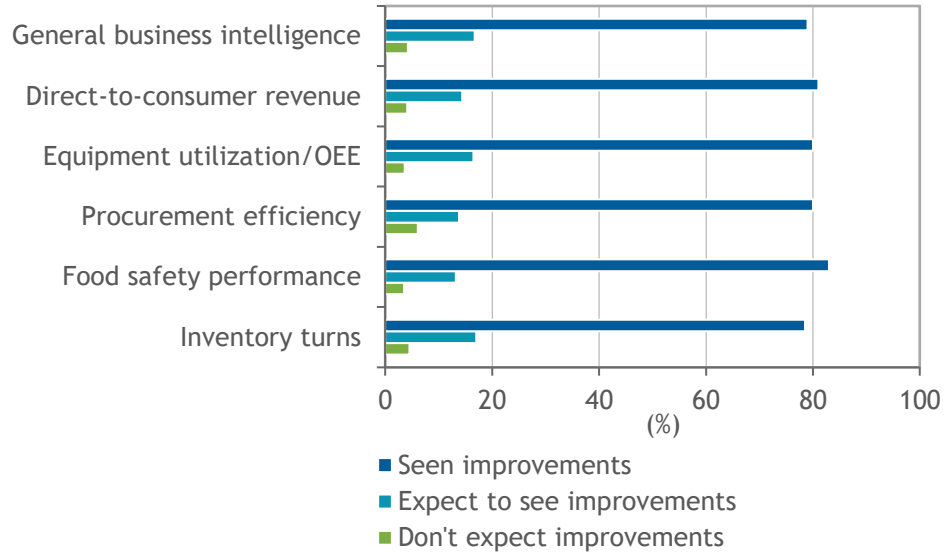
There are clear correlations between digital transformation and business performance, with both revenue and profit performance improving as companies advance their digital transformation efforts. While digital transformation efforts overwhelmingly led to KPI improvements across the business, the use of cloud-based ERP systems, specifically, correlates significantly with even stronger performance improvements than on-premises system adoption.

There is little question that the implementation of technology within the food and beverage industry has reaped significant benefits. In Figure 3, we illustrate the improvements that companies cite for selected key metrics as a result of their digital transformation efforts and the deployment of modern, digital technology.

FIGURE 3

Key Performance Metric Improvements

Q. In what areas of the business do you expect to see, or have you seen, KPI improvements from DX initiatives?



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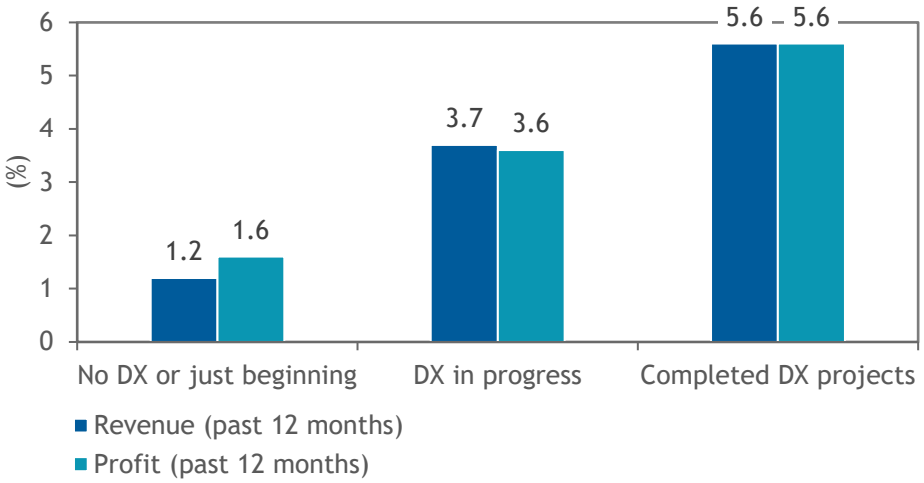
Source: IDC/Aptean's *Food and Beverage Survey,* July 2021

Not surprisingly, with improvements on so many important KPIs, the DX impact from a revenue and profit standpoint is noticeable as well. F&B companies that are more progressed in their digital transformation journey (i.e., the adoption of technologies like cloud, IoT, and AI) enjoyed much stronger performance (see Figure 4).

