From Source to Consumer: Building a Resilient and Sustainable Supply Chain

K3

Contents

Introduction

The fashion industry's struggles with ethical, social, and environmental responsibilities have long been the topic of debate. While many solutions have been posited over the years, they have seldom yielded results.

From purely an environmental perspective, estimates suggest that out of the 100 billion garments produced each year, 92 million tonnes are dumped into landfills. According to the *Ellen MacArthur Foundation*, this equates to an entire rubbish truck full of clothes being disposed of into landfill sites every single second.

In many ways, this problem derives from modern society's "take, make, waste" rationale that perpetuates a linear economy as opposed to a circular one, and is therefore more the responsibility of consumers rather than brands. But there are countless problems within fashion brands' supply chains that severely damage the environment too. In fact, *Business Insider* has previously reported that the fashion industry emits more carbon than international flights and maritime shipping combined, while also estimating that it takes about 700 gallons of water to produce a single cotton shirt and 2,000 gallons to produce a pair of jeans.

In the wake of the ongoing climate crisis, almost all countries unanimously agree that we must take collective action to protect the environment and planet. During COP21 in 2015, the Paris Agreement was adopted by 196 parties with the overarching goal to hold "the increase in the global average temperature to well below 2˚C above pre-industrial levels" and pursue efforts "to limit the temperature increase to 1.5˚C above pre-industrial levels".

Despite the continued attempts to fend off growing temperatures and lessen our impact on the planet, barely any progress has been made. Governments have since introduced legislation directly affecting fashion brands and retailers, like the French Anti-Waste Bill (AGEC), that holds brands accountable for social and environmental failures in their supply chains. Consumers are also applying pressure to brands, with younger cohorts like Gen Z having considerable desire to shop sustainably. This is a trend that brands cannot afford to ignore since, by 2030, Gen Z will account for approximately a quarter of global income. But governments and consumers fail to realise a critical factor:

Brands alone can't fix the problem.

This sentiment isn't fully understood by governments or consumers because they don't really understand how the industry works. There are myriad reasons and problems that brands face daily that severely limit their ability to build a sustainable supply chain that rectifies the environmental failures in their existing supply chains.

In order to appreciate this, however, one must first understand how the industry arrived at this point...

Chapter 1

A brief history

To understand the sheer scale and size of the solution required to solve the fashion industry's social and environmental problems, governments and consumers must first understand why the issue is so complex.

The issue itself is rooted in the technological innovations that led to globalisation. Fashion and footwear products themselves require little technology as they're constructed using materials and are therefore considered 'low tech'. Yet, the arrival of new technology drastically altered the industry's course and radically reshaped how businesses operated.

For example, the arrival of fax machines enabled businesses to communicate on a daily basis, which massively improved efficiency across the board. Likewise, the introduction of new aircraft and modes of transport allowed buyers to travel and source their materials from further away. In the same vein, production companies were empowered to establish production lines in remote areas where it was more efficient to produce or where labour was cheaper. These changes ultimately gave birth to mass production as we know it today.

In the 50s and 60s, jeans and t-shirts gained considerably popularity and so brands starting producing them en masse. But it wasn't until new methods of communication and travel were brought into play, like fax machines and aircrafts, that the industry started to really change. In the 70s and 80s, the 'original' producers transitioned into brands or service companies while weavers and sewing plants were moved increasingly abroad. Similarly, US and European factories became brands that outsourced their manufacturing.

By the time the late 90s rolled around, this shift occurred in the Far East too. Producers and manufacturers in Hong Kong, Shanghai and Jakarta transitioned into service companies with factories located deeper and deeper into China and Indonesia. At the same time, new factories were established in Laos, Vietnam, Myanmar, and Bangladesh. These companies effectively became sourcing agents who controlled multiple factories in various geographies.

All of a sudden, fashion became faster and cheaper, while companies began offering technical product support like patternmaking. Brands were still somewhat involved in selecting critical materials, like fabrics and zippers, but the remote factories had gained control over non-critical materials, such as labels, linings and paddings. In the early 00s and 10s, sourcing agents assumed control over fabric buying, and factories in the Far East transitioned into large retailers who produced fast fashion and offered their products to US and European markets.

Pushback had arrived by this point, however, as the working conditions in many of these factories were brought into the limelight, and the world was shown how poorly many employees in these remote countries were treated. In 2003, BSCI was launched to drive change and improve working conditions… but commerciality still mostly spurred sourcing decisions. In fact, it wasn't until the Rana Plaza disaster in 2013 – where a building collapsed and tragically claimed the lives of 1,134 workers – that investigations into working conditions really attempted to change the industry. Unfortunately, these investigations revealed that countless brands and retailers, including *Benetton*, *Zara*, *Mango*, *Matalan*, and *Primark*, had failed to enforce measures that would prevent social failures in their supply chains.

