# BRCGS | Storage and Distribution

The Missing Link: Supply Chain Safety & Integrity in the warehousing and logistics sector

Risk management and supply chain resilience

The global pandemic has placed supply chain resilience firmly front of mind for brands, retailers, and a growing number of conscientious consumers. Product integrity can be compromised by supply shocks which are increasing in frequency and severity and stem from a multitude of sources including adverse weather, financial crises, trade disputes, cyberattacks and, at times, deliberate sabotage attacks. Product integrity is the ultimate consumer quality standard and is also challenged if the route to market for goods does not meet the same high standards as the manufacturing process. This can cost brands and retailers dearly in wastage and returns. The United Nations estimate that 1.4 billion tons of perishable food is wasted due to logistics inadequacies found within the food supply chain[1]. Whilst a significant proportion of this can be attributed to poor demand forecasting, the impact of poor handling, distribution and storage is considerable. The chart below illustrates food lost or wasted by region and stage in the value chain[2]. In less developed regions with poorer infrastructure, quality control during handling and storage is a significant contributor to food spoilage.
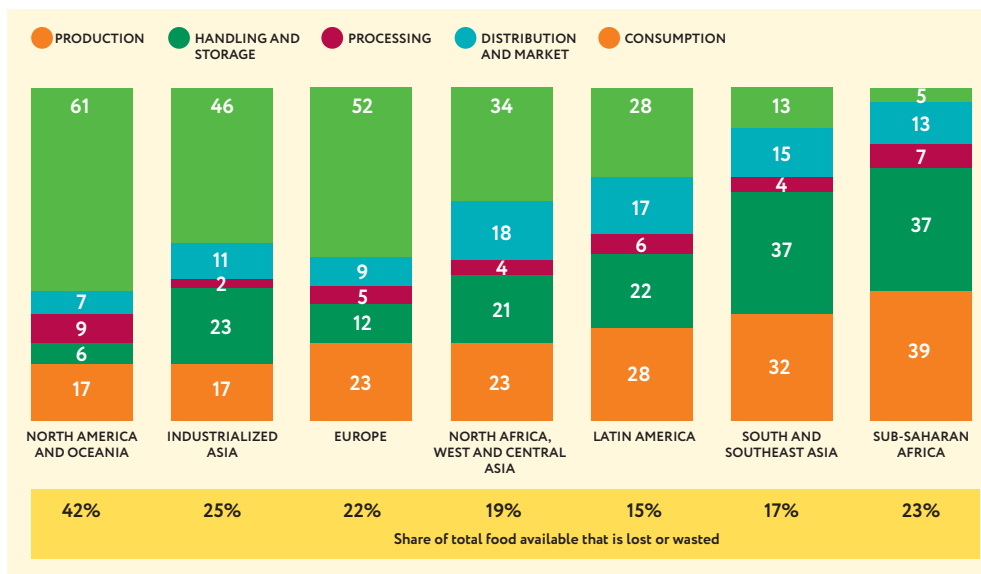
More broadly, food waste is a huge challenge for the sector. In 2018, the Boston Consulting Group estimated that 1.6 billion tons of food worth about $1.2 trillion are lost or go to waste each year—one-third of the total amount of food produced globally. They calculate that the proper deployment of more-advanced supply chain solutions—including cold chain in developing markets—could reduce the problem by $150 billion annually.[3]

These risks can be mitigated through comprehensive risk-based product safety systems that will ultimately bolster consumer confidence and ensure the integrity of goods when they reach their final destination.

Risk mitigation is a key factor for brands and retailers dealing with the complexity of today's global, Just-In-Time (JIT) supply chains. Consumer trends exacerbated by the impact of COVID-19 have heightened exposure in a multitude of ways and increased exposure can easily transform into financial losses if not effectively managed.

Those who can demonstrate transparent well-designed safety management systems will be well prepared to manage threats wherever they may originate. Building clear risk mitigation strategies into logistics and distribution processes not only helps to set leading industry standards but provides a much-needed safety net, protecting against the negative impact of any future black swan event.

This paper examines the factors fuelling growth in the Storage and Distribution sector. It also investigates the consequences of poor safety and compliance in supply chains and how preparedness is key for retailers and brands as they adapt to evolving and unpredictable market conditions. Building consumer confidence is key to sustaining economic growth at times of uncertainty. Steps taken to reinforce confidence will ensure brands and retailers can continue to focus on growing market share by delivering quality goods to those who rely on them when they need them most.

[1] Global Food Losses and Food Waste Report. Food and Agriculture Organization of The United Nations
[2] World Resources Institute UNEP Reducing Food Loss & Waste Lipinski, Hanson, Lomax, Kitinoja, Waite, Searchinger 2013
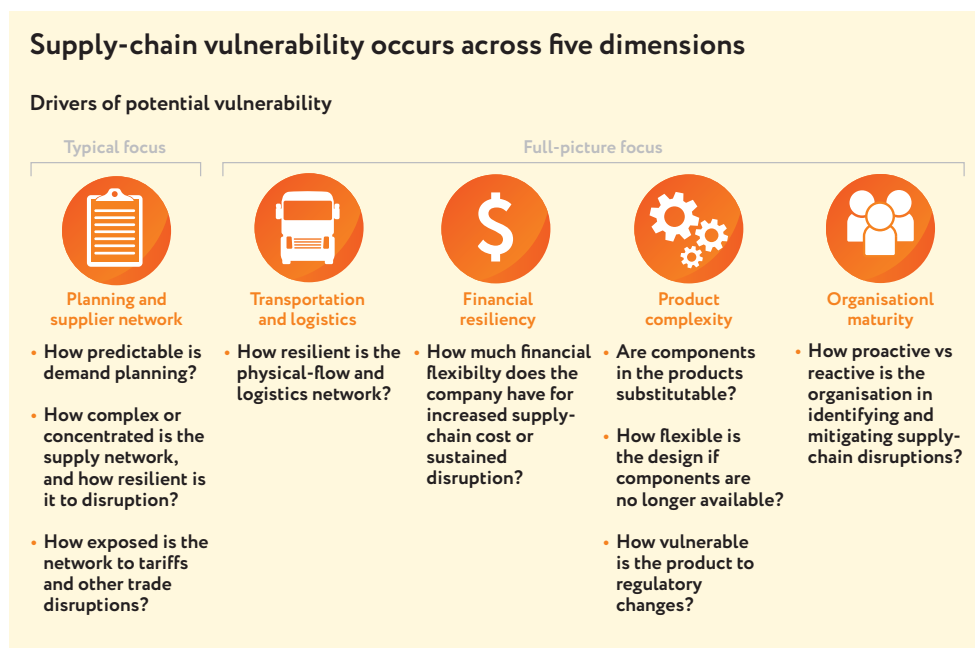[3] https://www.bcg.com/publications/2018/tackling-1.6-billion-ton-food-loss-and-waste-crisis