FIGURE 4

Correlation of DX Maturity and Revenue/Profit



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Source: IDC/Aptean's *Food and Beverage Survey,* July 2021

The biggest takeaway from the study is how the gap between the two groups increases over time. There are many companies that have already acted, embracing DX to make better decisions, and they are reaping the benefits. The question nondigital food and beverage companies need to ask themselves is, How much longer can you wait? The more time that passes without taking any actions, the more of an advantage their peers experience. In today's highly competitive food and beverage industry where disruption can occur at any moment, companies cannot risk inaction.

"Our company is increasingly heading toward all cloud-based services, and paper trails are becoming nonexistent."

— Director of Operations, small food processor

If we drill down a bit further to consider the adoption of cloud, and cloud ERP specifically, we see a similar story. Although growing, cloud ERP deployments are in the minority in the food and beverage industry (under 10% of respondents surveyed are currently on cloud ERP); yet for those companies that have made the transition, the impact of moving to cloud-based systems on the same key metrics was significant (see Table 1).

TABLE 1

Cloud ERP Leads to Higher KPI Improvements

Business Area	Cloud ERP (% Improvement)	On-Premises ERP (% Improvement)
Inventory/warehousing (turns/efficiency)	83.4	75.8
Logistics efficiency (shipping, accuracy, and costs)	95.4	77.1
Supply chain operations (demand forecasting and supply shortages)	94.2	78.4
Sales/customer service on time in full (OTIF)	93.5	77.1
Production (OEE, throughput, and clean in place [CIP])	94.3	76.7
Quality/food safety (waste, quality holds, and recalls)	93.4	81.8
Procurement (efficiency and reliability)	90.1	79.5
Maintenance/equipment utilization (unscheduled downtime, MTTF, and MTBR)	89.5	76.0
eCommerce/direct to consumer (DTC) (revenue per channel and cost to serve)	96.3	78.2
Analytics and business intelligence	90.7	74.3

n = 711

Source: IDC/Aptean's *Food and Beverage Survey,* July 2021

It is notable that the inquiries IDC gets into the movement to cloud systems have shifted dramtically from total cost of ownership five years ago to being able to take advantage of the newest functionality and latest technology today. The LOB in particular cites that legacy systems are holding back its innovation efforts, while IT is being tasked with data management and finds cloud systems better suited to meet growing data demands. In fact, when looking at the revenue and profit performance of cloud versus on-premises ERP orgnizations, the gap remains consistent:

- **Cloud ERP:** 3.3% increase in revenue and 3.9% increase in profit
- **On-premises ERP:** 1.7% increase in revenue and 2.7% increase in profit

While security and cyberthreats remain a common concern cited, it is not lost on food and beverage companies that the majority of cyberhacks are of locally owned/operated datacenters. In fact, from a separate IDC survey (*CloudPath Survey)*, manufacturers that moved to the cloud reported improved security as the top benefit they achieved – highlighting the fact that cloud security concerns are more of a misperception than a reality. Just this year, the meat proccesor JBS had to pay roughly $11 million in ransom payments as a result of a successful cyberattack on its operations, an amount that does not include the cost of the full-day shutdown of its United States-based plants. The potential impact of a single successful cyberattack can cripple a food and beverage company, including downtime, data loss, intellectual property (IP) theft, brand tarnishing, and loss of customers. Food for thought!

"Business has been excellent, but consumer demands are changing with more demands for traceability, sustainability, and buy-local initiatives. Consumer analysis has become increasingly important."

