



5 MEGATRENDS

That Will Reshape Global Supply
Chains in the Next Decade

What do a car dealer in Germany, a U.S.-based drug manufacturer and a chipmaker in China have in common? They're all part of an integrated global network with more linkages and interdependencies every day. Their production processes are likely fragmented across international and industry borders. They are both suppliers and customers of suppliers further upstream and downstream, one link in a broader system of value. And they are all vulnerable to disruption in either direction.

The traditional notion of a supply chain—a linear sequence of processes to produce a product or service for the end-consumer—falls flat in a connected world where the flow of information is as vital as the flow of materials. Innovations in technology, communication and transportation are breaking down traditional barriers between people, places and things. Large-scale disruption events are seldom isolated to a single industry or geography. Even a small, localised disruption can have far-reaching ripple effects well beyond the point of origin. A blocked transportation route, extreme weather event or scarcity of a critical good or material can lead to delays, shortages and higher prices for stakeholders across the supply chain—from the factory floor to the end customer.

What does the future hold as innovation and disruption events accelerate? How will companies need to evolve their approach to supply chain management? What new opportunities for collaboration will emerge? Companies will need to rethink all aspects of their supply chains to succeed in the new reality, which will be defined by continuous change in businesses and societies worldwide.

We explore the five megatrends that will transform global supply chains over the next decade—and what businesses need to know about them:



1 Accelerating Connectivity, Innovation & Uncertainty



WHAT WILL HAPPEN?

In this new era of connectivity, no business will be isolated from global events. Single events in just one corner of the globe will have ripple impacts on populations, businesses and politics everywhere. As the rate of change and connectivity continues to accelerate, there will be innumerable causes and effects of singular events to the point where they will be impossible to trace. This will lead to an increase in the variety, volume and frequency of disruptions that impact supply chains. Research has found that supply chain disruptions cause an [average 107% drop in profitability](#), and decrease in performance for up to two years after the initial disruption. Every industry and organisation will experience different impacts based on their location, risk profile, digital maturity, market and customer base and will need to take steps to adapt as well as capture emerging opportunities.

The accelerating rate of innovation will drive global connectivity and disrupt entire industries, upend traditional business models, and create new opportunities for unlocking value across supply chains. By 2023, [Gartner estimates](#) that at least 50% of large global companies will be using artificial intelligence (AI), advanced analytics and Internet of Things (IoT) in supply chain operations. At the end of the decade, this number will likely be close to 100%, which will make it critical for all companies to invest in digital capabilities not just to move ahead of the competition, but to remain competitive.

Our big bet: Decisive action will determine the winners. Companies that can make smart moves faster will come out on top in this dynamic environment.



MEGATREND DRIVERS



Increasing rate of natural disasters, climate change



Accelerating rate of technological innovation and adoption



Increased frequency and sophistication of cyberattacks



Political hyperpolarisation, rise of nationalism



Aging populations



Improved geographic mobility



Widening income disparities

HOW IT WILL IMPACT INDUSTRIES

Multinational manufacturers, energy companies and other organisations that have significant physical operations will need to contend with increasing extreme weather events and other natural disasters that can disrupt the transport of critical goods and other physical assets. Aging populations will require the healthcare and life sciences industries to increase production and distribution of critical medicines.

Improved geographic mobility will mean increased demand for new housing, offices and other infrastructure in areas with growing populations, which real estate and construction companies will have an opportunity to fulfill.

Digital tools and solutions will transform supply chains across industries. For example, self-driving delivery vehicles, trucks and ships as well as automated production facilities will enable manufacturers to automate most aspects of production and distribution. They will be able to control many aspects of their global operations remotely or at least keep smaller more specialised crews on the ground to run their facilities and reduce their need for human capital.

Increased adoption of automation and self-operating machinery will have huge benefits for natural resources companies by reducing the need for humans to be involved in dangerous work. This will help them meet ESG goals related to improving worker safety.

In the healthcare industry, technological advancements such as telemedicine will continue to transform the patient experience and provide greater accessibility for the elderly, people who live in remote communities and others that face mobility challenges. For retailers, digital tools like AI-enabled chatbots and drones will transform the customer experience, improving speed, quality and personalisation of service.

WHAT COMPANIES SHOULD DO

Think globally in business planning. No matter where a business is located, their company's role in the supply chain or their industry or subsector, they need to factor in global trends into their supply chain management strategies. Even if the impacts they feel are indirect, all businesses will experience some impact from the plethora of new operational, financial and digital trends and risks that are transforming the global economy.

Increase supply chain agility and resilience. To succeed in the years ahead, companies will need to be more agile in their business planning and decision making so they can quickly adapt to shifting market conditions and seize emerging business opportunities. This means that companies need to improve their supply chain's agility and resilience, balancing near-term obstacles while also making moves to unlock new value for the long-term. Specific steps companies can take to improve resilience include improving end-to-end visibility, identifying backup or alternative suppliers and simplifying their product suite.

