Supply chains post COVID-19

India’s role in reconstructing global production networks

November 2020

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Supply chains to get a makeover with this crisis

Global production networks were historically designed to take advantage of resource availability, customer proximity, cost arbitrage or a combination of these factors. Other aspects, such as geographical distance, and social, cultural and political factors, were less likely to influence business decisions when compared to economics. Furthermore, in an endeavour to lower barriers and promote freer markets globally for capital and goods, countries around the world were encouraged to hone their capabilities in specific, increasingly narrow areas to create a highly inter-related and inter-dependent system. A high degree of concentration of manufacturing capabilities within a certain country was the natural outcome of these trends.

In the years leading up to the COVID-19 pandemic, supply chains around the world were already under pressure due to turbulent geopolitical situations, heightened consumer shipping and availability expectations, and rapid adoption of e-commerce. Companies the world over depended on China, ‘the world’s factory’ to keep the global economy moving. Given the country’s position at the epicentre of the pandemic, there was a massive worldwide dismantling of supply chains. Thus, the vulnerability of production networks to this crisis was a result of the specialisation and extreme efficiencies inbuilt into them, which consequently made them brittle and susceptible to disruption.

The risk of supply chain disruption is also clearly reflected in the mindset of CEOs, globally. According to the KPMG 2020 CEO Outlook survey, supply chain risk has moved up the agenda from its ninth and placed position at the beginning of the year and it now occupies second place as a major strategic focus area. CEOs in India also view supply chain risk as a major concern. The number of CEOs in India highlighting this as a critical risk has risen five-fold since the onset of the pandemic. The pandemic has presented a rare opportunity for a reset. It is time to put a relentless focus on the customer centric, data enabled, digital technologies that many companies had good intentions to implement prior to COVID-19, but deferred due to fragmented efforts, legacy systems, or other factors. This crisis has given organisations an opportunity to fix inherent rigidities in their supply chains and transition from the current state of fragility to supply chain diversification. To enable this change, it would be crucial for organisations to implement new technologies that would not only allow real-time decision making but also aid organisations in adapting to supply chain variabilities.

The COVID-19 crisis, continuing trade disputes and shifting geopolitical forces have brought the risks, resilience, redundancy and regionalisation of supply chains to the forefront of business conversations and calls to action. Businesses are exploring a wide range of alternative strategies from diversification to localisation of production networks.

Arun M Kumar
Chairman and CEO, KPMG in India

1. Is it possible to end China’s control of global supply chains? Economic Times, 10 June 2020

China will remain important

Driven by its legacy advantages of favourable business policies, best-in-class infrastructure, abundant availability of skilled and affordable labour, and a vibrant technological ecosystem, China – even with the expected geo-political rebalancing post COVID-19 – is expected to remain one of the most popular destinations for foreign direct investment (FDI). The country’s rapid growth made it a major part of virtually every value chain and when the pandemic struck, the country accounted for 17 per cent of global GDP. Even after the catastrophic experience of the coronavirus, the country is set to report one of the fastest economic growth rates in the near term.

…but emerging markets set to play a pivotal role

To restart supply chains disrupted by the pandemic, global and regional supply chain flows – and alternative suppliers and modes of transportation – need to be examined according to trade-offs on needs, cost, service and risk scenario analysis. This includes mapping the criticality of sourced materials to high-value products and revenue streams and understanding contract liability in the event of supply shortage. Emerging markets will play a critical role here, as manufacturers actively look to diversify their operations.

A major shift can be seen with developing countries beginning to exhibit the same structural improvements as China, although they are at much earlier stages. In textiles and apparel, for instance, production networks spanning multiple stages are consolidating within countries such as Vietnam, Bangladesh, Malaysia, India, and Indonesia. As a percentage of GDP, Vietnam, Indonesia, Philippines and India are all ahead of China in attracting FDI, which could be an early indicator of the growing importance of these economies in global trade.

The COVID-19 pandemic and current geo-political landscape have left global manufacturers seeking more diverse, resilient and economically viable supply chain partners. Now that most businesses have restarted their operations, they must navigate through current complexities like risk exposure, tax and regulatory compliances, digital and analytical capabilities etc to both sustain and thrive in the ‘new normal’. India has a unique opportunity to take a more inclusive and proactive role in leveraging our vast pool of skilled resources, competitive costing and developed eco-system for select sectors to get ahead in the global supply chain reconfiguration race.

