

SUPPLY CHAIN AGILITY FOR ENGINEERING AND MANUFACTURING OPERATIONS



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Our Supply chain offering

We provide innovative solutions that help you simplify your operations, minimize risk and penetrate and exploit new markets quickly and competitively.

Our unique capabilities
DHL Supply Chain has a long track-record of running world-class supply chains for many of the Engineering & Manufacturing industry's most innovative and successful businesses.



THE CHALLENGES OF VOLATILITY

Diverse, large and complex operations, spanning multiple markets and continents: it's little wonder the Engineering and Manufacturing sector supply chain is so important and so complex.

Rising performance expectations and aggressive business competition mean that practices and operations that have remained unchanged for decades are no longer fit for purpose. The market wants greater uptime, faster response and robust aftersales service. And the market needs them now.

MIGRATING MANUFACTURING AND REGIONALIZATION

Emerging markets have become a catalyst supporting rapid, dynamic growth in Engineering and Manufacturing products and services. The migration from established to new territories has spurred powerful local players – hungry, new entrants capable of selling very competitively overseas.

If you are based in a mature, developed country you are playing catch up – wrestling to reduce lead times and costs, while increasing flexibility and responsiveness. Regionalized supply chains have long been adopted by the automotive sector to lower costs and simplify local supply; a decade on, Engineering and Manufacturing players are embracing this approach to gain an agility, visibility and resiliency advantage.

CUSTOMER CENTRICITY: GETTING CLOSER TO THE CUSTOMER THROUGH NEW BUSINESS MODELS

Industrial sectors like manufacturing and automotive will capitalize on new customer-centric business models. Servitization is helping manufacturers shift from selling units of machinery to selling uptime, maintenance, and servicing of the machinery they produce. Thanks to digital

technologies and changing customer demands, logistics providers can leverage analytics from machine sensor data, rethinking how to capture digitization value through business model innovation.

SUSTAINING LIFECYCLES

Economic pressure means many of your customers are keen to get the maximum return on investment from their plant and machinery in the field. This appetite for extending lifecycles creates profitable aftersales opportunities.



SUPPLY CHAIN CHALLENGES

Smarter, Faster, More Customer Centric & Sustainable.

TECHNOLOGY: CATALYZING INNOVATION WITH A COST PERFORMANCE TIPPING POINT

The combination of decreasing sensor costs, ubiquitous connectivity, relatively recent prediction capabilities, and ever increasing computing performance will accelerate the adoption of exciting new technologies in logistics, making supply chains smarter, faster, more agile, and ultimately predictive. Analytics expertise, data-driven decision making, and the new services that can be achieved with the Internet of Things (IoT) represent an immense \$1.9 trillion opportunity in logistics¹. Smart warehousing, real-time transport visibility, and predictive delivery are just some of the key areas for IoT innovation in logistics. However, until now only a few IoT applications in logistics have experienced widespread adoption, due to the total cost of deployment, security concerns, and an absence of standards in the fragmented logistics industry.

SUSTAINABILITY: BECOMING A ZERO-EMISSIONS INDUSTRY

Supply chain decisions have a major influence on global emissions and the carbon footprint of a business. While global sourcing may reduce costs, there is inevitably an environmental tariff. In the past two years, the logistics industry has made bold moves to reduce its carbon footprint and take greater responsibility for the adverse environmental effects of core activities like transportation and warehousing.

PEOPLE: CREATING THE COLLABORATIVE HUMAN-MACHINE WORKFORCE OF THE FUTURE

Perhaps one of the main elements of digitalization in logistics will be the automation of highly repetitive, labor intensive, and in some cases physically intensive tasks in operations. While at first glance this may seem to present a picture of a diminishing human role in logistics, automation will drive creation of jobs in entirely new fields in logistics.