Supply chain complexity and the importance of channel partners

Supply chain visibility is critical at a time when supply chains have never been so complex. Global supply chains involve multiple intermediaries pre and post manufacturing where goods and end products are passed between factories, shipping vehicles, pallets, warehouses, and delivery fleets. Their journey is fraught with risk. Logistics companies and, increasingly, direct to consumer third-party retailers and wholesalers take on the bulk of this responsibility.

Logistics is no longer a hidden operational function concerned with simply moving goods from A to B. The growth in e-commerce has led to increased service expectations combined with a greater need for personalised, individual, and bespoke orders. Supply chains have become faster, more flexible, and more customised to meet the needs of the markets they serve.

McKinsey outlines five key drivers of supply chain vulnerability[4], with transport and logistics playing a key role in addressing the resilience of the physical-flow and logistics networks.

Supply-chain vulnerability occurs across five dimensions

Drivers of potential vulnerability

Typical focus   Full-picture focus

Planning and supplier network	Transportation and logistics	Financial resiliency	Product complexity	Organisationl maturity
• How predictable is demand planning?	• How resilient is the physical-flow and logistics network?	• How much financial flexibilty does the company have for increased supply-chain cost or sustained disruption?	• Are components in the products substitutable?	• How proactive vs reactive is the organisation in identifying and mitigating supply-chain disruptions?
• How complex or concentrated is the supply network, and how resilient is it to disruption?			• How flexible is the design if components are no longer available?	
• How exposed is the network to tariffs and other trade disruptions?			• How vulnerable is the product to regulatory changes?	

Reliance on JIT supply chains and their fragility hit the front pages in the early days of the pandemic when supermarkets were, albeit temporarily, stripped of everyday essentials as people stockpiled and national shutdowns impacted global logistics and supply chain networks.

Fear of not being able to procure goods remained one of the main features of lockdown as COVID-19 spread and this crisis became its ongoing legacy. It was an important lesson for manufacturers and logistics service providers. The reputation of JIT was transformed overnight from a cost effective, lean model of centralised manufacturing and storage, to a liability, forcing businesses to re-evaluate their dependency on channel partners. Existing relationships were re-evaluated as confidence in channel partners' ability to deliver what was needed, when it was needed and where it was needed safely was called into question.

There is now a shift towards micro-fulfilment centres and the introduction of automation technologies to address some of this risk in retail supply chain strategies, particularly among grocery chains. This change in retail behaviours will become more entrenched post-pandemic as retail migrates online. Consequently, logistics management will come under the spotlight as increased storage and distribution capabilities are required. Only those supply chain partners who can adapt to current conditions and mitigate future vulnerabilities will stand out.

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[4] https://www.mckinsey.com/business-functions/operations/our-insights/supply-chain-recovery-in-coronavirus-times-plan-for-now-and-the-future#

The growth of Storage and Distribution

Before the global pandemic hit, the Storage and Distribution market was demonstrating exceptional growth, at a CAGR of almost 6%, underpinned by the demand for refrigerated warehousing to cater for frozen food. Frozen food has had somewhat of a resurgence. Food waste is significantly reduced because of its shelf life stability and this is a big draw for today's environmentally conscious consumer, for whom sustainability continues to be an important purchase driver[5]. The food we find in our freezer today has evolved from the peas and haddock fillets, found in most UK freezers in the thirties, to wide range of options from gluten free, vegan, halal, low calorie, and organic. This increased variety is offered at a respectable price point compared with fresh and ready to eat options.
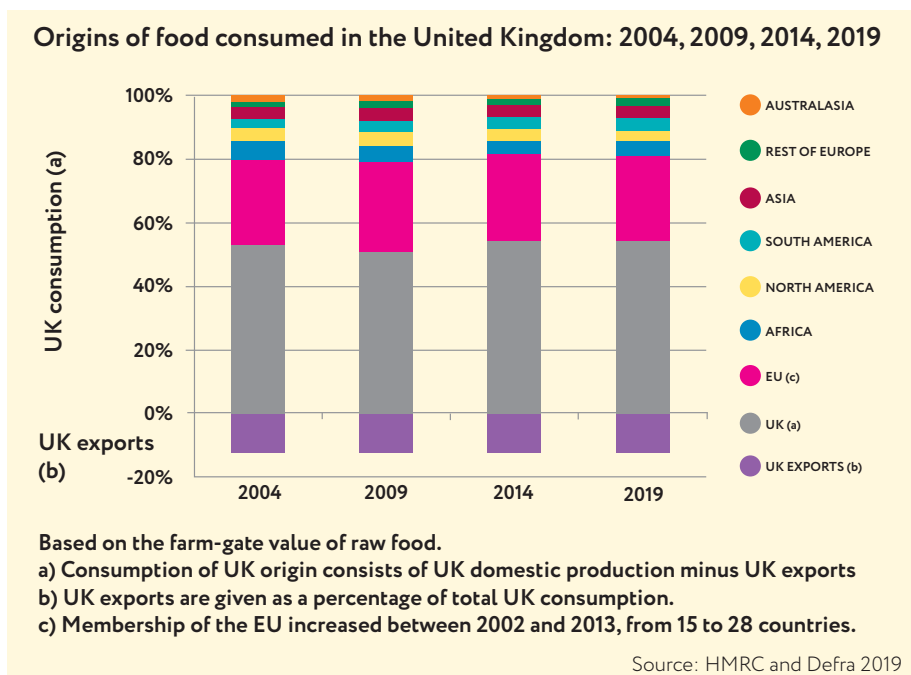
Technological advances such as increased automation in refrigerated warehouses through cloud technology, robotics, conveyor belts, truck loading automation, and energy management have increased much needed capacity in the storage and distribution sector. This year, food retailer Ahold Delhaize introduced an integrated temperature-controlled warehouse solution that has the capability for goods-in-receiving, automatic delayering, tray handling, sortation, automatic pallet building, dispatch trailer sequencing and ergonomic case picking[6]. Essentially, removing the need for most human input. This commitment to automation is set to continue judging by the growth of the Automated Guided Vehicle market. Worldwide this is projected to grow by US$970 million and reach US$2.6 billion by 2025[7]. Automated Guided Vehicles replace traditional forklift trucks in warehouses for transporting pallets and are particularly efficient in cold storage environments.