Neeraj Bansal
COO – India Global and National Leader – Supply Chain Re-alignment
KPMG in India

4. Supply chains: Specialisation, stronger leaders and self-sufficiency: HSBC global research, 30 April 2020
5. Economics in the time of COVID-19, CEPR, 2 March 2020
6. World Economic Outlook, IMF, June 2020
7. Supply chains: Specialisation, stronger leaders and self-sufficiency, HSBC Global Research, 27 April 2020
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2. The India replacement opportunity

Despite the prevailing uncertainty around the ‘next’ normal, there is consensus that supply chains are likely to become more diversified in the medium-to-long term. India is faced with the opportunity to attract companies for whom supply-chain relocation has become a top priority in the wake of COVID-19. The country’s favorable business environment, liberal FDI norms, constantly improving Ease of Doing Business rankings, enormous consumer base and rapidly improving digital infrastructure make it a top contender to emerge as a global manufacturing hub. India leads in attracting FDI within the region

In 2019, while Asia was the world’s largest FDI recipient accounting for 30 per cent share of global inflows, India was the largest FDI recipient in South Asia (excluding China). The country’s FDI flows grew 20 per cent y-o-y in 2019 to reach USD51 billion.8

The configuration of global supply chains is undergoing radical disruption, driven by three seminal trends: rising economic nationalism; geopolitical rifts and fissures, especially between China and the West; and the recent onset of the COVID-19 pandemic. These disruptions present India with a raft of possibilities to become a more significant presence in global value chains by attracting more inward investments, and the government is at work on improving the related policy regime as well as reducing process friction. KPMG in India is proud to be involved in supporting some of these recent initiatives both by the central and state governments.

A stable and growing economy with enabling ecosystem

(Elias George
Partner and Head
Infrastructure, Government and Healthcare,
KPMG in India

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2. The India replacement opportunity

There have been sustained efforts by the Indian government and private enterprise to leverage FDI to build productive assets and infrastructure for economic development. In this section, we examine the reasons that have led to this greater attention from foreign investors and why we believe this could also result in India emerging as an attractive destination for companies looking to diversify their supply bases towards enhancing resilience.

**Infrastructure has received the much-deserved attention**

- Concerted push to develop infrastructure projects including road connectivity and port modernisation
- India ranked 44th in 2018 globally, up from 54th place in 2014 on World Bank’s Logistics Performance Index\(^\text{10}\)
- During the period 2014-2018, India reported a substantial rise in container port traffic as compared to most of the other Asian nations. The Economic Survey 2019-20 reported that the turnaround time of ships in India has almost halved to 2.48 days in 2018-19 from 4.67 days in 2010-11.


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\(^{10}\) Global Rankings 2018 | LPI, The World Bank, 2018

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2. The India replacement opportunity

One of the largest transportation networks…..

- 2nd largest road network
- 2nd largest rail network
- 7th largest civil aviation market

being further strengthened through the draft National Logistics Policy

- Single-window e-logistics market
- Cuts logistics costs from 13-14% of GDP to 10%
- Generates additional 10-15 million jobs

Multi-modal infrastructure by optimising mix of road, rail and water

Current

<table>
<thead>
<tr>
<th>Mode</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Road</td>
<td>60%</td>
</tr>
<tr>
<td>Rail</td>
<td>31%</td>
</tr>
<tr>
<td>Water</td>
<td>9%</td>
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</tbody>
</table>

International Benchmarks

<table>
<thead>
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<th>Mode</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road</td>
<td>25-30%</td>
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<tr>
<td>Rail</td>
<td>50-55%</td>
</tr>
<tr>
<td>Water</td>
<td>20-25%</td>
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(Source: Invest India, IBEF)

Flagship National Infrastructure Pipeline (NIP) will be a game-changer for industrial corridors

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2. The India replacement opportunity

Other important enabling factors also in place

English is the second most widely spoken language after Hindi. As per the 2011 census, while a relatively small number of 256,000 people claimed English as their mother tongue (primary language), it was the second language of 83 million Indians11. India is also home to the second largest digit citizen in the world, after China, with a reported 718.74 million internet users12. As per KPMG in India’s analysis, India is set to be home to a billion digital users by 202813. Finally, India, with a youth population whose median age is 28.4 years, has a demographic advantage over many countries, including China that has a median age of 38.4 years14.