The industry promised to improve, but the onus was still on individual brands and suppliers to resolve these issues voluntarily. While some minor improvements were made, fast fashion continued to be produced faster. More issues were brought into the spotlight, and the public was made even more aware of the industry's problems. Eventually, all this compounded into massive layoffs when fashion companies were forced to cancel their orders after COVID-19, though we'll discuss these challenges later.

With the industry's failings front and centre for the whole world to see, non-profit organisations like *Fair Wear* and *Fashion Revolution* began to mount pressure. At the same time, politicians proposed legislation that would force accountability. Today, several laws have already been activated, such as France's *AGEC* and Germany's *LkSG*, causing brands to reassess how they tackle sustainability and transparency.

Yet, they fail to take into account a significant problem:

Many brands are unable to disclose transparent information.

Modern brands no longer control their own sourcing decisions; instead, these decisions take place far away from a brand's headquarters. In fact, most brands have little to no insight or control over what goes into their products, nor how and where the items are produced. At best, brands have access to some inspection reports with chemical details and production facility audits to protect what is in their control, but this is limited to their *Tier 1* suppliers and critical materials.

Crucially, this means that most fashion supply chains are now opaque, which in turn limits how much transparent information brands can disclose. So, in many cases, it's not that brands don't want to share information, but because they don't have the data to begin with, they can't share it.

While this does provide the context needed to understand the fashion industry's problems, it's still important to know how the modern supply chain works and who the key players are.

Today, a typical fashion product supply chain can be broadly mapped into the following:

Raw materials producer

Each garment is created from various components, but an item's journey always begins with the raw materials. These are often basic and are classified as either natural or synthetic. The former is derived from plants and animals, like cotton or linen, while the latter is often man-made, such as synthetic fibres.

Raw materials wholesaler

Raw materials are sourced and collected from all over the world. For example, cotton is grown by farmers in various countries, while artificial fabrics are often sourced directly from textile businesses. As such, a key aspect of any supply chain involves buying raw materials from a wholesaler.

Textiles

The textile industry is essential to fashion, as companies in this vertical utilise raw materials to create yarns, which are then turned into fabrics. The main types of fabrics are woven and knitted, both of which are subsequently dyed or printed.

Fabrics wholesaler

Like raw materials, fabrics are created in multiple geographies, so manufacturing companies must purchase these fabrics from wholesalers as well.

Manufacturers

Manufacturing is a complex process and one that is difficult to distil into a few words. But in short, manufacturers are commissioned by fashion brands to turn fabrics into clothing, at which point production begins. Several operations are involved in this process, including cutting, sewing, and patternmaking, to name a few.

Clothing wholesaler

Once the manufacturers have created the commissioned garments, they must be distributed to retailers, who will sell them to the end consumer. The selling and distribution of garments are handled by different parties, depending on the nature of the business, but they can be generally defined into agents, importers, and fashion brands.

Retail

The ‘final’ phase in this process, for lack of a better term, is retail. In this instance, ‘retailers’ refers to the shops that have received goods from brands that sell the clothing to consumers. These include independent retailers, entrepreneurs, and large chains like *H&M*.

But, as we all know, a product’s lifecycle doesn’t end there. Once it is with a consumer, a piece of clothing can be resold, repurposed, or dumped into a landfill. However, for the purposes of this whitepaper, only a fashion brand’s supply chain is being considered.

It is also worth stressing that this overview only provides guidance on a typical fashion supply chain. The industry itself is broad and encompasses several sub-verticals, like luxury or outdoor, each with its own subset of challenges that must be navigated and resolved.

Chapter 2

Why are fashion supply chains different?

Today, there is an overabundance of choice when it comes to shopping for new clothes, and this has birthed countless sub-verticals that all sit within the umbrella of the fashion industry, such as luxury and outdoor wear. Each of these has unique differences and challenges that businesses must consider to build an effective, resilient, and sustainable supply chain.

To begin with, we'll zero in on outdoor fashion, since this vertical faces complex conundrums tied to technical limitations and raw material scarcity. Unsurprisingly, outdoor fashion brands have the same system solution requirements as any other fashion business, but the processes they require are quite different. This is due primarily to the fact that outdoor clothing needs to be highly functional and durable in many weather conditions. Therefore, outdoor brands focus significantly on raw materials and their constructions to ensure the finished articles are up to standard.

At the same time, consumers have high expectations concerning functionality, quality, and sustainability. Consequently, outdoor brands need solutions that support and accommodate these factors to ensure they create high-quality products. This issue is further exacerbated by the fact that outdoor goods command higher sales prices to account for the scarcity of the raw materials needed to manufacture them. Therefore, the goods must be of high-quality to justify the higher price tag in the minds of consumers.

