

# Production as a part of value chain

## Case-examples



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# In this case study:

- IKEA's supply chain
  - Business idea and strategy
  - Structure and management of a supply chain
  - Demand forecasting and inventory management
  - Supply chain integration



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# Supply chain management: IKEA



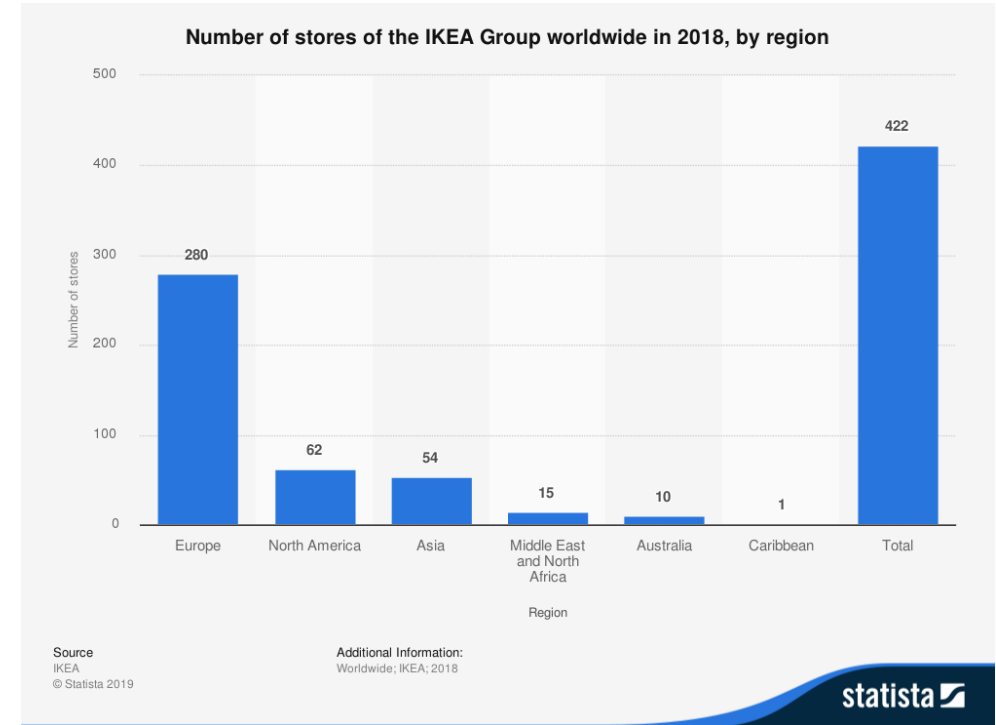
# Business idea

***“To offer a wide range of well-designed, functional home furnishing products at prices so low that as many people as possible will be able to afford them”***

**- Business idea of IKEA**

# IKEA's department stores and distribution centers

- **A total of 422 department stores worldwide in 2018**
  - 280 in Europe
  - 62 in North America
  - 54 in Asia
  - 15 in Middle East and North Africa
  - 10 in Australia
  - 1 in Caribbean
  - In addition, the company has several distribution centers, that deliver products to department stores and customers



# IKEA's strategy

- Global expansion and profit maximization
- Providing quality products at cheap prices
- A wide range of products
- Avoiding waste and mistakes in operations