However, some challenges persist

India offers global investors a large and attractive market, a sizeable demographic advantage and a vibrant private sector. However, there are also challenges that remain in the country’s path to achieving its stated potential. Two of the most well cited are inadequate, underdeveloped infrastructure and stifling bureaucracy. However, as mentioned, infrastructure spending is receiving focussed attention from the government, especially as a sector that could lead India out of an economic slowdown by simultaneously improving productivity and generating jobs.

Global investors have long been wary of complex regulatory guidelines that govern not just commerce, but most aspect of individual and business activity and there is still some work to be done on this front. The regulatory guidelines around labour are especially onerous with 463 Acts, more than 35,000 compliances and 3,000 filings that are applicable, although the government has made some announcements recently that look to rationalise this system. Fifteen states have approached the Centre to effect changes to some of the key labour laws including the Industrial Disputes Act, 1947, the Factories Act, 1948 and the Contract Labour (Regulation & Abolition) Act, 197015.

Some of these bottlenecks in India could be responsible for its relatively weaker standing as compared to nearby countries like Vietnam and Thailand when companies assess reshoring alternatives. Of the 56 companies that moved bases from China in 2018-19 for example, 26 relocated to Vietnam, 11 to Taiwan, eight to Thailand and three to India16. Further, post COVID-19, five ASEAN countries – Vietnam, Malaysia, Thailand, Indonesia and Philippines – are expected to recover at a faster rate than India17.

Tax reforms introduced by the government place India at an advantageous position to benefit from the global reconfiguration of manufacturing supply chains. Our globally aligned transfer pricing regime, abolishment of multiple taxes to make way to GST, steep reduction in corporate tax rate to 15 per cent are some of the critical steps taken that help strengthen India’s position. In addition, our extensive network of DTAA, FTAs and progressive alignment with international best practices, and offered fiscal and non-fiscal initiatives make foreign investments in India a lucrative choice for global manufacturing players.

Rajiv Dimri
Partner and Head Tax, KPMG in India

11. “In India who speaks English and where?” livemint, 4 May 2019
12. TRAI website accessed on 10 September 2020
13. A year off script: Time for resilience, KPMG in India, 2020
14. Youth can be clear advantage for India, The Hindu, 24 Feb 2020
15. 15 states seek approval for changes in three labour laws from Centre, The Economic Times, 16 September, 2020
16. “Do it like Vietnam”, The Times of India, 02 July 2020/ Nomura
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Chemicals
Pharmaceutical
Telecom

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As per a recent report by Cushman & Wakefield, India stood third, only behind China and the U.S., in the Global Manufacturing Risk Index 2020 rankings. The report, which assessed the most suitable locations for global manufacturing, evaluated 48 countries based on their ability to restart manufacturing operations as confinement measures eased and normalcy resumed. A favourable business landscape with access to skilled talent and markets, expenses related to operating costs and other essentials like labour, power, real estate and most importantly, political, economic and environmental risks were also factored in the assessment.

Within this context, there are some specific industries in India that are relatively better positioned to emerge as attractive and viable alternative locations in supply chain rebalancing efforts. We have selected four such sectors for a deeper analysis of their inherent strengths and tangible advantages they offer companies looking to reconstitute their global production networks.

18. 2020 Global Manufacturing Risk Index, Cushman & Wakefield, 25 June 2020

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Automotive industry: shifting to a higher gear

Automotive sales in India recorded a CAGR of 6.78 per cent between FY15 and FY19.¹⁹ However, sales in FY20 declined by 15 per cent on account of a general economic slowdown. The Indian auto components sector is valued at USD48 billion in FY20. While OEM demand drives the industry, exports constitute over 25 per cent of overall sales. The country’s exports increased at a CAGR of around 11 per cent between FY15-19. The U.S. is the top export destination for auto-components with a total share of 25 per cent of the total exports followed by Germany, U.K. Thailand and Italy.²⁰

Growth drivers

While multiple policy resets in the country (leapfrogging from BSIV to BSVI, abrupt diesel ban and focus on EVs), adoption of shared mobility options and other market-related factors such as fluctuations in interest rates and reduced liquidity in NBFCs have led to a slowdown in the automotive sales, there are significant growth drivers for the auto components sector.

