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“Risk and Resilience Management in Supply Chain” :In Next Normal As Corporate Strategy.

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Introduction:

Supply Chain Management has gone through many ups and downs during and post pandemic; there were many challenges. Significant adverse effects on finance, lead times, customer, and production performance have already occurred.

Industries came across many challenges which were going to affect production. During this ramp-up the supply chain manager realized that there is a need to reinforce supply base, making quick decisions towards business for availability of resources as well as material and its sustainability results in competitive advantage..

Understanding supply chain risks requires gaining visibility into tier 2 and tier 3 suppliers that, despite their relatively small in size, sparked strong interest in geographical diversification of supply chains. Recent reports show that over 90 percent of the Fortune 1000 companies have tier 2 suppliers in the regions of China most affected in the initial phase of the global COVID-19 pandemic. Any impediment to interaction and engagement with these suppliers makes risks hard to manage. At the same time, there's been a heightened premium on accelerating or driving greater agility into supply chains to better manage rapidly evolving situations. Some firms are moving from ocean freight, can quickly and significantly disrupt production. The knock-on impacts of China's shutdowns early in to more expensive but faster rail transport perhaps the most resilient course of all may be teaming up with supply chain partners to establish a coordinated crisis-support system.

In such situations, partners will likely rise or fall together, and sharing information, ideas, and response strategies in that climate becomes highly valuable. Tenacious supply chain professionals are and will continue working through immediate challenges. But, moving forward, how can organizations better manage, foresee, and limit the severity of disruptions? The answer involves building the capabilities necessary to respond to future events with both pace and certainty.

Key Words: AI, ML, RM, SCM, SUPPLIAR.

Some of the Risk which still exists:

Geopolitical Risk: -. There was manpower shortage as factories were running by 50% manpower and Oxygen shortage was also impacting our production of sheet metal components. As India was diverting industrial oxygen for medical requirements to battle the second COVID-19 surge, industries including some petrochemical plants dependent on industrial oxygen were facing a slowdown or were shutting down facilities in some cases. To meet the rising demand for medical purposes the Indian government banned supply of oxygen for industrial use from. Steel companies had diverted large amounts of their oxygen production for medical relief.

Supplier Capacity: - The industries appear to have withstood the COVID-19 onslaught. There has been increased in the rural economy in India, various segment has been doing relatively well. many efforts at supplier from supporting suppliers in arranging raw materials, building relations which suppliers, and outsourcing critical operations to reduce bottleneck, capacity increased at local suppliers.

Cost increase: - Due to pandemic there was major increase in operational cost, material cost which resulted in decline in supply of material raw material at supplier was vacant and there was steel shortage in the market resulting shortage in supplies.

Labor competency: - supply chain disruptions result mostly from labor shortages. It was bit difficult to arrange manpower in majorly affected areas were covid restrictions were high and lockdown was continued. Many were surged under medical conditions and factories were operating with 50% manpower which resulted in slow productivity and

supplies. Additional cost was incurred by the supplier to hire new manpower by providing some financial support or incentives. Supply base was facing sharply higher demand for production, with sharply less labor availability, and substantial uncertainty about their ability to pass higher costs by suppliers were offering higher wages and benefits but getting little response. Employee illness and distress about health, financial wellbeing, and other disruptions are affecting many employees Finance and Operations All companies were facing shifts in product demand and supply chain interruptions, and unprecedented volatility in cash and P&L positions

