



AIT Technology Event



Process driven change, demand and supply planning

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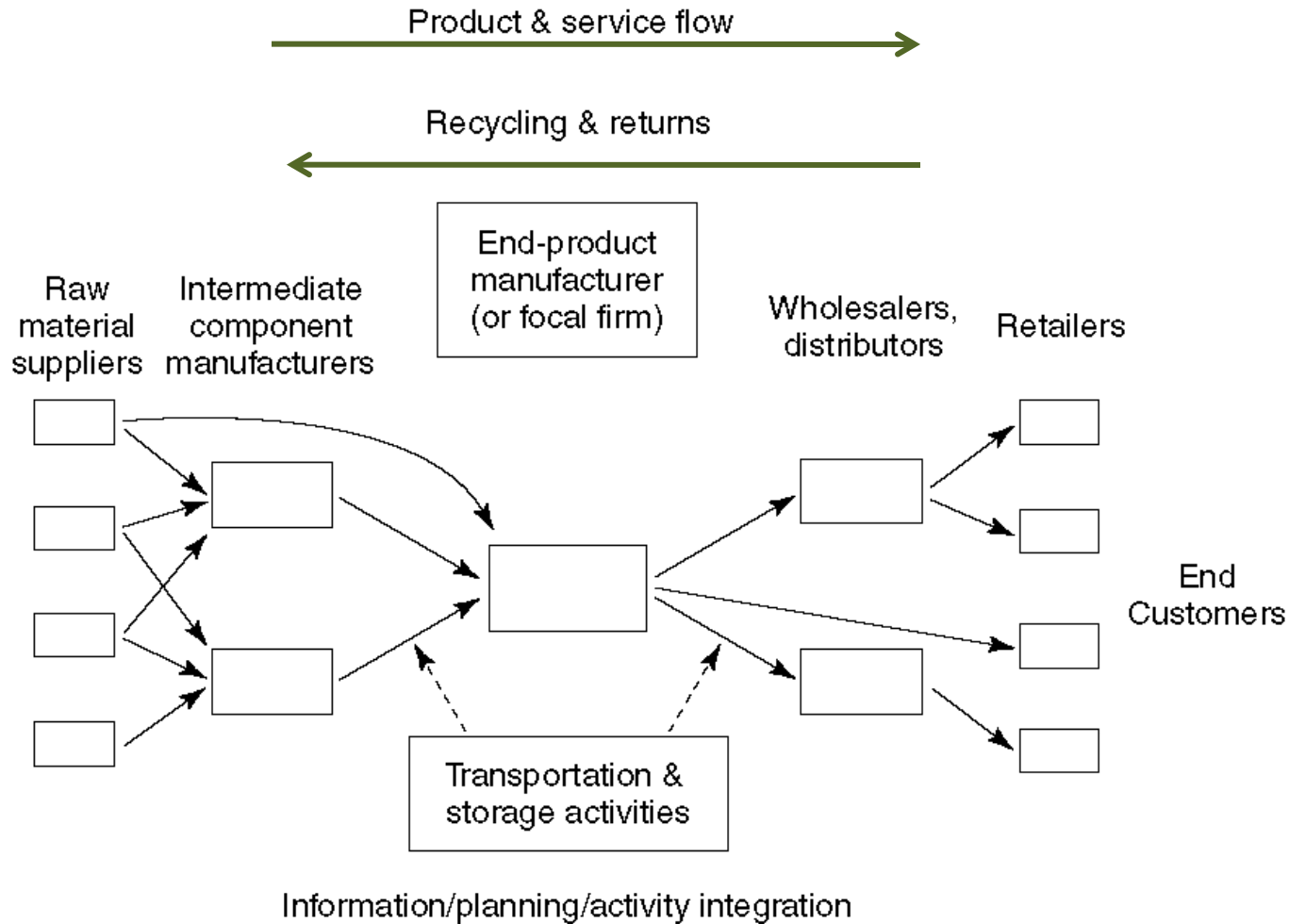
Presentation Contents