• Development of India as a manufacturing base: The Automotive Mission Plan 2016-26 targets 3x growth for the automotive industry and aims to establish India as a manufacturing base and an export hub. The plan also seeks to promote the advancement of the auto ancillary sector ecosystem in India

• Premiumisation: Increasing share of electronics and technologically advanced components in a vehicle is expected to drive premiumisation of components

• Adjacent industries: Aerospace, defence and agricultural machinery are evolving into a promising new market for Indian auto component manufacturers.

Automotive brands like BMW, Mercedes Benz, Ford, General Motors, Nissan, FIAT, John Deere, CAT among others have located their International Procurement Offices in India. South Korean automotive manufacturer Kia Motors has recently invested in setting up its state-of-the-art manufacturing facility in Anantapur, Andhra Pradesh from where the Kia Sonet, the company’s latest ‘Made-in-India’ product, would be exported to various global markets.²¹ Kia has already launched its first ‘Made-in-India SUV’, Seltos from this plant in August 2019. India’s auto-tech start-ups are thriving hubs for cutting edge advances in automotive technology and the country is the second largest R&D centre in the automotive industry across the globe.²²

India has been an integral part of multiple success stories over the years for both domestic and multinational auto component players. This lends a robust, credible support for positioning the country as a reliable partner in global auto supply chains.

Vinodkumar Ramachandran
Partner and National Leader – Automotive and Industrial Manufacturing, Global Head Industry 4.0, KPMG in India

¹⁹. Industry reports, KPMG analysis, SIAM website accessed on 10 September 2020
²⁰. SIAM website, accessed 10 September 2020
²¹. Kia rolls out the first Sonet from its Anantpur plant, Hindu Business Line accessed 30 September 2020
²². India becoming a global hub of R&D in autonomous automobile sector - TFiPost, KPMG internal database
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Chemicals sector: an attractive alchemy

Chemical exports from India cover all major markets and have recorded a CAGR of 10.7 per cent from FY14-18 driven by demand from the aromatics, performance plastics, agro-chemicals and fibre intermediates end-use segments. The Indian chemical industry is expected to grow at a CAGR of 7-8 per cent during 2020-25, to reach USD160 billion, accounting for 3-3.5 per cent of the global chemical industry.23

One of the world’s largest petro-chemical players Reliance India Ltd (RIL) has established almost a dozen petrochemical manufacturing plants all over India, which bring in revenue of over USD24.5 billion, while others like Galaxy Surfactants have established plants overseas that bring in revenue of approximately USD400 million.24

Growth drivers

India is well-positioned to be an alternate source of supply to the global chemical industry with permission for 100 per cent FDI in the sector, dedicated investment zones, availability of raw materials and a large domestic talent pool. It has also executed 13 FTAs and 16 are under negotiation, which is more than any other SEA country.25

23. CEFIC, Statista, research reports accessed on 10 September 2020
24. KPMG insights, industry reports
25. Supply Chain Realignment, KPMG in India, May 2020
The chemicals industry in India is a large and growing sector of USD100+ billion and is showing up as a bright star in the larger manufacturing ecosystem in India. The broad and diversified production base in India provides resilience in the current scenario and stands to benefit from global supply chain shifts due to the pandemic. With international organisations looking to de-risk their value chains by adopting a China +1 strategy, India stands to pick up a major chunk of this shift owing to large number of quality suppliers and competitive cost of production. This is expected to serve not just the growing domestic demand but also export markets due to integrated manufacturing, and increasingly favourable govt. policies and tax regimes.

Manas Majumdar
Partner IGH,
National Leader – Oil, Gas and Chemicals, KPMG in India

26. Department of Chemicals and Petro-chemicals, Make in India, FICCI, KPMG analysis
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Pharmaceutical sector: the prognosis shows promise

The Indian pharmaceutical industry is the world’s third largest in terms of volume and thirteenth largest in terms of value. The pharmaceutical industry in India was valued at USD50 billion in 2019-20.27 India’s presence transcends the value chain, with Indian pharmaceutical companies leading in APIs as well as formulations. The country’s API sector is ranked the third largest in the world, and India contributes approximately 57 per cent of APIs to the pre-qualified list of the WHO.