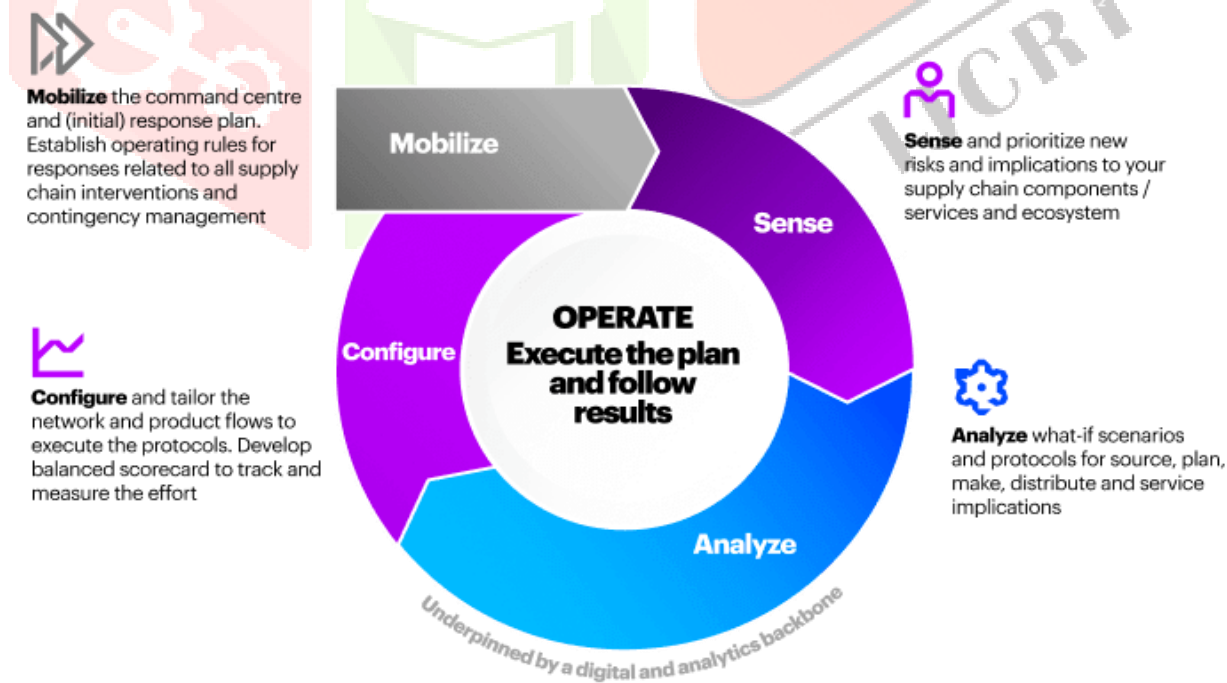
Availability of imported parts & equipment: - During pandemic imports parts supply were badly affected as China was complete shutdown In response to the pandemic, organizations across many different industry segments have attempted to stabilize their supply chains by conducting risk assessments and implementing business continuity plans. Many have diversified their product portfolio to respond to changing demands, making new parts based on their existing resources. we have made supply chains more responsive by utilizing 3D printing technology to make parts available closer to demand.

Availability of Logistic or Multimodal Network: - During the early stages of the pandemic, the B2B, logistics market came almost to a standstill and vehicles availabilities were delayed and interstate transportation were affected. Impacts were profound as supply chains were seriously disrupted and new regulations rapidly introduced. Now, as the journey to recovery begins,. Manpower is a key driver of the logistics sector, as they transport goods from place to place. The pandemic affects manpower directly, where movement restrictions were imposed such as border lockdowns, social distancing, telecommuting, leading to a drop in logistical capacity in the near term, logistics and business systems, shortage of containers and transportation options. The pandemic has also shown how important automation is to ensure logistics continuity and to mitigate the impact brought about by the absence of people during lockdowns. Automation supports to facilitate efficient safe distancing measures, contact tracing, enables digital applications and contactless operations which will be moving us towards smart supply chain.

Other natural calamities: - not only covid but other unpredictable issues also impact our supply chain like power outage, driver strike, Gas supply shortage, warehouse fire, power shutdown, typhoon, train strike, political war etc. Facing such kind of natural disaster will inevitably disrupt global supply chains with postponed or paused deliveries, closed ports, canceled cargo flights, and unbalanced supply and demand.

Business must navigate the financial (P&L) and operational challenges of post corona virus while rapidly addressing the needs of their people, customers, and suppliers. By taking the right actions, supply chain leaders have turn massive complexity and supply chain disruption into meaningful change.

As they respond to both the immediate impacts of the pandemic and prepare for what comes next, a continuous cycle of *risk mobilizing, sensing, analysis, configuration, and operation* will help to optimize results and mitigate risks:



The COVID-19 pandemic was not just a short-term crisis. It has long-lasting implications for how people work and how supply chain's function. There is a pressing need for businesses to build long-term resilience in their value chains for managing future challenges.

This requires holistic approaches to manage the supply chain. Companies must build in sufficient flexibility to protect against future disruptions. They should also consider developing a robust framework that includes a responsive and resilient risk management operations capability.

That capability that was to be technology-led, leveraging platforms that support applied analytics, artificial intelligence, and machine learning. It should also ensure end-to-end transparency across the supply chain. In the long-term, risk response will need to become an integral part of business-as-usual protocols.

