

Protect your supply chain from disruptions

A step-by-step approach to building a resilient supply chain solution for your business



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thyssenkrupp

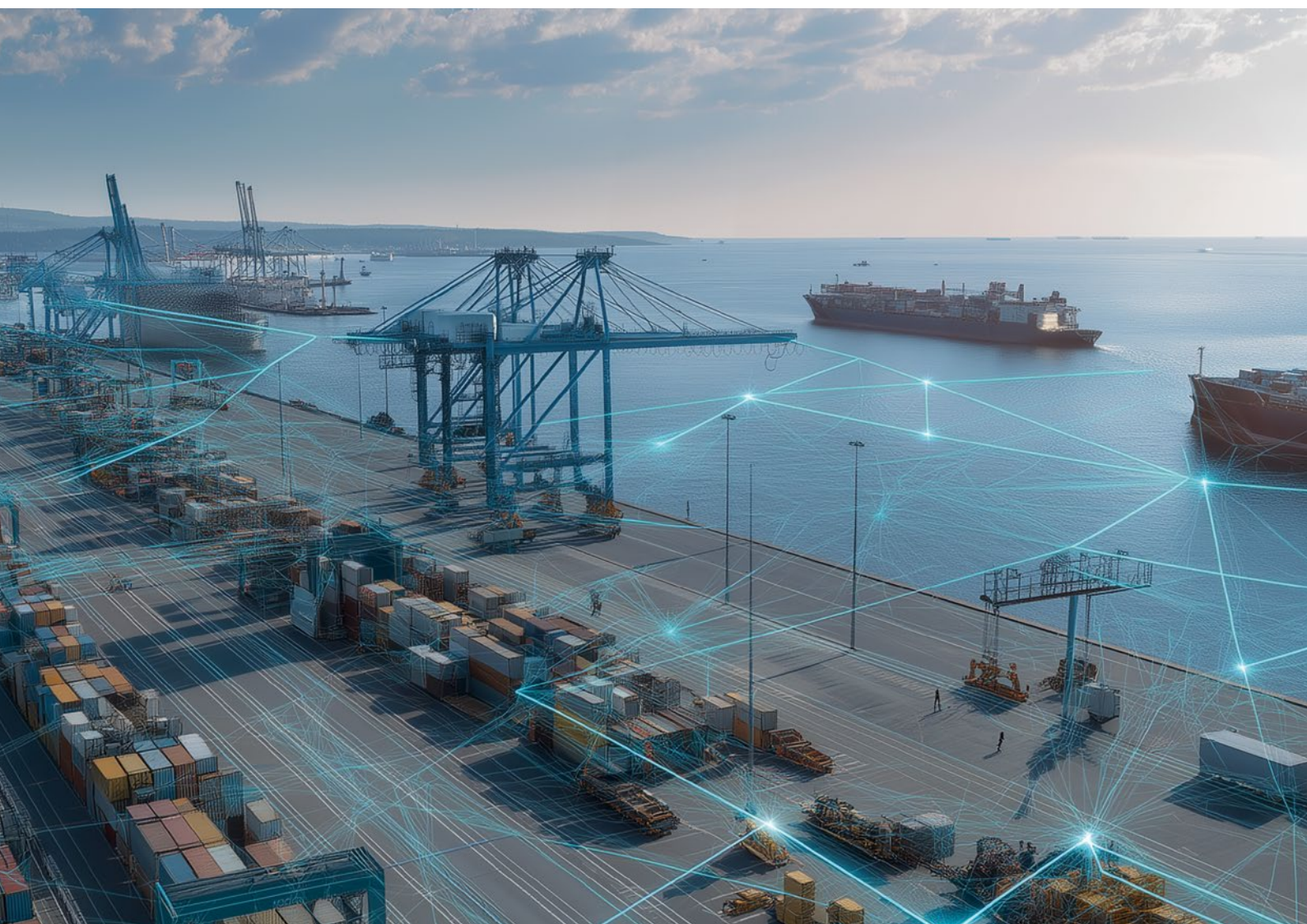
Navigating the
permacrisis
affecting
global supply
chains.

