

# ICXI - POST newsbriefing

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## Introduction From The President

Every organisation in all sectors are part of a supply chain. Where the organisation fits into that supply chain depends on their industry, whether they operate in the primary industries like mining , agricultural and forestry, the manufacturing of goods, logistics, bricks and mortar or online retail, the design and delivery of public and private sector or government services. The aim of all organisations is the supply of something to someone else and how well that generally defines their success and to achieve that the supply chain is a critical component. If evidence of that is needed the recent invasion of Ukraine supplies ample proof of the economic and social impact of supply chain disruption. So, service quality and customer experience are two key elements in effective supply chain management.

At its most complex level it may be a global logistics matrix. At its simplest level it can be the designer of the website through which the end customers accesses their good and services.

But at every level it is still a supply chain and still needs to be managed to meet customers' needs



## Wider Issues

As a global institution The United Nations takes a wider view of the impact of supply chain logistics viewing the global population and its environs as its customer base and to this end has developed 17 Sustainable Development Goals (SDG's)

The SDGs developed by the UN are a collection of 17 interlinked global goals designed to be a “blueprint to achieve a better and more sustainable future for all”. The SDGs were set up in 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030 and are included in a UN Resolution called the 2030 Agenda. The SDGs were developed in the Post-2015 Development Agenda as the future global development framework to succeed the Millennium Development Goals which were ended in 2015.

The 17 SDGs are:

No	Sustainable Development Goals	No	Sustainable Development Goals
1	No Poverty	10	Reducing Inequality
2	Zero Hunger	11	Sustainable Cities and Communities
3	Good Health and Well-being	12	Responsible Consumption & Production
4	Quality Education	13	Climate Action
5	Gender Equality	14	Life Below Water
6	Clean Water and Sanitation	15	Life On Land
7	Affordable and Clean Energy	16	Peace justice & Strong Institutions
8	Decent Work and Economic Growth	17	Partnerships for the Goals
9	Industry, Innovation and Infrastructure		

<https://logisticsviewpoints.com/2022/06/29/understanding-supply-chain-sustainability/>

## Why is This Important?

This document is concerned with the scale of relationship associated with organisational supply chain management but as end customers become increasingly concerned about not only the quality and price of the goods and services but also the where and how those goods and services are produced the UN SDG's provide a valuable reminder of the broader issues that should be considered. Everyone who is somebody else's customer in a supply chain has the ability and responsibility to influence the way their suppliers behave.

## Is it a Big Issue?

The pandemic has had a major disruptive effect in many sectors. These have been at both a national and international level. Supply chains have been affected causing an unsatisfactory experience to private and public sector customers at both B2B and B2C levels.

According to an SAP USA poll as reported in *Supply Chain Quarterly* SAP polled 1,000 U.S. consumers in February for their perspective on the greatest supply chain "pain points" one year into the Covid-19 pandemic. More than a third (37%) said they have lost confidence in supply chains and nearly half (48%) said they have changed their buying habits to include bulk shopping or restocking household items earlier than they did before the pandemic-induced lockdowns took hold last spring.

*"One year ago, 63% of consumers struggled to find a place to buy toilet paper," the researchers said. "Shelves are stocked now, but there are lasting effects on the broader supply chain. [Thirty-five percent of consumers] say their favorite grocers and retailers are still dealing with out-of-stock issues."*

*The survey also found that 70% of consumers switched brands due to supply chain problems, and **29% of them never switched back**. In addition, consumers say they are concerned about a lack of supply in 2021, including food (48%), hygienic or personal care products, such as toilet paper (44%), and personal protective equipment (PPE), such as face masks (33%). They are also worried about pending product shortages: 84% of survey respondents said they're concerned about the availability of electronic components, which are critical to producing everything from smartphones to cars and trucks. The changing behaviors and shifting attitudes are causing retailers, e-commerce companies, and others along the supply chain to rethink their supply chain management and sourcing strategies. Part of the change includes finding alternate sources of supply to meet demand more quickly or keeping more stock of certain items on hand. Agility and end-to-end visibility remain key components of any good strategy.*

