

INTERACTIVE GUIDE

Rethinking technology supply chains

A strategic guide to increasing visibility

The world of technology and electronics is defining our future. Original equipment manufacturers are delivering breakthroughs that change the way we live and work at an unprecedented rate. But can their supply chains keep pace with progress?

In this visual guide, we answer this question and more, giving you practical guidance to gain visibility and control in your technology and electronics supply chain.

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INTERACTIVE MENU →



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1 INTRODUCTION



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The wheels of the technology and electronics revolution were set in motion decades ago and haven't stopped turning since.

The global consumer electronics market, for example, is valued at \$1.103 billion in 2023 and is expected to grow annually by 2.17% until 2027,¹ while the global semiconductor industry is projected to become a trillion-dollar industry by 2030, with aggregate annual growth set to average at least 6% per year.²

However, top-line growth doesn't always translate to bottom-line success, especially at a time when slower European economic growth – predicted at 0.9% in 2023³ – is already squeezing margins. Logistics is one reason for this disconnect. Supply chain performance has a decisive impact on the bottom line and, unfortunately, it's an area that's ripe for improvement for technology and electronics manufacturers.

In part, that’s because, often, original equipment manufacturers (OEMs) don’t want to focus on logistics – they want to focus on developing their innovative products. But it’s also because logistics is inherently

complex. And, unfortunately, there’s currently more pressure on supply chains than ever before.

5 KEY LOGISTICS CHALLENGES FOR TECHNOLOGY AND ELECTRONICS MANUFACTURERS



INCREASED RAW MATERIAL COSTS

71% of global companies cite raw material costs as their number one supply chain threat for 2023.⁴



SEMICONDUCTOR CHIP SHORTAGES

The average wait for semiconductor chips is now 30 weeks, up 20 weeks from two years ago.⁵



DELIVERY EXPECTATIONS

41% of online shoppers hope to receive their orders within 24 hours, a sign of higher delivery expectations.⁶



SEASONALITY SPIKES

12% of total retail holiday spend is on electronics and accessories, but 52% of shoppers anticipate stockouts for this category during this period – the highest of any category.⁷



LACK OF VISIBILITY

Just 2% of global supply chain executives claim to have visibility beyond the second tier of their supplier base.⁸

In terms of upstream problems, raw material costs are increasing and there’s a deficit of essential components like semiconductor chips, meaning longer lead times for production. In terms of downstream problems, consumers expect faster delivery times as a standard, while seasonality spikes are adding extra pressure on inefficient supply chains. On top of this, there’s a lack of visibility throughout the entire supply chain, reducing control and creating uncertainty.

IT’S A SCARY OUTLOOK FOR OEMS; SOMETHING’S GOT TO GIVE.

So, as a technology and electronics manufacturer, how can you respond? With new technologies and new strategies, and the know-how to move forwards. In this visual guide, we’ll show you how. **Let’s go.**



2 THE VALUE OF SUPPLY CHAIN DIGITALISATION



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It's not just new hardware that's pushing the boundaries of the technology and electronics revolution. New software has emerged that's changing the face of logistics too.

But what do these supply chain technologies do?

