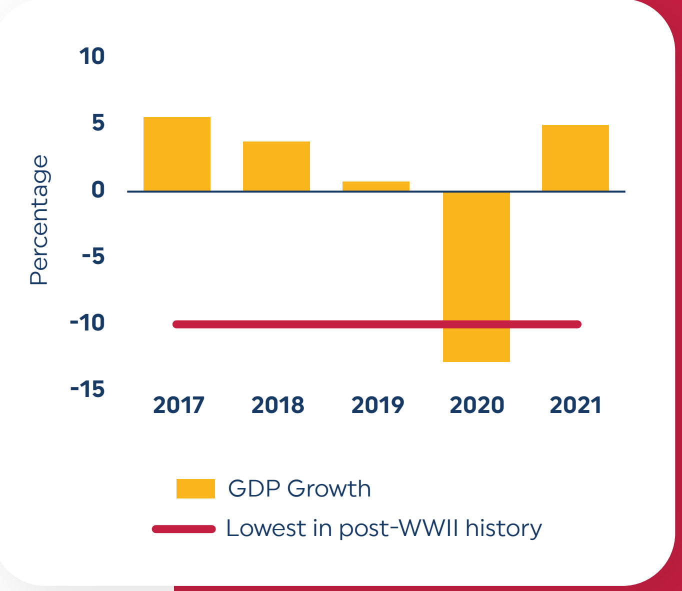
DP WORLD

REVERSING GLOBALISATION

I WOULD DIVIDE POST-WAR HISTORY INTO BC BEFORE CORONA AND AC AFTER CORONA

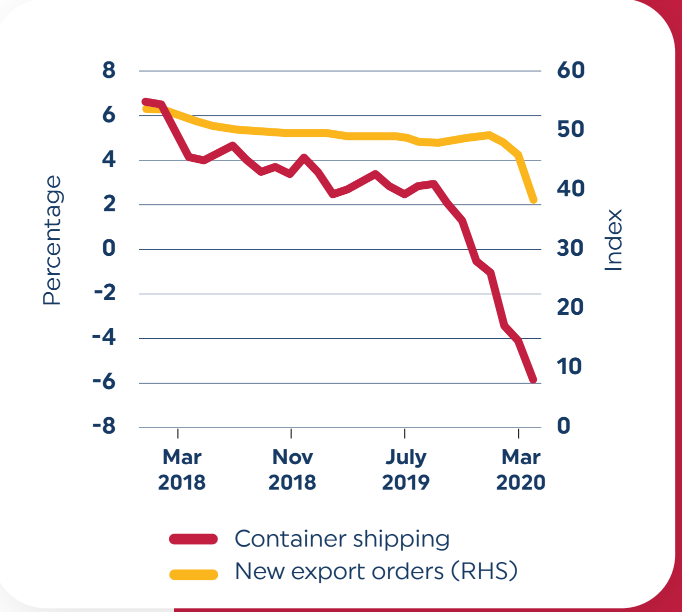
PETER HENNESSY
HISTORIAN

AUGUST 2020



Sounds overly dramatic, simplistic maybe, but life AC has changed everything and none of us at DP World believe that the world will ever be quite the same. Hennessy's well-known quote has turned out to be truly prophetic when it comes to global trade & supply chain resilience. How to turn life AC into competitive advantage is the challenge: helping our customers take advantage of these trends in the global economy at speed.

The shock to the global economy in 2020 is unique in that it is a consequence of government intervention; the shutting down of major parts of economic activity. Lockdown has changed consumer patterns - accelerating adoption of on-line shopping and working from home - reshaping our town centres and cities permanently.



THE IMPACT OF COVID-19 ON GLOBAL TRADE

- World merchandise trade is set to plummet by between 13% and 32% in 2020 due to the COVID-19 pandemic (World Bank)

13%-32%

- Nearly all regions will suffer double-digit declines in trade volumes in 2020, with exports from North America and Asia hit hardest (World Bank)

- Trade is likely to fall more steeply in sectors with complex value chains, particularly electronics and automotive products (World Bank)

- Merchandise trade volume had already fallen by 0.1% in 2019, weighed down by trade tensions and slowing economic growth. The dollar value of world merchandise exports in 2019 fell by 3% to US$18.89 trillion (World Bank)

GLOBAL TRADE IS AT THE EPICENTRE OF THESE CHANGES WITH GROWTH IN REGIONALISATION AND SUPPLY CHAIN RESILIENCE KEY

MAJOR TRENDS TO WATCH ARE THE RE-EMERGENCE OF RESHORING AND NEARSHORING

WHICH ENTERED THE LOGISTICS LEXICON IN RESPONSE TO OFFSHORING

OFFSHORING

Relocating factories or offices that produce goods or services from more costly countries to lower-cost economies. The goal is to lower the cost of production in order to provide consumers with a lower cost while improving margins. This is occasionally confused with outsourcing, in which operations are moved to a third-party. With offshoring, the parent company remains in charge of all operational decisions.

RESHORING

Reshoring, sometimes called onshoring or backshoring, is the process of relocating factories that had been previously offshored to a foreign country back to the parent company's domestic territory. Many companies make this decision to lower freight and transport costs and meet the growing demand for locally made products and faster lead up and delivery times.

NEARSHORING

The act of moving manufacturing operations geographically closer to the country where the goods or services will ultimately be sold. This practice is most commonly associated with American companies setting up their productive capacity in Mexico.

Since joining the World Trade Organisation (WTO) in 2001, China has become the de facto offshoring destination due to its abundance of cheap labour, dynamic manufacturing capacity, historically undervalued currency, aggressive export promotion policies, stable political environment and proximity to natural resources in the wider Asia-Pacific region.