It is not just the demand for frozen food that has implications for storage and distribution. Other factors such as the rapid rise of e-commerce, the fragility of supply chain cyber security and the traceability of supply chain processes have shone a light on effective supply chain management. Preparedness is key for retailers and brands who need to prioritise transparency to ensure they retain consumer confidence at each stage of what are exceptionally complex processes.

The changing dynamics of the Food and Beverage market

Consumers' evolving tastes and preferences are reflected in their expectations; choice is key. They want to be able to buy products from countries many miles beyond their own locality as part of their typical grocery shop.

In 2019, 45% of all food consumed in the UK came from outside UK borders[8] and firms charged with keeping up with demand for exotic perishables are exposed to increasing levels of risk. This requires longer, more complex supply lines, expanded wholesale and retail distribution systems, increased warehousing, and cold storage provisions including inspection and waste management to ensure the safe transportation and storage of such perishable goods.


Origins of food consumed in the United Kingdom: 2004, 2009, 2014, 2019

Based on the farm-gate value of raw food.
a) Consumption of UK origin consists of UK domestic production minus UK exports
b) UK exports are given as a percentage of total UK consumption.
c) Membership of the EU increased between 2002 and 2013, from 15 to 28 countries.

Source: HMRC and Defra 2019

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[5] July 202 CGC survey: 61% of UK consumers considered sustainability as important consideration in their retail habits https://www.globenewswire.com/news-release/2020/07/14/2061884/0/en/Second-Annual-CGS-Survey-Reveals-Sustainability-Shopping-Preferences.html
[6] https://www.forbes.com/sites/tomsteininger/2020/09/01/refrigerated-warehouses-dont-have-their-supply-chains-down-cold/#416559a07cb1
[7] https://www.globenewswire.com/news-release/2020/05/16/2034601/0/en/Global-Automated-Guided-Vehicle-Industry.html
[8] Agriculture in the UK DEFRA 2019

This trend is not just limited to the UK. Rapid urbanisation has brought significant changes to most traditional diets and China now is the world's largest food importer, with imports exceeding $70 billion[9]. Coupled with a trend for organic imports, health-conscious Chinese consumers are increasingly seeking food in pure, unadulterated form. Norwegian seafood is particularly popular, with exports to China reaching a peak of 80 thousand tons in 2017 and a total export price of 1,433 million NOK ($154 million), an increase of 34% from the previous year.[10]

China's top 10 food import partners (by value, hundred million)
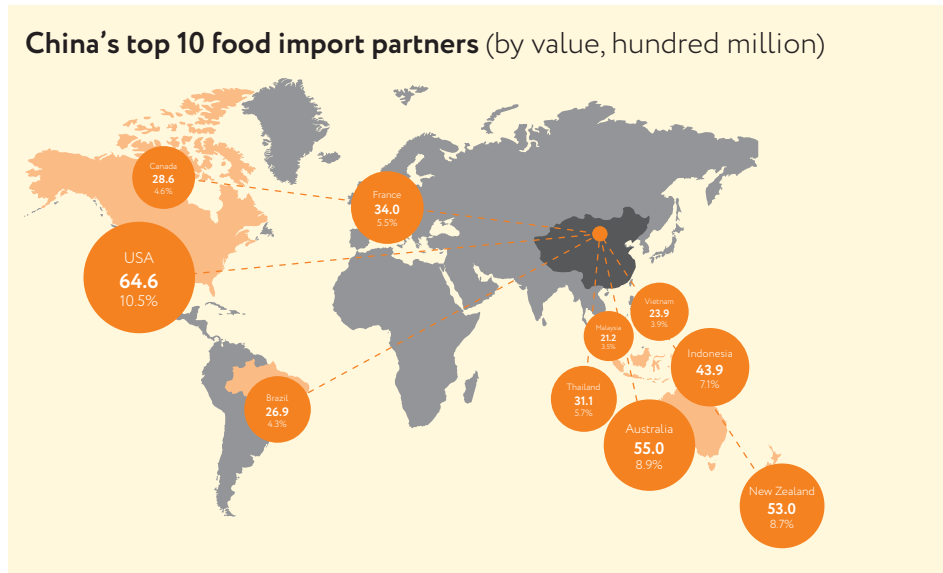
Consumers play an important role in how the food supply chain is designed and managed. Perceptions of optimal and edible goods change, and food preferences evolve over time.

In the US, food consumption habits and preferences have changed to a great extent. For children raised in the 1970s in the States, vegetables mostly came from the freezer or from a can. Now parents themselves, many of these consumers do not want to serve the same highly processed foods to their own children. This is driven by factors such as higher education levels, higher levels of income and a greater concern about health and wellbeing. This refinement of taste is also apparent in the beer industry, which has also changed dramatically. In the mid-1980s, there were only a handful of specialty craft breweries. By 2014, there were 3,418, offering a wide range of products, driven by an increasing desire for variety, taste, and local products.[11]

We can expect these consumer habits to become more pronounced as the world urbanises. Figures show that 85% of the Latin American population will live in urban areas by 2030. At the same time, the number of single person households is on the rise, as is household income. This is largely as a result of the increasing number of women in the workplace. As seen elsewhere, these socio-demographic shifts tend to accompany trends like a boom in e-commerce and the higher expectations of transparency between brands and consumers that typically follows.[12]

In more mature markets, expanding product portfolios are capturing trends such as vegan, organic, wellness and whole foods. This introduces new revenue streams but also a level of complexity to supply chain management. According to McKinsey, even though this strategy necessitates specialized packaging requirements and the risk of spoilage and waste increases, revenue increases are justified in growth markets. In a crisis, however, overly complex product portfolios suddenly become a vulnerability[13]. In today's unpredictable environment, this highlights the growing risk that can be mitigated for such manufacturers by the logistics support they rely on.