Implement a digital transformation strategy. Technology investments can help achieve both short- and long-term objectives of navigating disruption and value creation. Companies should develop a digital transformation strategy for their supply chain if they don't already have one to guide their technology investments. If they don't already have a digital strategy, they should define long-term goals for the supply chain and work backwards to build a digital roadmap that will help achieve them. For instance, if the goal is to improve supply chain responsiveness, then they should prioritise harnessing data from across the enterprise and from customers to improve demand forecasting capabilities. This data can be combined with advanced analytics and modeling tools to develop predictive capabilities that companies can leverage to drive decision making across the supply chain, such as informing production schedules or logistics planning.



2

Shifting Regulatory Environment



WHAT WILL HAPPEN?

Over the next decade, the global regulatory environment will grow more complex as countries implement new policies to achieve geopolitical goals, regulate the digital economy, and support domestic industries. These new regulatory regimes will be implemented both by individual countries and on a regional and international scale through multilateral agreements between world powers.

Geopolitical relationships between major world powers will remain in constant flux, influencing foreign and domestic policies which in turn will impact the flow of goods and services throughout the world. Global trade policy will likely bend towards protectionism over free trade, and countries will use different combinations of tariffs, incentives, sanctions and other measures to punish rivals, bolster domestic industries or achieve other goals.

Across all areas of policy, countries will first prioritise the wellbeing of their own economies and citizens, followed by that of their allies and strategic partners. The combinations of incentives, sanctions or other punitive actions to achieve these objectives will vary depending on the specific countries involved and the goods or services in question.

Our big bet: Additional global regulations around climate, data privacy and tax are all but certain to happen. Companies that keep their finger on the pulse of these developing policies will be in the best position to adapt to new rules. The businesses that adopt best practices like shoring up protection of data or working towards climate goals before they are official requirements will be in the best position to adapt to new rules.

MEGATREND DRIVERS



Shifting global trade alliances



Regulation of the digital economy



Rise in protectionism



New international taxation frameworks

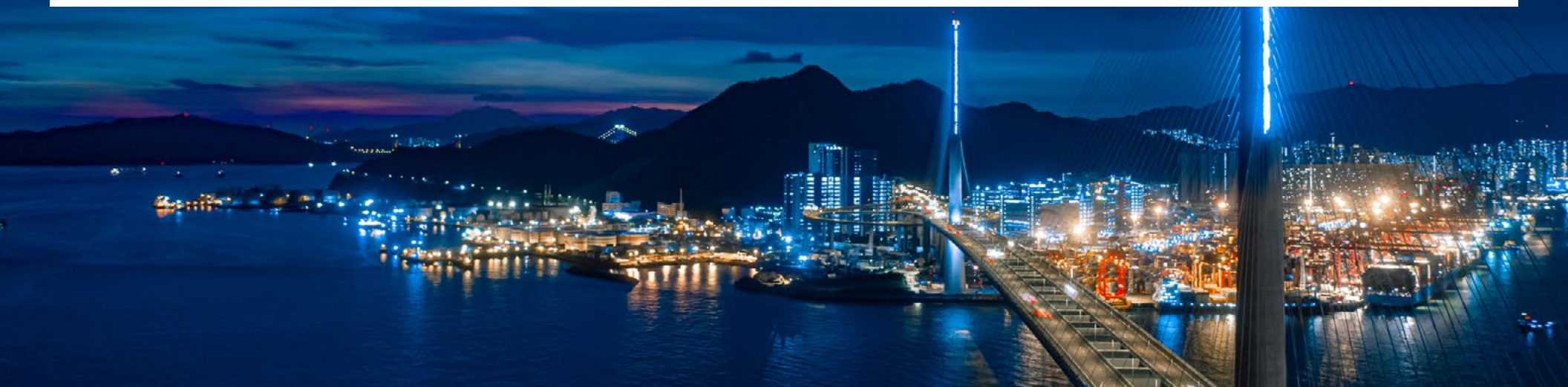
HOW IT WILL IMPACT INDUSTRIES

Any company that imports products from abroad will feel the impact of shifting global trade policies—whether unexpected new tariffs, trade deals or other sanctions. Manufacturers, retailers and other industries that import high volumes of goods frequently will feel significant impacts and likely see their exposure to tariffs increase. Technology companies that sell digital services will also feel the impact as new rules are created to tax and regulate the trade of digital services.

Retailers, technology companies and other end-consumer facing organisations will be the most impacted by new data privacy rules, but any company that collects data from its users on a large scale will need to comply. The specific policies between

countries will vary, but most major world economies will have some consumer data privacy rules impacting all companies who operate in their borders. And even if a business does not directly operate in a country that has these policies, if they share data with any customers or suppliers that do, they will likely be subject to those rules or else face potential consequences.

