



## Supply Chain

### *Rebuild your supply chains to ensure timely access to all inputs your business requires*

*Your business can only survive with the essential inputs, at the right time, quality and price point. This may no longer be possible from your established suppliers as they may not yet be back in business or their supplies cannot reach you due to national or international movement restrictions. Assess and debottleneck your supply chains to locate alternative inputs and suppliers and review contracts to lessen the burden on your company's cash flows.*

### **Background**

The outbreak of COVID-19 and the need to contain the pandemic through restrictions and lock down did put MSMEs under immense strain. Overnight it became impossible to obtain raw materials and other business inputs, operate factories and warehouses and distribute products to consumers – in short - entire supply chains fell instantly apart.

As restrictions are being lifted, the supply chains need to be rebuilt. Ideally, restored product demand, will drive value chain redevelopment. However, with weakened economic conditions and high uncertainty on the development of the pandemic and containment measures, this may not immediately materialize. Production and supply chains will require a restart to create and drive the resurgence of product demand.

A decades-long focus on supply chain 'optimization' though reduced costs, reduced inventories and high asset utilization had resulted in minimal buffers and flexibility. Supply chains had become very vulnerable to the type of disruptions brought forward by the COVID-19 pandemic.

Impact of the crisis appears particularly felt on the upstream component, i.e. affecting supplies, suppliers and logistics and the procurement contracts that bring these together. Each of these offers entry point for rebuilding supply chains: (i) *Supplies*: enhancing visibility of supply chain and ensuring availability of raw materials and supplies; (ii) *Suppliers*: facilitating supplier risk management and collaborative relationship, and securing capacities to meet requirement; (iii) *Logistics*: securing reliable, feasible and economical transportation and storage

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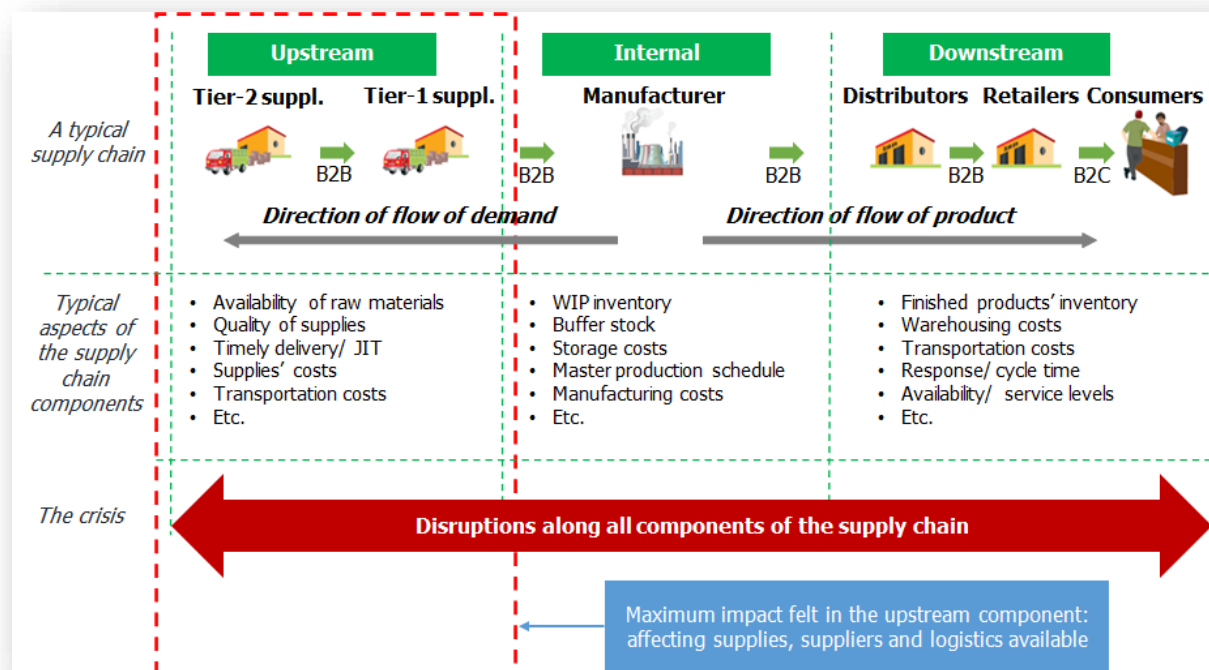
options; and (iv) *Procurement*: upgrading procurement capability to make it agile and more responsive.