Not only are consumer tastes evolving but convenience is paramount in an age where household groceries can be accessed at the touch of a button through handheld devices. Ensuring quality warehousing and logistics service to support JIT global food and beverage supply chains predicated on quality is a demanding task.

Food safety is paramount in preventing the spread of disease and infection and brands and retailers need the assurance that the condition of their goods is stringently monitored at each stage. The storage and distribution of non-processed food is particularly challenging given its limited shelf life and need to reduce spoilage and preserve profit margins.

[9] https://www.sjgrand.cn/food-beverage-market-in-china/
[10] https://asiaperspective.net/2018/08/23/chinese-consumers-gravitate-toward-organic-imported-foods/
[11] https://www.kansascityfed.org/~/media/files/publicat/rscp/2015/mccluskey-paper.pdf?la=en
[12] https://www.provokemedia.com/agency-playbook/sponsored/article/trust-a-key-factor-for-the-new-latin-american-consumer
[13] McKinsey Global Institute Risk, resilience, and rebalancing in global value chains

It is not just the transportation and storage of fresh food that is on the rise. COVID-19 has further accelerated the growth of the frozen food market. Reduced restaurant footfall as more opt to eat at home has increased demand for quality, convenient food in the home. Nielsen[14] reported a 16% increase in UK sales of frozen food in the 12 weeks to April 2020, translating to an extra 82.2 million packs of frozen goods transitioning through supermarket tills, a total increase of around £194.8 million. This trend was not just confined to the UK - in Singapore, supermarket NTUC FairPrice saw demand for frozen foods increase 20% in April 2020[15]. In the US, sales of frozen foods surged 94% in mid-March, and then held steady at around 30% to 35% up year-on-year by April, according to the American Frozen Food Institute.[16]
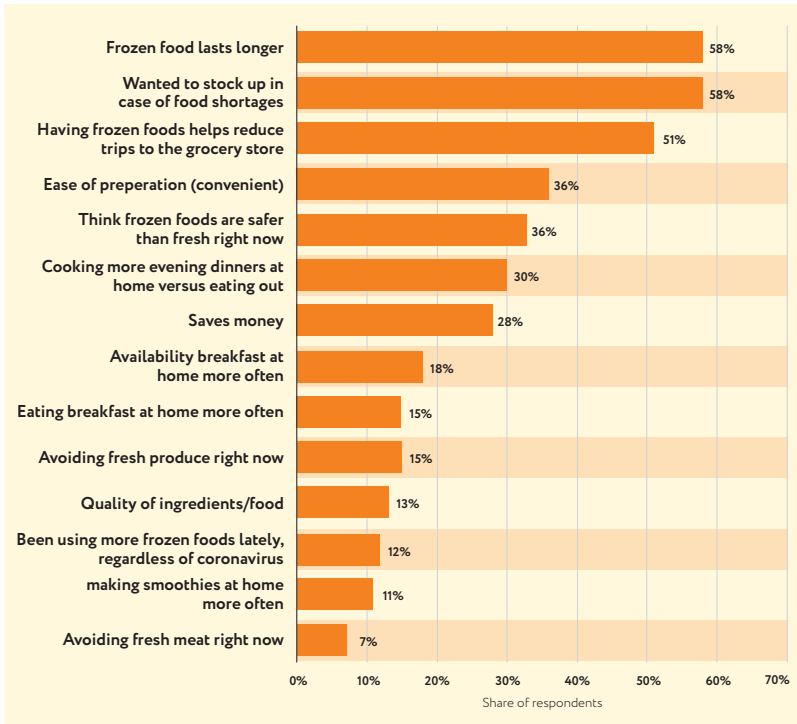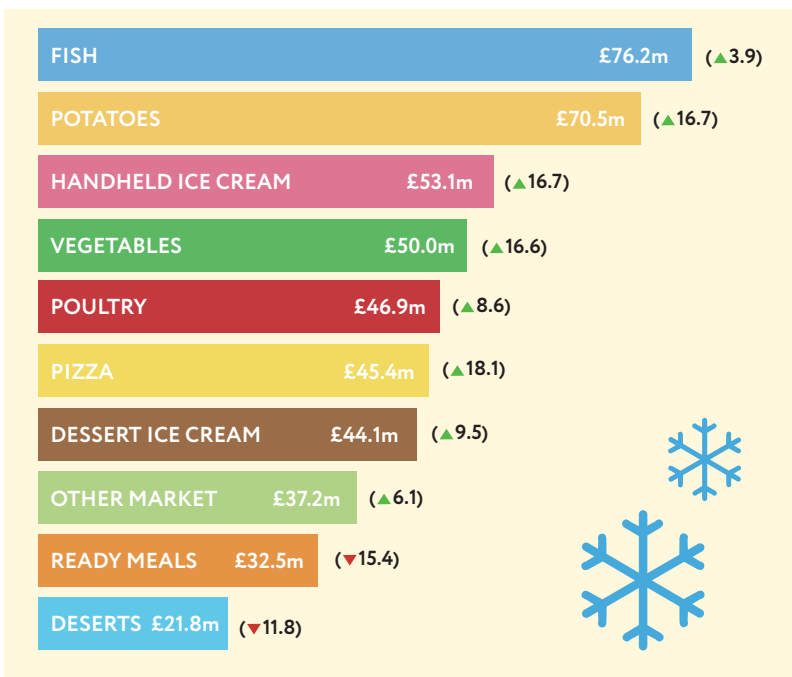

Fig: Leading drivers behind consumer preferences for frozen food during the coronavirus outbreak in the United States in 2020[17]

Kantar data[18], in April 2020, shows increases in every major frozen category with the exception of ready meals and desserts.