CIPLA limited, Dr Reddy’s Laboratories, and SUN pharmaceuticals industries limited are just a few of the India pharmaceutical companies that have made their mark globally. Among these players, SUN pharmaceuticals industries limited is the largest by revenue, clocking USD3.84 billion in revenue in FY19 with manufacturing locations spread across the U.S., Japan and Australia28. Some of the notable features of the India pharmaceutical industry include:

27. KPMG in India analysis based on primary and secondary research, IMF website accessed on 10 September 2020
28. KPMG insights, industry reports

Pharmaceutical sector: the prognosis shows promise

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27. KPMG in India analysis based on primary and secondary research, IMF website accessed on 10 September 2020
28. KPMG insights, industry reports

Highlights of the pharmaceutical industry in India

Largest exporter of generic drugs by volume

Ranked third globally by volume

North America is India’s largest exports market with 32% share followed by Africa 19% and Europe 16%

Highest number of U.S. FDA approved plants (664) outside of USA

44% of the total ANDA approved by USFDA to Indian manufacturers

India caters to 50% of the global vaccine supply

(Source: Invest India website, Indian API Industry – Reaching the full potential, KPMG in India, CII report, April 2020, Department of Commerce, Government of India)
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Growth drivers

Many of India’s recent policy announcements support growth of the pharmaceutical sector, including:

- **FDI policy:** Under the automatic route, 100 per cent FDI for greenfield and 74 per cent FDI for brownfield projects
- **New policy for clinical trials:** The government has notified the New Drugs and Clinical Trials Rules, 2019 to streamline clinical trials regulations in India and provide faster approvals
- **Funding for domestic production:** The government announced the establishment of three Bulk Drug Parks and a Production Linked Incentive (PLI) Scheme for promotion of domestic manufacturing of critical APIs and KSMs. Also, a corpus of USD1.3 billion has been proposed for domestic manufacturers of bulk drugs and ingredients
- **Fast-track clearances:** Bulk drug production projects in the country have been fast-tracked to increase domestic production. Also, a notification has been issued such that environment impact assessment report is no longer required for project clearance.

India’s pharmaceutical industry has progressed strongly and today the country is one of the largest generic suppliers to the global markets. India offers high-quality medicines at competitive prices and has the added advantage of an extensive workforce comprising trained and skilled personnel to support the establishment of largescale pharmaceutical manufacturing projects. Newly launched initiatives like New Drugs and Clinical Act, 2019, easing of FDI norms and Make in India all support local manufacturing in compliance with global regulatory standard.

Sanjay Singh
Partner – Advisory, National Leader – Lifesciences, KPMG in India
3. India’s competitive advantage: a sectoral perspective

Telecom sector: recovery comes calling

While the lockdown brought much of the economy to a halt, it has created new demand for communication services: work from home and home entertainment, are just two such examples. Telecom has therefore not been impacted as dramatically by COVID-19 compared to many other areas of the economy.

On the supply side however, from a handset and network equipment manufacturing perspective, the global disruption in supply chains and suspension of manufacturing will certainly affect the telecom sector in India. According to industry body Indian Cellular and Electronics Association (ICEA), manufacturers may incur losses to the tune of nearly INR150 billion (~USD2 billion) due to suspension of production.29 COVID-19 is also likely to delay the much-awaited 5G implementation as operators are focusing on servicing current demand surge and ensuring quality of service (QoS).

However, recent financial incentives in the telecom sector announced by the government have managed to attract leading smartphone manufacturing companies towards establishing their manufacturing bases in India. For example, a global mobile manufacturing firm is finalising plans to set up its first factory in India this year.30

Growth drivers

India has plenty of enabling factors that should prove attractive to foreign investors considering the country as a destination for their manufacturing plants:

- 268 mobile and mobile component manufacturing units set up across the country
- Phased manufacturing programme (PMP) to promote domestic production of mobile handsets
- Subsidy of 20 per cent in SEZs (25 per cent in non SEZs)
- State incentives: Stamp-duty exemption, electricity-duty exemption, etc. along with concessional rate of basic customs duty on import from specified countries subject to conditions
- Export incentives: Export benefit of two per cent under MEIS and SEIS has been provided to certain IT goods in the Foreign Trade Policy, 2015-19. Other benefits include customs duty exemption on goods, import of services, Service Export from India Scheme (SEIS). Export of goods/services by EOU is zero-rated.