— Operations director, medium-sized food services company

Another key finding that stood out from the survey was the clear difference between food and beverage organizations that used one ERP system versus multiple systems. Companies that utilized multiple ERP systems across their business were far more likely to encounter challenges with siloed systems, had less visibility/traceability, and were less prepared to respond to disruption – with their companies' DX efforts as a whole being slowed when compared with single ERP organizations. In addition, the impact in terms of revenue and profit stood out similar to cloud versus on premises, with single ERP organizations reporting larger revenue and profit increases over the past 12 months.

Implications for Food and Beverage Companies

Although something of an overused term, digital transformation is critical for the success of any food and beverage company, whether manufacturer, distributor, or retailer. DX is not "technology for technology's sake" but is about solving business problems or seizing on new opportunities – we still get companies asking us about "setting up our own IoT lab" or some such nonsense. Companies should work with a technology partner and focus efforts on how technology helps solve existing business problems or prepare in anticipation of future ones. Shifting a workload from on premises to the cloud is not enough – thinking about how a business process can be transformed as a result of having the newest functionality available is what drives true transformation and value. Indeed, take an "outside-in" approach to digital transformation strategy and the business – work with external partners to define and develop capabilities; don't try to do yourself what others can do better working with you.

INDUSTRY 4.0, SUPPLY CHAIN MANAGEMENT, AND FOOD SAFETY — IT VERSUS LOB

The technological implementations of Industry 4.0, supply chain transformation, and food safety/traceability have not consistently translated into business benefits; thus IT views digital transformation more positively than does the LOB. A strategic approach that involves both groups with a business transformation in these initiatives is essential to success.

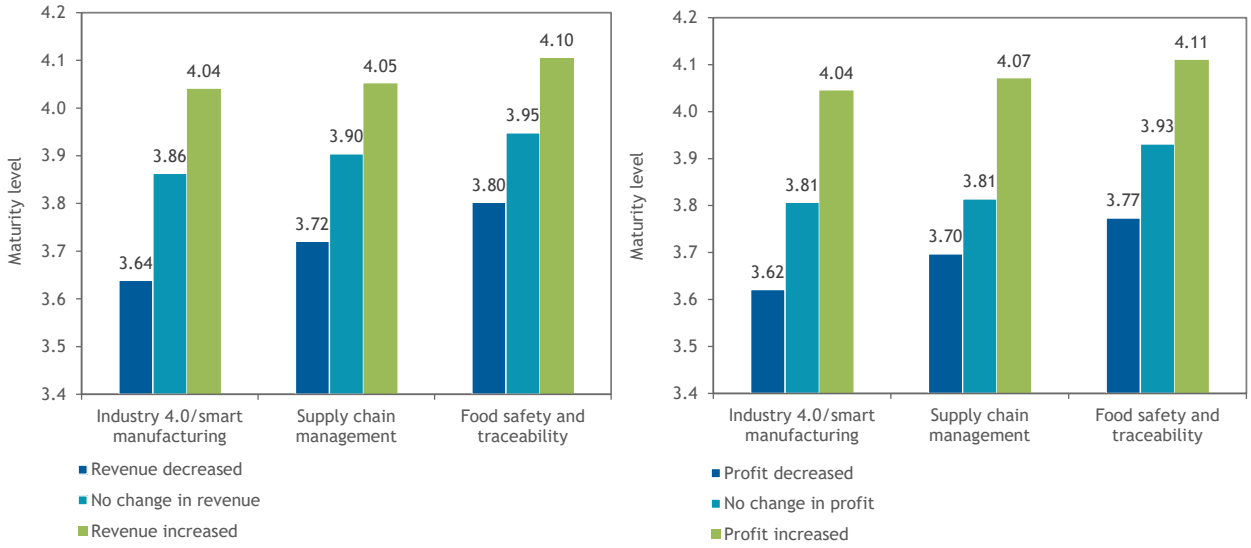
While digital transformation as an overall effort is important, the areas of the business targeted are important as well. The food and beverage survey focused on three areas of particular importance to the industry – supply chain management, Industry 4.0, and traceability. From an overall perspective, respondents assessed themselves favorable to their peers from a maturity perspective (rating is based on a scale of 1-5, where 1 = poor, far behind peers and 5 = advanced, far ahead of peers):