***Implementing the strategy requires effective supply chain management***



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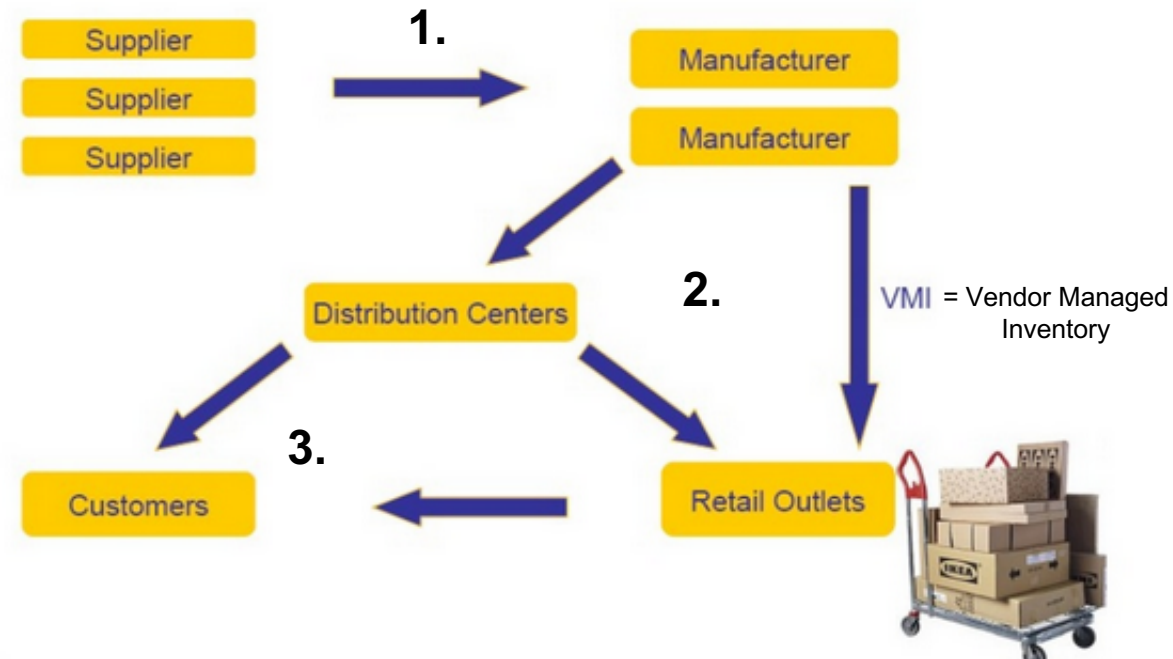
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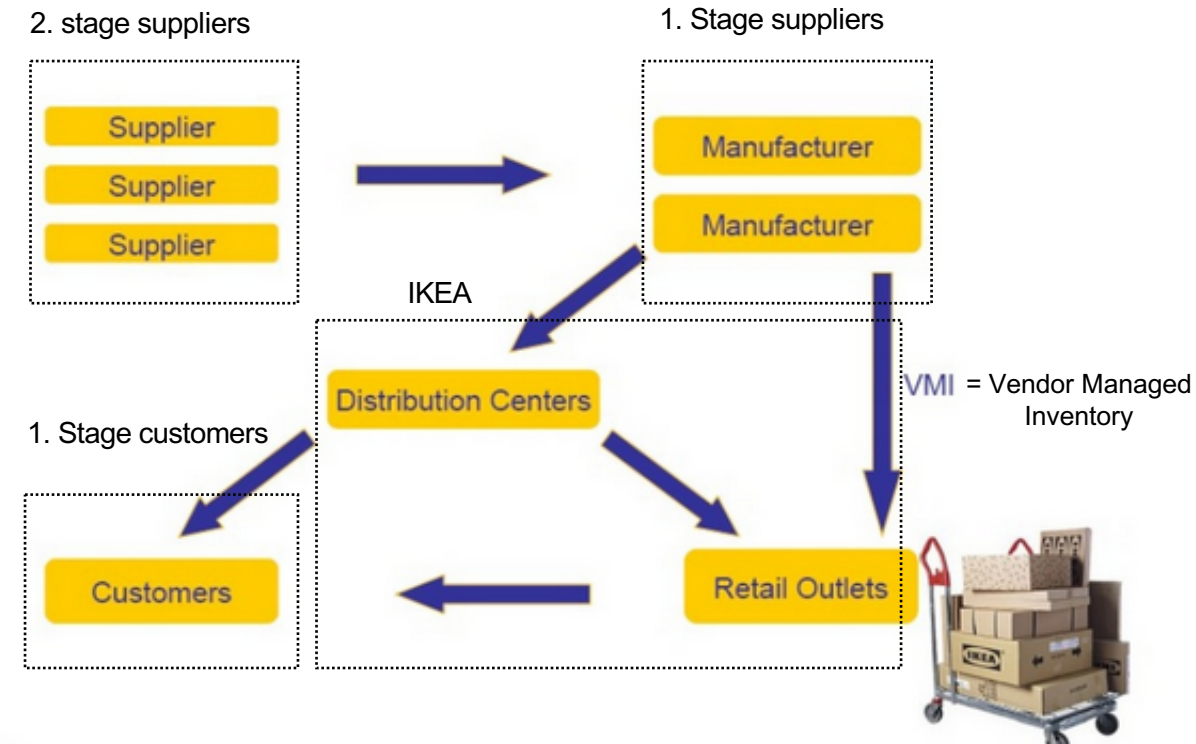
# Supply chain structure