*"More than any singular event in modern history, the coronavirus pandemic has brought the global supply chains' systemic weaknesses into sharp focus. To restore these links to full strength, businesses need to broaden visibility not only across their own operations but those of their trading partners, with the dual objectives of reducing risk and instilling resilience," says Sean Thompson, EVP, network and ecosystem, procurement solutions, for SAP. "A key area of focus is the symbiotic relationship between buyer and supplier. Proactively addressing the supplier experience, businesses can benefit from even more than increased resiliency and leverage supplier expertise to identify opportunities to enhance efficiency. Additionally, when buyers and suppliers align on shared priorities, this enables collaboration and knowledge-sharing to improve product and service innovations together."*

[CSCMP's Supply Chain Quarterly Home Page](#)

The key point here is that **"29% of them never switched back"** potentially "GFG" - Gone-for-good

## And it Could Get Worse

### Another SAP survey by their UK and Mid East division highlighted

*The pandemic happened. Almost overnight commerce shifted from being demand driven to supply driven, its lasting effect on businesses, governments and economies became and continues to be front of mind for every executive.*

*What impact would shortages have on goods?*

*How could costs be managed accordingly?*

*Where to go next if raw materials simply couldn't arrive?*

*were questions everyone was needing answers to. That uncertainty has taken many forms – from the closure, opening and then closure again of Chinese factories, port logjams and the start of an international war. Whilst this has shone a spotlight on the fragility of the UK's supply chains, solutions are emerging. We're seeing an increasing acceptance that they need to be brought into the modern era*

***as businesses switch from a 'just in time', to a 'just in case' model.***

*Whilst the term unprecedented has been overused so far this decade, organisations of all sizes recognise that success or failure may well depend on the capability of their supply chains, when more disruptions occurs not if. To make that transition happen, organisations are using technology to solve **two challenges:***

- 1. To make them as resilient as they can be*
- 2. To ensure they are more sustainable than ever before*



## **Short-term fixes won't solve the crisis long-term.**

*Significantly it's not just the pandemic that causes these problems. Disruption to one single shipping route cost \$400m (£292m) an hour in global trade when, in March 2021, mega-container ship Ever Given ran aground in the Suez Canal for six days. As Brian Deese, the top economic advisor at the White House, tweeted after the Ever Given was freed: "Just another reminder of how imperative it is to ensure the resilience of our supply chains going forward." As companies around the world grapple with bottlenecks, inflation, rising energy costs, staff shortages and burgeoning demand, supply chain management has moved to the top of corporate agendas. As a result, UK companies are not entirely abandoning existing supply chain policies, but they are overhauling them to build additional resilience.*

*Supply chains are being more affected by acute issues than ever before – it's why in our own recent research of UK & Ireland businesses, every organisation believes their supply chain needs improving to some extent, of these 59% think their supply chain needs a lot/significant improvement. Alarmingly, there's no quick fix - almost a quarter (23%) of businesses anticipate their supply chain issues will still be a problem in the Summer of next year*

*With almost a quarter (23%) of businesses anticipating their supply chain issues will still be a problem in the Summer 2023. Fears are echoed by the International Monetary Fund (IMF), which predicts problems in the global supply chain are likely to continue for years. Businesses expect to see continued shortages in raw materials, emptier shelves, and reduced availability of healthcare products/medication.*

*Disruption will really impact the public's lives:*

- *34% expect to see reduced availability of healthcare products / medication*
- *62% said they expect to see reduced availability of raw materials in the UK*
- *51% expect disruptions to public transport due to lack of drivers*
- *46% are anticipating reduced availability of food in supermarkets*
- *36% expect to see flight disruptions due to lack of available staff*

*For many businesses, increasing the price of their products/services isn't an option to cover increases in supply chain costs. Instead staff will bear the brunt of any cost rise, as 68% plan wage/recruitment freezes and 61% plan job cuts, which will only exasperate the Great Resignation trend in the UK. Vacancies in the UK are already at the highest level in 50 years, a quarter (24%) of workers planning to change jobs within six months. Some sectors may be forced into passing costs onto customers. UK business leaders in retail (64%), manufacturing (69%), automotive (88%) and transportation (58%) all see increasing the selling price of goods/services as an option, but as the cost-of-living crisis continues, stretched expendable incomes will lead to a drop in sales should prices increase*

## So What is the Way Forward?

That insight presents a fairly difficult picture of the times to come but doing nothing, though sometimes an option appears a high risk future strategy.