- Industry 4.0/smart manufacturing – 3.89 out of 5
- Supply chain management – 3.93 out of 5
- Food safety and traceability – 3.99 out of 5

However, unsurprisingly, the most mature organizations saw tangible benefits in terms of both revenue and profit compared with their peers (see Figure 5).

FIGURE 5

Maturity Level by Revenue/Profit Performance



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Note: Rating is based on a scale of 1-5, where 1 = poor, far behind peers and 5 = advanced, far ahead of peers.

Source: IDC/Aptean's *Food and Beverage Survey,* July 2021

No matter the area of the business that is a focus for DX initiatives, the first step every company should take if they truly want to achieve operational excellence is to get control over its manufacturing data. Effective decisions are always based on data analysis and information, not speculation or conjecture – this is no different for food and beverage-related decisions. Automated data collection is the basis for creating the real-time enterprise and significantly differentiates top performers from their poorer-performing peers. Operational excellence must be viewed as an ongoing, evolving process where there is always progress to be made. Continuous improvement is a very important mindset to strive for, especially in food and beverage with shrinking profit margins and rising input costs. Regional differences in terms of maturity did arise, with North America and EMEA being farthest along in terms of DX maturity, followed by South America and Asia/Pacific assessed as the least mature.

When it comes to food safety and traceability, a large portion of hardships felt in the industry can be attributed to the manual or paper-based systems that are still being relied upon. These systems are simply not accurate enough and cannot provide the visibility that successful organizations rely upon. Smaller or fast-growing companies are the most likely to still manage production through these methods, which simply cannot scale with the business. This puts this group at the highest risk, as they may not even be aware of a problem until it is too late. Compliance and document management go hand in hand for food and beverage companies. Those with automated solutions to manage these processes are generally in a much better position to answer the questions and provide the data requested by auditors. However, from a practicality standpoint, traceability is really about what you can track within your system. From the supplier used to distribution and any customer complaints – leading food and beverage companies are more likely to be able to track and trace their products from any stage in the value chain. This includes details on suppliers or operators that worked on the product (or ingredient mixed into product), equipment used in the manufacturing process, rework that was done, and even any customer complaints. A successful traceability system needs to be bidirectional – the ability to not only trace back but also trace forward. No industry knows the need for this traceability more than the food and beverage industry where even a single incident can cripple a business and the brand impact lingers on for years.

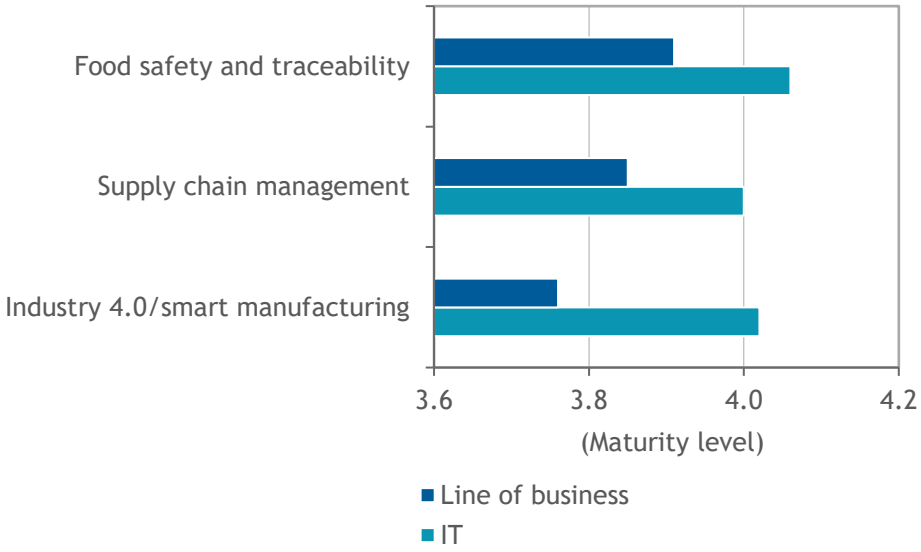
Where Traceability Is Most Challenging (All Respondents)

