

Supply chain Management Strategies

This presentation is based on the work and materials of:

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- David Simchi-Levy, professor at the MIT, President and CEO of Logic Tools.

- What SCM is looking for is to develop production & delivery mechanisms and processes that can produce goods to the actual end-user rate of demand for the smallest time-period manageable.
- Ensure that the variety of products reaching the market place matches what customers want to buy.

The functions of the SMC

➤ A physical function

Production	Procurement
Storage	Transportation

➤ A Market interface function

Ensure that the following conditions are met:

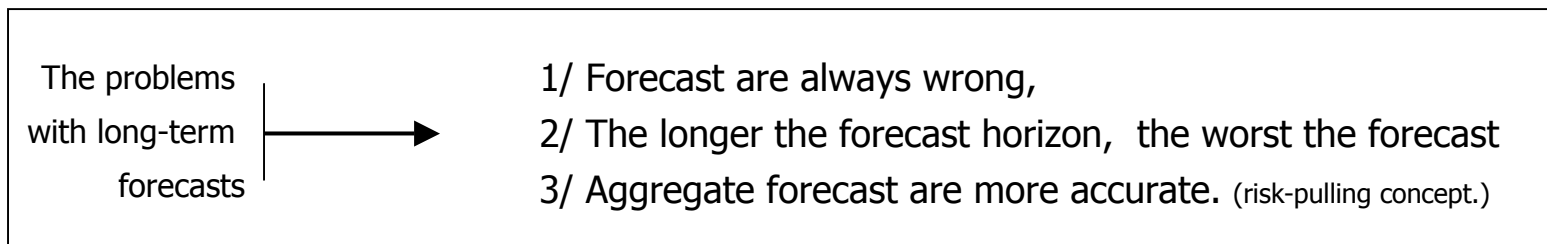
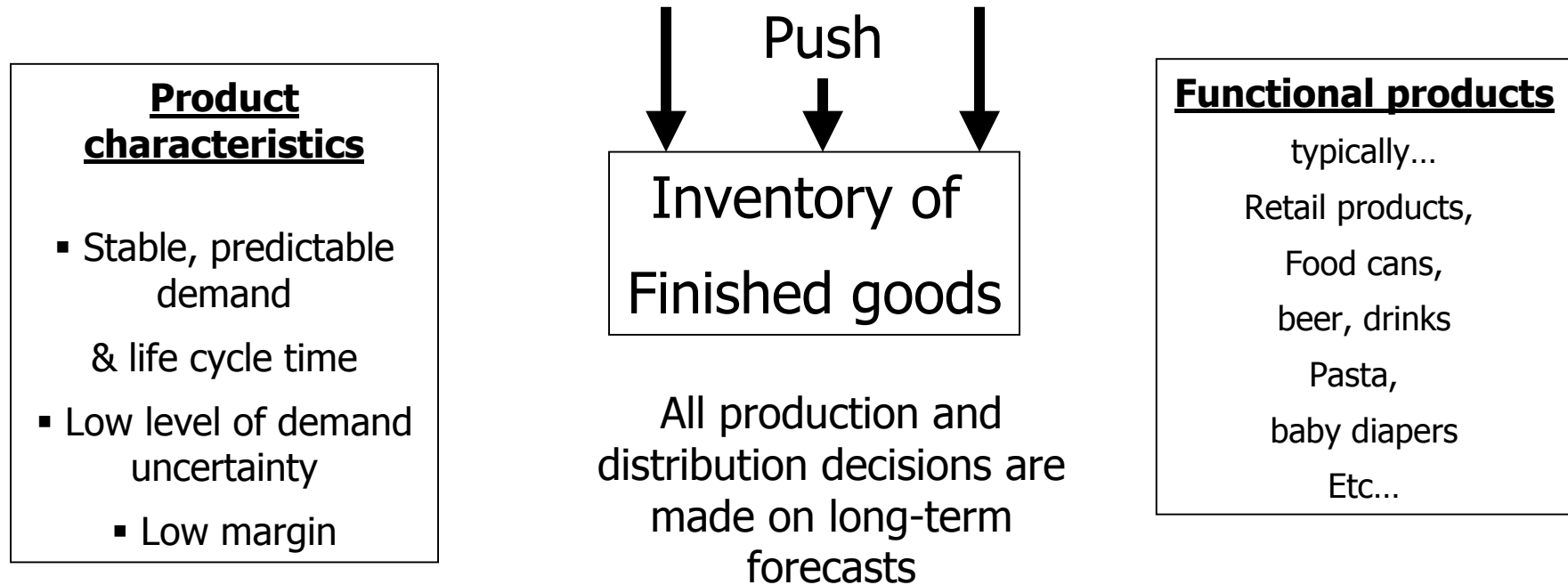
the right product	at the right place
at the right time	in the right quantity,

exactly as per Customers' needs and expectations.