If you are happy with the state of your supply chain, stop reading now.

If, on the other hand, you think it lacks stability, is not transparent enough, is prone to disruptions, or if you seem to be in a constant state of firefighting with your supply chain and are considering outsourcing work to your sub-tiers, read on.

History has shown us that supply chains are continuously evolving due to new corporate strategies, unforeseen risks, threats and disruptions.

The COVID-19 pandemic represented an extreme example of an unprecedented crisis, but there is also the string of crises that are increasing in volatility and frequency. Some industries are better placed to deal with supply chain disruptions during these crises than others, but no industry operates free from risk.





Not all supply chain threats grab the headlines

Just look at the current situation. We are in a period of unprecedented geopolitical tension and a global trade war that nobody could have anticipated. These factors alone are playing havoc with global supply chains—a recent survey of US-based manufacturing industries found that “77% (of supply chain leaders) say they lack the resources to effectively manage their supply chain as it is today.”¹

While supply chain leaders are desperately trying to grapple with increasing global business uncertainty, there are other ever-present threats to supply chains that do not make such dramatic news headlines, including raw materials shortages, a continuing struggle with the labor force, increasing energy prices, extreme weather events, cyber attacks, and data integrity and quality to name a few.

The way to cope with these threats, and the solution to this permacrisis, is supply chain resilience.

The pandemic was a catalyst for supply chains, with more and more companies coming to the realization that with the right business strategy, their supply chains can be a competitive advantage and decisive factor.

¹ Fictiv 2025 State of Manufacturing & Supply Chain

Transformation to end firefighting

Firefighting during the pandemic served its purpose but now it is time to look ahead and plan for stabilization. Supply chain transformation should be a priority, and more companies in a wide variety of industries are accepting this. They understand that transformation is needed to take them beyond firefighting so they can focus on stabilizing and preparing for the future.

But how do you get started on what seems like a massive and potentially overwhelming challenge? The key is to make it digestible for the organization and we have a tried-and-tested approach that does exactly that.



Phase 1: Agile co-creation through discovery workshops

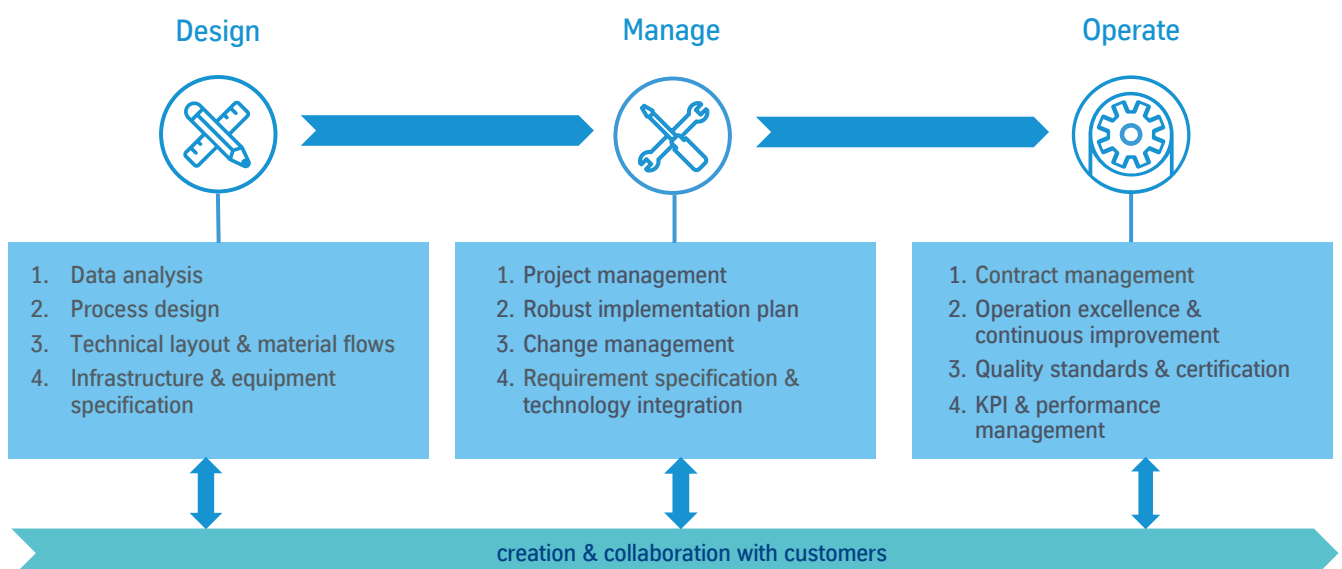
We work together with you beyond urgent product demands.