However, the most significant difference between outdoor brands and other fashion businesses lies in how the former operates within wholesale. Since the raw materials are scarce and more difficult to work with, outdoor brands have much longer lead times than traditional brands, meaning their sales are primarily driven and limited based on product and material availability. In contrast, fast fashion can mass-produce garments and sell them far quicker.

As a result of this difference, outdoor brands often sell what they can deliver on a particular date and push subsequent sales orders (typically after re-ordering from factories) into a later delivery drop. However, despite only running two main seasons into multiple deliveries, the follow-up process is far more complex for outdoor brands than for traditional fashion brands. For those out of the loop, seasonal follow-up refers to developers and buyers contacting suppliers and factories to keep up with their raw material sourcing, delivery dates, and other transactions. In most cases, outdoor brands do not own their materials but still want to remain in control. In instances where fashion brands take back control over raw materials (without owning them), there is another notable difference between outdoor and traditional brands, as the former often purchases materials more than a year before they're needed due to their unique requirements.

Typically speaking, traditional brands run multiple seasons (such as four, six or even twelve) while offering special collections for holidays like Easter or Halloween. Yet, their seasonal follow-up is less complex than outdoor brands since their complexity predominantly lies in handling more product volume rather than being burdened by technical limitations and raw material scarcity.

Outdoor brands also offer their collections much earlier to their customers and sell them for months afterwards. In contrast, other fashion brands sell their collections for four to six weeks before closing or stopping their presales period. The goods are then delivered in batches, typically once per month, four to six times yearly, which is why fast fashion's complexity is rooted in volume rather than technical requirements or scarcity.

To complicate matters further, outdoor brands operate differently in the sense that their clients are accustomed to being able to change their orders to add different items and colours retroactively, which is less common in other fashion verticals. The 'most important' clients

can even order much later than other customers but still receive their goods beforehand. Inevitably, this impacts sales orders from the other customers, but is necessary due to the importance of larger clients to the outdoor brands' profit margins, meaning they always have priority when raw materials are scarcer than usual.

Conversely, fast fashion brands have access to abundant materials and can, therefore, more easily fulfil orders for small customers consistently. Of course, this presents another challenge for outdoor brands as their customer and supplier orders constantly change, meaning they need robust and agile solutions to accommodate such demands.

Traditional brands lie somewhere in the middle between their outdoor and fast fashion counterparts regarding their processes, though this does not mean their operations and supply chains are simple. Depending on the nature of their offerings, they may also face the same challenges in acquiring scarce raw materials, or they may need to handle significant volume. More broadly, most fashion brands have staple pieces they continually offer all year round, widely known as 'never-out-of-stock' (NOOS) goods.

The NOOS approach offers various benefits. Chiefly, this approach enables brands to sell top-performing items throughout multiple seasons to capitalise on additional sales and drive revenue. By having regularly stocked items, brands can foster greater loyalty and a sense of reliability with their customers since they won't be visiting a store or online shop to be met with the dreaded out-of-stock message – something that dissuades customers from returning again in the future.

Additionally, NOOS goods enable greater inventory management and financial forecasting as the continual supply helps mitigate excess stock levels and storage costs. However, this presents yet another challenge, as brands that offer NOOS goods must ensure they can continuously source their raw materials, have the goods manufactured, and subsequently shipped to make them available for consumers.

Some brands are now exploring the concept of NOOS for a different reason: sustainability. NOOS goods are often more durable, like denim jeans, which means that brands that sell such items simultaneously promote longer product lifecycles. Furthermore, since these brands produce fewer garments season-by-season, they will also generate less offcut fabrics and other scrap that ultimately end up in landfills.

It's also worth mentioning that the boundaries between NOOS and seasonality are blurring separately to all this. Historically, brands have released their products in line with their seasonal calendars whilst allowing specific goods to be sold out-of-season, providing customers are purchasing them. This could last as short as a single season or as long as a full year. But brands have observed trends with some items, like winter jackets, that sell well during the summer since hikers require warm clothing for climbing mountains. On the other hand, since offices, houses, and cars are all heated, some brands sell countless t-shirts during the winter months, while lightweight denim jeans sell well all year round.

All of this still fails to account for people that travel to distant countries with varying climates, meaning that they also desire a broad range of clothing at different points in the year. This may seem confusing, but the key point is that seasonality is now less strict, and more concerned with how and where garments are worn. Naturally, this further impacts and complicates brands' supply chains.

Evidently, no two brands' supply chains are the same, and this is why finding a solution that empowers brands to disclose transparent information is challenging to find. Without such a solution in place, it is extremely difficult for brands to identify social and environmental failures in their supply chains, and report on them to suit legislative mandates.

Thus far, we have discussed the industry's history to determine where today's problems lie, as well as some of the key differences in brands' supply chains; however, we still need to delve into the logistical side of the supply chain. This is a mission-critical aspect of any fashion brand's operations and one that has proven problematic – particularly in the wake of the COVID-19 pandemic.

Chapter 3

Why is there so much demand volatility and supply risk in fashion?