Supply-Chain strategies

Made-to-stock environment

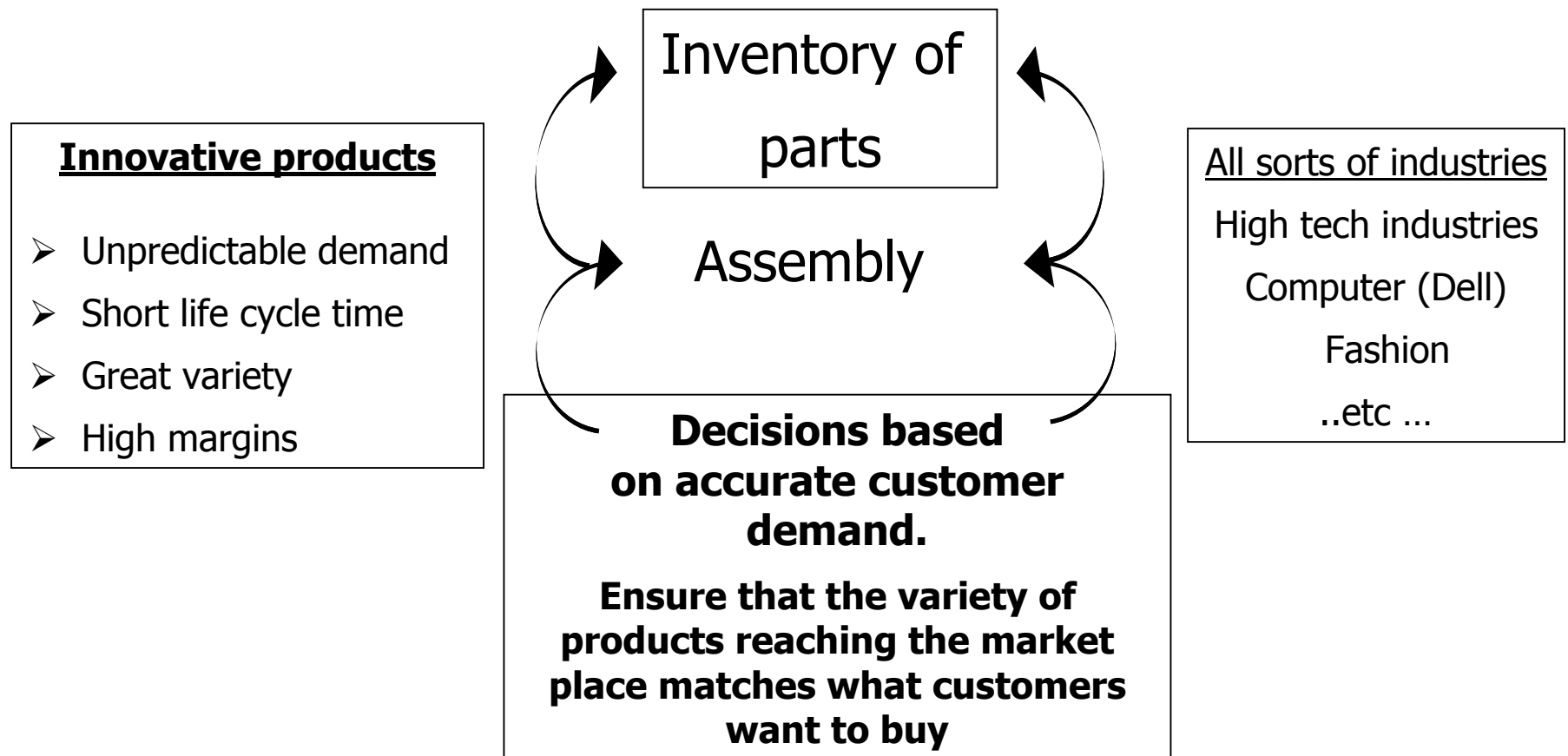
Efficient SC to market demand



New Supply-Chain strategies

Made-to-order environment

Responsive SC to market demand





What Strategy for your products?