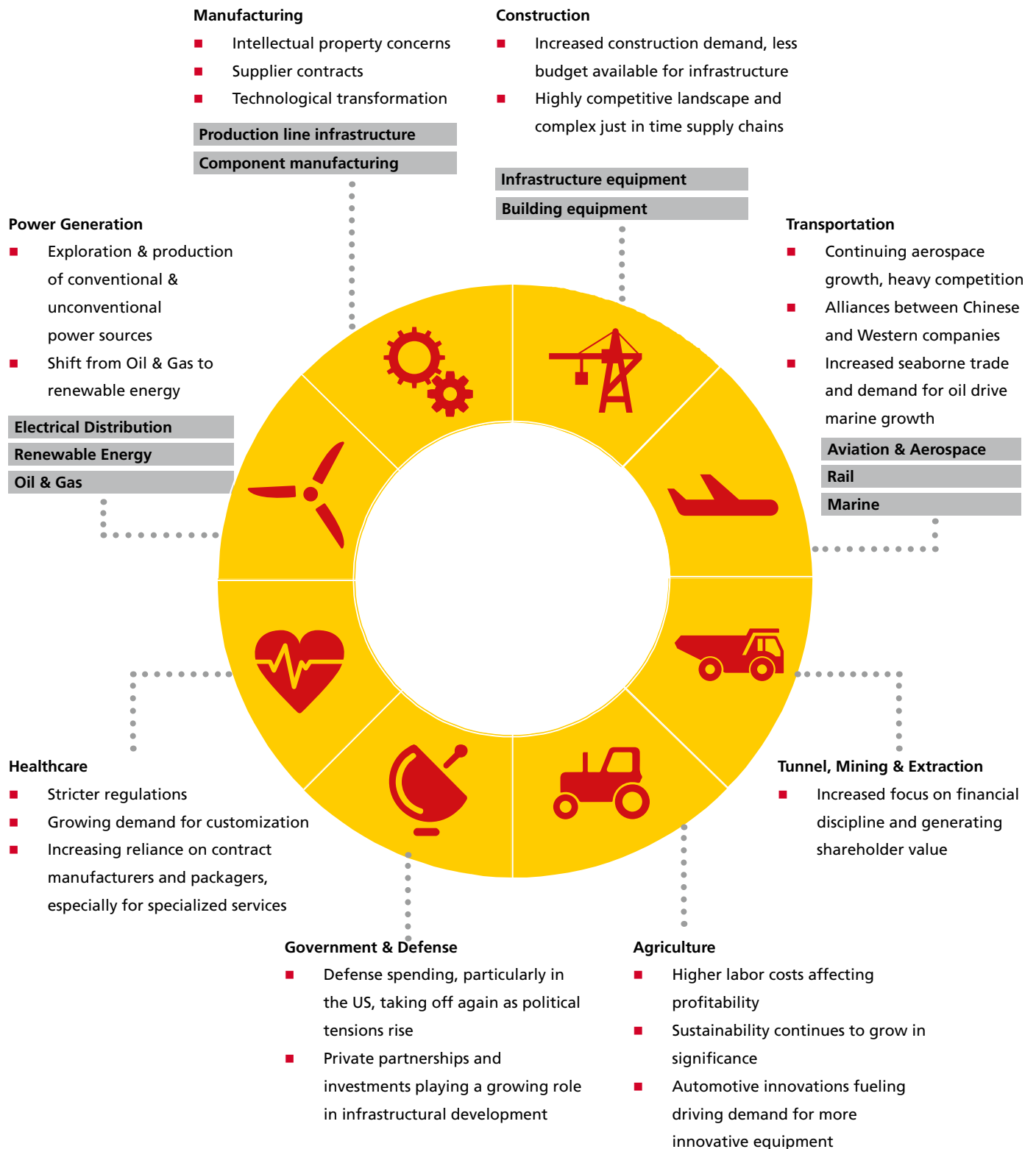
PRODUCTION AND SOURCING (INCLUDING RAW MATERIALS)

Engineering and Manufacturing operations demand a constant supply of components and equipment. Any disruption – from supplier issues to natural disasters and geopolitical events – can become catastrophic. Embedding resilience into the supply chain dramatically mitigates risk in the event of volatility, allowing operations to recover quickly minimizing loss and costs. Flexible and scalable operating models combined with standardized processes, structures and functions throughout the supply chain underpin competitive advantage.