The COVID-19 pandemic brought many challenges for brands and businesses across the globe, but perhaps none more significant for the fashion industry than the persistent disruptions to the supply chain.

The blocking of the Suez Canal, for example, showcased to the world just how fragile supply chains actually are. Such disruptions resulted in material shortages, long lead times, transportation bottlenecks and a sharp rise in shipping costs – many of which have yet to entirely subside.

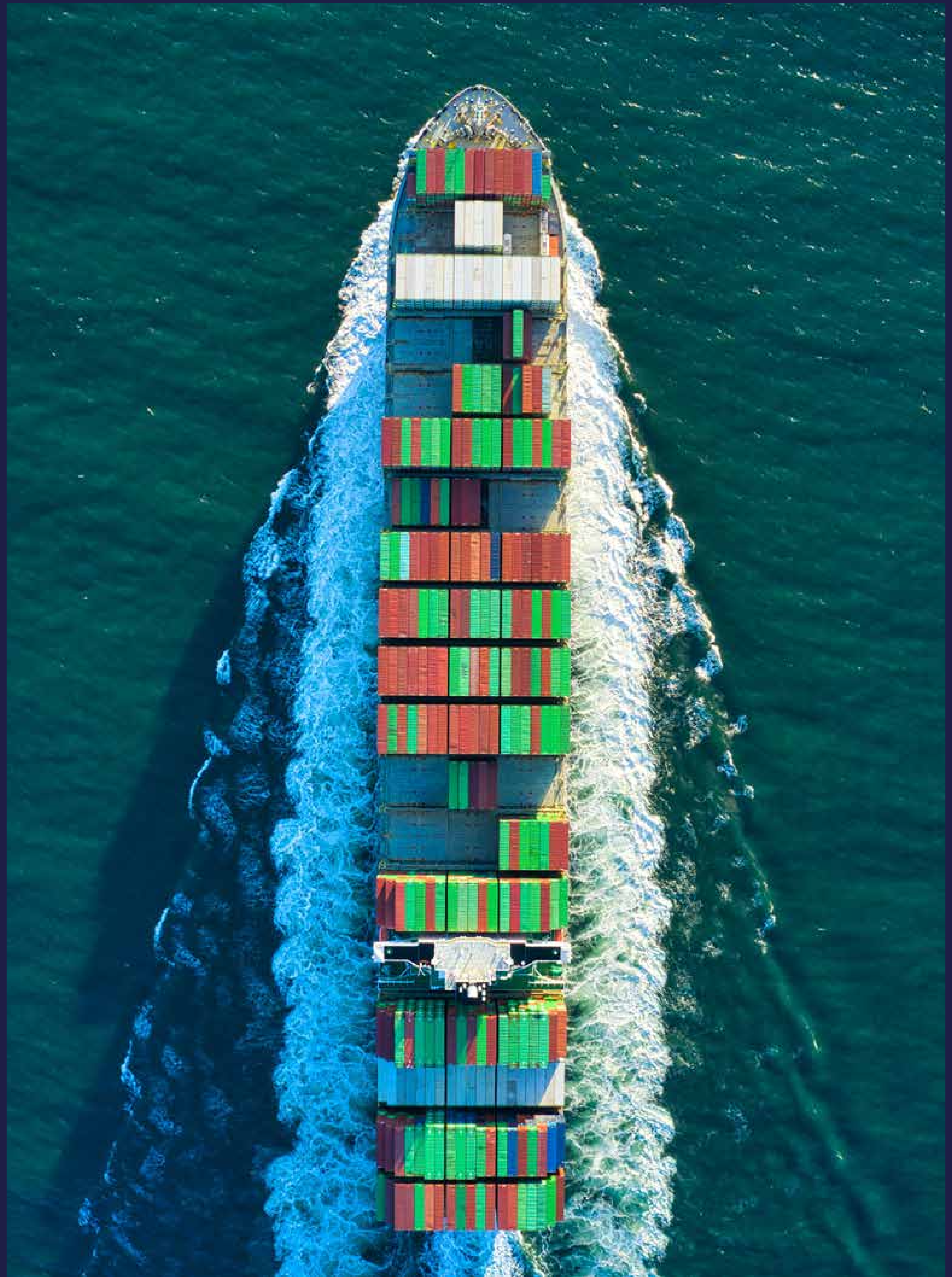
While the pandemic was a catalyst for many of these problems, there were other factors that greatly contributed to the issues, from shipping disruptions (i.e., congested ports and harbours being temporarily shut down) through to raw materials shortages (in part due to a slowed flow of supply from China). These issues were exacerbated by consumers releasing their pent-up spending power to treat themselves since they had saved money during lockdowns, leading to a huge boom in online sales. This change paved the way for the rise of the direct-to-consumer (DTC) model, which exploded during the pandemic and was a key reason for why online purchases surged 30% year-on-year during 2020 in Europe and the US. Due to the astronomical rise in online orders, production and transport capacities suddenly found themselves strained, and businesses were forced to re-evaluate their processes.