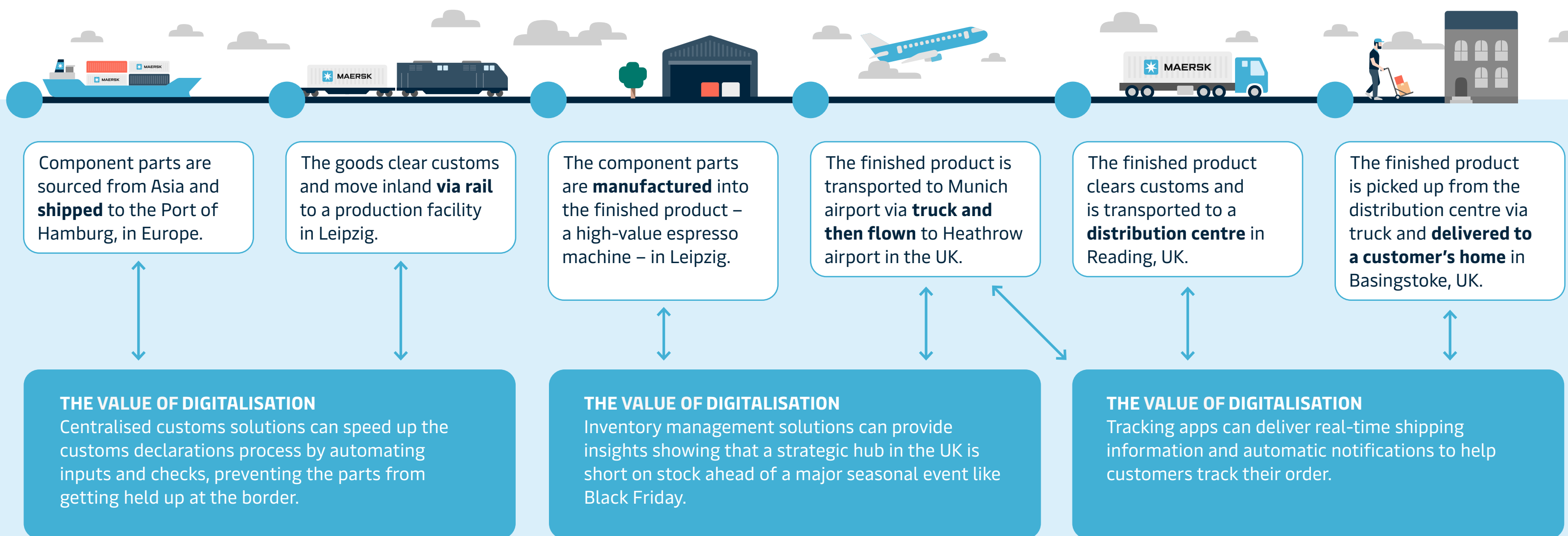
They provide you with end-to-end visibility of your supply chain operations. This enables you to proactively monitor your cargo at every stage of the supply chain.

With holistic visibility and a big-picture view, you can equip your teams with connected and accurate data to help you make better decisions and stay ahead of problems before they arise, so you can manage logistics costs and satisfy customer demand more effectively.



For example, look at the journey below to see the value of digitalisation at different touchpoints before the espresso machine arrives at the customer's home.

HOW DIGITALISATION CAN ENHANCE ESPRESSO MACHINE SUPPLY CHAINS





Many companies are already acting on this opportunity, making digitalisation a strategic pillar of their business. In fact, over the next year, six in ten organisations plan to invest in digital technology to bolster their supply chain processes, data synthesis and analysis capabilities.⁹

For those that aren't digitalising their supply chain, it's time to wake up and smell the coffee. Standing still is falling behind. The time to act is now.

But how exactly? With new strategies for a new era. So, we've outlined four to help you get started.

Show me how >

3

FOUR NEW STRATEGIES
FOR A NEW ERA



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As a technology and electronics manufacturer, you're facing a new set of logistics challenges and you've seen that supply chain digitalisation can help. But digitalisation alone isn't enough to resolve them. You also need to change your thinking.

So, we've outlined four strategies to help you tackle the current challenges. This selection isn't exhaustive, nor is it meant to be. What's important is that it helps you see how different strategies can be applied to your unique requirements.



1

BUILDING SHOCK ABSORBERS

Over 60% of global organisations expect geopolitical instability to have a detrimental impact on their supply chain in the next three years.¹⁰

To address this, you need to increase logistical resilience. You could do that by moving from the just-in-time to the just-in-case model using increased inventory holdings – though the risk mitigation vs. increased costs trade-off would need to be examined more closely given that “bloated inventories... are sustaining upward pressure on warehouse rates”¹¹ – or you could leverage more reliable data and insights to better align contingency planning. Either way, it’s vital to build shock absorbers into your operations to help defend against black swan events.