Working as a joint team on a supply chain solution leads to highly customized solutions that serve your individual needs in terms of higher efficiency, lower risk and more stable performance.

Discovering what is needed, step-by-step

But first, we have to understand more about your supply chain needs and we do this through a series of discovery workshops, co-creation activities and value stream mapping.

Our approach to developing tailor-made solutions



Your needs can change, and as they do, so should your supply chain solution. This is where our game-changing, cyclical, agile co-creation methodology pays dividends. Striking a delicate balance between customer value, design, and execution, we undergo multiple iterations to arrive at the optimal solution. This flexibility is key to staying ahead in the ever-fluctuating global economy.

Workshop outputs: a concrete plan of action

The result of these workshops is that we:

- create an actionable solution road map with concrete deliverables;
- understand where your pain points are and how to address;
- clarify your precise objectives;
- develop the right supply chain measures to match your business objectives.

**Phase 2:****Designing a resilient supply chain solution**

When we have co-created an actionable solution road map we move on to the next phase, designing a resilient supply chain solution.

We have an unmatched variety of supply chain building blocks at our disposal, including:

- raw material distribution/processing
- demand planning
- procurement
- supply chain management
- inbound logistics
- warehousing
- delivery
- sustainability
- digital control tower

We arrange these building blocks in many different combinations to create exactly the right customized solution to match the needs of your business.

For us, off-the-shelf is never an option.

A 3D architectural rendering of a modern building with a glass and metal facade. The words "RESILIENT SUPPLY CHAIN" are prominently displayed in large, bold, black letters across the upper part of the building's facade. The building is composed of several interconnected rectangular blocks, creating a complex, geometric structure. The lighting is bright, highlighting the metallic surfaces and the transparency of the glass.

Design Elements

Control Tower services supported by Spend Data Cube

	Harmonization of materials data and specification	Development of strategic supplier portfolio	Bundling of global demands	Circular and sustainable use of materials
 REQUIREMENTS/NEEDS  	OPTIMIZED BOM for more efficient planning (lower complexity) and improved leverage in purchasing through higher volumes and fewer specs.	OPTIMIZED SUPPLIER PORTFOLIO for more secure sourcing and higher number of best cost country alternatives	INTEGRATED FORECAST for efficient procurement processes and decision making INTELLIGENT PRICE FORECAST for raw material for improved hedging ADVANCED ANALYTICS for scenario building and more resilient supply chain.	RECYCLE material for stable material flow and price control REDUCE emissions of the supply chain (Scope 3) CALCULATE/MANAGE ESG indicators along the entire supply chain COMPLY with regulatory requirements to conduct and report business
 SUPPORT  	Integrate material data and requirements Review processing requirements Technical consulting on harmonization/consolidation of specs	Assess sourcing risk (of existing suppliers) Identify new sourcing opportunities Manage onboarding and qualification process for new suppliers	Aggregate global demands Standardize sourcing Innovate trading and strategic sourcing of raw materials through AI Introduce Artificial Intelligence and Forward Sensing technologies	Collect scrap and manage return to mills Monitor sustainability performance in real time and take measures to minimize impacts Consult on CBAM regulations and Voluntary Carbon Credits (VCC) to offset emissions

As a long-term partner for your supply chain, we are committed to creating value for your organization beyond urgent product demands. As a first step toward our customized and actionable solutions, we would like to get a full and clear understanding of your specific requirements. So, join us in a discovery workshop where together, we will kickstart the co-creation process.

