# Fashion in Flux: Modernising the Supply Chain with ERPs to Combat Volatility


K3 Fashion Solutions

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# Introduction

Fashion and apparel are facing unprecedented levels of volatility. From the fallout of the COVID-19 pandemic to geopolitical tensions and skyrocketing costs, brands are navigating choppy waters.

Traditional linear supply chain models and procurement strategies that once served the industry are no longer sufficient to weather these turbulent forces.

## The old ways of doing things just don't cut it anymore...

In this era of constant flux, companies must rethink and overhaul their entire supply chain to embed resilience, agility, and sustainability.

Failure to adapt will leave brands grappling with the brittleness of outdated systems, unable to respond to demand volatility, supply disruptions, and mounting pressures for transparency and ethical sourcing.

The solution lies in leveraging advanced digital technologies, such as cloud-based Enterprise Resource Planning (ERP) systems and Artificial Intelligence (AI) solutions.

These game-changing tools empower brands to sense and adapt to market shifts in real time, optimise operations, and maintain a competitive edge amidst constant change.

## Enjoy the read!

# Chapter 1

# Unprecedented Upheaval

**With disruption seemingly the default in fashion and apparel, brands must adopt new strategies and solutions to limit their exposure to uncertainty.**

This sentiment is shared by leading decision-makers. In December 2023, a McKinsey roundtable of Chief Procurement Officers (CPOs) reinforced that demand volatility and supply chain instability are expected to persist as the new norm.

Over the last few years, the industry has been whipsawed by dramatic demand fluctuations, material price volatility, geopolitical conflicts disrupting trade, intensifying competition, and an onslaught of sustainability regulations. To make matters worse, the apparel sector still hasn't witnessed the full brunt of demand fluctuations.

According to McKinsey's State of Fashion 2024, the peak impacts from these demand shifts are expected to continue throughout this year, heightening the risk of shortages when sales rebound. This is indeed concerning news, considering that this volatility already caused yarn and fabric exports to plummet by 11% last year in major textile-producing countries like China, India, and Turkey. Similarly, factory utilisation rates dropped from 100% in 2021 to just 60-70% in 2023 due to overcapacity.

These trends stress something crucial for CPOs: the traditional playbook of chasing low-cost labour in a handful of markets like Southeast Asia and Africa is dead and buried. Brands must seek to diversify their supply chains to mitigate the bullwhip effect.

The bullwhip effect refers to the phenomenon where fluctuations in consumer demand get amplified as you move up the supply chain. Even small changes in consumer demand can result in larger shifts in the orders received by manufacturers and suppliers. This demand amplification occurs because players at each stage of the chain make ordering decisions based on limited information and demand forecasts rather than actual consumer demand.

For instance, consider a fashion brand that sees a 5% increase in consumer demand for a particular style. The retailer may respond by increasing their order to the distributor by 10% to account for the rise in demand and buffer stock. With even less visibility into true consumer demand, the distributor may inflate their order to the manufacturer by 20% to avoid potential stockouts. By the time the order reaches raw material suppliers, that small 5% demand spike has translated into a much larger 30-40% order fluctuation. This amplification can whiplash through the supply chain.

Now consider that the peak of the latest wave of demand fluctuations is still in play, and it's easy to see that there is more turbulence ahead. The bullwhip effect makes it extremely difficult to forecast and plan with accuracy. Manufacturers struggle to optimise production capacity. Suppliers cannot efficiently manage their inventory and risk stockouts. Costs increase from expedited shipping, overtime labour, and insufficient asset utilisation. Stockouts and excess inventory ultimately impact customer service levels.

If anything is evident from the above, it's that the overly extended linear model has proven inflexible and opaque in today's climate of disruption. Material shortages, transportation bottlenecks, congested ports, lack of shipping containers, and a massive surge in freight costs have created persistent headwinds.

These myriad challenges have coalesced into two overarching problems plaguing the industry – unprecedented demand volatility and heightened supply risks. During the depths of the pandemic, pent-up consumer demand led to an explosion in sales, particularly for eCommerce, straining production and logistics capacity. However, that demand has contracted just as severely in the current economic climate roiled by inflation, geopolitical tensions, and the cost-of-living crisis.

Demand swings and escalating operational costs have converged to make forecasting demand accurately incredibly difficult. Yet, incorrect forecasting can result in overbuying products and wasting resources in an already tough economic environment where businesses cannot afford overstocking or stockouts.