Natural resources companies and manufacturers with significant physical footprints will need to make operational changes to lower their carbon footprint to comply with new environmental regulations. This may require integrating more sustainable energy sources into physical operations to lower emissions.





WHAT COMPANIES SHOULD DO

Reassess tariff codes. To mitigate the impact of new tariffs, organisations should review all their tariff codes and determine if they are correctly applying them to their imports. They may find they have been incorrectly applying a code, and depending on the country in which they operate, they may be eligible for retroactive refunds in addition to future savings.

Rethink suppliers. Organisations should also reconsider their reliance on suppliers that are in countries with whom their own home country has unfavorable geopolitical relations, as it may become increasingly unfavorable to continue doing business there.

Stay abreast of new policies. Organisations should stay up to date on all types of developing regulations—particularly trade, climate and data privacy legislation—both on a domestic and international level. When new trade deals pass, for example, companies should review all provisions of the trade deal to assess whether they need to make any operational changes to ensure compliance or take advantage of new incentives. There are some changes that all companies should start making now, such as increasing protections around user data. Even if a business isn't subject to major data privacy legislation yet, a data leak can have devastating reputational damage that can lead to lost customers and investors.

3

Increasing Supply Chain Transparency & Due Diligence



WHAT WILL HAPPEN?

The ability to track where all goods are in the supply chain will be crucial in doing business in an era where disruption is common, can come from multiple sources and is largely unpredictable. Businesses that can spot delays, shortages, or other types of disruption in real-time will be able to respond and mitigate the damage more quickly than the competition. In the years ahead, businesses will prioritise improving supply chain transparency to achieve these goals.

Transparency will also be key for navigating the shifting global regulatory environment. For example, as laws to ensure products are ethically and sustainably sourced become more common, companies will need to bolster their due diligence capabilities to prove their products meet these requirements.

These increased due diligence requirements will lead to a fundamental shift in supply chain management best practices to prioritise greater direct control over supply chains. Greater control will mean either having a more direct role in managing facilities and logistics throughout the supply chain or developing closer ties with external partners. Businesses will also need to reevaluate all relationships with external partners with whom there are communication or compliance issues.

Our big bet: Companies that share data with their external partners to achieve transparency across the entire value chain will have a competitive advantage. They'll have access to more data that they can leverage to drive better decision making.



MEGATREND DRIVERS



Accelerating rate of
supply chain disruption



Increased regulatory scrutiny



Higher customer and investor
expectations around ESG

HOW IT WILL IMPACT INDUSTRIES

Industries that have the most sprawling supply chains, such as manufacturers, will feel the impact of this trend the most acutely as they will be exposed to more sources of disruption and international and country-specific regulations. They'll need to have visibility into all corners of their supply chains to adapt quickly to disruption and meet various compliance requirements. This will involve tracking the origin of all products they import, which may be from multiple suppliers in different countries.

Other industries like healthcare, oil and gas and high tech will also come under greater regulatory scrutiny as countries look to protect these critical industries from disruption by cyber criminals. It will be critical for these industries to comply with new standards for cyber and IP security and work with suppliers and other external partners who can also meet these requirements.

WHAT COMPANIES SHOULD DO

Improve supply chain visibility. Companies should focus on improving supply chain visibility, which can be accomplished through integrating technology and entering into partnerships. Tools like blockchain, ERP software and others can provide greater visibility into all aspects of the supply chain and enable companies to meet compliance requirements. Industry partnerships with peers, customers and suppliers to share data can also help improve visibility and make this due diligence easier.

Assess third party risk. Before joining a partnership or adding a new supplier, companies must conduct thorough due diligence to ensure their prospective partner or vendor won't open them up to new risks. They will need to ensure that the other company has strong cybersecurity controls, that any data they share with this external party will be handled correctly and their products meet any necessary compliance requirements. If a potential vendor or other partner is deficient in any of these areas, companies should not enter a relationship until the issues are addressed.

Strengthen compliance systems. Companies should also reassess their approach to managing operations abroad and consider moving away from a light touch approach. Instead, they may want to have more of their own people on the ground to remain in more regular communication with local partners, or consider outsourcing to a trusted compliance partner. This will help to better ensure compliance with relevant sustainable sourcing, cybersecurity or other regulations.





4

Evolving Customer Expectations



WHAT WILL HAPPEN?

Customers will wield increasing power to drive standards in business for cost, quality and convenience of service. Established companies will be challenged by industry outsiders who seek to steal away marketshare by focusing on high-quality service that they achieve through an efficient and streamlined supply chain. These upstart companies will also be savvy in the use of tools like social media and digital advertising to drive sales and communicate directly with their customers.