Engineering change orders (ECOs) — 26.0%
Standard operating procedures (SOPs)/ good manufacturing practices (GMPs) — 24.5%
Employee qualification — 24.2%
Inspection/testing — 23.8%
Customer complaints — 22.0%
Raw materials — 21.6%
Hazard analysis critical control points (HACCPs) — 21.5%
Outbound shipments — 19.5%
Tier 2–4 suppliers — 18.3%
Certificate of analysis — 18.0%
Work in process (WIP) material flow — 16.4%

While respondents as a whole viewed their business as more mature than most, an area of disconnect did reveal itself when drilling down further. What emerged from the 2021 survey was a gap between the view of digital transformation success in specific business functions as viewed by the LOB versus IT, with the latter generally being more positive about the maturity level of key initiatives, as illustrated in Figure 6. Although both sets of constituents felt the maturity was good, and the impact of performance positive (as articulated in the prior section), IT was more bullish. IT also tended to be more aligned with the view of business leaders in the C-suite. IDC frequently sees this in surveys, where the LOB employees that are doing the detailed work and interacting with operational systems are also optimistic in terms of progress.

FIGURE 6

Maturity Level of Key Technology Initiatives — IT Versus LOB



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Note: Rating is based on a scale of 1-5, where 1 = poor, far behind peers and 5 = advanced, far ahead of peers.

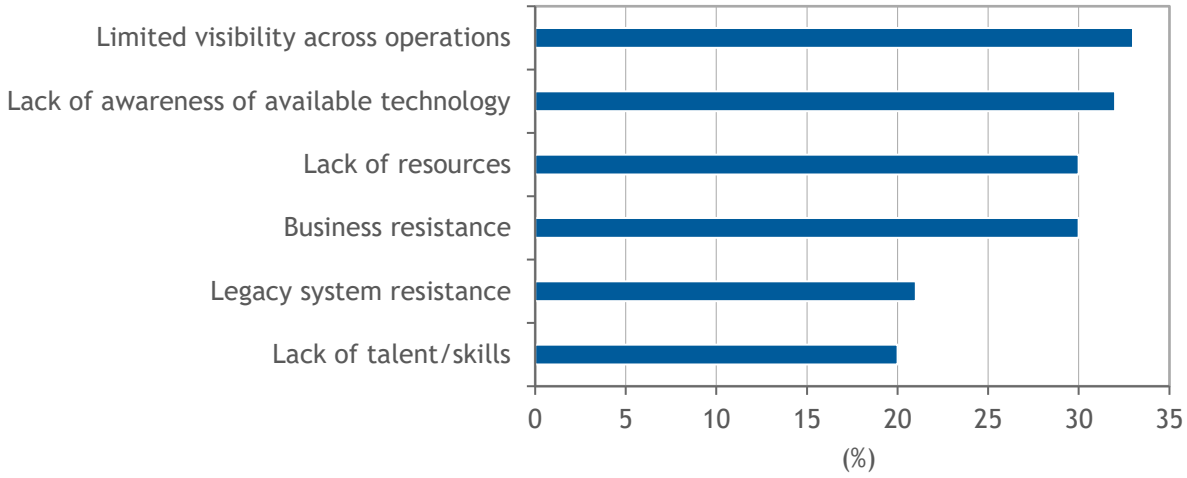
Source: IDC/Aptean's *Food and Beverage Survey,* July 2021