In 2004, China was the third largest trader in the global economy but just 5 years later it was the world's top exporter. However, just as China's economic rise has slowed in recent years, so its attractiveness as an offshoring destination has waned.

POST-PANDEMIC, BUSINESSES FACE A NEW DILEMMA – THE GAME PLAN HAS CHANGED IT'S NOT ALL ABOUT MINIMISING COSTS

How can businesses harness the latest developments in production and manufacturing, while catering to their key regional consumer markets, amid a global trade outlook fraught with uncertainty?

Increasingly, the answer looks to be nearshoring or reshoring strategies that bring business operations in proximity to their end-customer.

In the post-pandemic global economy, this acceleration towards regions is only going to continue as businesses look to mitigate risk and shorten their value and supply chains, rather than simply favouring the low-cost option.

The Kearney Reshoring Index highlights that 2019 was the first year in the previous five where domestic US manufacturing commanded a substantially greater share of total manufacturing versus low-cost countries (LCCs) in Asia. Imports of manufactured goods from Asian countries into the US decreased by 7.2%, from the value of $816 billion to $757 billion. In particular, manufacturing imports from China into the US showed a sharp decline, with $31 billion worth of imports shifting away from the once favoured offshoring hotspot to other Asian countries.

Covid-19 will accelerate trends towards shortening value and supply chains in order to mitigate risk.

↓7.2% Decrease of manufactured goods from Asian countries into the US

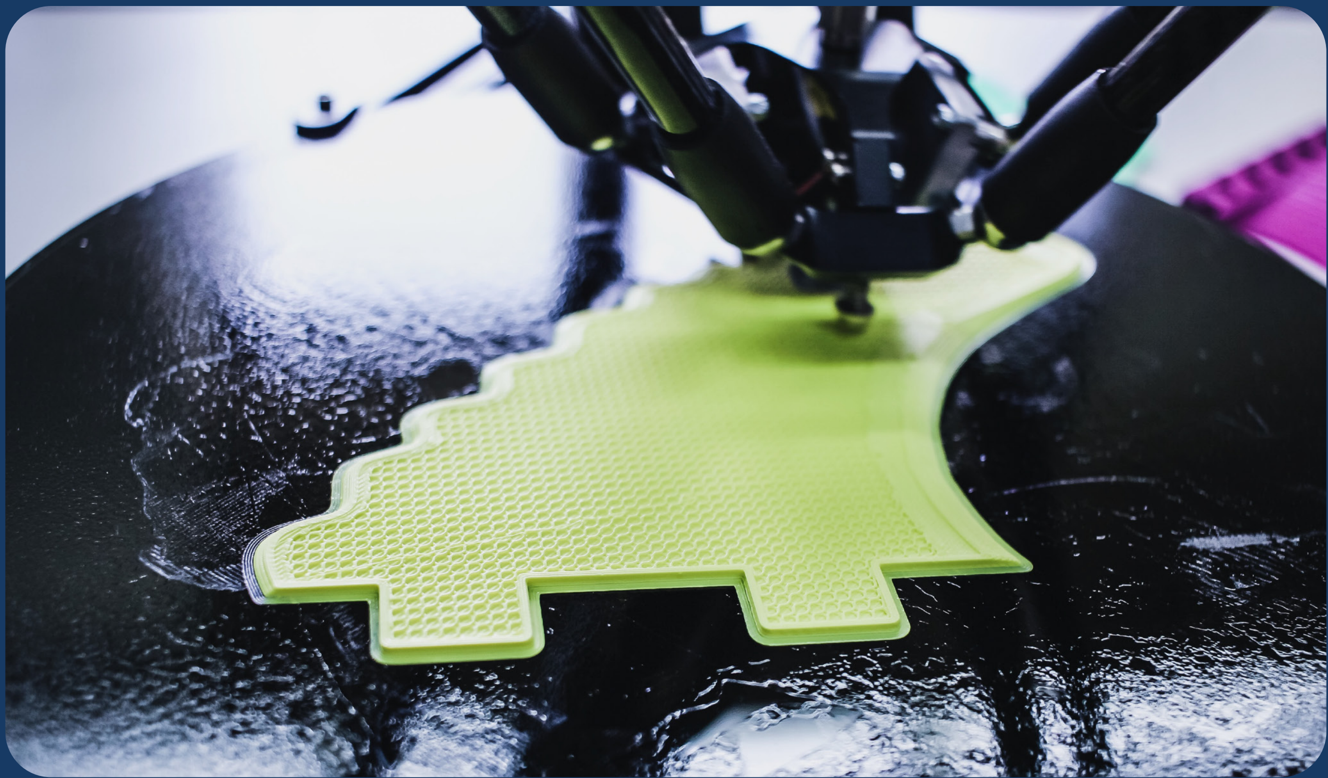
↓$31bn Imports shifting away from China to other Asian countries

WHY NEAR / RESHORING, AND WHY NOW?

To understand why nearshoring and reshoring are emerging once more as attractive choices for supply chain operators and businesses, we must first understand the key trends currently driving business decisions and the structural challenges that are transforming global trade today.

Some of these trends and challenges were very much present within the industry before the onset of the global pandemic, while others were not as prevalent. What's clear, however, is that Covid-19 has already accelerated these trends and will continue to.

KEY TRENDS:



1 IMPACT OF ADDITIVE MANUFACTURING

The rise of additive manufacturing - commonly known as 3D printing - is of particular interest as it has the potential to completely overhaul how global supply chains function.

Crucially, additive manufacturing provides a degree of flexibility, where inventories can be of a greater niche and a lower volume than the high volume and often inflexible inventories of traditional production methods.