However, it didn't take long until all this was completely reversed, as macroeconomic factors caused by major events like Brexit, escalating geopolitical tensions, rising energy costs, and the persisting cost-of-living crisis squeezed consumers' wallets. Of course, brands themselves were also severely impacted by these events. The constant change in consumer behaviour made it extremely difficult for brands to accurately forecast demand, creating supply risk. Given how many brands are still struggling, this is problematic since they cannot afford to over purchase a product and waste precious resources.

Worse yet, businesses and consumers are still being forced to reckon with higher transportation costs. In 2021, the United Nations Conference on Trade and Development's (UNCTAD) Review of Maritime Transport revealed that consumers could expect to be hit with a price rise of 10% on products to account for the increase in freight rates. It was noted that clothing and textiles were at high risk of price rises linked to higher shipping costs.

According to UNCTAD, consumers spent most of their money on goods rather than services throughout the pandemic. This dramatic swing in containerised trade flows was ultimately met with devastating side capacity constraints (i.e., container shortages, labour shortages, on and off restrictions across port regions due to COVID-19). The mismatch between surging demand and reduced supply crucially led to container freight rates soaring across nearly all container trade routes.

On the back of these economic and geopolitical disruptions, businesses started exploring alternatives, like nearshoring and offshoring, to mitigate the impact of such events again in the future. The rise in popularity for both nearshoring and offshoring was spurred mainly by the burgeoning need to achieve greater supply chain agility and flexibility to lessen brands' exposure to demand volatility and supply risk.



In recent times, China has been, and still remains, the world's manufacturing hotspot and supply chain hub. However, with wages in China increasing, on average, 10% per year, paired with rising costs across the globe, fashion businesses are continuing to look for alternatives. Italian brand *Benetton*, for example, successfully shifted its production activities closer to home in countries like Serbia, Croatia, Turkey, Tunisia, and Egypt. In an interview with Reuters, Massimo Renon, Chief Executive at *Benetton,* said:

> **"It's a strategic move to have more control over the production processes and transport costs. Today, a shipping container that used to cost $1,200 to $1,500 can cost $10,000 to $15,000 with no certainty of a delivery date. The tenfold jump in sea freight costs has been driven by scarcity of available vessels, as many were idled during the pandemic, coupled with rebounding consumer demand."**

Renon added that even if production costs remained 20% lower in Vietnam and Bangladesh, compared to Mediterranean countries, the benefit was offset by longer lead times instigated by supply chain issues. These concerns are still heavily weighing on the minds of fashion executives, who anticipate that these factors will continue to affect supply chains for some time.

> **In fact, 85% of senior fashion executives cited the rising cost of raw materials as the top issue that will impact global fashion supply chains going forward, as per *The Business of Fashion* and *YouGov*. This was followed by increased shipping costs (82%), port delays and disruptions (74%), availability of transport capacity (77%) and temporary vendor shutdowns (51%).**

While brands like *Benetton* found success in relocating core parts of its operations, others, like H&M, have not. The Swedish company decided to shift production from China to Southeast Asian countries like Bangladesh, Vietnam, Malaysia and Indonesia but found that the logistics network in China was still far superior. Until these countries mature and develop infrastructures that are on par with the likes of China, not every brand will be able to successfully move their operations abroad in the hope of saving costs. Though, it could one day be a viable avenue.

While China currently accounts for almost half of global textile and leather goods productions, this is set to decline by 2030, as per Deloitte's Global Fashion & Luxury Private Equity and Investors Survey 2023. If China's influence continues to wane, and lesser-developed countries create more robust infrastructures, brands could potentially shift their operations in the future. But that doesn't provide a solution for right now.

Deloitte's report also details how, since 2021, raw material prices (particularly those for cotton and petroleum-based textiles), rose to all-time highs as a result of price inflation in energy and chemicals, as well as the growing price of crude oil further up the supply chain. Going forward, at least in the short-to-medium term, increased energy and raw material costs, alongside further supply chain disruptions caused by labour shortages, are touted to be key drivers that continue to worsen inflation. Rising energy costs have the potential to generate additional price hikes in the market, which will more than likely force certain manufacturers – especially those with energy-intensive textile factories – to impose production run limits or shut down their facilities during periods of peak energy pricing.

Clearly, there are many moving parts that must be considered when brands look to future-proof their supply chains. From consumer demand and legislative mandates forcing brands to be more transparent to economic factors and supply chain woes causing mass disruptions, fashion businesses have a lot to think about. But where exactly do they begin?