¹ Source: http://www.cisco.com/c/dam/en_us/services/portfolio/consulting-services/documents/consulting-services-capturing-ioe-value-aag.pdf

ENGINEERING AND MANUFACTURING SUB-SECTORS AND THEIR SUPPLY CHAIN DYNAMICS



OUR SUPPLY CHAIN OFFERING

We provide innovative solutions that help you simplify your operations, minimize risk and penetrate and exploit new markets quickly and competitively.

Engineering and Manufacturing operations for global markets demand a global approach, investing in local skills and resources while carefully maintaining quality, capacity and control. Working in partnership with your logistics provider should help you streamline operations, reduce risk and maximize productivity to keep pace with demand and innovation. Our offering is designed precisely to meet your needs, creating a sophisticated supply chain that will bring benefits throughout the entire lifecycle of your products and services.

With some of the world's best logistics planning experience, our teams fine-tune your operations, from the supply of raw materials and components, to warehousing, transportation and delivery of equipment and critical components, to global provision of aftermarket services and support.

Equipment and components typically come from multiple, dispersed suppliers. Our inbound to manufacturing (I2M) solutions support flexible, dynamic production, matching supply to constantly varying demand. Competitive procurement keeps costs under control, providing continuity of supply and reducing costly delays.

We excel in the challenges of overseas operations, bringing order and control to complex operational movements. From meeting excise and importation regulations to providing local supplier parks, our systems ensure that equipment and components are tracked, tagged, stored and delivered to the lines at the optimum moment for production.

Industries such as aerospace, construction and manufacturing look to Lead Logistics Partners (LLPs) to control and minimize plant downtime. Our Maintenance, Repair and Operations (MRO) experience can help ensure uninterrupted manufacturing operations.

Collaboration can save money: depots and clusters, shared by multiple customers, are increasingly creating supply chains with greater flexibility, faster response and lower costs.

From planning, sourcing, manufacturing, storage, configuration and delivery to after-sales and returns, we offer solutions across your entire supply chain to help streamline your business, allowing you to stay one step ahead.



FLEXIBLE SUPPLY CHAIN SOLUTIONS FOR ENGINEERING AND MANUFACTURING

The new industrial supply chain revolution sees traditional supply chains becoming customer centric demand chains, and companies need to transform accordingly.

There are a number of issues associated with transforming to a customer centric demand chain, including, knowing where to strategically position supply chain assets, changes in consumer consumption demands, accelerating technological changes and a lack of supply chain visibility.

This all has to be managed within an environment of volatility, uncertainty, complexity and ambiguity.

RESPONDING TO YOUR CHALLENGES

These challenges require a new way of thinking. As your challenges continue to evolve so does your need to evaluate and assess the suitability of your supply chain; are you keeping up with your customer's demands?

We believe increased visibility and standardization based on a 'plug-and-play' supply chain allows you to face these challenges with the right level of agility.

With this in mind, we provide a portfolio of solutions that can be easily implemented and build upon our logistics expertise and global reach.

We create competitive advantage by delivering exceptional operational service and innovative solutions across the entire supply chain. From the initial consultancy and design to warehousing, final distribution and reverse logistics, we address your unique challenges with modular solutions which are localized to suit your specific market requirements.

ENHANCE SUPPLY CHAIN EXPERTISE AND RESOURCES

Whichever solutions you trust us to provide for you, you can be sure that we have the capability and expertise to deliver

the business results that you wish to achieve. Our highly skilled logistics engineers work with you to provide competitive advantage, allowing you to focus on your core business.

GLOBAL REACH AND SPEED TO MARKET

To meet your global ambitions a logistics provider can help you gain access to new markets. A provider can ensure an efficient set up of solutions making sure you receive the same level of high operations quality no matter which geography you operate in.