1. Raw materials go from raw material suppliers to product manufacturers
2. Finished products are shipped to department stores or distribution centers
3. Customers either buy products from department stores or get them home delivered

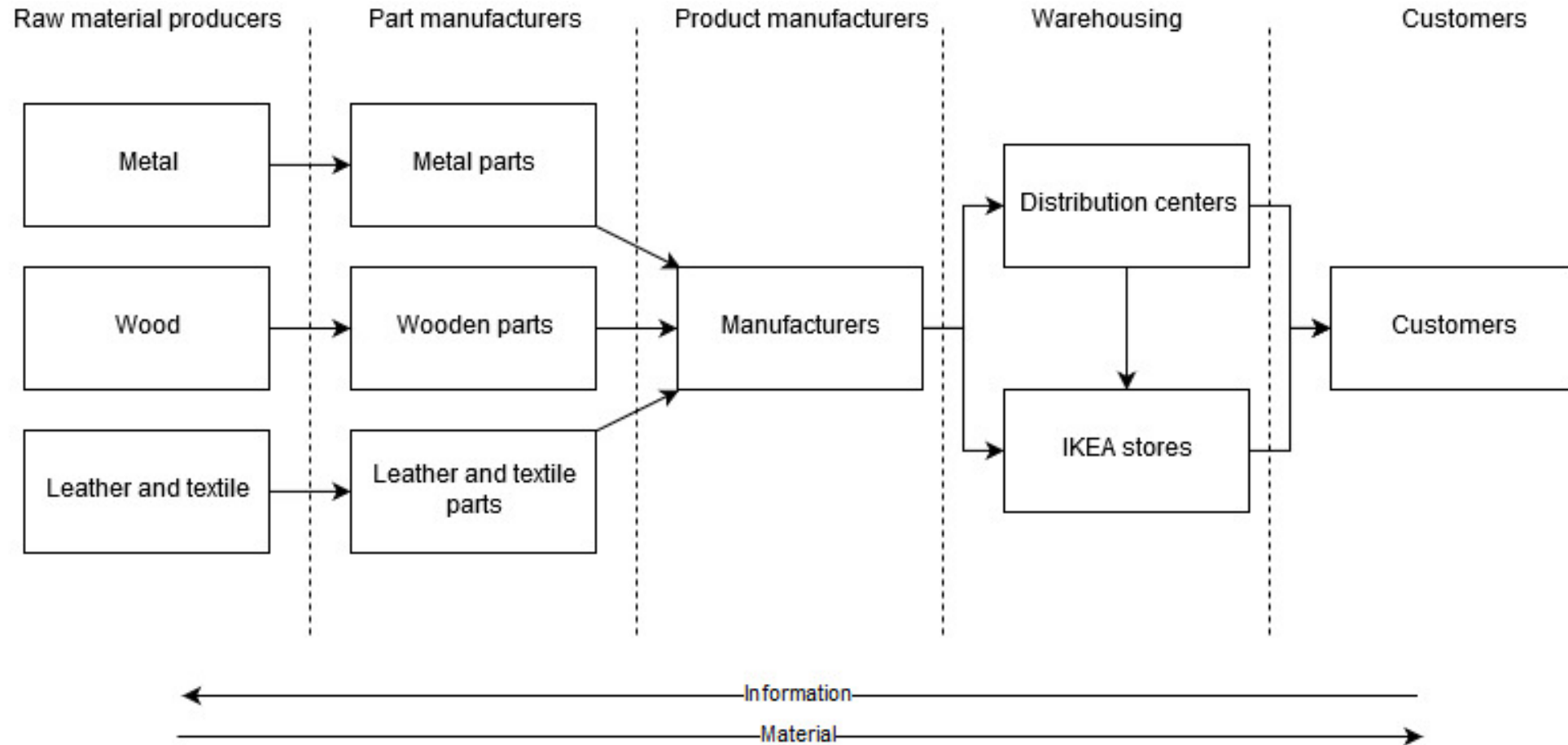


# Supply chain structure

- The supply chain can be divided into different stages according to suppliers and customers
- The products consist of many different parts
- Suppliers in 55 countries



# Supply chain structure



# Supply chain management

- **Right to products**
  - Resale under the full control of IKEA
  - Holdings in suppliers
  - The ability to influence suppliers' decisions
- **Cooperation agreements with suppliers**
  - Ensuring availability of raw materials and products
  - Effective communication (lesser bullwhip-effect)
- **Centralization of operation planning**
  - Long-term planning of operations
  - Implementation of ERP system(Enterprise Resource Planning)



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# Demand forecasting

- **IKEA has over 9500 different products**
  - Accurate demand forecasts are essential
  - Use of “Make-to-Stock” method is mandatory
  - IKEA utilizes sales statistics, seasonal information, and algorithms to forecast demand
  - The impact of market changes must be considered in advance
  - Advertising, price changes and new products also affect product-specific demand
  - Algorithms automate demand forecasting and find correlations between demand influencing variables

# Demand forecasting

- **Estimates are based on data collected by regional service centers**
  - Top-Down and Bottom-Up –methods
  - Forecasts are corrected using a moving average
- **Demand forecasts can be passed on upstream of the supply chain**
  - “One set of numbers” - principle

# Inventory management

- **Demand forecasts help minimize over-storage**
  - Accurate demand forecasts are important because it may take up to 8 weeks for products to be in storage