The SAP study provides a couple of strategic pathways which may provide some direction and interestingly “sustainability” appears to be a key consideration in future planning within many organisations.

*This recognition of sustainability as the cornerstone of revenue and efficiency is a departure from the conventional paths to growth and efficiency. This study revealed that just 28% would turn to new business partnerships to drive revenue today, and only 23% would consider expanding to new markets. It's no different in the supply chain as 51% of UK businesses plan to find new environmentally friendly supply chain solutions, increasing to 62% amongst manufacturing organisations*

The study goes on to identify that the long time backbone strategy of Just-in-Time (JIT) is being replaced by a new approach Just-in-Case (JIC) to address the worrying issue of JTL – Just-Too-Late.

***‘Just in time’ supply chain model:*** A stock control method where the business does not store any raw materials. Instead, it has regular deliveries that bring only what is needed before its existing raw materials run out, so buffer stock is not needed.

***‘Just in case’ supply chain model:*** A stock control method that involves producing or purchasing stock with excess, or buffer stock in place. This means that there is always stock available for the business if required



<https://www.netsuite.com/portal/resource/articles/inventory-management/just-in-time-vs-just-in-case.shtml>

Finally, 56%) plan to prioritise local supply chain solutions, rising to 69% and 68% in consumer goods and retail, but only 38% in automotive industries, posing the question as to whether globalisation remains a key driver of growth in the UK

<https://www.sap.com/uk/documents/2022/06/bc551cb1-2e7e-0010-bca6-c68f7e60039b.html>

## Localisation or Globalisation?

The last point from the SAP research show a bifurcation of opinion between different sectors and potentially that is a key consideration in planning the feasibility of local sourcing supply chain solutions. Where the supply source has little or no substitution options there may be no short term alternative, so perhaps the expectations of the organisation and its customers may need to be adjusted to that reality. The danger lies in the degree to which the finished product or service itself can be substituted.

### So What are Some Localisation Options?

The obvious option may seem to be just searching the local market for alternative suppliers. Into this apparently obvious equation enter a number of less obvious issues.

1. Quality – Can alternative suppliers provide the required quality?
2. Reliability – Have they a record of excellence in this area?
3. Partnership – Have they the resource to support your innovation and growth aims?
4. Reputation – Has their brand perceived qualities that are empathetic?
5. Trust – Can they be trusted with IP and your customer data?
6. Financial – Have they the strength to grow with your organisation?
7. Competition – Could they see your organisation as a vertical acquisition target?
8. Relationship – Can you and your organisation do business with them?

Moving to more localised supply or production operations is already becoming a global trend accelerated by the combined effects of the pandemic, the war in Ukraine and the consequent rise in global prices. As governments fell less secure there is a quiet political undercurrent supporting availability and cost as the mainstream drivers.

Supply Chain Management's Quarterly review shows evidence of a strong "Nearshoring" trend in the USA and Europe.

*Under pressure from compound economic snarls like the pandemic, geopolitical disputes, raw materials shortages, and trade issues, 70% of U.S. businesses are looking to bring their production facilities closer to American shores, [a survey from automation vendor ABB says](#). Specifically 70% of U.S. businesses are planning changes in their operations, 37% planning to bring production back home and 33% looking to nearshore and shift their operations to a closer location.*

*The research came from a survey of 1,610 executives in the U.S. and Europe.*

*Businesses are being driven toward reshoring/nearshoring by an increasing need for flexibility and resilience in production, Sami Atiya President of ABB's Robotics & Discrete Automation Business, said That same force is driving demand for increased automation, as robotics can facilitate the move to address supply chain concerns such as widespread labor shortages and an aging workforce.*

*“Business leaders are responding to unprecedented supply chain disruptions by putting into place measures to make operations more resilient and adaptable,” Atiya said.*