Chapter 4

Building a resilient and sustainable supply chain

The fashion industry's significant struggles are all, in one way or another, tied to the supply chain. Whether that encompasses the blurring boundaries between seasonality and NOOS, rising shipping and energy costs, inflation, transportation bottlenecks, or a lack of visibility, ultimately depends on specific circumstances, each unique to every business.

While it may seem daunting, the reality is that most of these components must be considered when companies look to build resilient and sustainable supply chains that adhere to legislative mandates and can withstand future crises.

With that said, some challenges are more straightforward to resolve than others. For example, as brands re-evaluate whether particular products should be sold on a seasonal basis or all year round, technologies like Artificial Intelligence (AI) will grow in importance. Since seasonality has become less strict and more concerned with how and where garments are worn, brands require tools that enable them to strike the right balance between their seasonal and NOOS offerings.

It's important to stress that there is no golden rule in this regard, nor does that balance need to stay precisely the same indefinitely. Fluidity is paramount. If a product performs well, brands can consider transitioning it into NOOS, and conversely, if it performs poorly, brands can make it season-specific. This fluidity can only be achieved by taking advantage of analytical tools like AI to better understand product performance. In the same vein, supply chain management solutions will be critical in ensuring continual supply for NOOS goods.

The use of AI and supply chain management solutions to determine the optimal balance between seasonal and NOOS, however, is more of a concern for businesses with a fully established supply chain that is future-proofed. It's a luxury rather than a necessity. In today's volatile climate, it's more pressing for most brands to focus on adding agility, flexibility, and reliability to their supply chains – particularly after the world was exposed to their vulnerability.

Fortunately, there are several steps brands can take to regain control over their processes. For one, businesses can allocate their products to different vendors, allowing developers to find nearshore and remote sources. In doing so, developers would be enabled to identify products that can be made nearby and those that are too expensive or complex for nearshoring. The goods could also be developed at multiple factories in different geographies to further increase flexibility.

Brands could also seek greater control over their critical raw materials and transactions without necessarily owning the materials themselves to boost agility. While many brands today don't have this level of control, regaining it would bolster their agility and allow them to more easily change factories while materials are being produced.

To mitigate the impact of delayed deliveries, brands could start splitting their large orders of items between multiple suppliers in various geographies, or utilise efficient warehouse allocation rules to ensure critical customers and retail stores receive an initial partial delivery against their orders while awaiting the remainder. In addition, businesses could combine multiple production sources to help distribute purchase orders more efficiently and start fulfilling sales orders on the promised dates. Short shipments would also be far less painful to manage as a secondary benefit to this.

On the costing side, brands could consider "what-if" scenarios while taking into account split order quantities over multiple sources to help determine the right purchase and sales prices. Furthermore, open cost calculations are an ideal method for understanding the cost down to the raw materials levels, which will help inform brands' overall costs and pricing.

Finally, businesses could consider their pre-allocation calculations in tandem with logistics scenarios – before shipments take place – to help understand what percentage of the purchase orders should be shipped and in what manner. This will drastically assist with fulfilling wholesale and retail demand based on criticality and profitability.

Central in all this, however, is the correct application of digital solutions to ensure that brands have the agility and flexibility to pivot and adapt when needed. Given that eCommerce growth is declining and will be much closer to pre-pandemic levels by 2025, paired with rising digital marketing costs, brands will also need robust solutions that enable greater channel mix diversification (i.e., wholesale and direct-to-consumer) and cross-channel strategies.

> **As McKinsey notes, this can be achieved by "having a clear distribution segmentation, allocation to wholesalers and DTC to distinct values tier and setting the guardrails on multiple dimensions, including the assortment offered, and the level of investment accounts receive. This enables brands to develop cohesive assortments working across distribution networks".**

The above avenues can significantly simplify life for brands as they offer routes to more efficiency, flexibility, and agility, but that doesn't mean each one must be implemented. It's imperative that brands consider each option carefully and evaluate which best suits their particular business and what offers the most security in the long term. It's also vital to utilise solutions that provide greater visibility. For example, knowing that a vendor in China offered a lower price but a higher lead time, while another vendor in Turkey had a higher price but a shorter lead time, could alter a brand's decision on which vendor to choose.

On the topic of visibility, this is the key to enabling brands to better understand their historically opaque supply chains. Before delving further, it's worth mentioning that while it's true that many brands can't share transparent information, some don't want to for an important reason. In many cases, i.e., luxury fashion, manufacturers and key materials are vital differentiators that dictate a brand's overall look and pricing position. In other words, they're a brand's DNA.

Sharing this information with the public is similar to *Coca Cola* sharing its original ingredients – it would be catastrophic to the business if other beverage companies could replicate the recipe. But that doesn't mean these brands can't disclose other parts of their supply chains and have the more secretive aspects privately audited in line with common Environmental, Social, and Governance (ESG) standards.