[14] https://www.dailymail.co.uk/news/article-8375803/Ready-meal-sales-slump-shoppers-cook-food-scratch.html
[15] https://www.channelnewsasia.com/news/singapore/demand-for-frozen-food-freezers-spikes-amid-covid-19-pandemic-12637304
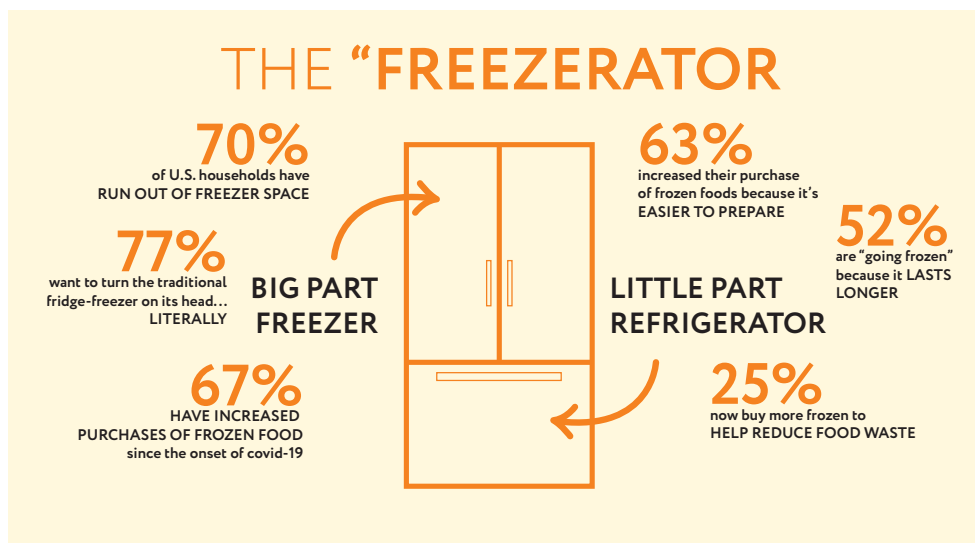[16] https://www.refrigeratedfrozenfood.com/articles/99226-frozen-food-sales-projected-to-remain-30-higher-than-2019-due-to-covid-19-spending
[17] https://www.statista.com/statistics/1132729/coronavirus-consumer-demand-for-frozen-food-us/
[18] https://www.thegrocer.co.uk/download?ac=185426

Pre-pandemic this trend was well under way and, according John Carmichael, Nestle Food Division President[19], has been accelerated by the transition of Millennials from student to working parents. This demographic grew up in an age of instant gratification made possible by digital devices and are now creating demand for frozen recipes as they move into the busiest phase of their lives and have less time to prepare meals. Frozen food appeals because of its shelf stability and they only eat what they need so food waste is reduced, and their environmental needs salved.

The cold chain logistics market size for Asia-Pacific alone was valued at over $61 billion in 2018 and is projected to reach $162 billion by 2026. In the US, Caulipower, a pizza manufacturer has capitalised on this growing trend and has gone as far as to call for simple, yet effective, redesign of the traditional fridge freezer to meet this new consumer need[20]. The 'Freezerator' concept is based on research revealing that traditional in-home food storage assumptions are outdated and require revision.

THE "FREEZERATOR

70% of U.S. households have RUN OUT OF FREEZER SPACE

77% want to turn the traditional fridge-freezer on its head… LITERALLY

BIG PART FREEZER

67% HAVE INCREASED PURCHASES OF FROZEN FOOD since the onset of covid-19

63% increased their purchase of frozen foods because it's EASIER TO PREPARE

52% are "going frozen" because it LASTS LONGER

LITTLE PART REFRIGERATOR

25% now buy more frozen to HELP REDUCE FOOD WASTE

Yet problems in cold and chill-chain can be costly. In 2018, a 10-day strike by self-employed truck drivers in Brazil over fuel prices resulted in significant economic losses and wastage for the food industry and supply problems for consumers. The country's dairy sector lost over $240 million when it was forced to dispose of more than 360 million litres of spoiled milk.[21]

The effective management of perishable stock is a growing concern as food safety has moved up the agenda given the serious public health implications of break in cold chain storage. It is critical that a specific low-temperature range is maintained throughout a series of storage, distribution, and logistics activities. And with todays' complex, multi-layered, supply chains the most effective way of demonstrating this is through the certification a universally recognised Global Standard affords.

The challenge of contamination and need for traceability

In 2015, Wolfgang Lehmacher, Head of Supply Chain and Transport Industries at the World Economic Forum, stressed the need for vigilance to protect economic interests and recognize supply chains as a potential target. He believes adequate measures are required to protect them and the consumers they ultimately serve. He said,
"When left neglected, the consequences on the economy and our society could be disastrous. Two risks are of particular importance: an overshoot of public safety measures affecting supply chains, and a negligence of securing supply chains, leaving them vulnerable to attack." [22]

In 2016, BSI highlighted the increasing frequency of deliberate attacks on global supply chains, recording a total of 346 terrorist attacks that year with a threefold increase on agriculture and food and beverage targets[23]. This threat is unlikely to decrease. Since COVID-19, many governments, such as the US[24] and the UK[25], have elevated food supply chains to 'critical infrastructure' status joining transportation, commerce, railways, and utilities such as electricity and water. All vital systems required for the proper functioning of society and economy. As such, they become a much more visible target for terrorist attacks.

[19] https://www.foodprocessing.com/articles/2020/frozen-foods/
[20] https://www.forbes.com/sites/yolarobert1/2020/09/22/caulipower-responds-to-shifts-in-frozen-food-industry-caused-by-covid-19-with-idea-to-create-a-freezerator/#4f17cade17ee
[21] https://www.foodnavigator-latam.com/Article/2019/10/21/Betania-adds-ambient-yogurt-range-to-cut-cold-chain-costs
[22] WEF: How safe are our supply chains from terrorist attack? (https://www.weforum.org/agenda/2015/12/how-safe-are-our-supply-chains-from-terrorist-attack/)
[23] BSI Screen Intelligence 2016 (https://www.mhlnews.com/global-supply-chain/article/22054528/supply-chain-experiencing-high-rate-of-terrorist-attacks)
[24] https://www.rfdtv.com/story/41921664/food-supply-chain-designated-as-critical-infrastructure
[25] http://researchbriefings.files.parliament.uk/documents/CBP-8862/CBP-8862.pdf

Each year, 200 billion metric tons of food is transported around the globe, 35% by land, 60% by sea, and 5% by air[26]. The volume and variety of goods being shipped and the many conditions that determine how it is transported including temperature and handling requirements, underlines the vulnerability of global food and beverage supply chains to possible contamination during storage and distribution. Logistics plays a vital role in moving products safety through each step and delivering the end product to market safely and if this link in the chain is found to be underperforming then the chain quickly unravels and public health is put at risk.