*“While investment in automation plays a key role in flexibility in operations, equally important is investment in education, vocational training, and apprenticeship programs needed to create safer, higher-paying jobs for American workers.”*

*ABB’s survey found that the rate of investment in automation remains higher in Europe, with 74% of European businesses indicating they will invest in robotics and automation in the next three years — compared to 62% in the US.*

*“Robotics and automation are job creators, requiring new ways of working with new skillsets,” Atiya said. “We are working with the U.S. government to share ABB’s experience in the U.S. and other countries where we operate on how we can accelerate robotics and automation education, vocational training, and apprenticeship programs needed to create safer, and higher-paying jobs for American workers.”*

<https://www.supplychainquarterly.com/>



[https://prodataconsult.com/blog\\_insights/nearshoring-vs-offshoring-how-do-you-choose](https://prodataconsult.com/blog_insights/nearshoring-vs-offshoring-how-do-you-choose)

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## So Can Technology Provide an Answer?

Netsuite, among others, have the view that technology can help not only in choosing between JIT and JIC but also in creating a hybrid approach employing tactically the strengths of each approach.

*No matter the industry, making the most of inventory requires planning and a solid grasp of current and future customer demand. There are several points about JIT and JIC inventory management that companies should understand to successfully carry out either just-in-case or just-in-time inventory learning objectives or a combination of both.*

*The goal of a JIT inventory strategy is to balance production volume with inventory levels and ensure the company keeps only the stock that's necessary for near-term work on hand. It's an effective method for attaining high production levels with minimal inventory holding and supply costs.*

*This inventory strategy works best when a company works with reliable suppliers that provide consistent quality, doesn't experience shipping disruptions and pens long-term contracts that minimize price fluctuations.*

*One of the most significant downsides to just-in-time systems is that unexpected supply chain interruptions in any area can derail the entire process. For example, a sudden shortage of raw materials or bad weather that slows shipments may have a dramatic effect on production.*

### **What is just-in-sequence (JIS) vs. just-in-time (JIT)?**

*Just-in-sequence (JIS) inventory management is a variation on JIT. The main differentiator between just-in-time and just-in-sequence (JIS) is that JIS ensures inventory arrives in the specific order in which it is used in production. JIS is associated with assembly lines, such as automotive or large appliance manufacturing, where items arrive at the line position at the time they're needed.*

### **What is just-in-case (JIC)?**

*Just-in-case inventory strategies are based on expected sales and require companies to purchase supplies proactively to meet any level of demand, within defined parameters. Businesses that use JIC may avoid the effects of common inventory management challenges such as supplier delays, unexpected increases in demand or spikes in the cost of a material or component.*

*Just-in-case inventory prioritizes preparedness over the cost and cash flow implications of holding stock in reserve. It protects businesses from falling behind in production or losing revenue because they couldn't meet demand.*

*This inventory management strategy pays off when demand is difficult to predict or a raw material or component is subject to sudden surges in price or going out of stock. It's also helpful in environments where suppliers aren't reliable.*

*A significant weakness of the JIC method lies in the fact that these systems can be wasteful if demand slows down and inventory stagnates. You're also tying up cash.*

## ***Just-in-time***

### ***Advantages***

*Just-in-time inventory benefits those with efficient operations and is good for the bottom line. This strategy also prevents overproduction and minimizes transport costs. Other benefits:*

***Efficient use of resources:*** *JIT inventory management reduces the risk of overordering and having supplies sit idle. This allows the company to divert resources from that inventory to other business areas.*

***Less waste:*** *There is less waste as businesses keep only the stock they need for production. That is particularly helpful for businesses depending on perishable supplies.*

***Reduced costs:*** *Eliminating overbuying reduces supply costs directly since companies only purchase what they use immediately. Eradicating stagnant inventory also cuts warehousing expenses, including labor and administration.*

***Increased agility:*** *Using JIT reduces the amount of time it takes to change over inventory when fluctuations in demand occur or products change.*