The sector has grown exponentially, doubling in size every three years, with annual growth forecast at between 18.2% and 27.2%

↑ 18.2% to 27.2%

In markets dominated by e-commerce, where supply chains must respond to highly-specialised individual consumer demands and delivery to a specific location, additive manufacturing can bake flexibility and dynamism into businesses' productive base.

Additive manufacturing can better enable supply chain operators and businesses to match supply with demand and to do so at pace.

Smart supply chain operators are keeping their eyes on additive manufacturing as it can be based closer to key markets, often in smaller spaces than traditional factories, reducing operational costs. As the global trade landscape adjusts to exogenous shocks, reducing the length of value and supply chains is a crucial way of reducing risk exposure and bottlenecks. For companies weighing up their reshoring and nearshoring options, additive manufacturing may be a key enabler for allowing production to be brought closer to key markets.

However, uptake so far has been slower than expected, with 71% of companies citing a lack of knowledge in making the shift away from traditional production, while 29% insist that 3D printing is unreliable. Despite this, the number of manufacturers utilising 3D printing for full-scale production has doubled between 2018 and 2019, rising from 21% to 40%. Once this hesitancy is removed however, 79% of surveyed companies expected their use of 3D printing for production parts or goods to at least double in the next 3 to 5 years. As it stands, the USA, UK, Germany, France and China are the top 5 countries for 3D printing adoption and investment rates.

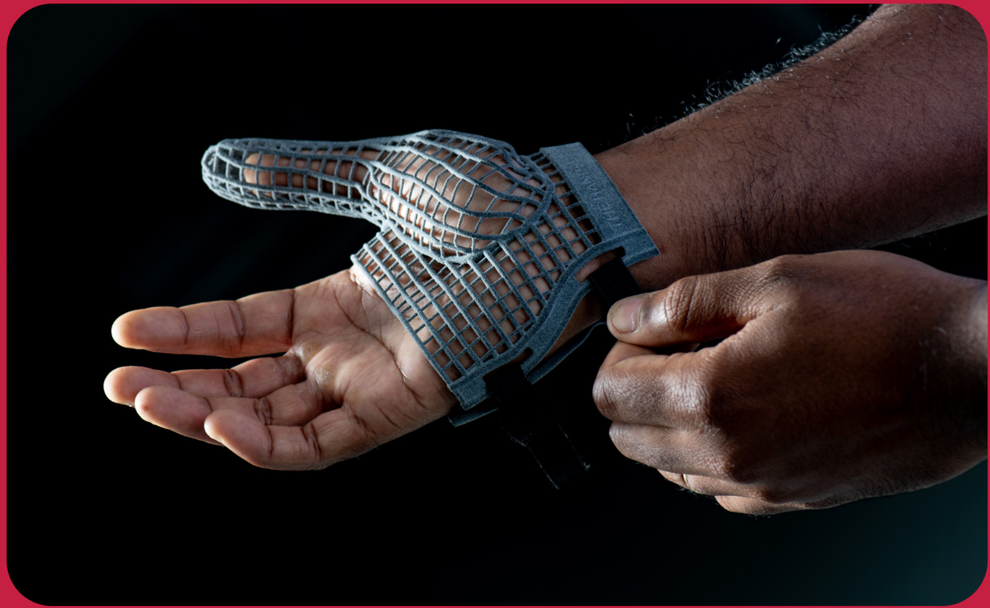
CASE STUDY

JAGUAR LAND ROVER

Jaguar Land Rover Group was formed when Tata Motors bought (Jaguar Land Rover) in 2008. Since then it has become a global success story in additive manufacturing, showcasing how emerging technologies and manufacturing techniques can enable nearshoring and reshoring strategies.

The majority of the company's manufacturing capabilities are based at the new Additive Manufacturing Centre, which is located within the Gaydon Centre, in Warwickshire, England. Measuring 4,000,000m^2, this is one of Jaguar Land Rover's principal engineering centres with 13,000 highly skilled engineers and 16 industrial 3D printers. The facility also houses a design, research and development centre, extensive test track facilities and is used for the design and development of vehicles.

Jaguar Land Rover is no stranger to additive manufacturing. 3D printing technology has been used to develop prototype parts since the early 1990s. In 1992, the Austin-Rover Group, which owned Land Rover, became an early UK adopter of additive manufacturing technology



Fast forward to today and Jaguar Land Rover have secured early access to many of latest additive manufacturing technologies, including becoming the first in the UK to use HP's multi jet fusion process.

According to Christopher Noble, Additive Manufacturing Strategic Engineer at Jaguar Land Rover, the widespread adoption of additive manufacturing technologies has significantly reduced the investment required in tooling and allowed much more experimentation with component parts, as they are no longer restricted by the design constraints of traditional manufacturing. This value proposition will continue to drive the businesses reshoring efforts as well as increasing customisation of products and unique offerings. Noble has also highlighted the logistics benefits of additive manufacturing, citing that improved capacity in this area will "deliver logistics improvements, through increased localised production and inventory management".

The company not only uses additive manufacturing for prototype parts and mock-ups, but also components for road-worthy sale vehicles. By adopting this process, they can print, test and fine tune component parts, all while lowering input costs, reducing waste and improving efficiencies across the manufacturing process. In 2019, the company produced nearly 100,000 3D printed component parts.

Beyond vehicles, Jaguar Land Rover are also using their additive manufacturing capability to improve the health and safety of workers on the production line, creating a lightweight 3D printed glove to prevent musculoskeletal disorders among the workforce, such as tendonitis or carpal tunnel. Consisting of a flexible lattice design, the glove can be worn comfortably for eight hours.

D2C
SO WHAT?

Many businesses remodel their supply chains to go direct to customers to streamline costs, remove touchpoints from their supply chains, eliminate the need for external partners and speed-up the turnaround of goods, with varied levels of success. Removing third parties is nothing new.