The role that each group plays in these transformation initiatives is important to keep in mind. IT is motivated to implement and integrate technology, while the LOB then must use it for business benefits. There are countless technology implementations that ultimately fail to deliver against their original goals, and the number of manufacturers that fail to see proofs of concept (POCs) scale is continually growing. A large reason behind this disconnect are companies operating in silos; the most successful organizations are the ones that involve both groups from the start. Another important point to consider is the digital transformation challenges that food and beverage companies face, not only in the initial adoption of technology but in successful deployment across the business. These challenges are illustrated in Figure 7.

FIGURE 7

Digital Transformation Barriers

Q. What are the primary barriers to digital transformation at your organization?



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Source: IDC/Aptean's *Food and Beverage Survey,* July 2021

The digital transformation barriers are quite interesting, particularly a lack of awareness of digital technologies. In some ways, this tracks back to the comment made before about food and beverage companies leveraging their partners. We still see many companies feeling like they must explore technology themselves, yet they are not technology companies and will invariably not have a full or complete view of what is available, especially as new avenues for business rise as a priority. Food and beverage companies must understand their pain points and their key use cases, but they are not technology experts and should not view themselves as such, especially as the talent gap continues to grow.

> "We lost out on some sales due to the closures related to the pandemic; this was about the time we were digitizing some of our systems, so it slowed us down. There is nothing wrong with the industry, but there are improvements to be made."
>
> — Director of Supply Chain, small food manufacturer

Limited visibility across operations is not, of course, only about digital transformation. Limited visibility is a chronic problem for most food and beverage companies that we discuss in detail in the Key Role for the Supply Chain and Mitigating Risk section. Visibility as a constraint on digital transformation may also, in part, explain the different views between the LOB and IT on technology maturity. It is fine to make a technology or an application available; it is quite another thing for the full breadth of the business to know that it is available and to utilize it fully.

Implications for Food and Beverage Companies

There is clearly some level of disconnect within food and beverage companies in terms of perception of technology maturity and the kinds of tools that are available. Partly this is about ensuring that the LOB collaborates more closely with IT and it may even be useful to do a better job of aligning functional KPIs

across groups. Also, the systems that are being relied upon are important to keep in mind; food and beverage organizations still utilizing legacy on-premises systems struggled to keep up as shown by the overall KPI performance improvements of cloud versus on-premises ERP (refer back to Table 1). In addition, the maturity level across initiatives highlights the importance of modern systems:

- On-premises ERP – 3.81 out of 5 (Industry 4.0), 3.84 out of 5 (supply chain management), and 3.93 out of 5 (traceability)
- Cloud ERP – 4.18 out of 5 (Industry 4.0), 4.11 out of 5 (supply chain management), and 4.28 out of 5 (traceability)

Beyond the differences in maturity, it's important to emphasize the point again about working with a technology partner and focusing your efforts on how technology helps solve existing business problems or prepare in anticipation of future ones. Work with external partners to define and develop capabilities; there is no need to resolve the wheel – don't try to do yourself what others can do better for you.