### ***Disadvantages***

*Just-in-time inventory management can increase issues in some key areas. For example, when using JIT, companies order bare minimums of items based on projections. However, if there's a sudden, unexpected surge in demand, there may not be enough products or supplies on-hand. Other downsides:*

***Supplier stability needed:*** *The success of a just-in-time inventory strategy relies on the timeliness and consistency of suppliers. However, companies have little control over supplier operations, and even previously reliable partners can experience disruptions that ultimately cause delays for the receiving company. Then there are unforeseen shipping delays to consider.*

***Inability to meet unexpected demand:*** *The just-in-time inventory method also requires few to no fluctuations in demand. Some variations are predictable and planned for, such as seasonal trends, but unexpected spikes or valleys make it difficult to maintain the necessary stock stability.*

***Pricing risks:*** *A JIT strategy can be more expensive than JIC if materials cost less during certain parts of the year, meaning stocking up would be prudent. Businesses may also lose out on savings because they don't take advantage of bulk-buying discounts.*

## ***Just-in-case***

*Companies that employ a just-in-case inventory strategy enjoy several benefits, but it is not without downsides.*

### ***Advantages***

*Just-in-case inventory management can facilitate growth and profitability in a few ways.*

***Increased competitiveness:*** *Companies can keep up with most any level of demand, increasing their competitive edge and even boosting market share if they can meet demand when a competitor is out of stock.*

***Fewer lost sales:*** *With JIC, companies reduce the risk of lost sales due to a lack of inventory. JIC inventory allows companies to continue production while waiting for stock to be replenished.*

***More wiggle room in demand forecasting:*** *There is less need for precise demand projections because inventory levels are high enough to keep up with demand.*

***Savings:*** *Companies can take advantage of bulk discounts or make large purchases when prices are lowest, decreasing direct procurement costs.*

### ***Disadvantages***

*Just-in-case doesn't address all inventory issues and creates a few of its own.*

***Additional storage costs:*** *Companies incur more carrying costs to maintain the excess inventory. These costs can be high, equaling 20% to 30% of total inventory value.*

***Increased opportunity costs:*** *Capital is tied up in inventory. That takes flexibility away from other aspects of the business and increases opportunity costs.*

***Wasted stock:*** *There is an increased risk of stock spoiling or becoming obsolete if items don't sell. This risk is particularly significant if the goods are perishable, seasonal or part of a flash-in-the-pan trend.*

### Just-In-Case

### Just-In-Time

A "push" system where inventory purchases are not based on actual current demand.

A "pull" system where inventory is essentially purchased to order.

Focuses on maximizing flexibility with less concern for capital application.

Focuses on minimizing inventory and using capital efficiently.

Excess inventory is kept on hand to avoid running out due to supplier delays or demand spikes.

Inventory is purchased only to meet immediate production or sales needs.

Companies generally make larger, more expensive inventory orders

Less working capital is required because inventory purchases occur in smaller batches.

Valuable when demand is unpredictable or suppliers are unreliable.

Works best when demand is stable and suppliers are highly dependable.

Demand forecasting is less critical as long as there is enough inventory to meet the highest demand.

Requires accurate demand forecasts to avoid over- or under-buying inventory.

However, ensuring that demand forecasts are accurate and optimizing the supply chain to ensure reliable operations is critical to either approach.

Modern enterprise resource management (ERP) software supports both JIT and JIC inventory to account for both push and pull. It provides granular and birds-eye views of current inventory levels, inventory in the pipeline and future demand. Look for a system can also gather and analyze supplier, inventory turnover and demand data to generate more reliable forecasts.

Agility, cost savings and the ability to meet demand are three pillars of effective inventory management. Getting the balance between JIT and JIC right can overcome many challenges, from shifting customer demand to limited visibility to poor production planning.