This supply chain model has also benefited from improvements in digital infrastructure, especially real-time data analytics that offer both customers and businesses supply chain transparency. Businesses and manufacturers deploying additive manufacturing at scale would be able to cut out component manufacturers and third parties, further streamlining costs.

Disruption caused by the pandemic has radically changed consumer behaviour and sentiment. Lockdown has accelerated the decline of physical retail in mature consumer markets while growth in e-commerce is seemingly on steroids.

3 BRAND LOYALTY

IT MAY BE A THING OF THE PAST

McKinsey found 75% of US consumers tried different brands and shopping practices during the pandemic, with 73% of these customers indicating that these were permanent changes in their consumption habits. In India, the numbers are even starker: 96% of consumers tried out new brands and shopping practices during the pandemic. This seismic shock to brand loyalty presents huge opportunities for

new players as they look to carve out a slice of the market amid the upheaval. It is clear that the growth of D2C will drive substantial interest in reshoring and nearshoring. Businesses punch drunk from the closure of physical retail and looking to minimise the risk of any future lockdown, will be very keen to reduce the length of their value and supply chains.

USA
75%

INDIA
96%

Consumers from these countries that tried different brands and shopping practices during the pandemic

4 NEXT DAY DELIVERY

CUSTOMERS ARE DEMANDING IT AND WILL PAY MORE IF THEY GET IT

Bored consumers during the pandemic want their goods the next day. Covid-19 has super charged demand for speedy delivery.

DHL recently announced a £17.5m investment into their UK supply chain to improve their delivery times and to increase handling capacity in light of the surge in demand. There is also a generational divide in terms of who wants next-day delivery the most. An SDC survey showed that 40% of Gen Z consumers (6 - 24yo) and 37% of Millennials (25 - 40yo) in the US would probably shop at a new retailer if they offered next-day delivery service, even at an additional cost. Perhaps more importantly, other research in the US found that consumers wanting groceries, electronics, and recreational items delivered on the same or next day are more likely to spend a greater amount of money on goods during Covid-19.

The trend for ever-speedier delivery times is only going to increase in popularity, not least because Amazon is pushing it as a USP.

RESHORING & NEARSHORING IS A POTENTIAL GAME CHANGER FOR BUSINESSES INTENT ON INCREASING CUSTOMER SPEND

By bringing production closer to - or even within - key markets, manufacturing capacities can be integrated with fulfilment and sorting operations to cut valuable hours off delivery times. Shorter lead times, due to manufacturing capacities being closer to key markets, mean that next-day delivery can be offered on a greater range of products.

This allows businesses to benefit from the consumer spending boost that comes with consumers' need for speed.

MORE CHOICE IN SUPPLY CHAIN CAPACITY: GIVES OPTIONS OTHER THAN CHINA

China has seen a concentration of manufacturing offshoring hot spots based on an abundance of cheap labour and the availability of manufacturing capacity. These have lost some of their dominance recently due to rising labour costs and the wide proliferation of high-tech supply chain capabilities in other geographies. There is greater choice: the technology and skills required to manufacture goods to high standards is far more widely available than it once was.

THIS IS GREAT NEWS FOR COMPANIES LOOKING TO NEARSHORE OR RESHORE ASPECTS OF THEIR BUSINESS.

Mexico is attracting an influx of nearshoring business from American businesses that had offshored manufacturing to China, as well as Asian multinationals looking to create regional hubs near key North American markets. While some of this inflow of investment can be explained by the rising trade tensions between the US and China, Mexico has also greatly improved its skills base and investment into Research and Development (R&D).

According to the National Chamber of Industrial Transformation, Mexico has increased the number of innovation centres from 11 in 2013 to 72 in 2018 and now produces over 110,000 graduates in fields of engineering and technology each year. In 2018, Mexican exports grew by 10.1% to reach $450.5bn, of which $371.9bn worth of goods went to the US, according to Oxford Business Group. The same research also found that industrially manufactured products make up 88.2% of exported goods by value. It is clear that the abundance of skills and manufacturing capacity are aiding the rise of reshoring hubs around the world. (show as schematic)

$450.5bn

Value of Mexican exports in 2018, up by 10.1%

110,000

Annual number of graduates in engineering and technology fields

MEXICO

There are still sunk costs that must be overcome in order to bring production back to the domestic nation or nearby. Companies must weigh up the investment required to move production. However, in light of the global economic slowdown due to Covid-19 and the realisation of further cascading risks, there is potential that businesses currently holding off investment will use this opportunity to begin the reshoring and nearshoring process, which is a long game. It could also go in the opposite direction, with a Deloitte survey finding that one-third of respondents citing a "high degree of future uncertainty" as the biggest hindrance to investing in supply chain resilience.

Yet the fact remains that for those businesses keen to bring production closer to home, there are a variety of emerging technologies and a general proliferation of skills, facilities and know-how to ease nearshoring and reshoring transitions.

COULD GLOBALISATION BE OVER?

The pandemic has put huge pressures on global value chains and supply chains which we believe will result in a resurgence in the regionalisation of trade over the next few years. This isn't to say that the age of globalisation is over – it isn't – but the diverse array of challenges the industry currently faces lends itself to a more regional and integrated approach.

The transformation currently taking place in China is testament to this shift. Due to China's legacy as the manufacturing heart of the world, much of its skillsbase and manufacturing capacity is still being put to use. However, much of the production is being redirected towards domestic and regional markets, rather than export markets to Europe and North America. China's burgeoning middle class is driving much of this reorientation, as businesses seek to cater for this huge growth market.

In fact, China's burgeoning middle class is one reason why multinational companies are retaining manufacturing in China. How many Chinese want the latest iPhone? As Apple sees sales slowing in domestic markets, China is set to become a reshoring and nearshoring hub, catering for domestic and regional consumer markets.