## Approach

**Enhance visibility of supply chains, secure supply capacities, manage supplier risk, develop collaborative supplier relationships, identify secure, reliable and viable transport options and develop agile and responsive procurement capabilities.**

Supply chains comprise three main components:

- ✓ *Upstream*: deals with supplier-side particularly availability of raw materials, parts and sub-assemblies and other supplies of the right quality, at the right time and at the right landed-cost.
- ✓ *Internal*: covers production and comprises aspects such as procurement, stock and work-in-progress inventory.
- ✓ *Downstream*: deals with distribution including warehousing and outbound logistics



The current crisis has severely impacted all three components of the supply chain. However, apparently, upstream component is particularly impacted. Plant closures and suspended operations had a snowballing effect on enterprises along the value chain. Even before lock down restrictions were introduced in India numerous

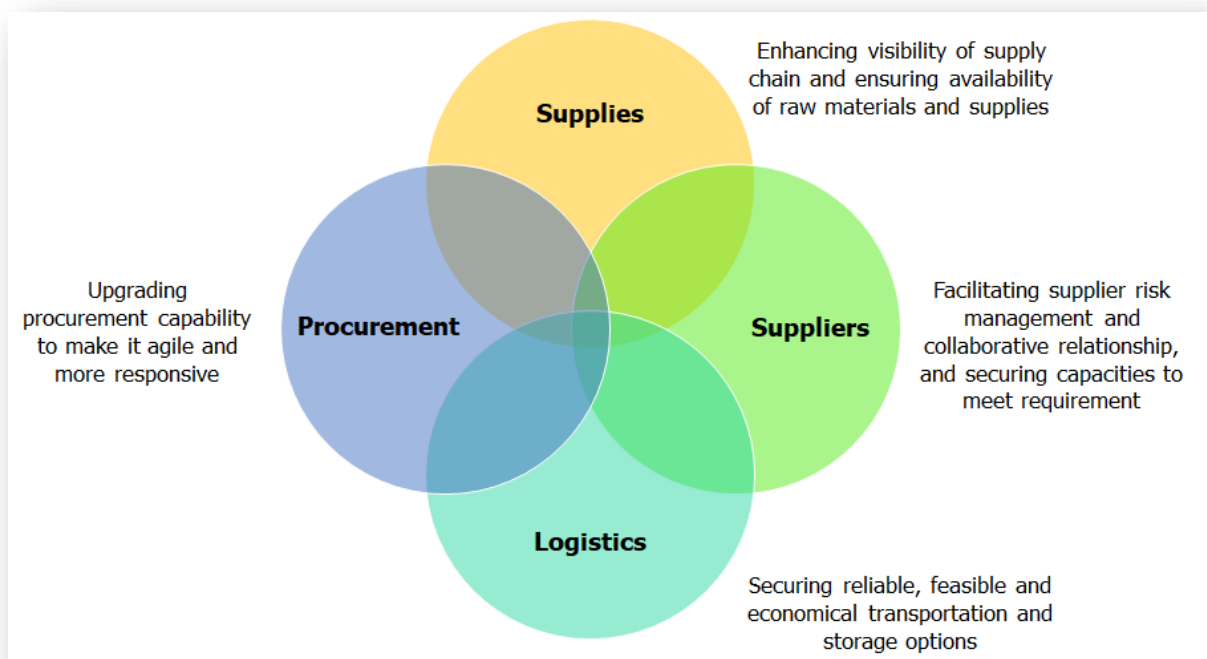
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enterprises already had to downscale production due to non-availability of critical parts. Each actor along the value chain requires a functional upstream supply chain, supported by logistics services, in order to receive materials and resume production. Thus, emphasis is laid on key aspects affecting supplies, suppliers and logistics available in this module. Complementary modules on '[operations](#)' and '[sales](#)' address aspects of internal and downstream components.

## *Strategies for Restoring Supply Chains*

You can rebuild supply chains by focusing on what supplies you need, who provides these, how these supplies reach you and against what financial and other considerations. Each provides an entry point for rebuilding supply chains, through:

- ✓ **Supplies:** strategies to ensure availability of raw materials, components and auxiliary materials.
- ✓ **Suppliers:** strategies to assess suppliers' capabilities and risks, and securing capacities.
- ✓ **Logistics:** strategies to secure reliable and economical transportation options.
- ✓ **Procurement:** strategies to acquire supplies, goods and logistical and other supply chain services.