<https://www.netsuite.com/portal/resource/articles/inventory-management/just-in-time-vs-just-in-case.shtml>

## Supply Chain Data Management

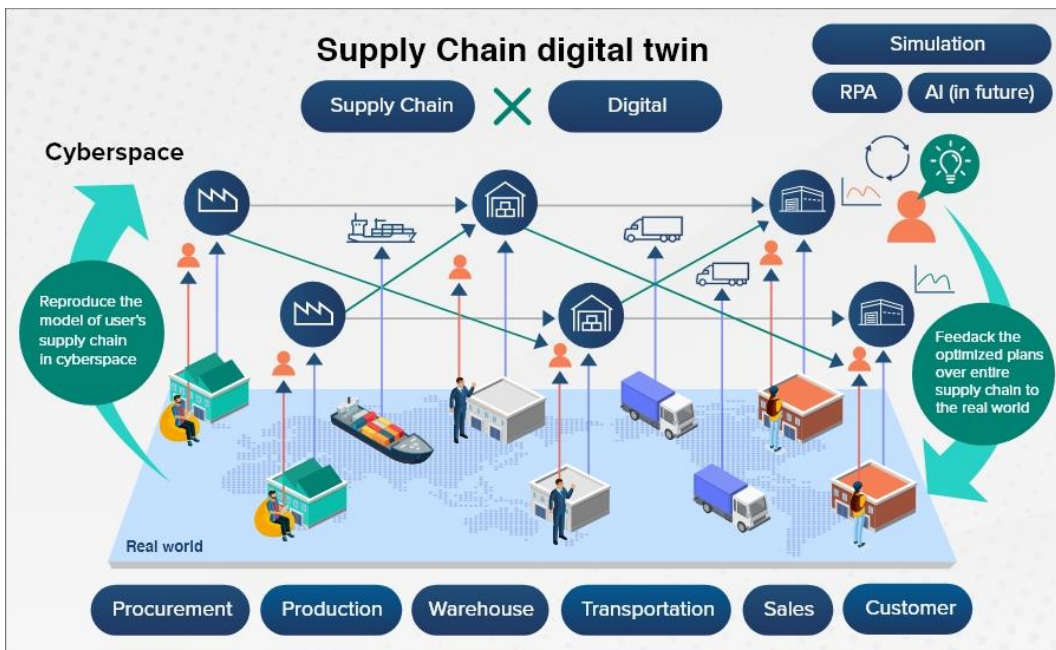
As stated earlier the complexity of supply chains varies widely according to sector, industry and scale but to all organisations planning their way through supply chain issues information is a key resource and the more complex the supply chain the greater the difficulty in data gathering, analysis and strategic planning. Hitachi has produced a solution which may be helpful to organisations in their quest to move forward.

*Driven by the need to mitigate supply risks in the current scenario, Hitachi has developed its Supply Chain Optimizer solution, which sets forth benchmarks in sourcing rules, stocking points, delivery route, and re-balancing inventory at optimized cost.*

*An IoT enabled Supply Chain Command Center has made possible end-to-end supply chain visibility from remote. Linked with simulations, the solution helps retailers monitor change in demand, production rate, transportation route, supplier risk, and change in inventory level, thereby empowering businesses to optimize customer response. At the global level, Hitachi is enabling the seamless adoption of AI-powered tools.*

*Through collaborative creation, Hitachi has helped Seiyu GK ("Seiyu"), a subsidiary of Walmart, adopt the Hitachi Digital Solution for Retail in stores all over Japan to help curb stockout, food waste and losses. An AI-enabled Automatic Planning System has been introduced for Nichirei Foods, a pioneer in frozen food, for optimized production and manpower allocation planning.*

*Additionally, Hitachi has collaborated with Microsoft Corp. to accelerate the digital transformation of the manufacturing and logistics industries across Southeast Asia, North America and Japan. This alliance will support in meeting the growing demand for predictive maintenance and process automation in remote areas and support enterprises as they tackle the challenges infused by the COVID-19 pandemic.*



## **Concept of Hitachi's SCO Service**

*Reproduces the supply chain in Cyber Space, and achieves overall optimization for daily changes that are difficult to follow in the real world. You will foresee the future.*

### **Way Forward**

*The current digital and disruptive environment demand agile and resilient networks. The longer businesses wait to embrace digital transformation, the more likely the competition will leapfrog over them. Supply Chain 4.0 assures supply chain excellence and adaptability to disruptive forces. Hitachi is helping businesses ride the digital wave and embrace Industry 4.0 solutions for a robust, customer-first supply chain network.*