- Introduction
 - Supply chain
 - Supply chain management
- Demand and supply planning
 - A case study: making supply meet demand
 - The planning process
- Improving the demand and supply planning, an optimization of end-to-end supply chain process





Supply chain – an example



Source: Wisner





Supply chain management – the definition

Definition: Supply Chain Management

The systemic, strategic **coordination** of the traditional business functions and the tactics across these business functions **within** a particular company **and across** businesses within the supply chain for the purposes of improving the long-term performance of the **individual companies and the supply chain** as a whole

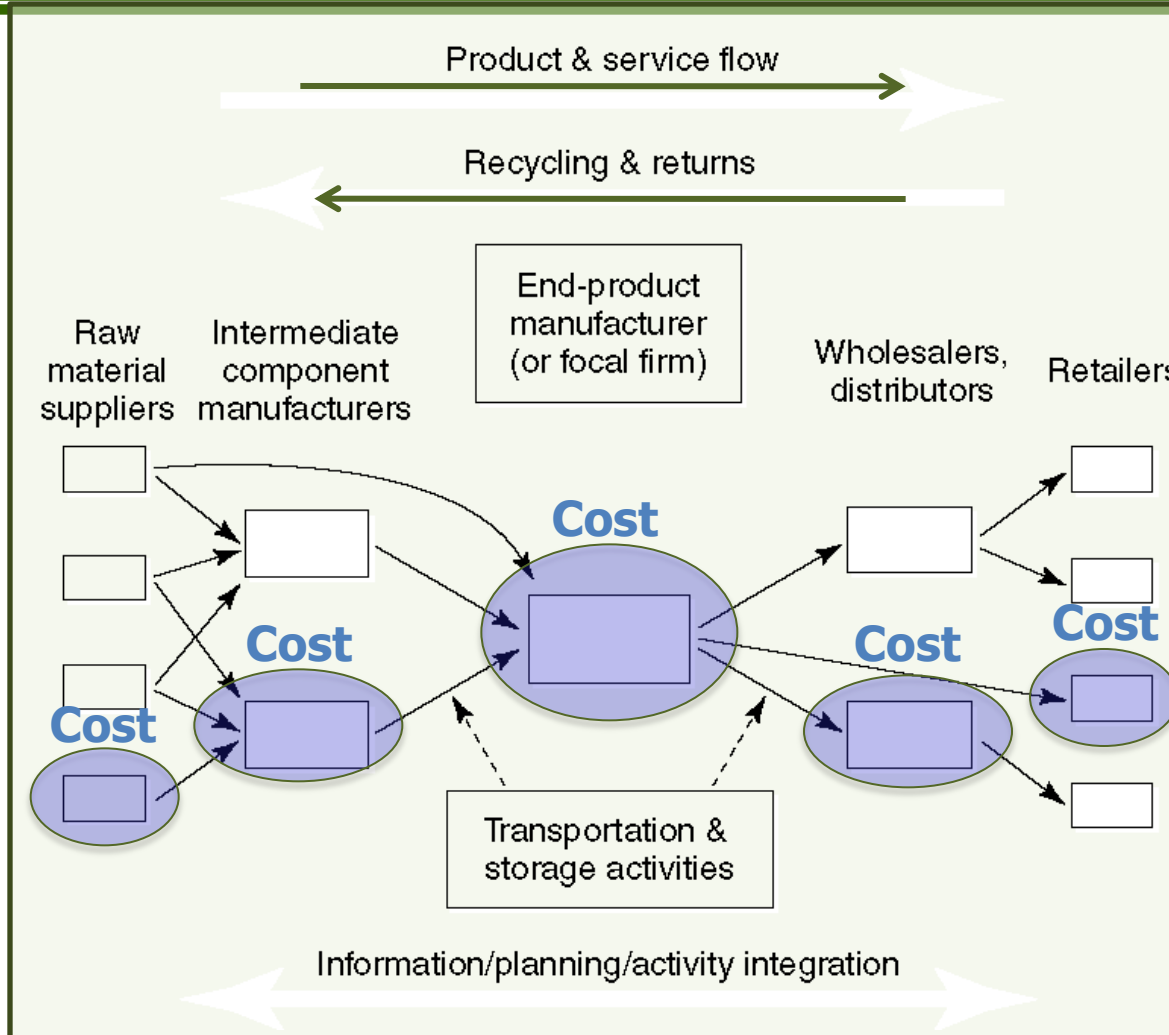
SCOR Council

Source: Supply Chain Council
By Mentzer





Supply chain goal

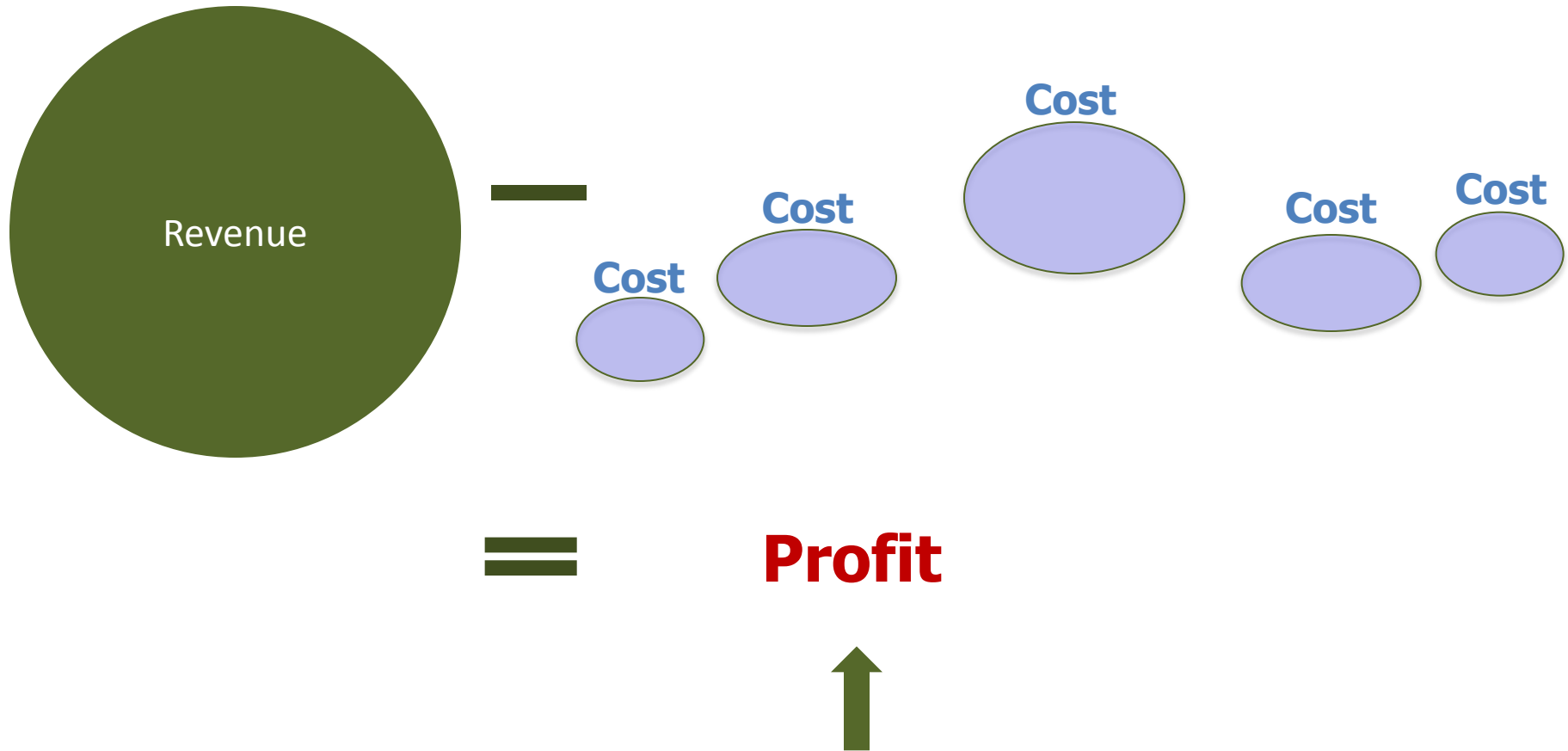