Traceability and accreditation have become a critical part of this process. Regulatory requirements are becoming more stringent to deal with the proliferation of cross border trade and brands and retailers need to focus more on ensuring compliance. Across the European Union, Regulation (EC) 178/2002 stipulates that businesses must be able to identify the firms from whom they have obtained food, ingredients or food producing animals and those they have supplied with products and must be able to produce this information on demand.[27]

China, compared to other large economies, is in still in the developmental stage of traceability regulations but this is set to grow. Since June 2009, Articles 36–41 of the Food Safety Law require food producers, processers, packers, and retailers to implement testing and record-keeping systems for all inputs, and to archive the records for at least 2 years.[28]

In addition, investors and consumers are seeking more information about the origins of the goods they buy and how they are transported and stored. Consequently, brands and retailers are under pressure to share information about their complex global supply chains. All parties are seeking reassurance that the handling of goods has been certified to clear accredited standards at each stage. Process traceability is an intrinsic part of this process as Paul Bulcke, Nestle Chairman, outlined in a recent World Economic Forum report on Food Value Chains[29],
"Ensuring traceability is vital to providing transparency and building consumer trust in the content, quality and sustainability of the end-to-end food supply chain. New technologies, such as blockchain and satellite imaging, can strengthen traceability programmes and lead to better transparency and value across the supply chain."

Although advancing technology has increased efficiency and automated checks and balances with developments in traceability, monitoring and testing, the risk of contamination food or medicine or high-risk goods remains. An increased level of visibility into the supply chain will differentiate products in the marketplace and provide a level of much needed security for end consumers.

The growth in e-commerce and impact on standards in Storage and Distribution

Pre-COVID-19, the UN's trade and development body, UNCTAD, estimated global e-commerce sales at $25.6 trillion[30], equivalent to 30% of global gross domestic product. This as a result of more than 1.4 billion people shopping online which is almost one quarter of the world's population (aged 15 and older) using the internet to purchase goods that would otherwise have been bought in traditional shops. Consumers are seeking assurances that the products they purchase online are subject to the same levels of quality control during storage and distribution that they would be if transitioned through more traditional retail channels, particularly during the last mile delivery phase.

The rise of e-commerce was well established and well documented before the outbreak of COVID-19 and consequences for retail frequently predicted. In the UK alone it is estimated that e-commerce will account for around 40% of all UK retail sales by 2030 and half of the UK's existing shop premises are expected to disappear.[31]

In China, 256 million people used online food ordering services in 2016 – by the next year that number had risen to 346 million. In 2020, the figure is 355 million and 35% of users are ordering food online four to six times a week.[32]

In contrast, Italy has historically had one of the lowest rates of ecommerce penetration in Europe at 4 per cent of retail revenues, according to the Centre for Retail Research. However, COVID-19 has accelerated change in this area as supermarket chain Carrefour saw online customers in Italy double to 110,000 due to the lockdown. Meanwhile, sales in urban areas via its partnership with the company Glovo, which delivers certain items in 30 minutes or less in Italian cities, increased more than ten-fold.[33]

[26] Food Transportation Safety: Characterizing Risks and Controls by Use of Expert Opinion
[27] https://www.food.gov.uk/sites/default/files/media/document/fsogfrni2004.pdf
[28] https://onlinelibrary.wiley.com/doi/full/10.1111/1541-4337.12101
[29] Work Economic Forum Innovation with a Purpose: Improving Traceability in Food Value Chains through Technology Innovations (http://www3.weforum.org/docs/WEF_Traceability_in_food_value_chains_Digital.pdf)
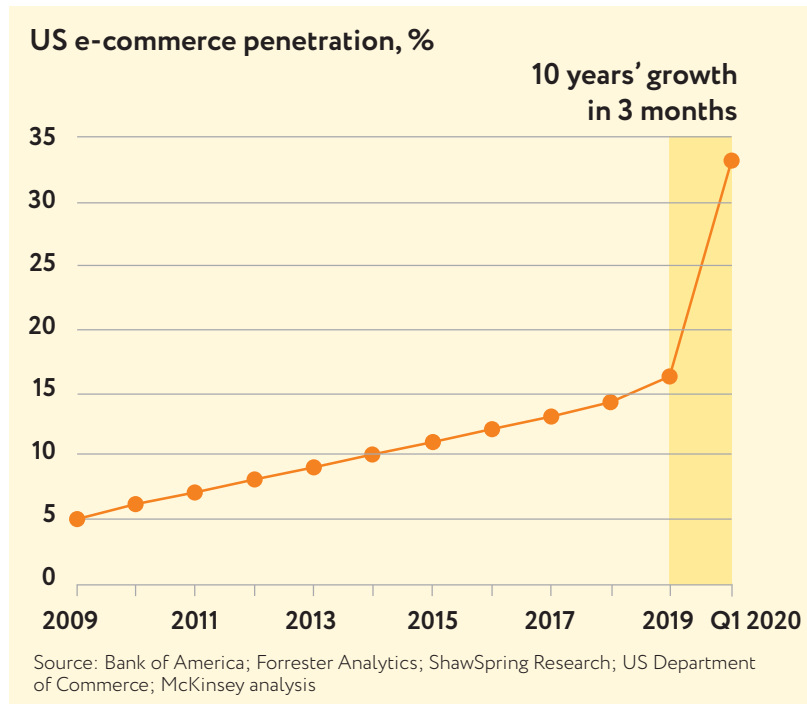[30] https://unctad.org/en/Pages/PressRelease.aspx?OriginalVersionID=552
[31] 2030: The Death of the High Street. Parcel Hero Industry Report
[32] https://daxueconsulting.com/o2o-food-delivery-market-in-china/
[33] https://www.ft.com/content/26416b7a-6a89-11ea-800d-da70cff6e4d3

COVID-19 has undoubtedly accelerated digital transformation: digital payments are largely replacing cash; automation technologies have advanced across many sectors; virtual meetings are substituting in-person get togethers, but the impact has been most felt in e-commerce.