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This division puts emphasis on entry points for identifying and evaluating supply chain-related solutions. The following sections summarize the main considerations under each. A further set of common measures and approaches can be found in the [accompanying checklist](#) as well as [additional references](#) provided with this module.

### Supplies

‘Supplies’ strategies primarily aim to ensure availability of raw materials, parts and other inputs. Specifically:

- ✓ Enhanced visibility of supply chains - getting a more complete picture of where components are coming from and the associated risks. Such a mapping exercise provides important information regarding supplier inventory, production status, likelihood of order fulfillment and delivery lead times. This is important to anticipate potential supply shortages and prepare accordingly.
- ✓ Secured supply capacities - ensuring that sufficient quantities of materials (or sub components) at the right quality and price point are obtained/available.

You can: update your buffer inventory or stocks available in-house for potential use in transitional phases; identify main supplies at risk; map critically-sourced components/materials to high-value products and revenue streams; secure raw materials for planned production targets; use pre-approved substitutions for parts or materials that are temporarily unavailable and; explore product redesign or material substitutions to counter material shortages.

### Suppliers

In regard to ‘suppliers’, it is primarily aimed to assess suppliers’ risks and secure their capacities. Specifically:

- ✓ Supplier risk management: considers all factors that may cause disruption of operations and/or shipments from each supplier and ways to reduce dependencies on such suppliers.
- ✓ Development of collaborative relationships with suppliers: be transparent and collaborate with them such that orders are fulfilled through mutually beneficially arrangements.



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To achieve this, consider to: evaluate tier-1 suppliers' risks and capacity to meet the requirements; access real-time supplier data; secure capacity for tier-2 and tier-3 suppliers; identify and activate alternate sources of supply/ secondary suppliers; work with critical suppliers to balance supply and demand, logistics-based costs & buffer stock; review contracts with key suppliers to understand liability in the event of supply shortage; and explore resource-sharing with other enterprises (material exchange, sharing common inventories, etc.) to meet immediate requirements.

### Logistics

Actions on 'logistics', are to secure reliable and economical inbound and outbound transport and delivery. You may need to reconsider standard modes of transport used previously and gauge the transport capacities currently available. Usual modes might not be available, might become prohibitively expensive due to excessive market demand, or might not be viable for reduced quantities being transported. In other circumstances, enterprises might need to consider alternative, faster transport modes such as courier services instead of traditional hauling/freight services.

To ease logistical challenges, consider to: assess supply routes and transport options and determine current feasibility (vis-à-vis availability, costs, permissions); evaluate alternative inbound logistics options and outbound logistics options and secure capacity; explore faster transportation options where possible; keep updated on imposed city/ state- specific restrictions that would affect transport and deliveries; rapidly model alternate supply and transportation scenarios (such as re-routing around a hub/port) and; explore resource-sharing with other enterprise (lending of idle transport or sharing of transport capacities).

### Procurement

'Procurement' interventions would upgrade procurement capacities and processes to be agile and responsive to changing business conditions. Supply chain constraints affect internal operations, at all times available materials/components should suffice to meet production targets. Your procurement function should ensure that the right materials are available at the right time and at acceptable costs.



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This may require further action to: plan procurement considering current exposure (Work In Progress (WIP) buffer, inventory in transit, warehouse, spare, etc.); buy-ahead to procure inventory and raw materials that could run short; re-orient procurement to updated inventory planning parameters catering to crisis-related shortages; prioritize procurement on the basis of criticality of supplies mapped to high-value products and revenue streams; and update procurement manual to including a prioritization of products to be produced in case of raw and direct material shortages.