With that out of the way, it's time to explore how brands can best tackle supply chain traceability and transparency to suit legislative mandates. As previously mentioned, the core problem for brands is that they have little to no insight into what happens in their supply chain and therefore are unable to disclose the information laws require them to. So, initially, brands must first tackle their internal supply chain issues because otherwise, there's little that can help them display more transparent information. And even then, brands alone can't fix all the problems because there are only so many companies in the supply chain that pay correctly, source ethically, and manufacture responsibly.

Suppose brands pivoted and exclusively used companies that have been "approved" in line with relevant CSR and ESG classifications. In that case, they'll swiftly find that there isn't enough capacity available, and this in turn will massively drive prices up. Still, it will simultaneously attract more companies to become "approved". But that also means that consumers would need to accept the higher costs to enable the broader fashion industry to truly redefine its processes.

This is precisely why, as mentioned in the introduction, the push for transparency must include change across all fronts – from small and large businesses to consumers and even governments. The tides have been slowly changing, but it will take longer for permanent change to take place. The positive news, however, is that the technology is already there to enable brands to start making strides in their endeavours, like supply chain traceability tools.

Such solutions can disclose a brand's supply chain at a much deeper level than they've previously had access to and showcase any weaknesses or potential issues within them. Equipped with this level of visibility, brands can identify which topics require action first, empowering them to fix the problems before publicising the information to the broader world. With the right solution provider, i.e., those partnered with trusted, third-party certification bodies, brands will have all the tools needed to authenticate their suppliers' CSR and ESG data. From there, brands can display the final results to governments and end consumers to adhere to the legislative mandates, whilst appealing to the ever-growing number of socially-responsible and eco-friendly shoppers.

While these solutions won't magically fix the entire fashion industry's problems, they empower brands to understand their supply chains better and take action. In a world where brands have lacked insight into their supply chains, these tools provide an easy and practical way for businesses to regain control over who and what is involved in the process. Gradually, as more brands and suppliers are onboarded to these solutions, many of the industry's social and environmental problems will be flushed out as more sustainable and socially responsible supply chains are forged.

With the right use of technology, fashion businesses can radically overhaul their operations to ensure they are resilient and sustainable. It sounds almost too simple, but the best solutions always are. The technology to enact change already exists, and businesses are ready and willing to transform business processes for good. Like K3…

Chapter 5

How K3 can help

K3 has been supporting fashion businesses with their biggest challenges for over 30 years, and we offer several solutions that enable brands to navigate today's problems. With long-standing expertise and a singular mission to transform fashion for good, we'd like nothing more than to discuss how we can resolve your issues.

But first, here's some background on our solutions.

Our concept-to-consumer solutions, **K3 Fashion** and **K3 Pebblestone**, are embedded within D365 Finance, Supply Chain Management, and Commerce and D365 Business Central, respectively. Both solutions have been explicitly enhanced to create environments where brands can thrive with out-of-the-box functionality geared specifically for fashion.

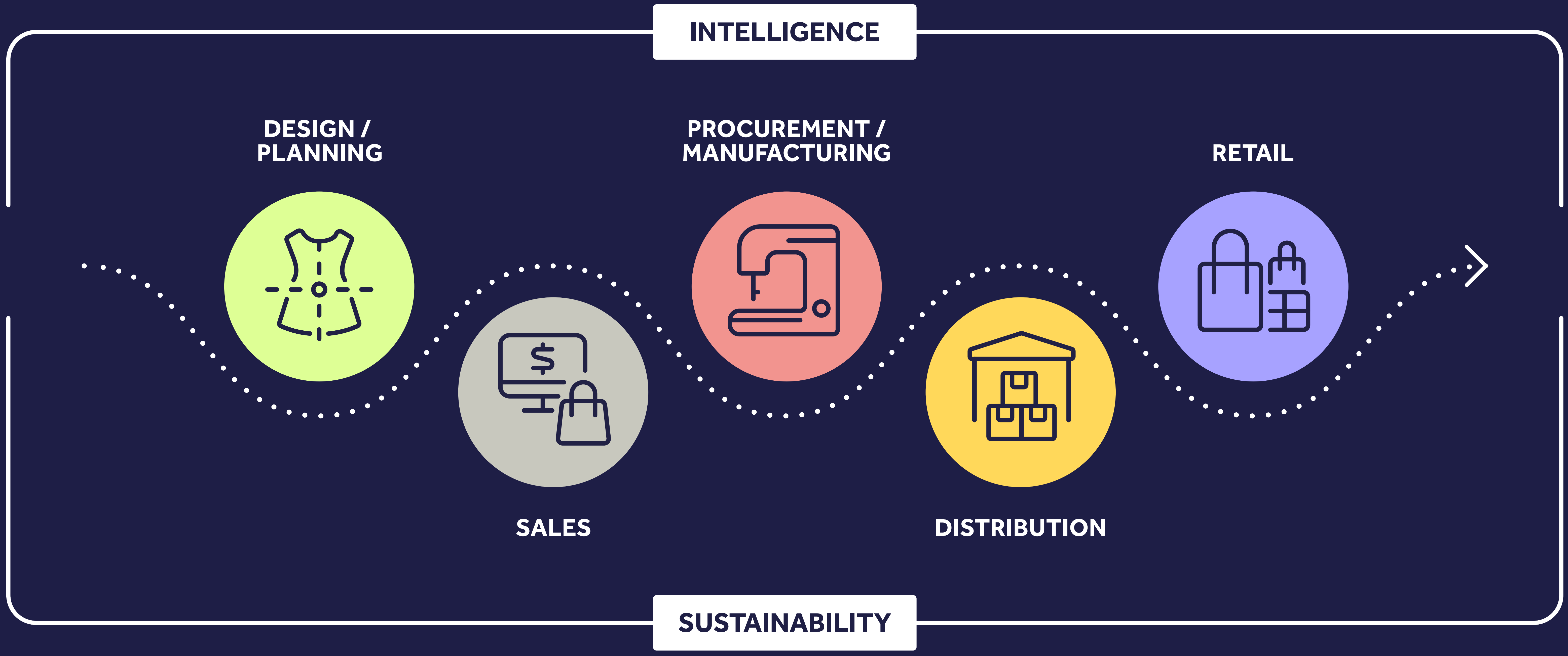
To borrow the example of outdoor fashion discussed earlier, **K3 Fashion** supports brands in this vertical with Product Lifecycle Management (PLM) functionality that helps ensure product longevity and durability. Additionally, our solution provides comprehensive planning capabilities that enable brands to plan more efficiently for their wholesale, retail, and online businesses in siloes, ensuring they can separate stock per channel. The stock is siloed systemically to guarantee availability in warehouses across all channels.