29. Suspension of mobile, equipment manufacturing to hit Indian telecom sector: KPMG, Outlook India, April 6, 2022
30. Tech investment news article, Times of India, accessed July 17, 2020
4. Evaluating the way forward

Global production networks are complex, sophisticated, inter-dependent and deeply entrenched, making reconfiguration a challenging task. Depending on the individual business circumstances and priorities, organisations could choose to drive specific and relatively less complex cost optimisation supply chain initiatives or dig deep and completely overhaul the network.

According to the World Investment Report 2020, companies are likely to favour one of four trajectories when evaluating their supply chains post-pandemic:

<table>
<thead>
<tr>
<th>Reshoring</th>
<th>Regionalisation</th>
<th>Replication</th>
<th>Diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>This move will result in a higher usage of value addition becoming geographically concentrated leading to shorter supply chains in general, and will primarily affect industries such as automotive and textiles that have global value chain (GVC) intensive production networks.</td>
<td>This move will see a transition from global “efficiency seeking investment” to “regional market-seeking investment” with the formation of clusters around certain geographical markets such as ASEAN, Middle East, Africa. The shift will imply a reduction in the breadth of supply chains but not necessarily address its fragmentation.</td>
<td>This move will create multiple hub-and-spoke models and regional processing centres; a move away from large-scale, concentrated industrial activity. While the supply chain will be shorter, the demands on production capabilities, technology infrastructure will be high to ensure value capture.</td>
<td>This move will be led by a focus on greater supply chain digitalisation characterised by platform-based, asset light models. The share of value addition in the host country will remain relatively small.</td>
</tr>
</tbody>
</table>
In addition, due to this abrupt pandemic-induced disruption, future proofing supply chains should gain prominence, which is where technology could play a vital role. Implementing new technologies allows for the co-existence of digital enablers and humans across different supply chain processes and activities. It can help achieve twin goals of good supply chain management – reducing complexity as well as uncertainty.

The supply chain mantra is changing from efficiency and low-cost county sourcing, to supply chain resilience and visibility to reduce complexity and uncertainty. The acceleration of digital transformation is key to that new way forward.

Henry Brunekreef
Director, Operations Advisory and National Leader, Supply Chain Management, KPMG in Australia

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4. Evaluating the way forward
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- **Automate**
  - Lower value-added tasks/processes are automated, and the human element removed partially or completely
  - Chatbots and Robotic Process Automation (RPA) are examples of current ways to automate repetitive tasks, a step in the process, or the complete process

- **Assist**
  - Across all industries, technologies such as drones, automated guided vehicles (AGVs), and robotics will likely continue to assist in performing routine, high precision or hazardous activities removing humans from harm’s way
  - With the continued advancements in technology and convergence of robotics, IoT, and sensors, humans may be removed from the mundane tasks to the higher value-add activities and decision making

- **Augment**
  - Advancement in AI and analytics will lead to Cognitive decision centres, which can collect and analyse internal/external data (big data) and automate routine supply chain activities as well as assist with strategic decisions.
  - As these technologies become more integrated into daily processes and decision-making, they will likely change workforce roles/skillsets as well as increase the rate of new technology rollouts and adoption

(Source: Building supply chain resilience through digital transformation, KPMG)
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4. Evaluating the way forward

The KPMG in India 4V framework

Aside from the immediate goal of restarting and ensuring stability in their operations, businesses now have to contend with assessing the risk exposure, supply alternatives, tax considerations, and channel complexity involved in reshoring supply chains. Matters such as governance and regulatory adherence, use of digital technology and analytics, implementation priorities and roadmap all need detailed study and domain knowledge.

KPMG in India has had the benefit of working across geographies and sectors, and the team brings significant subject matter expertise and multidisciplinary advisory services to demystify the complex implications of a decision to rebalance supply chains. It has developed a structured way to navigate these complex decisions and help organisations with their supply chain reconfiguration strategies:

- **Value Unearthing**
  - Unearth supply chain cost reduction/reconfiguration opportunities – evaluate total network aspects including procurement, manufacturing, logistics, trading, duties, taxes, JV/ M&A opportunities etc.

- **Value Recognition**
  - Recognise value unearthed through analysis / trials / expert validation. Business leaders ‘recognise’ and sign-off on the initiatives, value, timelines and set implementation targets

- **Value Realisation**
  - Realise value through governance, progress monitoring, implementation and issue resolution to generate identified benefits

- **Value Sustenance**
  - Sustain value through workshop on tools/ methodology, structural amendments, governance mechanisms and analytical capability.

