


# 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

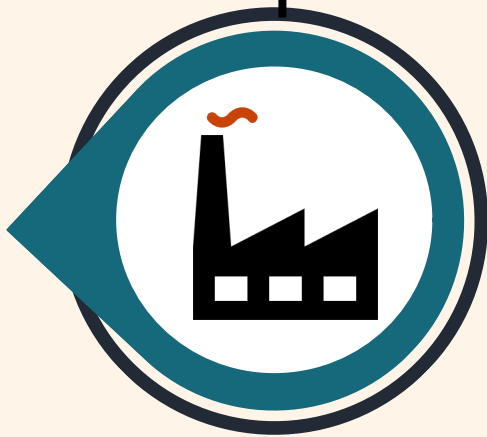


Predicting machine breakdown in manufacturing line



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

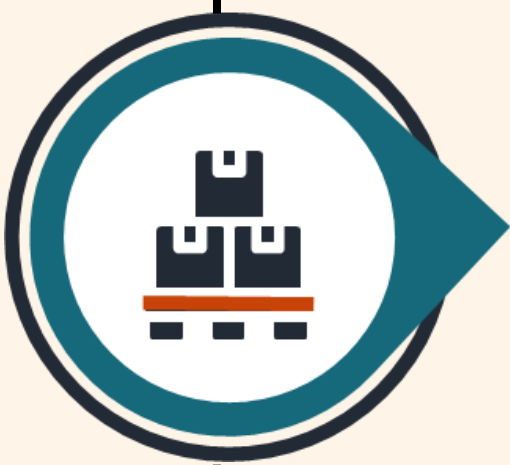


How to reduce loss accrued from damages, loss of sales and overspending on logistics



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