THE KEY ROLE FOR THE SUPPLY CHAIN AND MITIGATING RISK

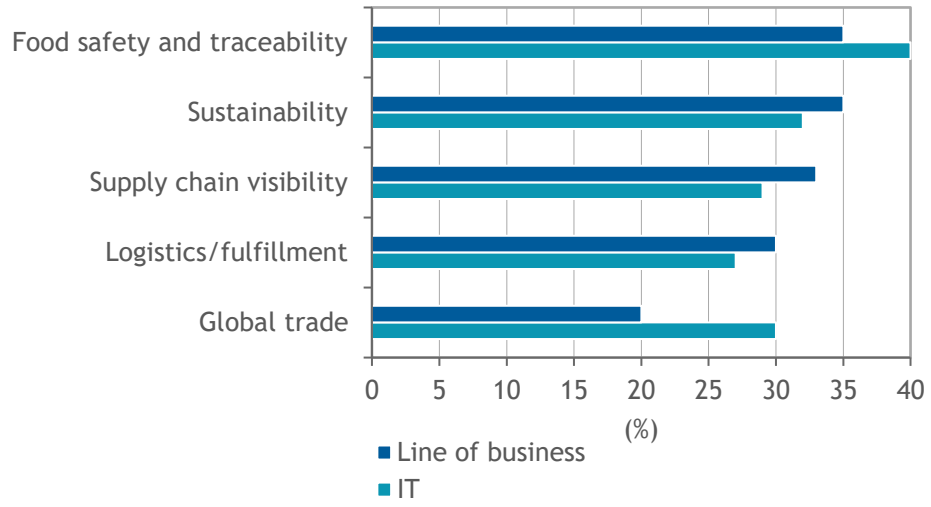
The supply chain plays an outsized role today in managing and mitigating business risk through traceability, visibility, and sustainability efforts.

When we think about the disruptions caused by COVID-19, it was not one single large disruption, rather hundreds or thousands of smaller disruptions that occurred, some sequentially while others happened at the same time; no matter the timing of the disruptions, the supply chain disproportionately took the brunt of the impact, and still does. We see that clearly in the survey when asking about the focus for risk mitigation, especially when looking at IT versus the LOB (see Figure 8).

FIGURE 8

Risk Mitigation — IT Versus LOB

Q. What are the top focus areas for risk mitigation in your organization?



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Source: IDC/Aptean's *Food and Beverage Survey,* July 2021

With such a high focus on customer satisfaction, delivering high-quality products and experiences is essential to success, and this is why traceability is such an important factor. Traceability is the process that provides the identification of all relevant data (and data relationships) for the materials used in the production and distribution of finished products. The reason why traceability is so important is shown anytime there is a recall. The cost of a recall goes well beyond the expense of replacing an order; there are potential regulatory fines/penalties or payments for damage caused by use. But potentially the most impactful result of a recall would be significant tarnishing of the brand name and lowered trust in the company.

For decades, those who have studied and operated supply chains have often talked about the importance of visibility, agility, and resiliency. These terms are now on the tip of everybody's tongue and take on a profoundly more critical role in an increasingly disruptive world. In today's context, resiliency, visibility, and agility are likely to be more construed as trade-offs for sustainability/safety outcomes. To achieve an efficient and sustainable supply chain, food and beverage organizations need to quickly align these principles, as they are becoming requirements from a trust and regulatory perspective. Companies need to be able to react quickly to changing market demands, customer expectations, and environmental shifts to properly ensure risk is managed.