There has been an increase in significant geopolitical events that have dramatically influenced the way supply chains are structured, such as in recent years the U.S.-China trade relationship, the renegotiation of the North American Free Trade Agreement, and COVID-19. Each of these events triggered both intended and unintended consequences. There’s suddenly a momentum to start building supply chains anew.

Chris Foster
Global Head,
Operations Center of Excellence,
KPMG International
With the outbreak of COVID-19, global supply chains were swiftly and effectively dismantled as one country after another went into lockdowns. The crisis exposed the reliance of businesses around the world on a few markets for fulfilling their manufacturing and sourcing requirements.

Supply chain leaders are reassessing their new realities and trying to forecast what the future may bring. This means working with current supply chains to improve efficiency and security of supplies while also finding new suppliers and routes that allow diversification in times of crisis.

Companies that can stabilise their supply chains and position themselves to assess future disruption by providing structured responses to their risk and exposure points will be in a position to ensure resilience in a fundamentally changed world.

A more realistic approach for many companies looking to realign supply chains would be to consider a ‘China + n’ strategy to their future course of action. This allows for a non-linear consideration of global trade, more in the nature of production networks with multidimensional value accretion phases rather than sequential links in a chain. The metrics deployed to capture and manage these newer categories of value will have to shift as well. We therefore expect a de-emphasis on efficiency and lowest cost dominant determinants, in favour of an interdependent, ecosystem-based value framework that assigns more equal weight to risk exposure, supply alternatives, tax considerations, and channel complexity.

5. Conclusion

Looking ahead, a few areas that the leaders should keep in mind as they restart their supply chains:

31. Restarting the supply chain visibility is the key, KPMG
32. Supply chains: Specialisation, stronger leaders and self-sufficiency, HSBC Global Research, 27 April 2020
33. Supply chain’s new world order, KPMG in the U.S., 2020
34. Operations restructuring for a post-COVID-19 world, KPMG

Redefine your ‘measuring stick’

In the new normal, companies need to stop evaluating supply chain purely from a cost or service level perspective. While costs and service measures will remain, these need to be augmented with measures that assess the ability to be intelligent, agile and responsive to customer needs. Intelligent supply chains are segmented based on customer needs and have an ability to capture and propagate signals from the outside world to trigger required actions internally.

Understand your exposure

Companies should look at how fragmented their supply chain is. This should be across suppliers, distributors, and other third parties, looking at key indicators such as where are they located, what markets are they operating in, and the raw materials being used. Understanding the risks they carry can help you plan for the future. What is the impact on your business if your cost to serve goes up by 10 per cent, what happens? What is the business impact?

Identify your constraints

What fixed investments do you have? What is outside of your control? Many businesses are seeing fragmented customer bases, raw materials being cut off and financial concerns that put constraints on their supply chain. Having a strategy that can be adapted where needed will help you weather future complications, even those problems you cannot control. For example, if a material you need is no longer available, what are your alternative solutions? Do you have other suppliers you can use?
The supply chain microsite

Supply chains post COVID-19

COVID-19: accentuating the weak links

The India replacement opportunity

India’s competitive advantage: a sectoral perspective

Evaluating the way forward

Conclusion

Supply Chain Realignment

Our Supply Chain Realignment solution is a specialised service designed to help clients build greater resilience into their global supply chains.

Mutating global supply chains: opportunities for India

The scale and speed of globalisation has suffered setbacks owing to the surge of economic nationalism and rising geopolitical tensions. These trends have been compounded by the sudden onset of COVID-19 bringing into play health and经济社会 risks as some of the prime determinants of global supply chain reconfiguration. Complementary benefits of global manufacturing hubs are evolving, challenged by combinations to reduce excessive exposure to one geography. Investors and enterprises are realising cement supply chain models in the quest for safer harbours to disperse geographical concentration as well as diffuse geopolitical risk. Supply chain configurations and selection of manufacturing locations by organisations will now be determined by:

- Long-term geopolitical stability
- Openness to inward investment
- Supportive policies, taxation and regulations

India’s competitive advantage: a sectoral perspective

The India replacement opportunity

Evaluating the way forward

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Connect with us

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