



SUPPLY CHAIN MANAGEMENT

KEY BENEFITS

- Test a future system in an early design stage.
- Test and improve proposed modifications without disturbing the operational environment.
- Modeling and analysis of several scenarios to be prepared for the future.
- Optimization and safeguarding of investment planning for production and transport equipment.
- Estimating the influence of uncertainties and variations.
- 2D and 3D visualization.

Simulation of supply chains concerns both supply chain design and supply chain control. How may we help you?

SUPPLY CHAIN MANAGEMENT

In supply chains, the focus is much broader than the activities within just one company. It generally involves a network of multiple enterprises, including suppliers, manufacturers and retailers who work together to meet a customer's need for products or services. Supply chain management therefore refers to the need to integrate the business processes, from an end user through original suppliers.

The control over supply chains covers the movements of raw materials, work in process and finished goods through all joints and the storage in every link of the chain.

SIMULATION OF SUPPLY CHAINS CONCERNS

Simulation of supply chains concerns both supply chain design and supply chain control. Some typical subjects are:

Configuration of the distribution network:

- Which network locations are involved?
- Implement centralization or decentralization
- What mode of transportation will be used?
- How many warehouses will be used?

Inventory management issues:

- Where should stocks be kept and how much?
- How can replenishment strategies contribute?
- Trade-offs between manufacturing costs, transportation costs and stock keeping costs to minimize operating costs in the chain.

Lead time reductions:

- What is the effect of an improvement program for forecasting?
- How can communication protocols to improve the performances?

Performance measurements in the chain:

- How does the supply chain function and what are the individual contributions?
- Which key performance indicators can be evaluated?

Return flow management:

- How to deal with handling of waste and return goods?
- How to organize recall operations in the chain?

ENTERPRISE DYNAMICS® SOLUTIONS

Simulation tools, applications or systems have proven to be very suitable for performing these kinds of simulation analyses on the required level of detail. Simulation solutions on a strategic level have been used to take decisions about chain design. At a more detailed level improvement of manufacturing flow and physical distribution are realized. Enterprise Dynamics® is applied successfully to simulate distribution networks and solve location problems. Other Enterprise Dynamics® solutions concern simulation of the demand and supply variation in the chain and have succeeded in improving inventory management and lead time reduction drastically.

EXPERIENCE INCONTROL

Together with the experience and knowledge INCONTROL gathered within the supply chain market, Enterprise Dynamics® really contributes to optimizing goods flow and return flows in supply chains.