The fashion industry is uniquely vulnerable to these dynamics. Its short product life cycles, seasonal influences, and high marketing volatility rooted in trends and changing consumer tastes tend to amplify demand swings. Fast fashion brands running frequent promotions and turning over styles on compressed timelines are especially susceptible to the bullwhip effect.

Without robust inventory management capabilities and supply chain visibility, production plans, distribution plans, and purchasing plans can quickly become distorted and misaligned from actual end customer behaviour.

While fast fashion is particularly susceptible to the bullwhip effect, the reality is that any fashion company spanning multiple sales channels, geographies, product lines, and stock-keeping units (SKUs) is at significant risk of overreacting to short-term blips in demand because of how quickly volatility can spread throughout the chain.

Even luxury brands, which are traditionally viewed as more insulated from demand shocks, are not immune. Limited product lifespans for trendy items and seasonal inventory build-ups can exaggerate demand fluctuations if not proactively managed. Operational inefficiencies created by the bullwhip effect often lead to overstocked markdowns or costlier underproduction for in-demand products.

Combating these challenges requires having real-time inventory visibility spanning the entire multi-tier supply chain enabled by advanced technology solutions like fashion-focused ERPs hosted on the cloud. The ability to pinpoint evolving demand signals early and swiftly adapt procurement, production, and distribution plans is paramount for maintaining cost-efficient operations and customer service levels.

On the flip side, not having these digital tools in place to support efficient operations will cripple brands. They must modernise their systems and processes while diversifying their supply chains to successfully navigate this new era of perpetual volatility.

Chapter 2

# Diversifying Sourcing Strategies

**Having explored the demand volatility and supply risks disrupting the industry, it's time to turn our attention to how brands can best wade through these waters to build more resilient supply chains. In addition to fashion-focused ERPs, businesses must diversify their sourcing strategies.**

Once again, this is a sentiment shared by leading decision-makers. CPOs globally are prioritising improved process efficiency, cost optimisation, and revamped global sourcing strategies. In fact, nearly 70% expect to take action to lower product costs, reduce sourcing overheads, and accelerate go-to-market in the near term, according to McKinsey.

Central to this transition is the diversification of sourcing and production across multiple geographies. The idea behind this strategy is to avoid oversaturation in any single region. As McKinsey notes, Southeast Asia remains a hotbed, representing 33% of global sourcing value, which is expected to further increase over the next five years. South Asia and countries like Bangladesh, India, and Vietnam have seen the fastest growth since 2019, accounting for 32% of the market. These emerging hotspots are where some 40% of CPOs plan to increase their sourcing operations as brands recalibrate their footprints.

However, China still maintains a formidable position, comprising 28% and 21% of the total apparel import value into the European Union and the United States, respectively, in 2023. But its dominance is waning as companies hedge their reliance on China amid geopolitical tensions and supply chain disruptions emanating from the region.

Another major strategic shift underway is nearshoring and onshoring more production closer to home markets in the Americas and Europe. While total apparel imports from nearshore territories like Mexico and Central America have remained relatively flat since 2018, largely because the total landed cost from these regions is still generally on par with Asian import costs at best, this trend is expected to accelerate.

Suppliers in these markets have been aggressively investing. They aim to improve productivity, build and develop yarn and fabric production capabilities, and enhance their ability to manufacture a wider array of products.

Mexico itself is quickly becoming a popular destination for nearshoring activity, spurred by the potential to drastically reduce lead times, increase supply chain visibility, and lower inventory markdown risk. Aside from the need to build yarn and fabric production capabilities, Mexico faces other challenges in its rise to becoming a hotbed for nearshoring. Chiefly, the informal nature of the workforce – which accounts for 55% of the total Mexican workforce – could lead to instability and high turnover rates.

Mexico's regulatory landscape is also complex and evolves quickly, meaning companies must continuously monitor the legal, fiscal, trade and compliance rules to ensure sustainable operations. Nevertheless, if these issues are addressed, the opportunity to slash lead times, gain more visibility, and reduce markdown risk could soon outweigh offshoring's labour arbitrage advantages.

For decades, fashion and apparel brands pursued an offshoring strategy, relocating production to low-cost Asian labour markets to capitalise on cost efficiencies. As McKinsey outlines, in the 2000s and early 2010s, companies developed expansive global supply chains concentrated in regions like Southeast Asia to leverage affordable manufacturing hubs. However, as wages rose in those countries, the search for low-cost production shifted to South Asia and parts of Africa in the latter half of the 2010s.

