

Manufacturing Sector Challenges & Recommendations

The challenge of supply-chain infrastructure will have to swiftly respond to the changing needs that India can become a major manufacturing hub,
Ravindra Ojha.



Professor, Operations,
Great Lakes Institute of
Management, Gurgaon

Prior to Covid-19, leaders in the industry were evolving strategies to take the industrial business to next orbit through Industry 4.0. No one dreamt of the havoc the virus could bring to humanity and business at large, in such a short span. The supply chain experienced a level of disruption never experienced before. Production of goods and services, the sign of prosperity, came to a grinding halt to level-zero. The focus swiftly moved to the survival mode of here and now. Life-protection, health-care, hygiene, food-supplies and basic need fulfillment became the only priority. However, the success of lockdown and social-distancing paved the path to hope. But, what is the scenario after lockdown? Humanity would continue needing goods and services. Manufacturing would commence but with a new normal. Demand would manifest itself in a different avatar which would change entire manufacturing practices in industry.

The five key challenges and associated recommendations envisaged are:
Informal Migrant Labor Chaos – Informal

migrant labor returning back to the industry for work is likely to take a hit. Their fear psyche will dominate their decisions and would wait and watch for a reasonable period of time. Local labor is not likely to be an equivalent early replacement to production to the migrant in terms of skill, productivity and quality. Warehousing and other supply chain related activities are likely to be affected especially when the pent-up demand rises in the post-Covid-19 days. A lot would also depend on the responsiveness of MSME which have a large number of informal labours. This is the apt time for modifying the archaic labor laws with special focus on the informal lot.

Multi-national Factory Movement to India
China, known as the factory of the world, is likely to witness an upheaval. Covid-19 has added fuel to fire in the already strained US-China trade relationship. The deteriorating trade relations of multiple nations with China would accelerate the shifting of factories to other Asian countries like India, Vietnam, Thailand and many others. It would

SECTOR ANALYSIS MANUFACTURING

an excellent opportunity for Indian manufacturing sector. The challenge of supply-chain infrastructure in India will have to swiftly respond to the changing needs, especially in the areas of ports, customs-clearance speed, road quality etc. Indian policy on ease-of-doing-business may have to be revisited quickly for speedy and easy entry to new and meaningful manufacturing set-up.

Leaner & Agile Production systems

Engineering industries are likely to be the worst hit in financial terms because of their high capital investments. New customer demands, based on new behaviors / fear of future / risk aversion / purchasing capacity are anticipated to bring in more severity to production process in terms of volatility, uncertainty, complexity and ambiguity. Shorter lead times, shorter time to market, shorter lot-size, waste-free manufacturing systems, stretching to improve utilization (OEE) of plants, increased total cost of ownership and more agility to respond to the needs would provide relief and subsequently be the new normal.

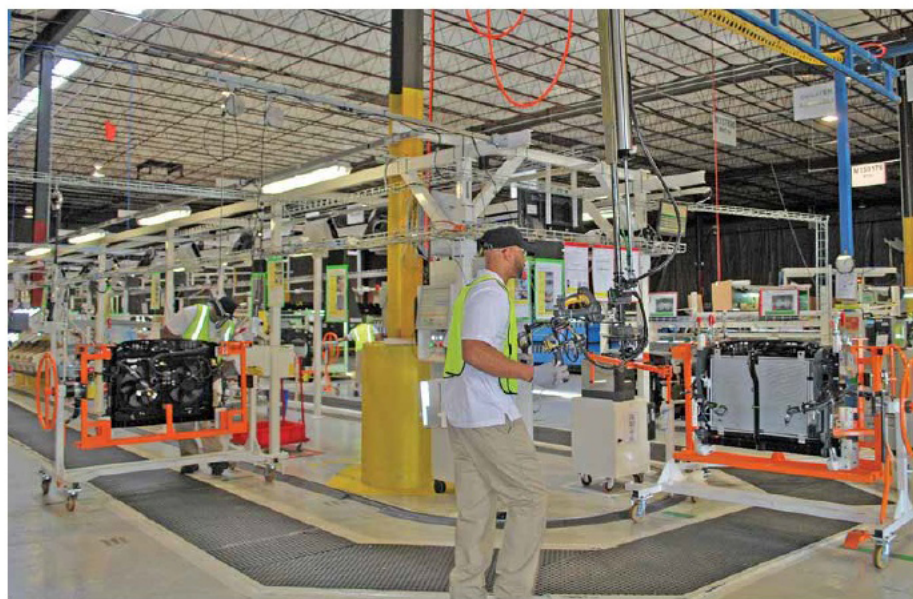
Application of Technology & New Competency

The post Covid-19 struggle of manufacturing plants, after a 45-day lockdown, to transition from Survival stage to Recovery stage is going to be challenging and painful.

This will drive low-cost automation in operations, application of robotics for non-value adding labor content of manufacturing, use of 3D printing for critical parts, accelerate the application of drones and AGV, artificial intelligence would play a major role in consistent assessing and re-planning due changing situations and increasing uncertainty. However, these are likely to happen at a gradual pace. Physical and seamless supply-chain will become critical using technology (RFID). Innovation and new-product development shall see a leap in Indian manufacturing arena.

In summary, the transition to normalcy and then to growth in the post Covid-19 period will be challenging but would serve as an opportunity for the India manufacturing sector which has the capability in terms of scalability, speed and skill. **CT**

Innovation and new-product development shall see a leap in Indian manufacturing arena.



New Normal for Health & Hygiene

Entry-exit health check-ups of employees, social distancing, hand hygiene (washing), appropriate masking, towards contact-less (gloves/ no-touch) Gemba operation, sanitization of relevant areas, rules in the canteen, veggie canteens and many newer practices would get implemented. This would result in layout changes (spacious), more washing areas (contactless tap operation), increased water consumption, availability of disposable low-cost masks / gloves, emergency health rooms, homing facility for worker, rules during taking meal and other eatable etc. This is bound to make manufacturing units a better place to work in terms of health and hygiene; however, there will be a cost to it.