2

CHINA +1

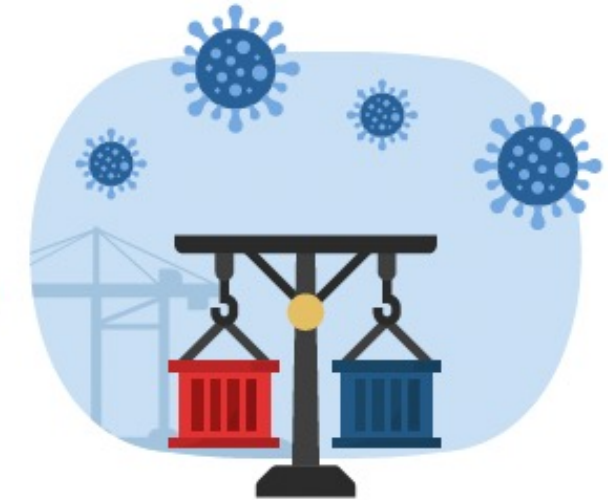
55% of suppliers said that they've actively explored new countries to source from due to trade uncertainty with China.¹²

While China has long been an attractive production option, labour cost hikes, increased protectionism regulations and events like COVID-19 are causing some OEMs to rethink their manufacturing. If you want to reduce the risk of a Sino-centric supply chain, you might want to shift some of your production to other markets, in what's been named the "China +1" strategy. The most favourable options are likely Vietnam, the Philippines and Indonesia.

- 1** Peter is the owner of a company selling laptops. Because of low labour costs and skilled labour force in China, a few of the manufacturing centres are located there.



- 2** However, the continuously rising labour wages over the past 2 decades and uncertain events (such as the recent trade war and COVID-19) have reduced the attractiveness of China as a manufacturing location.



- 3** As a result, Peter recently decided to establish additional manufacturing centres in Vietnam to mitigate risks.





3

NEARSHORING

53% of industrial companies say they have near- or re-shored operations in the last 24 months.¹³

Linked to the China+1 strategy, technology and electronic manufacturers are moving their supplier base closer to market to mitigate risk. This can be highly advantageous if you can align procurement nearer to your production facilities – but this isn't always as straightforward as it sounds. That said, if you can synergise the two, you can create shorter supply chains, meaning products get to consumers faster while reducing fuel costs and emissions.

4 INTEGRATED LOGISTICS

43% of businesses are planning to increase investments in their supply chain over the next year, with technologies that enable transparency and visibility a key focus.¹⁴

An integrated logistics model, where all systems are interconnected, enables you to action real-time data flows. Access to multiple logistics modes that can flex and bend as needed gives you the flexibility to overcome disruption. It sharpens your competitive edge to help hit seasonal demand while it's hot. Plus it offers you the visibility to speed up or slow down inventory flows dependent on consumer demand. And it all starts with the right data.

[Learn more >](#)



4 THE WAY FORWARD





As a technology and electronics manufacturer, you might find yourself in an unusual situation at present. Though the industry has experienced boundless growth over the years, the current economic climate is now bringing your bottom line into sharper focus.

With logistics having a major influence on your bottom line, a bad supply chain is therefore a scary prospect for your technology and electronics business. However, the age-old logistics problems haven't gone anywhere and new challenges – such as increased raw material costs, semiconductor chip shortages and higher delivery expectations – have been added to the mix, making this undertaking even more complicated.

To regain control and keep your momentum going, you need to arm your teams with new supply chain technologies and strategies. But how can you marry the two together for optimal results?

1

PARTNER UP

A logistics partner provides the expertise, knowledge and advice to help determine the right strategy and supply chain technologies for your specific requirements. Choose a partner with global reach and competencies in all types of logistics services.