A GREATER PUSH TOWARDS REGIONALISATION WILL BENEFIT THOSE NATIONS' PORTS AND LOGISTICS FACILITIES THAT TAKE A MORE HOLISTIC VIEW OF SUPPLY CHAINS

With risks only increasing as supply chains stretch further, those operators that take a hub approach will be able to offer a 'one-stop-shop' solution for businesses, thereby minimising risk, eliminating single-source dependencies and aiding the integration of entire industries, so they can source, assemble and penetrate key markets all from a single location.

With a drive to bolster regional hubs, we are likely to see a surge in nearshoring and reshoring as companies look to reduce the distance covered by their operations to provide more agility to their business offering, minimize risk and exposure to their supply chains and better balance production with consumer demand through these uncertain times.

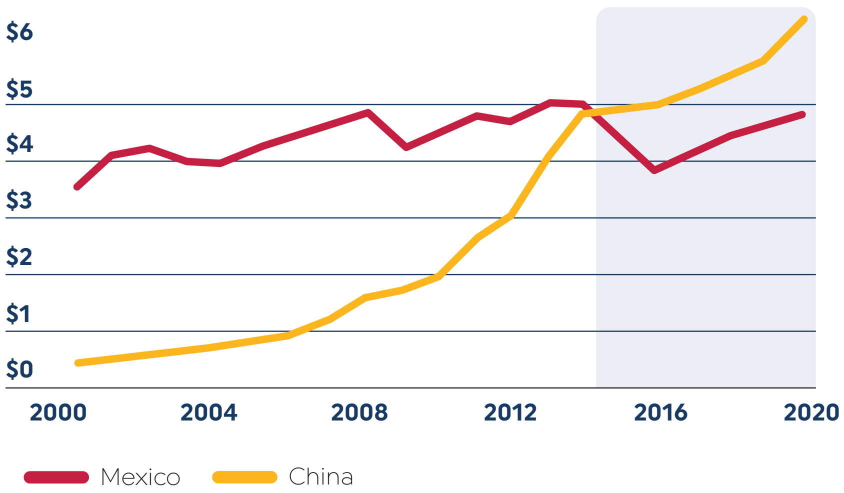
Low cost may have to be sacrificed for security and adaptability of supply. The world was shocked as some key workers on the front line did not have access to the correct PPE at the height of the pandemic. Shocking images on our TV screens of nurses wearing makeshift face masks will linger long in the memory and a regional model is likely to prove more resilient in the face of future short-term shocks and longer term economic, climatic or societal change.

COSTS OF DOING BUSINESS IN CHINA ARE INCREASING AS LABOUR COSTS RISE

Despite China's continued manufacturing dominance, the shifting labour market, growing middle class and rising wages are reducing the country's attractiveness as an offshoring hotspot for multinational companies. Companies looking to minimise risk amid a backdrop of cascading risks, are looking at reshoring aspects of their businesses closer to home if labour costs are lower than the incumbent offshoring location.

Mexico has long been a destination for US businesses looking to benefit from lower costs of labour and the proximity to domestic markets, but an array of social, political and economic factors have stymied its potential as a nearshoring destination. However, after a prolonged period of investment in industrial capacity, education and research and development, Mexico is quickly attracting nearshoring interest from North American businesses and Asian manufacturers looking to create a hub close to North American markets. Crucially, the cost of labour in Mexico has been cheaper than China since 2014, with the gap increasing over the past two years. Other factors are making Mexico a desirable location for nearshoring, including worsening trade relations between China and the USA, stronger Intellectual Property (IP) protections in Mexico, a consistent rate of inflation that aids business planning and a variety of Free Trade Agreements (FTA) between the USA, Mexico and various third-party nations.

Average compensation for manufacturing workers in US dollars per hour



IT'S RESILIENCE OF THE SUPPLY CHAIN THAT MATTERS

Images of the enormous super tanker the MV Ever-Given wedged between the banks of the Suez canal dominating the landscape and everything in its path demonstrate the vulnerability of global supply chains. This narrow, 120 mile passage of water which links the Red Sea to the Mediterranean joins the world East to West. It is a direct route from Asia, through which 12% of all global trade passes in excess of one trillion dollars worth of goods per annum. Around fifty ships a day carry billions of dollars worth of cargo. The short cut through Suez saves global shipping around a week in time by not having to sail around the Horn of Africa and countless other costs from fuel to the environment. It did not take long for the world's biggest traffic jam to build up as ships no longer able to pass through the canal backed up. What appears to be a strong, dependable supply route was shown to be very vulnerable and so therefore was the global supply chain. When companies have near-shoring options that build in resilience to their supply chains – such shocks and disruptions can be mitigated.

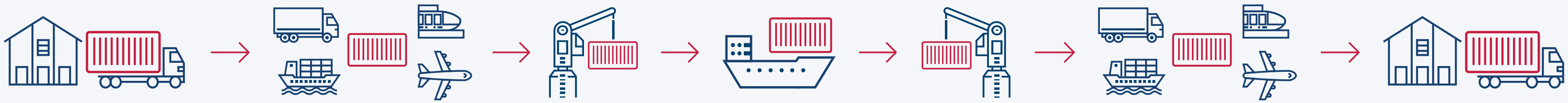
Image credit: Wikimedia Commons

Covid-19 has brought unprecedented, unpredictable upheavals to global trade. Due to the nature of the pandemic and nations' differing approaches to containment, there is a high chance that economic recoveries will be staggered, asymmetric and cautious. New variants pose a threat which may well mean that in key consumer markets, economic activity will once more be halted.

An outbreak in Europe could dent demand for manufactured goods in East Asia, and vice versa. The stop-start nature of trade during an ongoing pandemic and the current predominance of lengthy value chains makes continued offshoring a risky endeavour.