  - If the products run out of stock, sales will be lost
  - At the same time, excessive storage should be avoided
  - Availability of certain products is more important for sales and customer experience





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# Supply chain integration

- **IKEA's supply chain can be considered partially vertically integrated**
  - Ikea does resale and storage
  - Collaboration agreements and partial ownership of suppliers
- **IKEA has contact with end-customers and is able to gather information about customer requirements**
  - Information can be passed on to suppliers
  - Customer feedback can be used to make changes in products
  - The result is better customer quality

# Assignment 4:

## Production as a part of value-chain

### 1. Focus of own operations and procurement(1-2 pages)

- What parts of production and other operations would you do yourself and what would you outsource and why?
  - *Examine the implementation of production, particularly through core competence and cost.*
- How should you procure outsourced services and production parts, as well as the necessary raw materials and equipment for your own production?
- What are the parts of your supply chain?

### 2. Demand assessment (2 pages)

- What kind of fluctuation in demand is expected?
- How do you make production and the supply chain such that it can withstand fluctuations in demand?
- Estimate quarterly demand for the first two years and yearly for years 3 and 4
  - *A table/chart would be useful*
  - *How will demand develop over time?*
  - Consider the reliability of your demand forecast

# Assignment 4:

## Production as a part of value-chain

- **Return the assignment as a PDF to MyCourses**
- **Deadline: Monday 12 October, 18:00**
- **Remember to give feedback:**
  1. How long did it take to do the assignment?
  2. What new did you learn?
  3. What should be developed in this exercise?
  4. General comments on the course so far?
- **Next week we will discuss projects and investing**