This model of continuously chasing the lowest labour costs by moving production to new territories has proven unsustainable in the long run. Suppliers in traditional hubs like China, Southeast Asia, and South Asia have invested

heavily in enhancing productivity through lean manufacturing principles, automation, and other initiatives to retain cost competitiveness. As a result, the advantages of labour arbitrage have diminished, driving apparel companies to rethink their global sourcing strategies.


So, the question is, what is the best strategy going forward? As has been heavily suggested thus far, the trick for fashion and apparel companies is to diversify. This includes diversifying sourcing strategies as much as it does diversifying the supply chain. When regions like Central America and countries such as Mexico develop their infrastructures and solve key challenges, they will be primed for North American companies to relocate parts of their production and sourcing closer to home. In doing so, they will avoid overreliance on traditional hubs while improving their speed-to-market and mitigating potential volatility.

As volatility roils, however, fashion and apparel brands also contend with mounting pressures to improve sustainability, Corporate Social Responsibility (CSR), and supply chain transparency.

More than 80% of CPOs surveyed by McKinsey stated that Environmental, Social, and Governance (ESG) certifications, material traceability, and sustainable sourcing have become prerequisites for supplier selection and procurement decisions.

This elevation of ethics and sustainability as procurement criteria stems from increasing consumer activism, media scrutiny of labour practices and environmental impacts, and the introduction of new regulations aiming to hold brands accountable. Laws like France's AGEC and Germany's LkSG are driving apparel companies to provide granular disclosures about their supply chain practices, emission footprints, and human rights protections. However, most brands struggle to attain full supply chain transparency and traceability due to the complexities and opaque handoffs involved in globally dispersed multi-tier production networks. We've previously discussed how the once vertically integrated apparel industry fragmented over recent decades, leaving brands with limited line-of-sight beyond their Tier 1 suppliers as sourcing migrated to lower-cost regions.

As a result, many companies lack critical data regarding the products they sell, unable to disclose substantive information on labour conditions, material sources, environmental impacts, and other ethical facets of their supply chains. This predicament propels investment in digital tools offering crucial end-to-end visibility to support new sourcing strategies.

Chapter 3

# The Pivotal Role of Cloud ERP and AI

**While diversifying sourcing is a critical step in the process, holistically addressing volatility, nearshoring, sustainability pressures, and other converging challenges requires a comprehensive digital transformation.**

Indeed, more than 80% of CPOs rely on digital Product Lifecycle Management (PLM), 3D modelling, and other data-driven capabilities to address these issues, according to McKinsey.

However, for such systems to be effective, brands require intelligent, end-to-end cloud technologies like Microsoft's Dynamics 365 (D365) ERP solutions. This is because siloed systems operating independently, like PLM and 3D modelling solutions, create barriers and inefficiencies.

ERPs serve as the operational backbone of any successful organisation in fashion and apparel, helping to address volatility, sourcing challenges, and sustainability pressures. These cloud-based platforms unify data from financial management, customer engagement, supply chain, and eCommerce into a centralised system. By consolidating these information flows into a single source of truth, ERPs enable real-time visibility, empower data-driven decision-making, and drive process modernisation.

For instance, ERPs ensure compliance with local regulations and facilitate better workforce management by tracking labour availability and performance, helping to formalise the workforce and reduce turnover rates. This is particularly key as brands look to nearshore in places like Central America or Mexico.

Likewise, D365, when enhanced by expert fashion solution providers like K3 Fashion Solutions (K3), offers a dedicated CSR module. This module provides classifications and certificates on suppliers and raw materials. It allows CPOs to choose the option that best meets their company's specific policies.

Rules can also be established to block transactions with vendors who do not meet such criteria, providing companies with a simple way to achieve sustainable sourcing.

Inventory management capabilities, which ERPs enable, profoundly help companies looking to minimise the impact of demand fluctuations. They provide real-time visibility into stock levels and order statuses to support proactive decision-making. With increased visibility, companies can examine their supply chain and better understand potential issues to lessen the risk of overreacting to short-term fluctuations.

Crucially, fashion-focused ERPs equip brands with a robust digital core to streamline and connect operations across the entire supply chain. From design and product development to purchasing, quality assurance, inventory optimisation, multichannel distribution, and financial management, centralised ERPs provide the end-to-end visibility lacking with makeshift solutions.

But the value extends far beyond those table stakes. By centralising product data, brands can streamline processes like order management, season planning, product lifecycle management, warehousing, manufacturing, retail commerce and supply chain traceability.

The real-time analytics provided by ERPs offer the intelligence to make customer-centric decisions, optimising activities from pricing and promotion to allocation and replenishment.