McKinsey analysis demonstrates the unparalleled speed of this change in the US as buying behaviours that may have taken a decade to evolve in normal circumstances have been forced front-and-centre by virus-related restrictions. The penetration of e-commerce, previously forecast to reach 24 percent by 2024, moved from 17 percent to 33 percent in a matter of months with e-commerce channels replacing physical retail channels more quickly in the latter end of 2019 and the beginning of 2020 than in the past 10 years.[34]

US e-commerce penetration, %

10 years' growth in 3 months

Source: Bank of America; Forrester Analytics; ShawSpring Research; US Department of Commerce; McKinsey analysis

"The global e-commerce market is expected to reach US$6.07 trillion in 2024, growing at a CAGR of 11.34%, for the period 2020-2024. Factors such as growth in third-party logistics, rise in use of mobile wallets, high preference of online shopping among millennials, increasing number of smartphone users, rapid urbanization, upsurge in disposable income and rising usage of the internet would drive the growth of the market. However, the market growth would be challenged by trouble in choosing a right logistic partner, problem of customers' data security and various legal issues" [35]

Amazon's two-day shipping model has set a somewhat unobtainable standard for most retailers, but this reflects customer expectations. Receiving goods anytime and anywhere with a very short time between order and delivery, with undisputed service and convenience is fast becoming the norm, more so as the traditional bricks and mortar retailers adapt to COVID-19 restrictions and the implications for logistics are immense.

Making supply chains customer centric is a systemic shift that requires catering for stronger product availability, streamlining fulfilment processes, an efficient last-mile delivery and simplifying the returns process. Logistics play a key role in this transformation and only quality logistics partners can help brands and retailers safeguard their relationship with customers.

This must be underpinned by reliable safety assurances that ensure the quality and safety of products during their storage and distribution. To keep up with demand, particularly in the FMCG space, brands and retailers require the support of transportation and logistics firms who can respond rapidly and reliably and employ best practice hazard and risk analysis, facility management and operating practices to ensure goods reach their end destination safely and without quality compromises.

The emergence of Direct to Consumer models, largely a product of the online world, have redefined the relationship brands have with consumers by cutting out the retailer to own the end-to-end relationship. Make up brand Glossier is one such prolific example. This digitally native beauty brand started in 2014 and with just four products and is now valued at $1.2 billion. According to its founder, Emily Weiss:[36]

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[34] McKinsey Quarterly https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/five-fifty-the-quickening
[35] Global E-Commerce (Online Shopping) Market: Insights & Forecast with Potential Impact of COVID-19 (2020-2024)
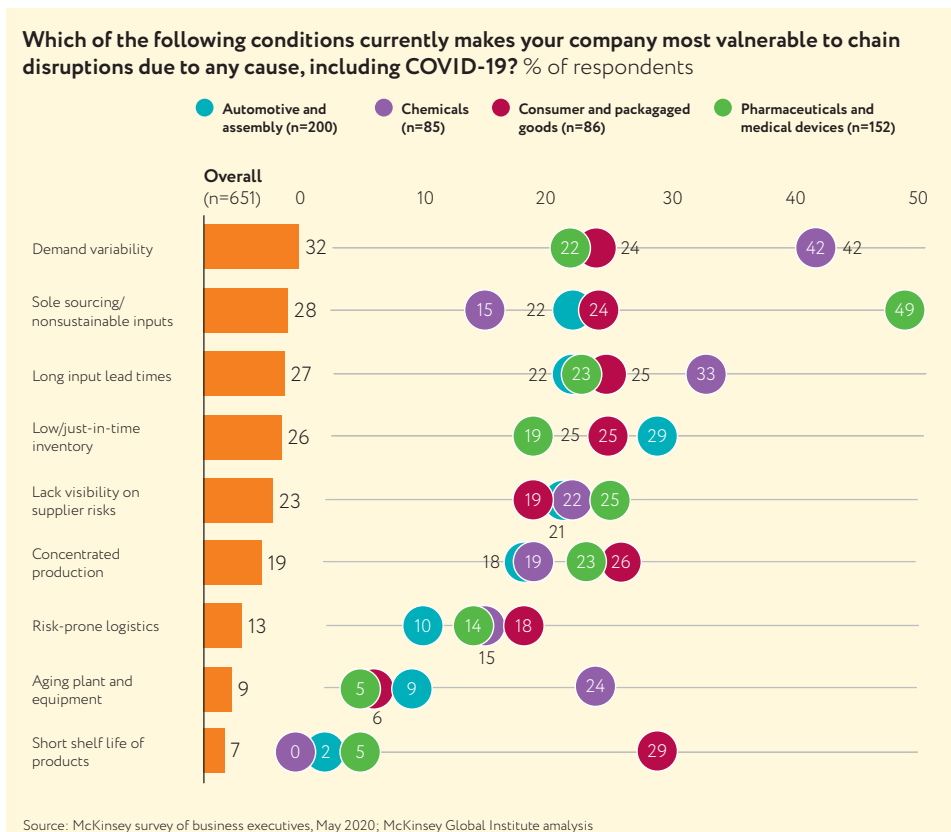[36] Harpers Bazaar March 2019

"We are building an entirely new kind of beauty company: one that owns the distribution channel and makes customers our stakeholders. Thanks to this direct relationship with our customers, we have access to endless inspiration for new products, experiences, and ways of building an enduring business—all while staying true to our core belief that beauty should be a celebration of individuality and personal choice."

With most relationship building happening through online or social media channels, D2C brands hold a large amount of detailed demographic and behavioural data about their customers. Personalization is key and the ability to deliver to such specification at scale puts increased pressure on often fledgling brands' logistics firms who are served with maintaining a seamless and high-quality operational supply chain. The supply chain becomes integral to the brand experience and logistics execution capabilities need to be exceptional and supported by rigorous quality control systems.

Finding the right logistics partner will continue to be a key challenge as the retail landscape evolves. Those who can demonstrate high quality standards that inspire industry leading operational procedures will stand out. Only channel partners with validated, differentiating credentials will provide such quality assurances. Universally recognised Global Standards for Storage and Distribution that reflect best practice and facilitate a process of continual improvement through well-designed risk-based product safety management systems can ensure the quality and safety of products during their storage and distribution throughout the supply chain.