Due to these heightened risks, which are set to become a constant within global trade in the short and near-term, companies are pursuing a policy of resilience, ensuring their operations, supply chains and value chains are insulated from exogenous shocks and risks.

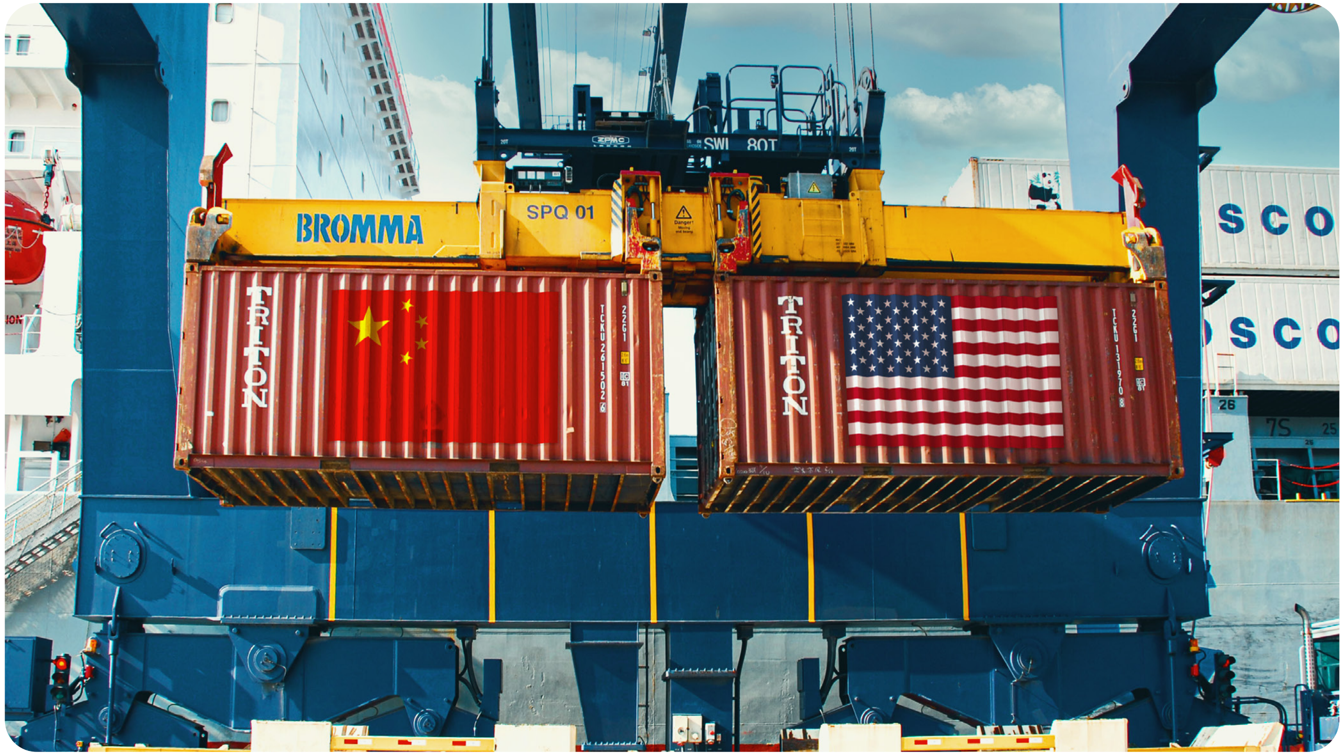
Reshoring and nearshoring are attractive strategies for those companies looking to bake resilience into their operations, as bringing operations closer to home shortens both value chains and lead times while reducing exposure. What's more, by bringing production closer to key markets, firms can reduce the number of touch points involved in the value and supply chain. Against the backdrop of a pandemic and future viral outbreaks, reducing both touchpoints and the length of value chains can mitigate risk and protect supply chains against further disruption.



Crucially, advanced manufacturing, supply chain resilience and life sciences are set to benefit from the various Covid-19 economic recovery programmes that are being rolled out all over the world. This could play a pivotal role in changing the skills landscape in countries with mature consumer markets but reduced manufacturing capacity, creating both the labour and skills base required for successful reshoring and nearshoring strategies. It's abundantly clear that resilience will become the main motivator for supply chain strategies and investment decisions in the coming months and years. The UK's recent rows with the EU over vaccine supply are testament of what is to come as countries build their own manufacturing capability in areas where previously there was virtually none. In some cases this has happened almost overnight. With the climate emergency gaining speed this trend will be seen in agriculture as well as pharmaceuticals.

POLITICIANS WORLD OVER MAKING PLANNING DIFFICULT AS TRADE AGREEMENTS STALL

Even before the global pandemic and its destructive tailwinds, global trade relations have been weathering periods of prolonged uncertainty due to heightened tensions and damaging policy measures, primarily between China and the USA.



Conglomerates looking to serve US consumers shifted production accordingly, with Samsung moving its manufacturing base from China to India and Vietnam and LG Electronics shifting refrigerator production for the US market to South Korea.

It is not just between China and the USA where trade tensions are heightening: India has brought in some regulatory tariffs on USA products and future trade relations between the UK and the EU remain unclear. Most recently, President Joe Biden has signed an executive order ordering all Federal agencies to conduct a review of their critical supply chains with a view to reducing the US's dependence on China and other rivals.

Combine this with a global pandemic and increasingly frequent climate impacts and uncertainty becomes the defining feature of global trade going forward. Trying to mitigate risk and create certainty through supply chain resilience is therefore vital.