K3 Fashion also incorporates ringfencing functionality to help brands to secure product and/or product quantities for specific customers or groups to support special programmes with particular customers. Finally, our solution's channel management and prioritisation functionality enables outdoor brands to efficiently deal with critical customers' eCommerce platforms and retail stores while keeping stock available for important clients across their individual channels to ensure that key customers, stores, and outlets receive their goods when needed.

Both solutions enable brands to manage their entire operations from end-to-end, something that 61% of fashion executives believe will be among the most important investments between 2021 and 2025. In fact, *McKinsey* estimates that applying integrated digital solutions to merchandising could lead to a 50% faster time to market, an 8% rise in full-price sell-through, and a 20% decline in manufacturing costs. With this in mind, it's no surprise that many executives believe end-to-end process management will be pivotal to success over the next few years.

K3 Fashion and **K3 Pebblestone** also support all critical fashion processes, from planning, design, sourcing, purchasing, logistics, warehousing, and finance, including:

- Inventory and Warehouse Management
- Season Management
- Item Management
- Product Data Management
- Order Management
- Manufacturing
- Price and Cost Management
- Corporate Social Responsibility
- Sustainability



We also supply brands with Cargo Management and Landed Cost solutions, ensuring they have better visibility over their cargo's transportation routes and costs. The former allows businesses to seamlessly access essential information about their vendors, transport routes, dates, and other essential documentation. With this visibility, it becomes significantly easier to update purchase order details, inform customers about changes, maximise efficiency, and reduce costs down the line. The latter enables brands to calculate expenses (like freight rates, tariffs, insurance, import duties, etc.) with easy-to-use calculation templates and worksheets. Crucially, this allows brands to determine what price to assign their products in order to turn a profit once they've been sold.

And last – but certainly not least – we have our supply chain traceability solution **K3 ViJi**. Our platform enables brands to gain control over their ESG challenges by onboarding their supplier network to gather information throughout their supply chains. Through our direct alignment with certification bodies and partnership with Peftrust, we automatically validate the collected data and provide carbon footprint analyses.

Ultimately, this gives brands real-time insight to understand their supply chains and where the major issues lie, empowering them to take action that best suits their ESG policies.
If you'd like to learn more about our solutions, feel free to drop us a line today.

Thank you

From everyone at K3, we thank you for reading our latest whitepaper and hope that you have learned something new.

We regularly publish thought leadership content that aims to educate the broader industry on upcoming trends and technologies. So, if you'd like to read more insights from us, we recommend keeping an eye on our website and following us on social media.

About K3

As a Microsoft Cloud for Retail launch partner, K3's team of expert solution architects and developers support businesses in their mission to transform retail for good.

K3 builds market-redefining software capabilities and delivers future-leading strategies to promote digital adoption, sustainability, and optimised business processes in fashion, footwear and apparel.

K3's concept-to-consumer software helps businesses of all sizes – from independent start-ups to global luxury brands – navigate intricate challenges, including ESG and CSR, complete with end-to-end visibility and traceability.

To learn more about K3 and how we can help your business, visit our website www.k3btg.com

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