### *Cross-Cutting Interventions*

These operational strategies offer practical guidance to address specific supply chain challenges. These stand to benefit from cross-cutting strategies that would improve organizational response capacity to disruptions in the supply chain. These include:

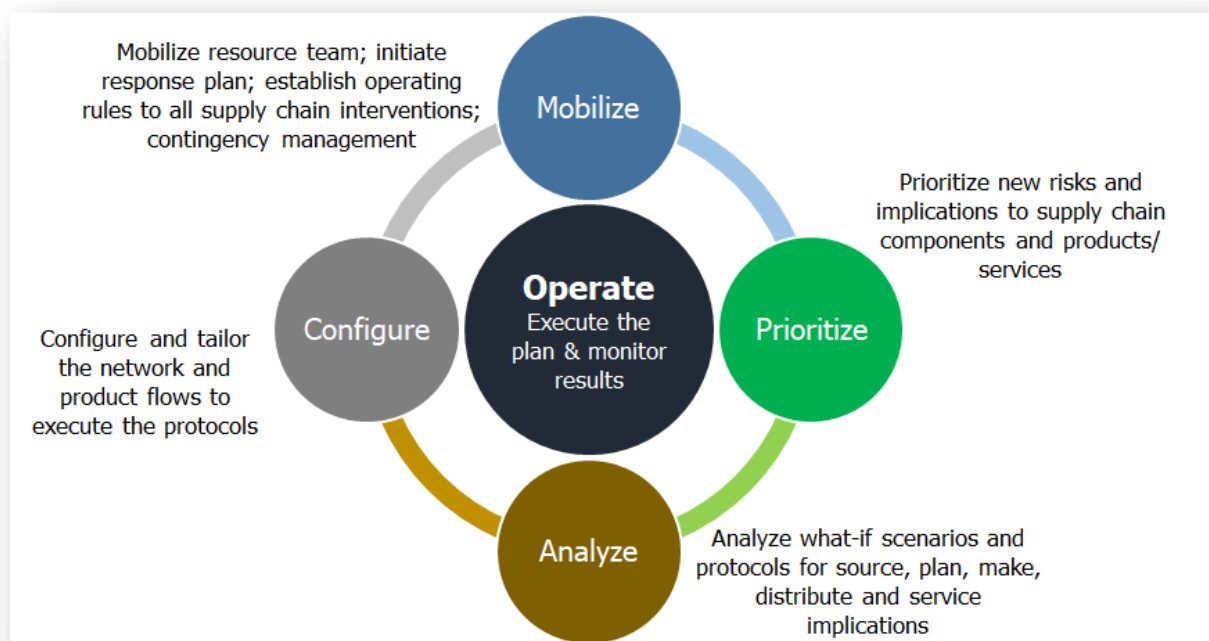
- ✓ **Value chain assessment** to identify all possible risk factors that may escalate costs and impact service and inventory capabilities, and taking proactive action to address anticipated shortages.
- ✓ **Scenario planning:** analyzing what-if scenarios, creating pre-emptive action plans for different scenarios and making effective trade-off decisions.
- ✓ **End-to-end supply chain management:** ability to model and predict demand; measures to equip supply chains to cope with demand and expectations; and ensuring agile replenishment processes.
- ✓ **Technology upgrades, ICT and analytics:** re-designing the way employees collaborate with each other, customers and suppliers such that digital tools are harnessed to exchange information, be connected remotely, conduct transactions and collect market intelligence; adopting cloud-office technology and zero-touch models; preparing for potential web-based fraudulent actions such as phishing, malwares, etc.
- ✓ **Focus on resilience:** with learnings from the crisis, moving toward more comprehensive proactive modeling; controlling further dimensions of supply chain; longer-lasting reconfigurations of supply chains to build resilience.

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## Plan Supply Chain Improvements

You can benefit from an action plan to systematically improve and debottleneck supply chains in response to market development. Such action plan can be developed and implemented using practices of Kaizen and business process reengineering, with following broad inter-related steps:

- ✓ **Mobilize** the resource team, initiate a response plan, establish operating rules for supply chain interventions and formulate contingency plans.
- ✓ **Prioritize** new risks and implications to different supply chain components and products/services.
- ✓ **Analyze** what-if scenarios and corresponding protocols for key steps (source, plan, make and distribute).
- ✓ **Configure** and tailor the supply chain network and product flows in line with devised protocols.
- ✓ **Execute** the plan and monitor the results for smooth operations.





## Supply Chain

### *Way Forward*

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The crisis caused by the COVID-19 pandemic and lockdown restrictions is unique yet unlikely to be the last disruption to your business. Hence, this crisis offers an opportunity to reconfigure supply chains and networks to ensure these are resilient for plausible future disruptions and have adaptable response plans that are ready for roll-out. It is useful to start: deepening the understanding of strategic operations and supply chains; identifying 'areas of improvements' to make current supply chains more robust; developing more collaborative relationships with critical suppliers and key customers for cohesive action and forward planning.