HOW TO REDUCE THE UNCERTAINTY

Reshore or nearshore certain aspects of businesses' operations to limit exposure to a potentially unpredictable trade policy and trade relations. Of course, trade relations can change suddenly after an election cycle or through economic necessity and should therefore be treated with the utmost caution when using them to determine nearshoring and reshoring strategies. However, as the pandemic has clearly shown, there is a danger of cascading risk through the entire trade system, where prolonged and staggered economic recoveries lead governments to pursue protectionist policies for short-term gain. In this situation, the unpredictability of global trade relations and policy should be at the front of business minds - alongside the other key trends and structural challenges listed in this report - when assessing the potential of nearshoring and reshoring strategies.

↓16%

Fall in trade between China and US in 2019

Auto-part imports into the US in 2019, according to Boston Consulting Group.

↓17% FROM CHINA

↑10% FROM TURKEY

↑24% FROM SOUTHEAST ASIA

Consumer durable imports into the US in 2019, according to Boston Consulting Group.

↓19% FROM CHINA

↑ FROM JAPAN, SOUTH KOREA, INDIA, BRAZIL AND SOUTHEAST ASIA

CASE STUDY

SHORING-UP FOOD SECURITY - A TASTE OF WHAT'S TO COME?

Nearshoring and reshoring strategies are not solely for the manufacturing arms of businesses - although this does make up the bulk of nearshoring and reshoring initiatives. One such sector that suffered huge blows at the hands of the pandemic, and to which climate change is already hitting supply chains, is agriculture.

When simplified, the food supply chain has three main stages: primary production (farming), processing and manufacturing of the final product and distribution. Yet a closer look exposes a vast, complex and increasingly risk-laden supply chain that spans the length of the globe.

Long gone are the days of local food production - it is now a complex global system. While this means that consumer choice has skyrocketed throughout the seasons, it has also created a system that is highly unsustainable in terms of emissions and highly susceptible to shocks - as seen during Covid-19.

Fortunately, there is a constellation of emerging technologies and the political will to create resilient food systems, where value and supply chains do not stretch the length of the globe and risk is mitigated.

As mentioned, the rise of additive manufacturing technologies is not exclusively reserved for industrial uses, with Israeli food-tech company Aleph Farms recently partnering with the Israel Institute of Technology to produce the world's first 3D printed rib-eye steak. Aleph Farms' 3D bioprinting technology prints actual living cells that are then incubated to grow, differentiate, and interact, in order to acquire the texture and qualities of meat. And these companies are no longer on the fringes of industry - they are attracting huge swathes of capital. In its first three months after going public, Beyond Meat's share price increased by 500percent. Beyond Meat's and Impossible Foods' products are now available in fast food restaurants throughout the USA, Europe and Asia. There's no doubt that the cultured meat industry is growing rapidly.

2016

2019

Alongside innovation in livestock agriculture is the continued modernisation of plant agriculture, which improves yields on an almost yearly basis with a reducing amount of available farmland. Vertical farming is the practice of growing crops in vertically stacked layers and often incorporates controlled-environment agriculture, which aims to optimize plant growth, as well as soilless farming techniques such as hydroponics, aquaponics, and aeroponics. While critics denounce these methods as yet another fad that is damagingly energy-intensive with high start-up costs, this belies the benefits:

RELIABLE YEAR-ROUND CROPS

Unlike traditional agriculture, vertical farming is not weather dependent which means you can grow all year round.

MORE EFFICIENT USE OF SPACE

Sprawling traditional farms do not have an infinite amount of land to farm without infringing further on the natural work. With vertical farming, the sky's the limit.

LESS WATER

Hydroponic growing methods within vertical farms use roughly 10percent of the water, fertiliser and nutrients of traditional farming, reducing the pressure on dwindling freshwater supplies. Also, vertical farming does not create the same amount of noxious water run off into groundwater supplies, an increasingly alarming problem.

KINDER TO THE ENVIRONMENT

Vertical farming uses less input resources, requires less energy intensive labour and processing, and removes the incentive for clearing old growth forest to create farmland.

LOWER LABOUR COSTS

Vertical farming systems can be partly automated, dramatically reducing the labour costs involved in agriculture.

With all this in mind, nearshoring or reshoring large swathes of the global food system isn't out of the question. To complement this shift, port-centric supply chains could be well placed to enable the nearshoring and reshoring of the food industry. Through the additional capacity of warehousing and industrial space to house vertical farms and 3D printing meat plants, port-centricity can connect the processing and manufacturing stages of agricultural production with distribution, reducing touch points and lead times. Likewise, the port and terminal aspects allow for agriculture inputs, such as fertiliser and feedstock, to be handled and consolidated in a single location to mitigate risk.

Reducing touch points within the food system is also vitally important in light of Covid-19 and other zoonotic diseases, as recent viral outbreaks at industrial livestock plants show.

PORT-CENTRIC LOGISTICS TO SHORE UP GLOBAL TRADE

As reshoring and nearshoring strategies gather momentum due to the key trends and structural challenges outlined above, supply chain operators must reassess their offerings to enable businesses to bring production close to - or even within - key consumer markets.

GETTING THIS RIGHT IS CRUCIAL

The efficiency gains, risk mitigation and compressed supply chains that reshoring and nearshoring can bring to a business depend on the logistics infrastructure that is in place, its capacity and how it interacts with other nodes in the supply chain. The supply chain partners' knowledge and experience is also essential, understanding the trade-offs and helping businesses overcome barriers by aiding their supply chain pivots.