The value of Discovery Workshops

Transformation is the only pathway to continuous supply chain improvement. We are experts at managing this process and making it digestible for the organization. It all starts with a discovery workshop.

Take the first step and together we will transform your supply chain challenges into opportunities.

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Case Study

The following case study shows how our tried and tested method worked for a company operating in the aerospace industry, which has the most complex supply chain. This is a clear demonstration of how it is therefore applicable to any industry.

Deutsche Aircraft: co-creating a resilient, reliable and sustainable supply chain solution in the most complex of industry sectors.

Deutsche Aircraft made the decision to take a long-term view of its supply chain and wanted an integrated end-to-end solution for material management for the D328eco® aircraft. This included planning, sourcing, processing, warehousing, and logistics and distribution to Deutsche Aircraft and more than 10 of its European subcontractors, with the possibility of more added in the future. The prerequisites for the supply chain solution were that it should be reliable and resilient. And, with its mission to drive the aviation industry towards a more climate-friendly supply chain and to set new benchmarks when it comes to aircraft manufacturing processes, the supply chain solution had to satisfy DAG's stringent sustainability criteria.

A long-term solution requires a long-term commitment

A long-term solution to one of the A&D industry's most persistent challenges requires a long-term commitment and close collaboration to overcome it. This is precisely what the dedicated teams from thyssenkrupp Aerospace and Deutsche Aircraft did. In what is an object lesson in the benefits of co-creation the team from thyssenkrupp Aerospace spent two years consulting with Deutsche Aircraft to assess their supply chain for raw materials. This led to a long-term frame agreement between the two companies and a three-part design-manage-operate solution that was built from the ground up.

The first part is a digital control tower that was developed to manage the entire ecosystem and to coordinate all material flows, from sourcing to distribution. This was tailored to the very specific needs of Deutsche Aircraft. In the second part of the solution, thyssenkrupp Aerospace took full responsibility for procurement of all materials. The emphasis was on nearshoring materials as much as possible and to use very carefully vetted overseas suppliers when that option was not viable. The third part is a materials hub and distribution center based in Finland and operated by thyssenkrupp Aerospace.

“The digitalization and the use of a control tower has given us complete end-to-end transparency of the D328eco aircraft supply chain. This means we have full traceability of materials – from sourcing to integration in the manufacture of the D328eco. This improves compliance, reduces errors, and increases efficiency across the supply chain. What we also have is real-time data. This ensures that all partners along the supply chain can collaborate in real time and know exactly what is needed and when it is needed. This can only work if everyone is looking at the same data. The digitalization and valuable data it provides give us the consistency that is vital for a reliable supply chain.”

Rodrigo Vilella – Director of Supply Chain, Operations at Deutsche Aircraft

Futureproof outcomes

The entire solution was built from scratch to enhance the end-to-end transparency of the D328eco aircraft supply chain and to ensure a seamless, on-time supply of materials to Deutsche Aircraft and its sub-contractors. In other words, an efficient, uninterrupted and resilient supply chain.

The digitalization of supply chain flows has enabled proactive risk management and the ability to anticipate in advance potential risks across the entire supply chain.

“The long-term approach to future proof our supply chain meant we needed a long-term commitment from our supply chain partners and close collaboration with them. This is exactly what we got from thyssenkrupp Aerospace. We worked with them for two years before co-creating exactly the right solution for our long-term supply chain needs. This level of cooperation and co-creation was a vital part of the solution design. It led to a precise understanding of our needs and objectives followed by a plan of action and concrete deliverables that aligned with our goals. In other words, the partnership has been a huge success!”

Rodrigo Vilella – Director of Supply Chain, Operations at Deutsche Aircraft

By working closely together, the teams from Deutsche Aircraft and thyssenkrupp Aerospace developed synergies that have led to more efficient material use and reduced scrap, a requirement of the client’s industry-leading drive for greater sustainability. In the same context, material distribution from a central hub has also given Deutsche Aircraft a far more efficient logistics operation and that plays an important role in reducing their overall carbon footprint and achieving their net-zero goal.



DEUTSCHE AIRCRAFT