Customers will also increasingly prefer to develop personal connections with companies they buy from. Companies that view their relationships with their customers as purely transactional will lose out to competitors who treat their customers as partners.

Both business to business (B2B) and business-to-consumer (B2C) companies will have to evolve their business models in response to these expectations. They will need to deliver swift and quality service at a competitive rate, as well as offer support after the sale. This will require making changes to the supply chain to minimise delays, shortages or other issues that would impact service.

Our big bet: The most successful companies will focus on developing authentic relationships with their customers and suppliers to build loyalty and mutually beneficial relationships.

MEGATREND DRIVERS



Higher customer expectations around speed, quality and cost of service



Widespread customer access to information online



New industry entrants



Proliferation of social media, other digital communication channels and platforms

HOW IT WILL IMPACT INDUSTRIES

Retail companies may experience this trend the most acutely, though all industries will feel some effects. Retailers will need to make investments to improve the quality, consistency and personalisation of their customer experience. This will have a ripple effect up the value chain as these retailers will increasingly only want to work with manufacturers who can minimise product defects, delays and shortages.

For healthcare organisations, meeting higher customer expectations translates to improving the quality and consistency of the patient experience. Healthcare providers can achieve this by investing in digital health capabilities, such as portals that allow patients to pay bills, access medical records and even communicate directly with medical professionals. There are generational preferences when it comes to using digital platforms, so providers will need to tailor their patient experiences so that even less tech-savvy patients will still have a seamless experience.

WHAT COMPANIES SHOULD DO

Prioritise the customer experience: All organisations, regardless of where they sit in the supply chain, need to put customer service at the core of their business planning. Businesses that ignore rising standards for customer service will see competitors who invest in these capabilities steal away market share. While front-end customer experience is vital, companies should also reassess their supply chains through a customer-centric lens to ensure they can always meet demand in case of surges or shortages of critical materials. This may require moving away from a just-in-time inventory strategy and instead keeping strategic stockpiles of goods near key markets.

Invest in digital CX capabilities: Businesses should implement an online store and order form, if they don't already have one, and consider more sophisticated capabilities like AI-powered chatbots and experiences that leverage augmented or virtual reality to showcase new products or services. Deploying these capabilities both with customers and suppliers can also help improve efficiencies throughout the supply chain, by enabling stakeholders to remain in closer communication with each other and provide real-time updates on shipping times, demand spikes, material shortages or other information.

5

Rising Importance of Environmental, Social, Governance (ESG) Issues



WHAT WILL HAPPEN?

Environmental, social and governance issues will become increasingly important for businesses due to pressure from customers, investors and governments. There will be new climate regulations that organisations will need to comply with, as well as higher customer and investor expectations around the sustainability of companies' products and commitment to ESG values in their corporate structure. According to BDO USA's Spring 2021 [Private Capital Pulse Survey](#), 94% of fund managers say incorporating ESG investment criteria into their investment strategies is a priority for their limited partners.

Newer market entrants who place ESG at the core of their company's operating model and corporate mission will catalyse this shift by providing customers the option to choose brands that align with these expectations and will set the standard for established players. These startups will be newer companies who leverage digital channels to market their commitment to these values. Customers and investors will increasingly prioritise these kinds of companies, putting pressure on established players to adapt.

Companies will need to demonstrate their commitment to ESG values by selling products that are manufactured using sustainable processes and materials, use ethical labour across the value chain as well as taking action to achieve diversity, equity and inclusion (DEI) goals within the company.

Organisations that deliver subpar customer service, have adverse impacts on the environment, use unethical labour sources or demonstrate governance lapses—such as by mishandling user data—may see their customers and investors leave, suffer long-term reputational damage and even incur large fines.

Our big bet: Focus on sustainability will be key to survival and success. Companies who ignore ESG will be spurned by customers and investors who care about these issues.

MEGATREND DRIVERS



Increasing importance of ESG values for customers and investors



New climate and ESG domestic and international regulations



Increasing frequency and severity of natural disasters

HOW IT WILL IMPACT INDUSTRIES

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Looking ahead

The rate of change isn't slowing down, and no business is immune to the myriad of disruptive forces transforming our world. To succeed in this new reality, the supply chain of the future will need to be interconnected, simplified, resilient and agile. It will need to use data to drive decision making and be constantly improved as external market conditions shift and new innovations, business models and other forces continue transforming all aspects of society. The organisations that can both navigate disruption effectively while also realising new value will be the most successful.

Curious to see how we help companies navigate these trends?
Check out our [Global Value Chain Services hub](#) and see how we help our clients. ►

Want regular updates on the latest trends impacting global supply chains? Subscribe to Global Value Chain Chronicle on LinkedIn, written by Eskander Yavar, BDO's Global Value Chain Practice Leader.

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