OPTIMIZING COSTS AND LOGISTICS CONTROL

You can trust us to manage any aspect of your logistics business. Whether you are looking for a one stop shop, or a provider who can meet your specialist, niche requirement; all our solutions aim to improve the visibility and control of your supply chain.



DHL SUPPLY CHAIN SOLUTIONS



Transport Solutions

Helps your business maintain high levels of service and reliability, and gain full visibility into product movements. At the same time, we reduce your transportation costs. Our team will put together the ideal combination of systems, carriers and resources to meet your specific needs.

- DHL Managed Transport and Brokerage
- DHL Inbound Transport Operations
- DHL Outbound Transport Operations



Warehousing Solutions

Improve inventory efficiency and accelerate your response to changing customer demand. Our experts design, implement, and operate flexible warehousing and distribution solutions tailored to your business needs. They analyze every point in your supply chain to determine the optimal solution.

- DHL Warehousing
- DHL Real Estate Solutions



Management Services

Gives you the confidence that each of the outsourced elements will be handled by true specialists. Consulting and management services are available as stand-alone offerings or as add-ons to our transport or warehousing solutions. Whatever you outsource, your business will benefit from DHL's global strengths and best practices.

- DHL Logistics Consulting
- DHL Procurement Services
- DHL Recall Services
- DHL Business Support Center



Integrated Solutions

Help you extend efficiency, flexibility, and cost benefits to your entire end-to-end supply chain. By drawing all necessary (transport, warehousing and management) services together into a complete, optimized package, your supply chain operations are simplified and your business becomes stronger and more efficient.

- DHL Lead Logistics Partner
- DHL Inbound to Manufacturing
- DHL Service Logistics
- DHL Indirect Materials Management (MRO)
- DHL Envirosolutions
- DHL Fulfillment



Additional Services

Include more than 250 service options that, when combined with our solution offerings, provide you with the flexibility to address your individual logistics needs.

- DHL Packaging Services
- DHL Pre-Sales Services
- DHL In-plant Logistics

Case Study: From materials to manufacture – a tailor-made solution

Our customer – a global leader in power and automation technologies operated a warehouse in confined space, making operations highly inefficient. We set up an Inbound to Manufacturing alternative, storing components in another warehouse. To shorten the production line we took on pre-assembly, pick-to-order and kitting activities. We added production line services to optimize the factory and warehouse and helped our customer take their operations to the next level.

OUR UNIQUE CAPABILITIES

DHL Supply Chain has a long track-record of running world-class supply chains for many of the sector's most innovative and successful businesses. Engineering and Manufacturing customers continue to partner with us for many reasons.

INDUSTRY EXPERTISE

DHL Supply Chain is one of the leading contract logistics providers serving Engineering and Manufacturing operations around the world. By working closely with our customers, our supply chain experts have developed flexible, efficient solutions that increase productivity and drive efficiency across the entire production driven supply chain. We also encourage the sharing of best practice through our global community of customers and supply chain consultants.

Integrated Service Logistics Model

A manufacturer of popular and highly rated executive jets must ensure its aircraft are flight-ready on short notice.

To keep its planes in premium condition, the company must ensure spare parts are available on short notice. DHL Supply Chain has created a network of strategically placed field stock locations and has optimized shipments up to 11:00 pm for next day delivery of critical parts.

Linked to a DHL Command Center, full global visibility allows the management of orders and exceptions. Quality Certification documentation is accessible by all parties to allow timely repairs.

SIMPLIFICATION

Our strength is built upon our ability to create collaborative solutions between manufacturers and tier suppliers which make your supply chains more agile and allow you to focus on core business objectives. This reduces operating and capital costs and simplifies your operation.

COMMITMENT TO EXCELLENCE

DHL is the first choice for continuous improvement and operational excellence. Our proven tools and techniques can be applied at every level to identify process gaps and waste, take appropriate action, measure results, and achieve true breakthrough performance. For us, quality assurance and process improvement are more than merely exceeding standards, regulations and directives. They're about seizing every possible opportunity to raise the bar. Through a structured and systematic approach, we continuously improve standards and customer satisfaction.