End Customers





Supply chain goal

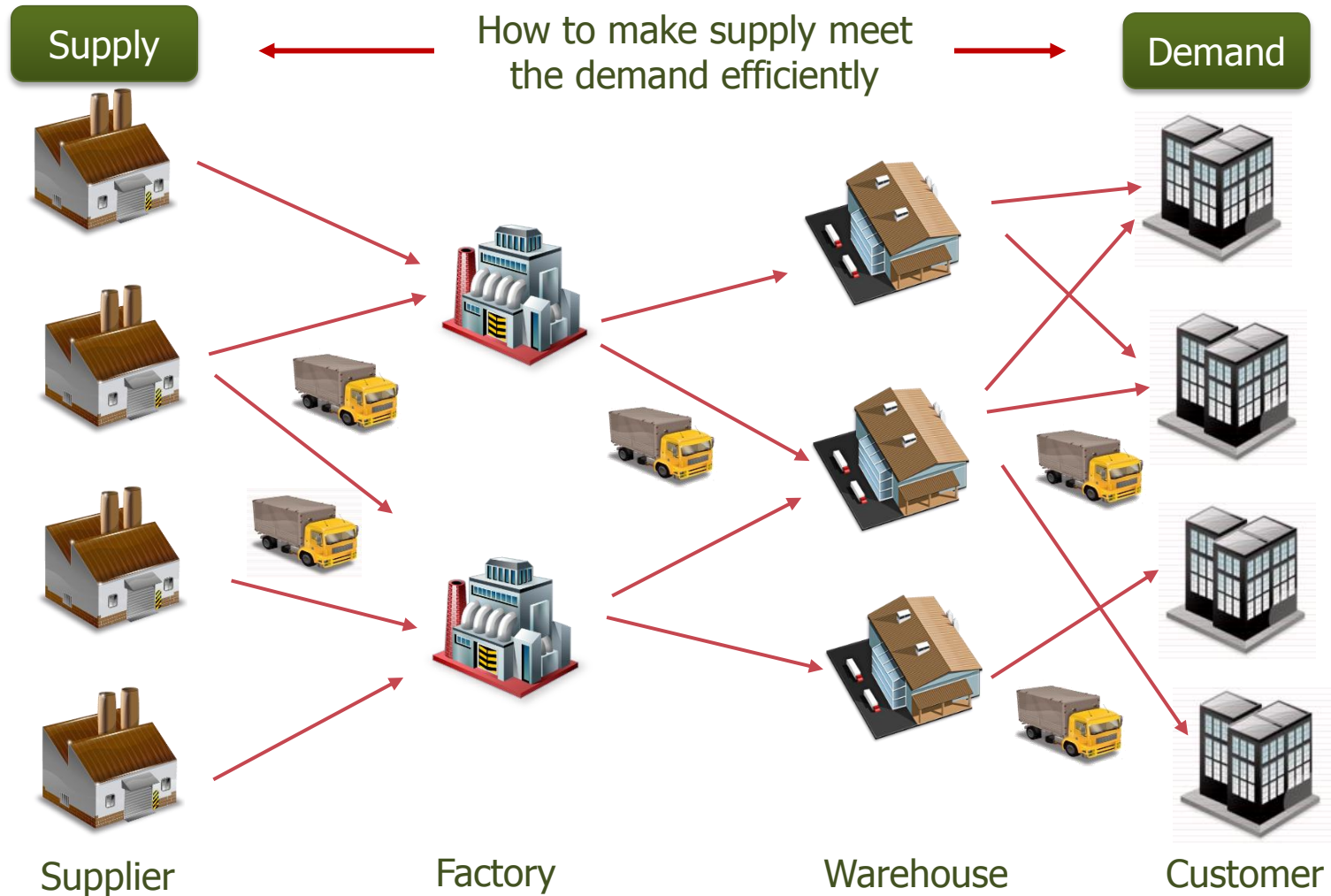


Goal is to maximize supply chain performance => e.g. profitability



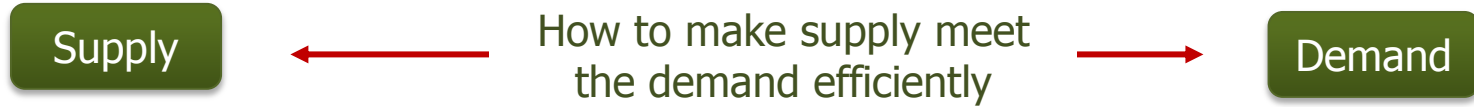
A case study: making supply meet demand

Beverage company

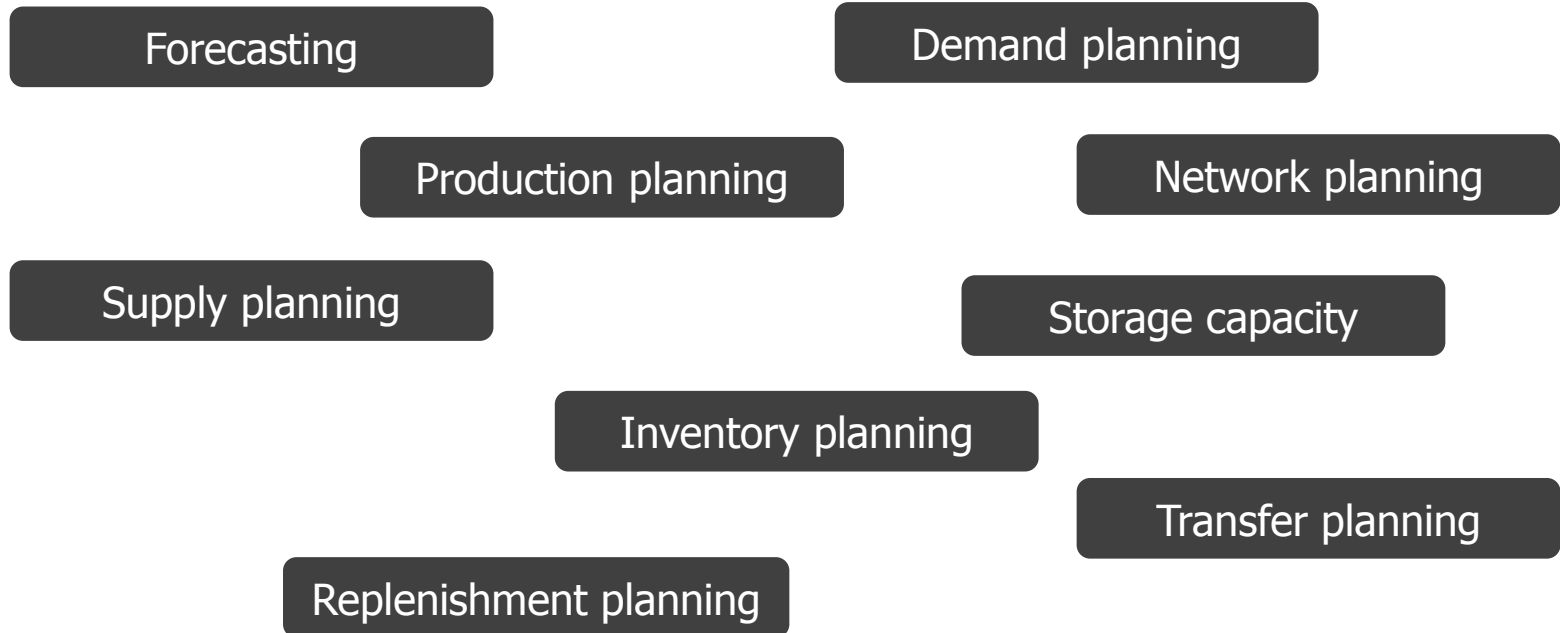


A case study: making supply meet demand

Beverage company



Supply chain management issues





Supply chain management issues

Forecasting

Supply