*<https://www.moneycontrol.com/msite/hitachi-social-innovation/digital-supply-chain-reimagining-the-supply-chain-of-tomorrow>*

### **Another Approach**

*The case for digital support in supply chain management is made by “Reprocity” who see tradition supply chain management systems as reactive while digital systems offer a greater degree of proactive planning and implementation.*

## **Traditional Supply Chain vs. Digital Supply Chain**

### **Traditional Supply Chains**

*One way to compare traditional supply chains and digital supply chains is to think of the former as a largely static entity. Traditional supply chains are reactive. They operate on rules based on historical transactions. Traditional supply chains usually rely on standalone systems which function in siloes with little or no data-sharing. These supply chains involve processes where a product evolves from the procurement of raw materials to production and delivery to the end customer. Thus, the key elements of traditional supply chains are:*

- *Procurement of raw materials*
- *Raw materials to manufacturing*
- *Manufacturing*
- *Distribution and shipping*
- *Sale*
- *Consumption*

*Traditional supply chains and SCM focus only on production and provision, not on customer needs. They also are not optimized and lack the “intelligence” to spot problems along the value chain quickly. Even after a problem is identified, predicting its likely effects and finding a fix can require considerable time and effort. That delays production, introduces errors, and increases the time-to-market — all of which can harm customer satisfaction and corporate profits.*

## ***Other key disadvantages of traditional supply chains are:***

- *Limited visibility and lack of real-time data, which:*
  - *Complicates performance analysis and ability to identify gaps*
  - *Reduces accountability*
  - *Slows down and reduces the quality of decision-making*
  - *Impacts ROI*
- *Less agile and responsive to changing market conditions*
- *Higher cost of goods sold (COGS) and lower profits*

## **Digital Supply Chains**

*In comparison, digital supply chains are dynamic and able to adapt quickly to changing circumstances (market disruptions, political turmoil, pandemics, and so forth). They function in real-time and are highly agile “value networks” with integrated systems and processes. In these supply networks, contextual, relevant, and timely data from information technology (IT) and operational technology (OT) systems are integrated and readily available to every process in the ecosystem.*

*The key elements that differentiate a digital supply chain from a traditional supply chain*

### ***Technology***

*Digital supply chains incorporate modern processes, strategies, and technologies, including:*

- *Cloud computing and software-as-a-service (SaaS)*
- *Artificial intelligence (AI)*
- *Machine learning (ML)*
- *Natural language processing (NLP)*
- *Big data*
- *Business intelligence*
- *Virtual reality and augmented reality*
- *Robotics and robotic process automation (RPA)*
- *Internet of things (IoT)*

*These technologies offer automation and predictive analytics capabilities. Organizations are better equipped to improve time-to-market, anticipate and resolve problems quickly, shorten planning cycles, improve decision-making, and deliver value to all stakeholders. Digital supply chains are more resilient and adaptable to future challenges and opportunities*

**Logistics Management**

*Today’s supply chains leverage cutting-edge logistics management software. Such solutions allow supply chain managers to plan, implement, control, and optimize the flow of goods and materials; all to minimize cost and maximize ROI.*

**Partnerships**

*Unlike traditional supply chains, digital supply chains are not standalone or static. They are interconnected, dynamic, and agile. They focus on building mutually beneficial partnerships and nurturing stakeholder relationships. Digital supply chain management is about collaborating and building alliances with supply chain partners to help optimize the entire value chain.*

**Customer Focus**

*Digital SCM is not just about bringing the product to the customer in a transactional way. It’s also about delivering value and building long-term customer relationships.*

*Further, digital supply chains don’t focus on a single node, shipment, or order optimization. Rather, they evaluate the entire supply chain as a whole, to achieve the highest possible levels of profit, service levels, and customer experience.*





## **Drawbacks**

*Of course, digital supply chains are not perfect. Since they leverage internet-enabled digital technologies, they introduce an element of cybersecurity risk.*