THE FUTURE FOR FOOD AND BEVERAGE

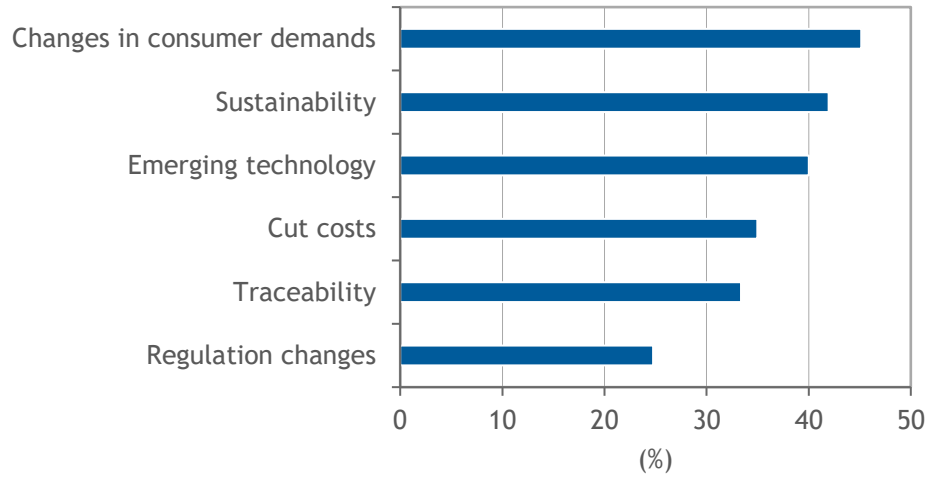
Changes in consumer demand and sustainability are clearly the trends that will impact the food and beverage industry the most over the next five years (see Figure 9). Food and beverage companies have already begun the transition from just selling products to selling products that deliver experiences, and mass-market fulfillment is shifting to personalization/contextualization at scale. Contextualization is particularly important for food and beverage, where the underlying product may remain the same but the way in which it is delivered or presented varies by context. Indeed, IDC's view of the mission for these companies is to "*create and offer engaging consumer (the end user) and customer (mainly retail) experiences at scale. It is not enough to meet the needs of broad consumer segments but to meet and exceed the needs of individual consumers in both ways they expect and ways they have not yet imagined. There must be an emphasis on innovation excellence in terms of the success of new products and the numbers of them required, the ability of the supply chain to manage different engagement models, and the ways in which both consumers and customers are engaged and how that engagement is funded. Consumer and customer expectations in the various consumer products market categories will make this strategy mandatory, but implementation success and efficacy will determine profitability and competitive differentiation.*"

> "The competition is very high, and more online sales will be shifted to accelerate the pace of digital transformation according to changes in the market and to keep up with the changes in the trend."
>
> — VP of IT, large food processor

FIGURE 9

Key Areas of Significant Impact

Q. What is going to impact the food industry the most in the next five years?



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Source: IDC/Aptean's *Food and Beverage Survey,* July 2021

IDC has also predicted that over the next decade, 90% of the industry growth will be captured by those companies that successfully engage directly with consumers. The consumer rules the world — he or she is ubiquitously connected, craves individuality/personalization, and is intolerant of complexity and latency. Connected consumers are a food and beverage company's worst nightmare and, potentially, its greatest opportunity. It seems intuitively obvious that those companies that figure out how to best engage with these consumers will be the ones that get more than their fair share of growth. And, by the way, as older consumers give way en masse to millennials, the "problem" just gets worse.

"COVID-19 has had a huge impact on the industry as a whole. Luckily, our business made smart decisions to limit lasting hurt to the company. We are looking to make a faster change in our digital efforts than originally planned. This is due to COVID-19."

— Operations director, small food distributor

Another consumer demand aspect for food and beverage companies will be the ability to deliver innovative new products. IDC expects that the contribution of new products (less than three years in market) to overall revenue will increase by 20 percentage points by 2025. There are many product categories within the food and beverage industry that already experience high churn. Whether new beverage flavors or an entirely new brand, it is our view that this churn is only going to accelerate over time as consumers become more demanding of personalization and product differentiation. Personalization and differentiation are key elements of changing consumer demand. Again, it's important to understand companies should not deploy technology for technology's sake. There is little question that modern, digital technologies will be integral to the ability of food and beverage companies to deliver against their future goals.

CONCLUSION

The food and beverage industry, like most manufacturing segments, has had to deal with unprecedented levels of disruption, whether unpredictable demand, unreliable supply, or broadly changing demographic tastes and preferences. Unique industry demands as well as differentiation challenges have left many companies struggling to adapt with older, out-of-date business models. Making effective decisions to address these concerns is a major challenge for all companies yet is particularly problematic for those that are not properly prepared. While the threats, priorities, and challenges may vary from company to company, the ability to use data to make better decisions is universally beneficial to any and all organizations. The results from the survey are quite clear; food and beverage organizations that make digital transformation a priority, involving both IT and the LOB, are the ones that will be best positioned to be nimble and have excelled in this disruptive business environment.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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