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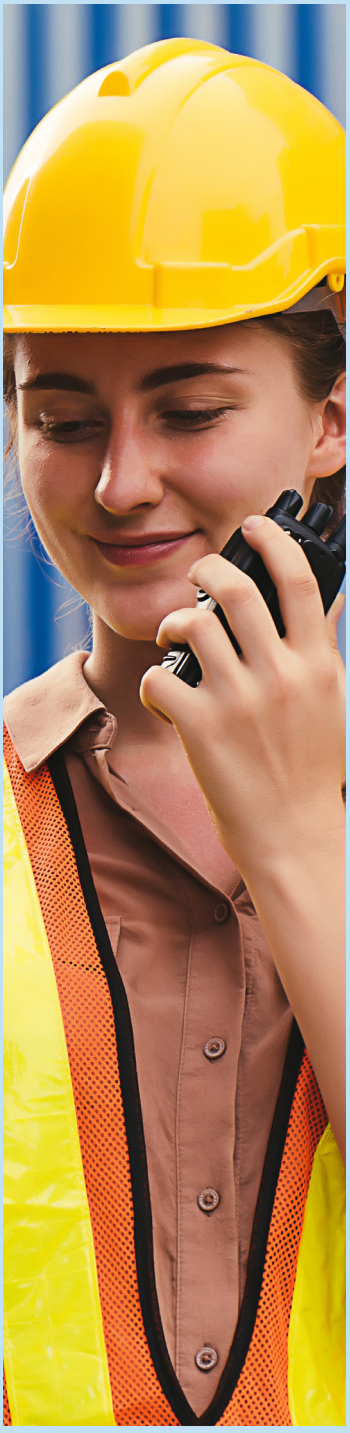

# TRANSFORMING INBOUND SUPPLY CHAIN BUSINESS PROCESSES IN MANUFACTURING ORGANISATIONS


## Abstract

The COVID-19 pandemic has brought about significant changes in manufacturing supply chains worldwide. As organisations are attempting to diversify their supply chains to alleviate risks, it is adding more complexity to the business. In this POV, we highlight some of the challenges faced by manufacturing organisations worldwide and how can they transform their business processes to manage this change.


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## Supply chain challenges

The need to seamlessly manage changing customer expectations and yet ensure optimised supply chain costs is driving global manufacturing organisations to explore alternative strategies to transform their manufacturing supply chains. Moreover, manufacturing organisations typically go through structural changes in demand based on business cycles, and the inability to calibrate the operating cost based on the activity level has a significant impact on per transaction operating costs.

### Distributed operations driving sub-optimal business processes

A majority of the large manufacturing organisations have expanded through acquisitions and have multi-locational manufacturing facilities, with supply chains managed independently at these facilities. Management of critical raw materials required by multiple manufacturing facilities is a key challenge in a distributed setup. Moreover, the underlying supply chain processes in these facilities are non-standardised and inefficient due to siloed operations.

### Scalability to support demand changes in a volatile environment

Organisations are lacking the ability to ramp-up and down in an agile manner. This is because of increasing competition and regulations, as well as changing geopolitical landscape and unpredictability in price and supply. Variabilisation of cost in a changing demand environment is critical for most manufacturing organisations.

### Manual processes

Supply chain operations for manufacturing plants require processing significant amount of information to optimise business performance. The inability to digitise these processes has an impact on key business metrics such as on-time delivery and inventory besides increasing supply chain operating costs due to lower efficiencies.

### Delivery complexities

Increasingly complex multi-tier supply chains with unpredictable delivery lead times has compounded the problem of missing parts for production, which has a significant impact on delivery and inventory. Visibility into upstream parts in a multitier supply chain on a real-time basis is a key requirement for collaboration and real-time decision-making.

## Tackling supply chain challenges

Organisations have invested significantly in integrated ERP and SCM solutions, supplier collaboration solutions, and visibility solutions for inbound and interplant manufacturing supply chains. However, the business value realisation from these solutions continues to be a challenge as the complexity of the supply chain architecture and non-standardised processes impact the ability of organisations to move to unified global solutions that can provide end-to-end visibility.

### Enabling manufacturing supply chain transformation

So, how can organisations address such challenges? By leveraging the power of data, manufacturing organisations can transform their supply chains to make them lean and sense, as well as learn and respond like living organisms, to drive business process excellence. Leveraging a multipronged approach — which includes organisational transformation enabled by digital solutions and accelerated digitisation with a modular suite of services that combine best-of-breed technology platforms with digital solutions and harnessing the power data to drive real-time enhancements in visibility and stakeholder experience — leading global manufacturing organisations can make their supply chains Live.*

### Reimagined business processes to drive centralisation and optimisation

Centralisation of the manufacturing supply chain and integrated material planning at a global level ensure fair distribution of scarce raw materials to meet priority demands across multiple manufacturing plants. Moreover, the pandemic has opened up avenues for managing material planning and execution and inventory management processes in a remote model as against the physical proximity model, which was employed by most supply chain organisations in the past. The centralised model allows for leveraging key talent in global hubs as supply chains become more complex and demand specialised skills in domain and underlying technology to manage.

## Digitisation to drive touchless supply chain transactions

Accelerated transformation of the supply chain through optimisation of core technology platforms — integrated core ERP solutions and collaboration solution — will drive visibility across the supply chain. RPA and AI-/ML-based automation of master data, ordering, interplant transfer, and subcontracting processes can be used to augment the digitisation process from the core technology platforms and enable accelerated value realisation from these solutions in terms of improvement of key business metrics such as on-time delivery, missing parts for production, and inventory besides improving compliance.

## End-to-end visibility to enhance stakeholder experience

Integrating large amount of data across distributed technology platforms and providing a consolidated view across the multi-tier supply chain through supply chain control tower solutions will drive visibility needed for quick decision-making. Material planners are able to effectively process all the information needed seamlessly through supply chain cockpits, which can process and provide actionable information on managing raw material suppliers considering MRP computations. Leveraging the power of workflow solutions to orchestrate the actions from the MRP fallouts, organisations can ensure effective governance in the planning process and ensure manual interventions in planning are minimised and the MRP actions are completed as per the target timelines

## Leveraging advanced analytics to drive business transformation

For a supply chain material planner, a key metric is to minimise missing parts for production. The ability to leverage big data analytics and predictive capabilities to identify potential supply failures and address them proactively can help in significantly reducing plan changes and unwanted inventories. Also, the usage of analytics for inventory management and managing slow-moving and obsolete inventory can help in driving optimisation of inventories and working capital and yet provide the flexibility needed to meet plan changes.

## Conclusion

In summary, leveraging the power of organisational transformation and combining it with digital solutions to harness the data generated in the manufacturing supply chain on a real-time basis to drive visibility and analytics can help manufacturing organisations significantly transform their inbound supply chain business processes and enable achievement of supply chain objectives.

*For organisations on the digital transformation journey, agility is key in responding to a rapidly changing technology and business landscape. Now more than ever, it is crucial to deliver and exceed organisational expectations with a robust digital mindset backed by innovation. Enabling businesses to sense, learn, respond, and evolve like living organisms will be imperative for business excellence. A comprehensive yet modular suite of services is doing precisely that. Equipping organisations with intuitive decision-making automatically at scale, actionable insights based on real-time solutions, anytime/anywhere experience, and in-depth data visibility across functions leading to hyper-productivity, Live Enterprise is building connected organisations that are innovating collaboratively for the future.

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