Preparedness is key

Around a fifth (18%) of business leaders who responded to McKinsey survey in May 2020 cited risk-prone logistics as the primary condition that makes their company most vulnerable to value chain disruptions[37]. Where disruptions occur, financial consequences follow.

Which of the following conditions currently makes your company most valnerable to chain disruptions due to any cause, including COVID-19? % of respondents

- Automotive and assembly (n=200)
- Chemicals (n=85)
- Consumer and packagaed goods (n=86)
- Pharmaceuticals and medical devices (n=152)

Condition	Overall (n=651)	Automotive	Chemicals	Consumer	Pharmaceuticals
Demand variability	32		42	24	22
			42		
Sole sourcing/ nonsustainable inputs	28	22	15	24	49
Long input lead times	27	22	33	25	23
Low/just-in-time inventory	26	29		25	19
Lack visibility on supplier risks	23	22	22	19	25
		21			
Concentrated production	19	19	19	26	23
			18		
Risk-prone logistics	13	10	14	18	14
			15		
Aging plant and equipment	9	9	24	5	5
				6	
Short shelf life of products	7	2	0	29	5

Source: McKinsey survey of business executives, May 2020; McKinsey Global Institute amalysis

Poor risk management can put a firm in breach of their insurance terms in the event of damage to or loss of a consignment. It can also result in contamination of perishable items that have been stored under sub-optimal conditions or result in lack of product availability for the markets they serve. All have significant implications for the financial bottom line and, ultimately, erode consumer trust, which can be hard to win back.

[37] McKinsey Global Institute Risk, resilience, and rebalancing in global value chains.

In 2018, fast-food retailer KFC experienced shortages of their staple ingredient, chicken. Problems began when the company switched to a new logistics and delivery provider[38]. More than a week of disruption followed, with some 646 of their 900 stores forced to close temporarily and a 6.8% sales dip followed the distribution crisis.[39]

In today's hyper transparent world, where the behaviour and ethics of firms is under the microscope, supply chain visibility is critical in order to identify and act upon any parts of that chain that may be engaging in illegal, unethical and unsafe activities wherever along the chain this may be occurring.

Apple has long been criticized for supply chain violations. It's supply chain relies on up to 2.3 million workers, and the company has received criticism for working conditions within it, such as reports of 60-hour working weeks, worker suicides, child labour, pay being withheld, discrimination against women and minorities, beatings and harassment.[40]

In China, Yue Yen Industrial Holdings, which manufactures shoes for 60 international brands, triggered one of the largest strikes in mainland Chinese history in 2014, when 40,000 workers protested for two weeks over low pay and lack of social security.[41]

Retail giant Walmart's supply chain social responsibility commitments have been deemed deficient in many quarters, due to internal standards for suppliers differing for each country, resulting in building safety standards that are less stringent in Bangladesh than other countries, for example.[42]

Customers are increasingly looking for assurance that the products they buy have been extracted and produced and, ultimately, transported in a responsible manner. Problems in long, complex supply chains can hit businesses in many ways and brands are only as strong as their weakest supply chain link. Preparedness is the best risk management technique ahead of a potential food or product safety event and investment in a globally recognised quality standard is a worthwhile risk mitigation expense.

The BRCGS Global Standard for Storage and Distribution

The BRCGS Global Standard for Storage and Distribution reflects best practice and facilitates a process of continual improvement through well-designed, risk-based product safety management systems. It covers all activities which may affect the safety, legality, quality, and integrity of the products stored and distributed, and of any additional contracted services that may be offered by storage and distribution companies. BRCGS launched an upgraded version 4 of its Global Standard for Storage and Distribution Standard in November 2020 to reflect best practice and facilitate a process of continual improvement through well-designed, risk-based product safety management systems.

It has been developed with input from leading brands, retailers, storage, logistics and online retailers and can be applied to any part of the supply chain.

industry adoption and use of the BRCGS certification in this sector has increased by 16% year on year, currently being deployed in over 50 countries. Issue 4 is the only global standard to be developed in line with GFSI 2020 requirements, as well as being covered by globally recognised accreditation (ISO/IEC 17065).

Operations that opt for certification have access to an all-inclusive service package designed to support continuous improvement, allowing businesses to get added value from BRCGS, in addition to the management system certification process.

The BRCGS scheme is operated to our 5 layers of compliance to deliver results that Brand Owners can trust. This involves a comprehensive and stringent range of initiatives which, together, form our quality assurance process including performance management of delivery partners and auditors, and online platforms to capture issues and trends.

The Global Standard for Storage & Distribution is a fully flexible framework that reflects the current dynamics and changing role of the current logistics sector, as seen in the growth of e-commerce and the diversification of operational activities. It is the only standard that offers new additional voluntary modules to provide assurance of e-commerce and cross-docking. The Standard also has a requirement to develop a

Mark Proctor, CEO BRCGS, said: "We are delighted that HelloFresh, one of the world's leading online food retailers, has recognised the reassurance that our Standards and certification programmes give them as a brand. Our new Storage and Distribution Standard has evolved to meet changing consumer expectations and supply chain dynamics, to ensure that brands can maintain assurance in product safety and integrity. We look forward to working with HelloFresh to protect its strong brand."

38 https://www.theguardian.com/business/2018/feb/19/kfc-uk-closed-chicken-shortage-fash-food-contract-delivery-dhl#:~:text=The%20fast%20food%20chain%20KFC,Sunday%20night%20at%20646%20closures.
39 https://www.bighospitality.co.uk/Article/2019/10/07/KFC-sees-profits-drop-following-distribution-crisis#:~:text=KFC%20said%20in%20the%20report.year%20following%20the%20distribution%20crisis.
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product safety culture, looking at the attitudes and values which of the operation that relate to product safety.

The Standard will benefit storage, distribution, and logistics providers that are seeking to reduce their risks and potential liabilities associated with storage and distribution. It addresses customer assurance demands by demonstrating best practice, regulatory compliance and the development of a strong product safety culture.

Visit our website to learn more about the standard and how to benefit from certification to the standard.

BRCGS | Storage and Distribution