Resilience: -

Logistics - Improve visibility by use of integrated logistics control tower to get real-time visibility into operations.

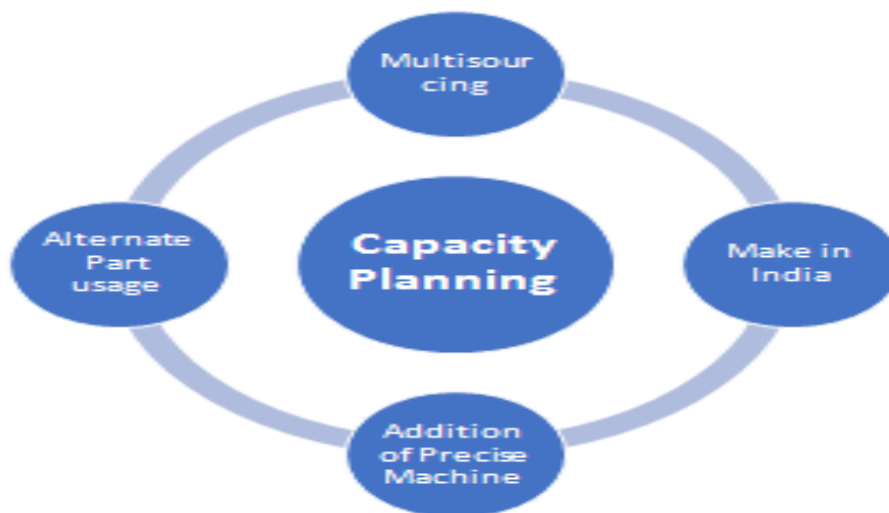
Increase flexibility - repurpose assets, inventory, and capabilities to balance supply and demand.

Communicate effectively - ensure proactive communication with onsite and remote workers, suppliers, carriers, and customers

Support the workforce - address the physical health and mental well-being of the core workforce as well as the extended logistics workforce.

Be a responsible steward of supply chains - think creatively and with purpose about how to support customers, suppliers and logistics networks affected by COVID-19.

Capacity planning: Industries in post-covid is shortening supply chains by sourcing from local suppliers and building



battery plants closer to markets. manufacturers have also shifted some production and raw material sourcing out of China in favor to indigenous and other parts of Asia to keep production lines moving, despite higher costs.

Conclusion:

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That capability that was to be technology-led, leveraging platforms that support applied analytics, artificial intelligence, and machine learning. It should also ensure end-to-end transparency across the supply chain. In the long-term, risk response will need to become an integral part of business-as-usual protocols. Redesigning warehouse methodology: The regular practice for moving material from storage location to point of utilization is using the forklift across the storage racks, as the space optimization needs to carry out wherever the scope is available the storage racks were narrowed down which restricts the usage of regular forklift which later changed to unidirectional forklift which could be articulated as per the requirement.

Palletizing Local Suppliers material considering the unloading station: The local suppliers were sensitized for the clubbing the material with same vehicle and palletizing at supplier end to reduce the space and reduce the movement at or after unloading. The core values should start from- Quality being one of them. So, one must ensure correct material supply and assembly on production line. The cumbersome activity of feeding multiple parts is streamlined using live dashboards which display sequence of parts to be supplied on-line as per launching sequence. Benefits of material Sequencing are as follows: a) Improvement of material Availability at point of use .b) Quality improvement due to reduced chance of wrong parts assembly. c) Space utilization d) Movement Reduction ,e) Efficient Manpower Management

Post Pandemic disrupted supply chain model needed the more agility and flexibility in terms of inventory flexibility which is tough for an organization to increase the inventory levels at their end being Cost to Company, the trading model for C-class parts was one of the solution to manage the inventory flexibility which allows us to in-warding the right material at right time with right quantity sustaining the quality of the procured material, which results in efficient manpower management which is one of the greatest challenge while ramping up the industry Post-Pandemic. Eventually skill up gradation of the manpower available as the scope of multi skilling was walking into the scenario as the need of an hour. *Since as per reports 45% of cost is incurring in SCM &Logistics which significantly hurting the sentiments of corporate and dragging away the much awaited corporate advantage which likely to be achieved in pre –pandemic era results in huge amount of value addition in terms of profits across the value chain.*

References/ Webliography:

1. www.et.com
2. www.eicher.com
3. www.cytiva.com
4. www.mmr.com
5. www.automotive.com.