2

LEVERAGE INTEGRATED INFRASTRUCTURE AND ASSETS

Workload and upfront costs can be reduced, and new strategies can be implemented faster, by tapping into infrastructure and assets that are already in place. For example, it'll likely be easier to diversify your supplier base to Vietnam if you've a partner with an existing footprint and established trade routes there.

3

ACT FAST

With the competition already busy implementing their programmes, it's even more critical to act fast to help close that gap. Taking no action isn't a sustainable business strategy. It only makes it harder to manage your supply chain.



Maersk can help increase visibility and resilience in technology and electronics supply chains.

You can benefit from the following levels of support.

1. TRANSPORTATION SERVICES

As an integrated logistics provider, we offer transportation services across ocean, inland, rail and air, serving our customers with frequent departures on all major trade lanes.

2. SUPPLY CHAIN AND LOGISTICS

From warehousing and distribution to supply chain management solutions, we fuse our global network and depth of expertise with pioneering digital innovations to enable our customers to stay ahead.

3. DIGITAL SOLUTIONS

Our tailored online services take the complexity out of shipping by letting you instantly book, manage and track shipments, submit Verified Gross Mass information and much more.

Let's go >

For more information on how Maersk can support your requirements, [visit this page.](#)

1. Statista, Consumer Electronics – Worldwide, December 2022, <https://www.statista.com/outlook/cmo/consumer-electronics/worldwide#:~:text=Revenue%20in%20the%20Consumer%20Electronics,US%24498.30bn%20in%202023.>
2. McKinsey & Company, The semiconductor decade: A trillion-dollar industry, April 2022, <https://www.mckinsey.com/industries/semiconductors/our-insights/the-semiconductor-decade-a-trillion-dollar-industry>
3. The Guardian, EU tipped to avoid recession after gas crisis eases, February 2023, <https://www.theguardian.com/world/2023/feb/13/eu-tipped-to-avoid-recession-after-gas-crisis-eases-cost-of-living>
4. KPMG, The supply chain trends shaking up 2023, December 2022, <https://kpmg.com/xx/en/home/insights/2022/12/the-supply-chain-trends-shaking-up-2023.html>
5. Bain & Company, When Will the Chip Shortage End? September 2022, <https://www.bain.com/insights/chip-shortage-end-tech-report-2022/>
6. Statista, Expectation on “faster delivery” times by online shoppers worldwide in 2022, December 2022, <https://www.statista.com/statistics/1279369/delivery-time-expectation-online-shoppers-worldwide/>
7. Deloitte, 2022 Deloitte holiday retail survey December 2022, https://www2.deloitte.com/content/dam/insights/articles/us175738_holiday-retail-travel/DI_2022-Holiday-retail.pdf
8. Maersk, Unleashing the UPSIDE potential for the Technology & Electronics industry, 2023, <https://www.maersk.com/industry-sectors/tech-electronics>
9. KPMG, The supply chain trends shaking up 2023, December 2022, <https://kpmg.com/xx/en/home/insights/2022/12/the-supply-chain-trends-shaking-up-2023.html>
10. KPMG, The supply chain trends shaking up 2023, December 2022, <https://kpmg.com/xx/en/home/insights/2022/12/the-supply-chain-trends-shaking-up-2023.html>
11. CNBC, There's a new inflation warning for consumers coming from the supply chain, February 2023, <https://www.cnbc.com/2023/02/13/a-new-inflation-warning-for-consumers-coming-from-the-supply-chain-.html>
12. The Advertising Specialty Institute, Report: More Manufacturing Moving Out of China, October 2022, <https://www.asicentral.com/news/newsletters/promogram/october-2022/report-more-manufacturing-moving-out-of-china/>
13. EY, Why global industrial supply chains are decoupling, June 2022, https://www.ey.com/en_cn/automotive-transportation/why-global-industrial-supply-chains-are-decoupling
14. Capgemini, Where are organizations investing in 2023? Supply chains and tech are top of the list, January 2023, <https://www.capgemini.com/news/press-releases/where-are-organizations-investing-in-2023supply-chains-and-tech-are-top-of-the-list>