How to make supply meet the demand efficiently



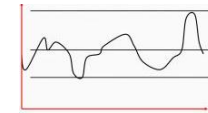
Demand

Forecasting

How to change quickly and single number is used



Often wrong



Demand seasonality and fluctuation

Wrong supply



Wrong forecast





Supply chain management issues

Production planning



Production planning

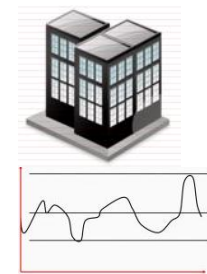
Production leveling vs. inventory build-up



Manu.
cost



Inventory
cost



Demand
seasonality
and fluctuation



Incentive alignment

How do we make sure that the decisions made by each supply chain member will result in maximized supply chain performance?



Supply chain management issues

Transfer planning

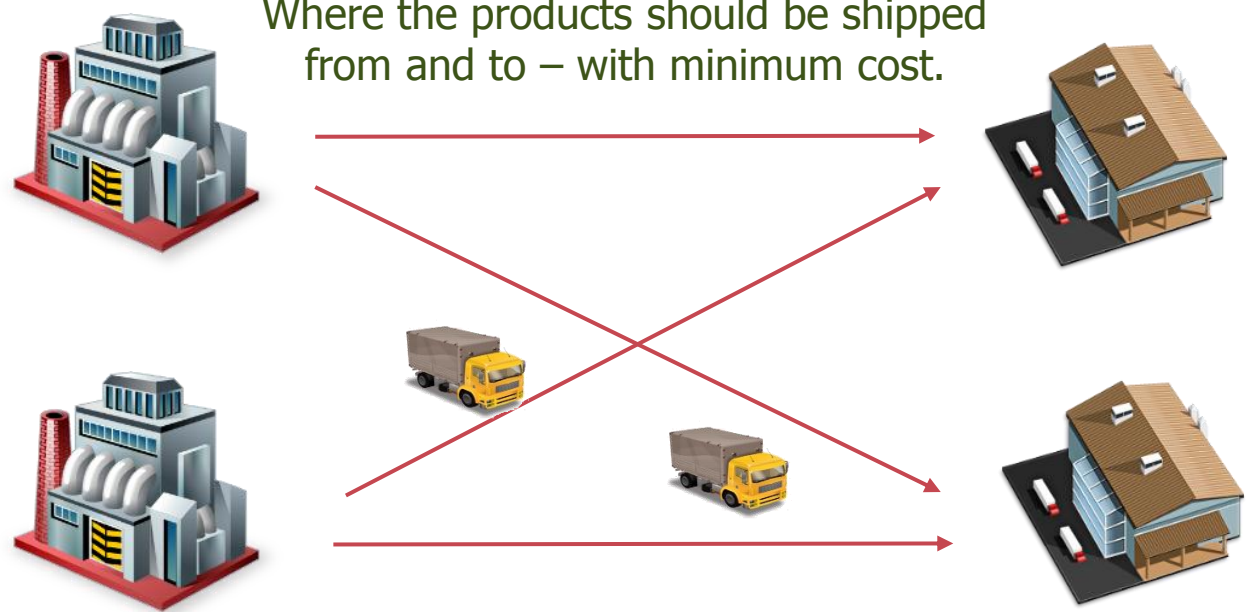
Supply

How to make supply meet the demand efficiently

Demand

Transfer planning

Where the products should be shipped from and to – with minimum cost.