Furthermore, the quantifiable impacts for fashion and apparel companies go beyond just operational efficiency. By streamlining processes and optimising resource utilisation, ERP systems drive down operational costs while simultaneously improving speed and service levels to capture more revenue.

ERPs are undoubtedly the linchpin of modern organisations; however, these systems offer even greater value when enhanced with advanced AI capabilities like in D365. Microsoft Copilot automates routine tasks, extracts insights from data, and surfaces intelligent recommendations.

## Some key use cases include:

- Inventory Optimisation: Copilot integrates with D365 Business Central to generate accurate sales/inventory forecasts and automate vendor replenishment processes based on those projections. It allows users to query real-time omnichannel inventory stock through natural language.

- Personalised Shopping: In Cloud for Retail, Copilot can analyse shopper data to provide real-time personalised product recommendations and offers, enhancing customer experiences.

- Supply Chain Visibility: Within D365 Supply Chain Management, Copilot can rapidly update purchase orders by assessing disruption impacts, communicating with suppliers, adjusting lead times, and rerouting deliveries based on identified risks.

- Sourcing Optimisation: Copilot can analyse market data on raw material pricing and volatility to predict future costs in D365 Finance & Operations, giving brands the insight to budget accordingly and develop appropriate purchasing strategies.

This kind of AI-driven automation and optimisation tackles key bottlenecks inherent to the fashion industry's fast product cycles and vast product assortments spanning thousands of SKUs. By offloading tedious tasks to AI systems, brands can reallocate resources to higher-value activities while ensuring consistent, high-quality execution of fundamental processes.

Together, the combination of a connected cloud ERP core, industry-specific enhancements from K3, and advanced AI capabilities empowers fashion and apparel brands to truly reimagine and future-proof their supply chains. With the ability to sense and adapt to volatility in real time, they can maintain resilience, compliance, and competitive agility.

Up to this point, we've covered the industry's struggles with demand volatility and supply risk, delved into strategies and solutions to overcoming these challenges but there's still something that needs to be addressed...

You've more than likely noticed us mentioning "fashion-focused ERPs" and "K3's enhancements" several times in this chapter. Wondering why?

Chapter 4

# How K3 Fashion Solutions can help

Most horizontal ERP platforms – even top-tier ones like D365 – lack the inherent functionality and tailored capabilities to effectively meet fashion and apparel's nuanced requirements out of the box. This means brands must thoroughly evaluate which vendor best serves their needs.

Whether you're a designer or merchandiser, product owner or supply chain manager, you need a solution that supports you in your role.

## Fashion should be fun and creative, not technical and complicated.

At K3, we bring deep subject matter expertise and a genuine understanding of the industry. Our experts and developers purposefully choose what functionality to develop based on the industry's requirements. But we're fashion specialists… not ERP.

Microsoft, however, is an expert in ERP. It is consistently recognised as a Leader in Gartner's Magic Quadrant for Cloud ERP for Product-Centric Enterprises. Forbes also ranks D365 Business Central as the best overall ERP. So, we opted to embed our solutions natively into the D365 technical landscapes to ensure our customers benefit from a leading ERP and our specialised fashion enhancements.

Our added functionalities are purpose-built to streamline operations and automate routine tasks, freeing time to focus on what matters – creating exceptional fashion.

## Key highlights include:

- Mastering item management with simple colour, size and fit grids
- Automating product description creation with AI
- Simplifying shipping with prepacks
- Easily capturing product information

By embedding fully into D365, we eliminate the need for disparate third-party add-ons or APIs, reducing your tech stack complexity. This ensures you operate from a single source of truth, accelerating decision-making and business velocity.

## Additional enhancements and functionalities include

### Sourcing & Compliance

CSR and supplier management modules enforce sustainability criteria, certifications, and ethical policies.

### Merchandise Planning

Sophisticated line planning, open-to-buy, and store clustering optimise merchandising strategies.