One approach to logistics that is well positioned to aid nearshoring and reshoring strategies is the port-centric logistics model pioneered by DP World. Port-centric logistics is commonly defined as:

> **"A DISTRIBUTION CENTRE (DC) THAT IS LOCATED AT A PORT AS OPPOSED TO INLAND, BRINGING COMPANIES CLOSER TO THE MARKETS THEY SERVE AND DECREASING FREIGHT MILES"**

Since the turn of the millennium, port-centric logistics has been developing, improving and adapting to the needs of businesses and enabling a more inclusive, dynamic and sustainable form of global trade. Port-centricity favours a hub approach, where port connections are combined with other modal transport options, such as road, rail and barge, complemented with adaptive capacity in terms of warehousing and inventory management, all enabled through digital oversight and human expertise. Not only does this dramatically reduce freight miles and related emissions, it limits touch points within the supply chain and increases the pace of trade flows, it also offers businesses the additional flexibility and capacity required to flourish in modern trade. Port-centric logistics brings a range of additional benefits to businesses that are continuing to navigate a pandemic and its subsequent containment measures:

ADDITIONAL CAPACITY TO BETTER MATCH SUPPLY & DEMAND

- In a world of cascading risks, where future stability is anything but guaranteed, centralising and integrating business operations - from manufacturing through to distribution - in a single location can substantially mitigate the risks associated with lengthy value and supply chains.

LIMITS TOUCH POINTS

- With varying restrictions and levels of cases and vaccinations, reducing touch points through the supply chain is vitally important for ensuring both speed, security and hygiene standards.

- Concentrating business operations in single locations mean viral breakouts can be dealt with swiftly and efficiently. Likewise, having consignments passing through fewer hands also reduces the risk of loss or damage.

MULTIPLE MODAL OPTIONS

- Due to the hub nature of port-centric logistics, businesses have a variety of modal options available to them depending on their needs. Route optimisation is fundamental to supply chain success, but in an age of pandemic it is even more important. What's more, multiple modal options offer better outcomes in stress testing scenarios, which are becoming an increasingly common requirement for supply chain operators.

GREATER OVERSIGHT AND TRANSPARENCY

- Oversight and transparency have been growing trends within supply chain and consumer circles for a number of years now but the pandemic has brought these into sharp focus. Port-centricity gives businesses a better understanding of their inventory and its movements, with businesses able to pass on the transparency and real-time oversight to their customers, easing any concerns that may emerge.

THE PORT-CENTRIC MODEL IS WIN-WIN FOR ALL PARTIES:

Port-centric logistics could play a pivotal role in enabling nearshoring and reshoring strategies globally. There are a range of capabilities that port-centric logistics brings to the table for businesses weighing up their nearshoring or reshoring potential, which are supplemented by DP World's expertise in enabling better trade:

- ✓ Ports and logistics companies enjoy better profit margins
- ✓ Supply chains are more economical
- ✓ Environment benefits from of reduced carbon and lower road congestion
- ✓ Better compliance with environmental legislation

ROOM FOR MANOEUVRE

- Port-centricity brings additional space and capacity close to key transport nodal points. So, whether it is additional inventory space for bringing stock or component parts close to key markets, or creating manufacturing facilities to bring production closer to home, port-centric logistics offers the capacity that businesses need to fine tune their offering

CENTRALISING OPERATIONS

- In a world of cascading risks, where future stability is anything but guaranteed, centralising and integrating business operations - from manufacturing through to distribution - in a single location can substantially mitigate the risks associated with lengthy value and supply chains

ONWARDS OPTIONS

- DP World's port-centric operations offer businesses a range of modal options for accessing large consumer markets. A variety of options mean that businesses can tailor their supply chains according to business objectives, consumer needs and aggregate demand, whether its rail, road or barge

CASHING-IN ON SPILLOVERS

- In any business hub environment, collaboration and spillovers are inevitable. Businesses that choose to nearshore or reshore in a port-centric terminal will benefit from the other businesses that are also based there, whether its technology infrastructure, higher incumbent skills base or cross-business collaboration. Port-centricity can directly aid innovation. With this in mind, the recent push towards the 'freeport' model, in the UK and elsewhere, will further incentivise cross-collaboration within a port-centric hub environment as well as crystallising investment flows into these hubs. The result should be a boost in manufacturing capacity within freeports, aiding nearshoring and reshoring strategies

AIDING INTEGRATION

- Due to port-centric logistics providing manufacturing and supplementary business capacity within key transport nodes, businesses can integrate and compress certain aspects of their business due to the shorter lead times and supply chains involved. With shorter manufacturing lead times required in a nearshoring or reshoring scenario, as well as the additional inventory management capacity, businesses can better adjust to exogenous shocks and economic conditions with flexibility embedded in their operations. In the current global situation, with pent-up demand and paused spending, this type of offering can give businesses an edge

GLOBAL REACH

- DP World's global network of ports and terminals means that wherever nearshoring or reshoring strategies are focusing on, there will be a terminal that can cater to businesses' needs. In terms of emerging markets and future growth trends, this provides added capabilities for businesses looking to tap growing consumer markets

AS ECONOMIES AROUND THE WORLD BEGIN TO RECOVER IN THE WAKE OF THE PANDEMIC AND GAIN AN UNDERSTANDING THAT SOME DEGREE OF UNCERTAINTY IS GUARANTEED IN THE NEAR-TERM, BUSINESSES WILL START TO SERIOUSLY WEIGH UP THE PROS AND CONS OF NEARSHORING AND RESHORING STRATEGIES.

Doing so is not a straightforward decision and will not be achieved overnight - it requires careful consideration, costing and forecasting to ensure that the efficiency and financial gains outweigh the sunk costs of shifting production. It is already clear that the tides of global trade are turning, with key trends and structural challenges culminating in a future for global trade that is different, yet still teeming with opportunity.

At DP World, we understand how to best capture the opportunities that these new tides bring, guiding our partners so they continue to flourish and helping to shore up global trade for a more prosperous humanity.

DP WORLD

For business enquiries contact
DPWSales@dpworld.com