Improving the supply chain planning

The need:

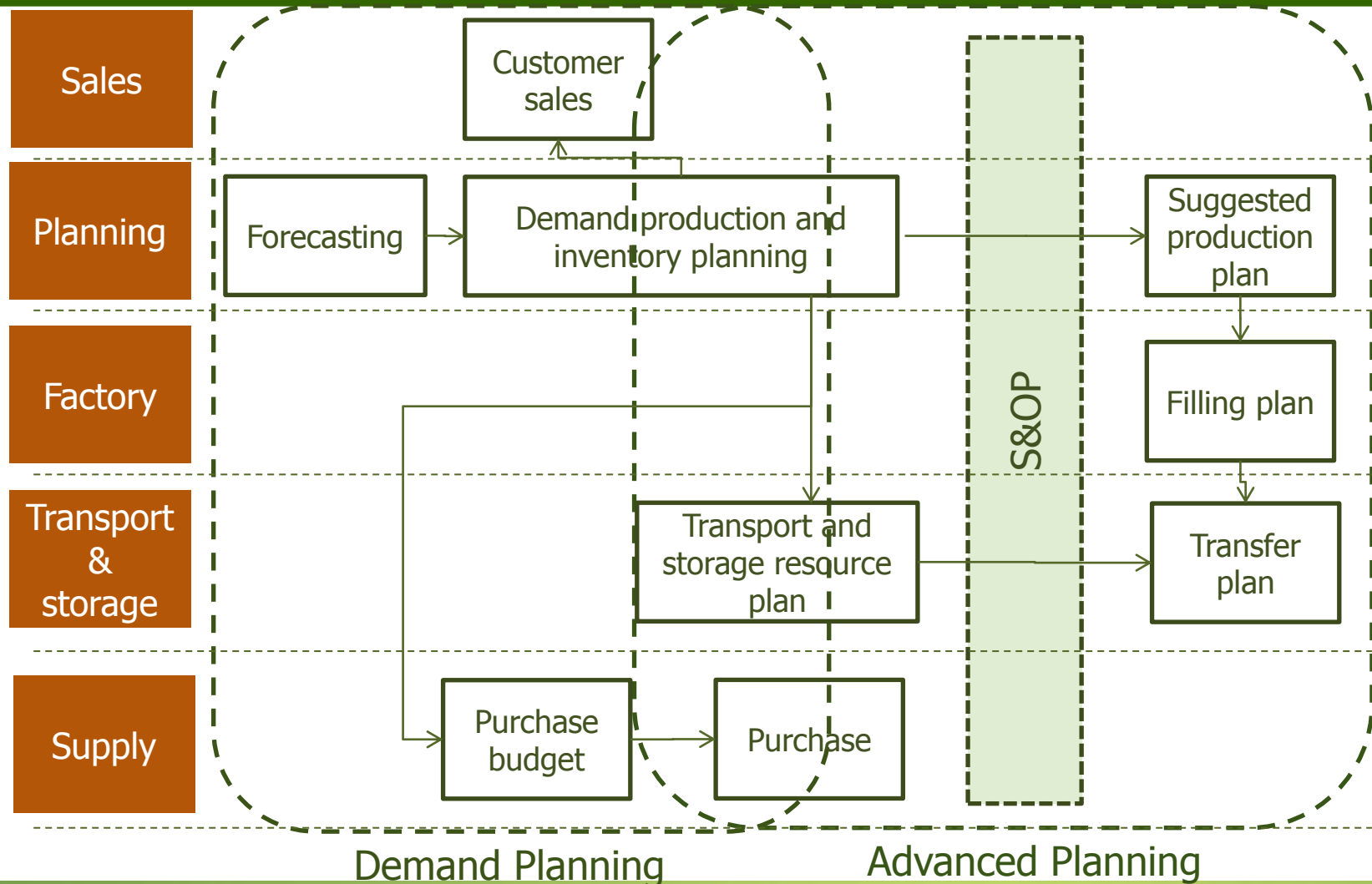
- Increased competition
- Frequent new product introduction
- Resources to manage
- Supply chain constraints





Supply chain planning

Optimizing the end-to-end supply chain process





Supply chain planning

Optimizing the end-to-end supply chain process

As-is

Forecasting and demand planning is done with **lack of true collaboration**.



