ANALYTICS IN SUPPLY CHAIN

ANALYTICS

Analytics is used to gain insights from data associated with procurement, processing and distribution of goods.

DESCRIPTIVE

Descriptive analytics is utilisation of historical data to obtain insights and answers, “What has happened?"

PREDICTIVE

Predictive Analytics can help understand the future by improving forecasting and efficiency; and answers, "What could happen?

PRESCRIPTIVE

Prescriptive analytics leverages data to determine an optimal course of action and answers, "What should be done?"

VENDOR/ SUPPLIER SELECTION

- Quantities of material to be procured, as per demand
- Will vendor meet our demands of good quality at low cost
- Can supplier accommodate fluctuating demands and sudden emergencies
- Risk vs cost analysis in selecting between new vs old vendor

PROCUREMENT

UNITS TO BE MANUFACTURED

- Production capacity of the plant (available machines and labour)
- Sales forecast for the next quarter or FY
- Available raw materials to use and scheduled delivery commitments
- Predicting machine breakdown in manufacturing line
- Optimize the production process and reduce human-based error

MANUFACTURING

INVENTORY ALLOCATION AND MAINTENANCE

- Real-time inventory tracking
- Ways to strategically replenish stock based on warehouse space and costs
- How to reduce loss accrued from damages, loss of sales and overspending on logistics
- Decide which product to restock and its frequency to avoid overstocking

INVENTORY

OPTIMAL WAY TO DELIVER PRODUCTS

- Correlate and sync real-time inventory and scheduled shipments
- Forecasting demand with respect to geography
- Efficiently consolidate shipping
- Optimize delivery route
- Check if any task can be outsourced to save time and money

LOGISTICS

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