GLOBAL FOOTPRINT

With our unrivaled global capability and experience in emerging markets, we can help you access new growth opportunities and low cost operations across Supply Chain, Express, Freight and Global Forwarding. With local expertise in over 220 countries and territories, combined with our financial strength, we have the flexibility to scale up or down to meet requirements or overcome disruptions.



GREEN LOGISTICS

The transport sector currently represents 14% of global carbon emissions. As the first logistics company to establish carbon efficiency targets – we aim to become a zero-emissions logistics company by the year 2050 – we are at the forefront of green innovation. We will help you enhance your brand reputation and bottom line while decreasing your impact on the environment. Our GoGreen initiatives enable customers to offset handling and transport costs against climate protection projects.

We combine alternative fuels, state-of-the-art telematic systems and hybrid and electric vehicles, with simple and immediate solutions such as maximum speed reduction.

HEALTH AND SAFETY

We help you to meet high standards on health, safety and security through extensive training and timely monitoring. We offer consulting and advice on global safety regulations accomplished by in-depth audit processes and regular inspections of our sites. We'll help you lower workplace injuries, reduce equipment failures and prevent business disruptions. Our satellite and video technology ensures vehicle, driver and load security.

INNOVATION

Innovation is at the heart of everything we do. To get things moving quickly, our dedicated Solutions & Innovations team works closely with customers to develop ground-breaking new solutions. In addition, the DHL Innovation Centre brings together leading academic, industrial and technological specialists to speed up the delivery of new vehicles, such as the Teardrop Trailer, from prototyping to market launch.

Case Study: MRO Solution

A joint petrochemical venture with ambitious growth plans sought to consolidate its MRO service – delivering chemicals and spare parts into a single, global MRO supply chain. As Lead Logistics Provider, DHL Supply Chain was able to optimize the organization's global logistics network. Implementing DHL Supply Chain's track and trace tool with control tower visibility has created a robust operations framework, reducing stock returns to 2.2 per cent while increasing volume forecasts by 10 per cent.

END-TO-END SUCCESS

As you can see, the challenges facing Engineering and Manufacturing operations have shaped a comprehensive portfolio of supply chain solutions and services to help you to transform, compete and grow.

STREAMLINE COMPLEX PRODUCTION PROCESSES

Trust DHL Supply Chain to prevent costly manufacturing delays – especially when establishing operations in emerging markets. Our best-in-class inbound to manufacturing support lets you schedule, control and fine-tune production quickly, while our just-in-time upstream information supports late configuration that allows inbound production materials and components to arrive precisely when needed.

SCALE LABOR TO DEMAND

Reduce fixed labor costs and embed the ability to manage fluctuating demand within your production capacity. Let DHL manage outsourced subcontract labor, helping you respond rapidly to market peaks and troughs as needed without carrying unnecessary overheads. While our workforce fulfils your manufacturing supply chain and maintenance and repair operations, you can focus on developing your business.

MONETIZE PRODUCT LIFECYCLES

Ensure your supply chain makes you the OEM 'go-to' supplier for essential maintenance and spare parts throughout your product lifecycles. By delivering high-performance quality products quickly you can earn customer trust, winning profitable long-term business for aftersales service, components and support.

2 Source: PricewaterhouseCoopers (PwC) global supply chain survey

PROCURE MORE COMPETITIVELY

In today's volatile global economies, maintaining trustworthy and secure supply chains is critical. DHL Supply Chain can help you optimize your procurement strategy and buying operations across the board – and across borders. You can plan component and raw material purchases from approved suppliers with confidence while securing competitive market pricing backed by quality and supply guarantees. You'll quickly see the benefits of operating collaborative multi-partner supply chains.

On average, Engineering and Manufacturing companies that unlock strategic value in their supply chain achieve 70 percent higher performance². Use our skills, resources and experience to take your business forward.



For further information

Contact our supply chain experts [here](#) >

Or visit our [website](#) >