*For example, IoT sensors and smart systems are vulnerable to cyberattacks and data breaches. Moreover, since digital supply chains are so well-connected, an attack or threat on one part of the network could propagate across the entire supply chain — sometimes all the way to the customer.*

*Another potential drawback is that upgrading your supply chain requires significant capital expenditure. Even though the returns are measurable, not every company can afford the initial investment in infrastructure and resources.*

*These issues, however, are not insurmountable; and they should not deter your digital transformation efforts. A **sustainable supply chain plan** is a must-have to protect your supply chain ecosystem.*

## **Why Are Businesses Switching to a Digital Supply Chain?**

*A digital supply chain is characterized by a network of interconnected digital and technological enablers. These enablers simplify SCM and help companies better respond to and satisfy their customers' evolving demands. Companies can now deliver products more quickly, offer more choices, and hyper-personalize to customers across various fulfillment channels. Supply chain processes can be automated to save time, improve quality, reduce costs and working capital requirements, and boost profits. Traditional supply chains with manual, silo-based processes cannot deliver these benefits at the same level.*

Up-to-date and real-time data is a key differentiating feature of digital supply chains. Supply chain managers can leverage data and transactional reporting to improve and optimize:

- Raw material flows
- Logistics
- Inventory
- Cashflow, expenses, and pricing
- Forecasting
- Supply and demand planning
- Resource planning
- Preventive maintenance
- Overall supply chain strategy

## Benefits

Digital supply chains offer the following additional benefits:

- Improved coordination and collaboration among stakeholders at every stage
- Faster issue identification, response, and remediation
- Support for ongoing disruptive innovation
- Improved predictions for planning, product quality, safety, and customer experiences
- Optimized inventory
- Lower cost of goods sold and higher profits

<https://reciprocity.com/blog/traditional-supply-chain-vs-digital-supply-chain/>

## Mapping it All Out

Producing a graphic representation of the supply chain can be a useful way of understanding the supply chain. The complexity of the supply chain can make the task difficult. *Infodiagrams* offer a useful tool for addressing that task and communicating the issues to those involved.



<https://www.infodiagram.com/diagrams/3d-supply-chain-icons-logistics-ppt-template>

## The Final Word

There is no doubt that a series of world events have combined to create a climate of great difficulty in almost every sector for the management of supply chains. As the old saying goes every journey begins with the first step.

As SAP suggest

*As a first step, UK organisations should conduct a supply chain health check to review their sourcing arrangements. Businesses will need to make complex calculations on inputs, processing, and sales pricing.*

*It will be essential to dispense with Excel sheets and use the assistance of software solutions to help model rapidly changing and complex pricing and profitability scenarios, which can help manage business profitability in uncertain times.*

In setting out on the journey it is also important to determine the scope of the analysis starting from where the organisation is positioned in the supply chain especially understanding at what point the source revenue (the ultimate external customer) enters the equation.

Understand the potential impact that supply interruption may have on the proposition made to potentially multiple customers and from multiple suppliers. In certain sectors it may also be both useful and necessary to understand the supply chains of the organisations on both sides of the chain in order to better understand and thereby predict and positively manage issues that may affect their performance.

Understanding the potential pinch points and planning alternative options and communicating them to customers. If necessary, consider managing future customer expectations by modifying your supplier proposition

A supply chains is just that, a chain.

When a link is broken it is not that one link but the whole chain that fails and the expectations and experiences of customers suffer as the risk of permanent damage to revenue and brand increases.

Final Footnote

Sustainability is a high agenda item in the plans of the majority of organisations reviewed in the newsletter.

## Recommended Reading

<https://logisticsviewpoints.com/2022/06/29/understanding-supply-chain-sustainability/>

<https://icograms.com/usage-supply-chain-diagram>

<https://www.infodiagram.com/diagrams/3d-supply-chain-icons-logistics-ppt-template>

<https://logisticsviewpoints.com/2022/06/29/understanding-supply-chain-sustainability/UN>

[CSCMP's Supply Chain Quarterly Home Page](#)

<https://www.sap.com/uk/documents/2022/06/bc551cb1-2e7e-0010-bca6-c68f7e60039b.html>

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