So **many data sources** and great efforts are required



Level of details required is not practically feasible.



To-be

Collaboration is built-in into the forecasting and demand planning process supported by the demand planning system.

Data sources **interfaced** through the demand planning system.

Level of details required is achieved and enabling better supply chain planning.





Supply chain planning

Optimizing the end-to-end supply chain process

As-is

Planning of the demand, production, supply, inventory, storage, and transportation is done with **limited integration**

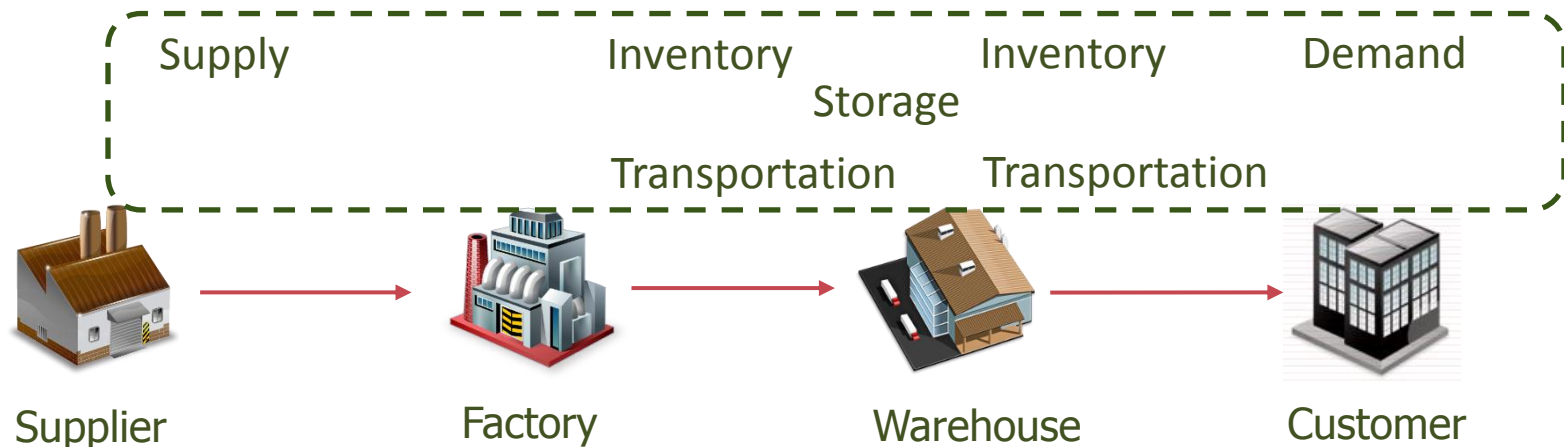


To-be

Planning of the demand, production, supply, inventory, storage, and transportation is **integrated into a single plan**

Optimized by the advanced planning system with integration to the demand planning system

Optimized integrated supply chain plan





Supply chain planning

Optimizing the end-to-end supply chain process

As-is

Sales and operation planning (S&OP) process has **limited intelligence** for decision making and changes made may not lead to a feasible plan.



To-be

Sales and operation planning (S&OP) process is supported by **scenario planning** and changes made can be **immediately simulated** for better decision making and lead to a feasible plan.



Replenishment decision from up-stream sources to down-stream facilities is done with **limited integration** to the overall supply chain planning.

Replenishment decision from up-stream sources becomes **part of the supply chain planning** with a level of automation.





Supply chain planning

Optimizing the end-to-end supply chain process

Reaping the benefits

- Reduced effort to perform forecasting and demand planning



- Optimized end-to-end supply chain process

- Enabled collaboration

- Lower inventory, production cost, transportation cost and lost sales





Thank You



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