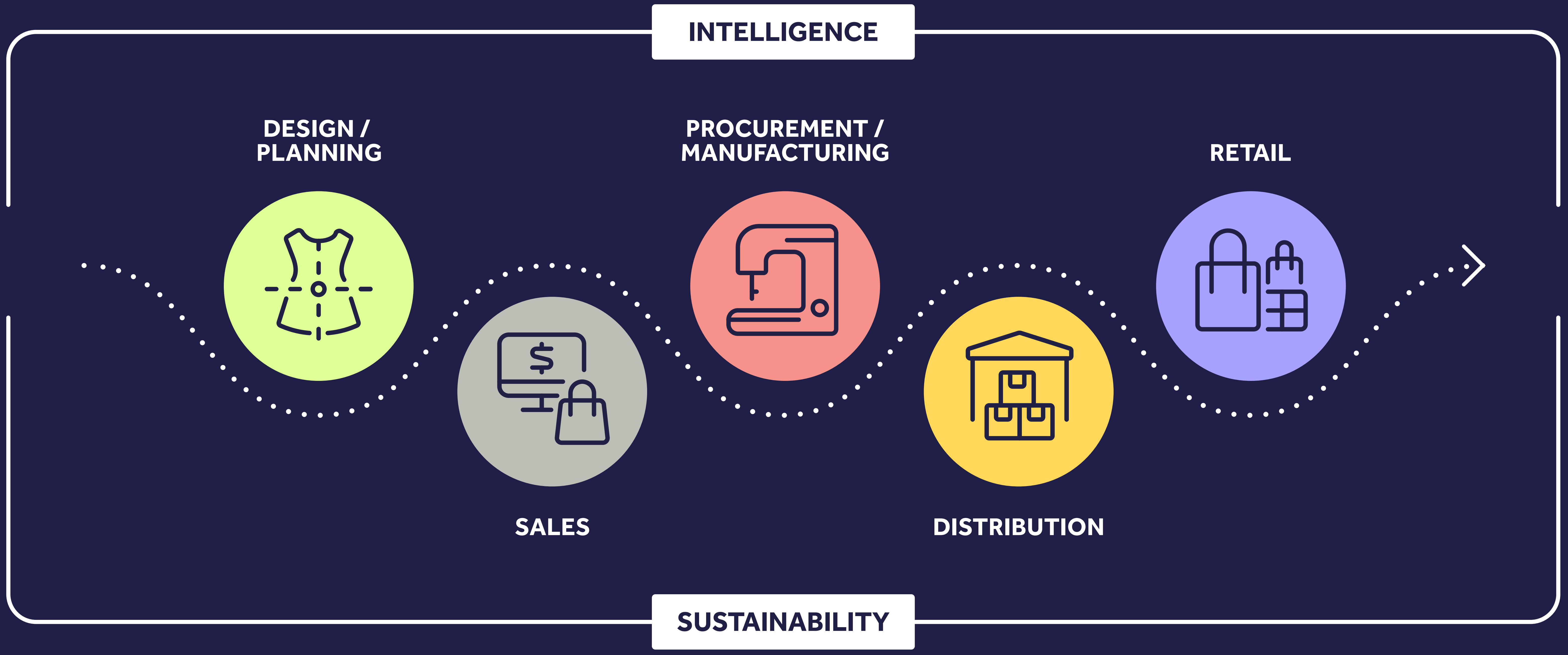
### Product Lifecycle Management

Unified PLM, sample management, and product development functionality expedite go-to-market activities.

### Omnichannel Operations

Harmonised planning, inventory visibility, and fulfilment streamline wholesale, retail, and eCommerce distribution.

As volatility and complexity intensify in fashion and apparel, brands require digital solutions built for their industry's intricate requirements.




K3 and Microsoft provide that seamless fit, embedding specialised capabilities within a secure, cloud-based platform to future-proof their supply chains for long-term resilience and sustainable growth.

To learn more about how we can help you navigate volatility, feel free to [drop us a line] today.

# Thank you

## From everyone at K3 Fashion Solutions, 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.]

K3 Fashion Solutions

## K3 Fashion Solutions, a leading supplier of fashion business technology with more than 30 years of experience, develops industry-specific tools to support fashion workflows, improve customer experiences, and deliver sustainable growth throughout the supply chain.

Our solutions, K3 Fashion and K3 Pebblestone, are fully embedded in icrosoft's Dynamics 365 ERPs offering enterprise-grade support from design and production through to retail. As a top 20 GISV with a global footprint delivered through our network of Microsoft implementation partners, we are committed to supporting brands of all sizes.

# K3 Fashion

## K3 Fashion supports fashion businesses with all aspects of operations, such as planning, design, sourcing, purchasing, logistics, warehousing, and finance.

Fully embedded in Dynamics 365 Finance, Supply Chain Management and Commerce, K3 Fashion presents a single solution to remove technical blockers, unify data sources and maximise margins.


# K3 Pebblestone

## K3 Pebblestone provides brand owners, wholesalers, and manufacturers with an intuitive ERP environment that provides standardised fashion workflows and tools.

Fully embedded in Dynamics 365 Business Central, K3 Pebblestone is a single solution that supports essential processes like planning, design, sourcing, purchasing, logistics, warehousing and finance