

## SUPPLY CHAIN OPTIMIZATION

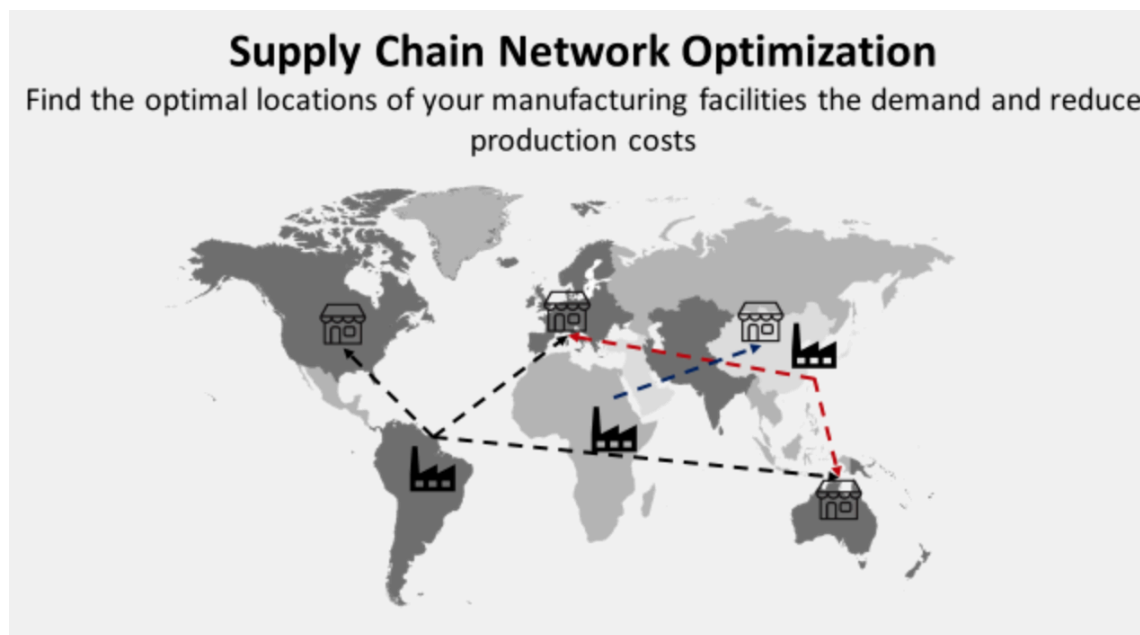
Supply chain management involves the planning, execution, and monitoring of the movement of goods and services from suppliers to customers. Following the same, a data analytics project on supply chain management requires you to work on the following:

- Demand forecasting,
- Inventory management,
- Analysis of supplier performance,
- Logistics optimization, etc.

The main idea is to study all the factors and see how each one of them affects the chain. Many companies are indulging in supply chain analysis. For example, PepsiCo utilizes predictive analytics to manage its supply chains. As a result, the company actively hires seasoned data analysts familiar with supply chain management. The main idea is to study all the factors and see how each one of them affects the chain.

### Problem Statement

As the Head of Supply Chain Management of an international manufacturing company, you want to redefine the Supply Chain Network for the next 5 years considering the recent increase in shipping costs and the forecasts of future demand.



For more information, please refer to this article:

<https://towardsdatascience.com/supply-chain-optimization-with-python-23ae9b28fd0b/>

In this article, we will present a simple methodology using Linear Programming for Supply Chain Optimization considering

- Fixed production costs of your facilities (\$/Month)
- Variable production costs per unit produced (\$/Unit)
- Shipping costs (\$)
- Customer's demand (Units)