- Is your product functional or innovative?
- Should your SC be physically efficient or responsive to the market?
- Where in the SC to position inventory and available production capacity in order to hedge against uncertain demand?

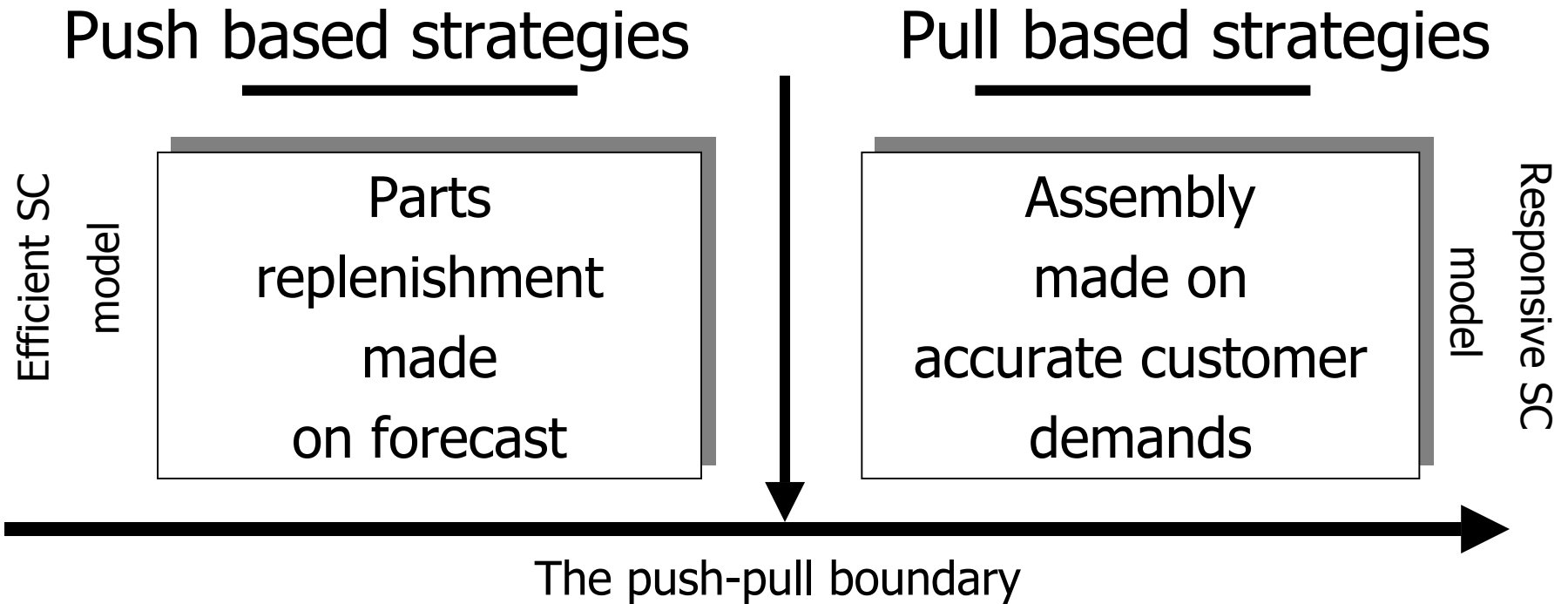
Physically Efficient vs. Market-Responsive SC

	Physically Efficient process	Market-Response Process
Primary purpose	Supply predictable Demand efficiently at the lowest possible cost	Respond quickly to unpredictable demand to minimize forced markdowns, obsolete inventories
Manufacturing focus	Maintain high average utilization rate	Deploy excess buffer capacity
Inventory strategy	Generate high returns & minimize inventory throughout the SC	Deploy significant buffer stocks of parts or finished goods
Lead-time focus	Shorten lead times as long as it does not increase cost	Invest aggressively in ways to reduce lead times
Approach to choosing suppliers	Select primarily for cost & quality	Select primarily for speed, flexibility and quality
Product design strategy	Maximize performance & minimize cost	Use modular design to postpone product differentiation as long as possible

Matching SC with products

	Functional products	Innovative products
Efficient Supply chain	match	mismatch
Responsive Supply chain	mismatch	match

The Push - Pull Strategy



It is the point at which the product goes from being pushed in anticipation of customer order, to being pulled by actual demand.

What is the appropriate strategy for a company?

- The higher the demand uncertainty, the more we want to use **Pull based strategies.**

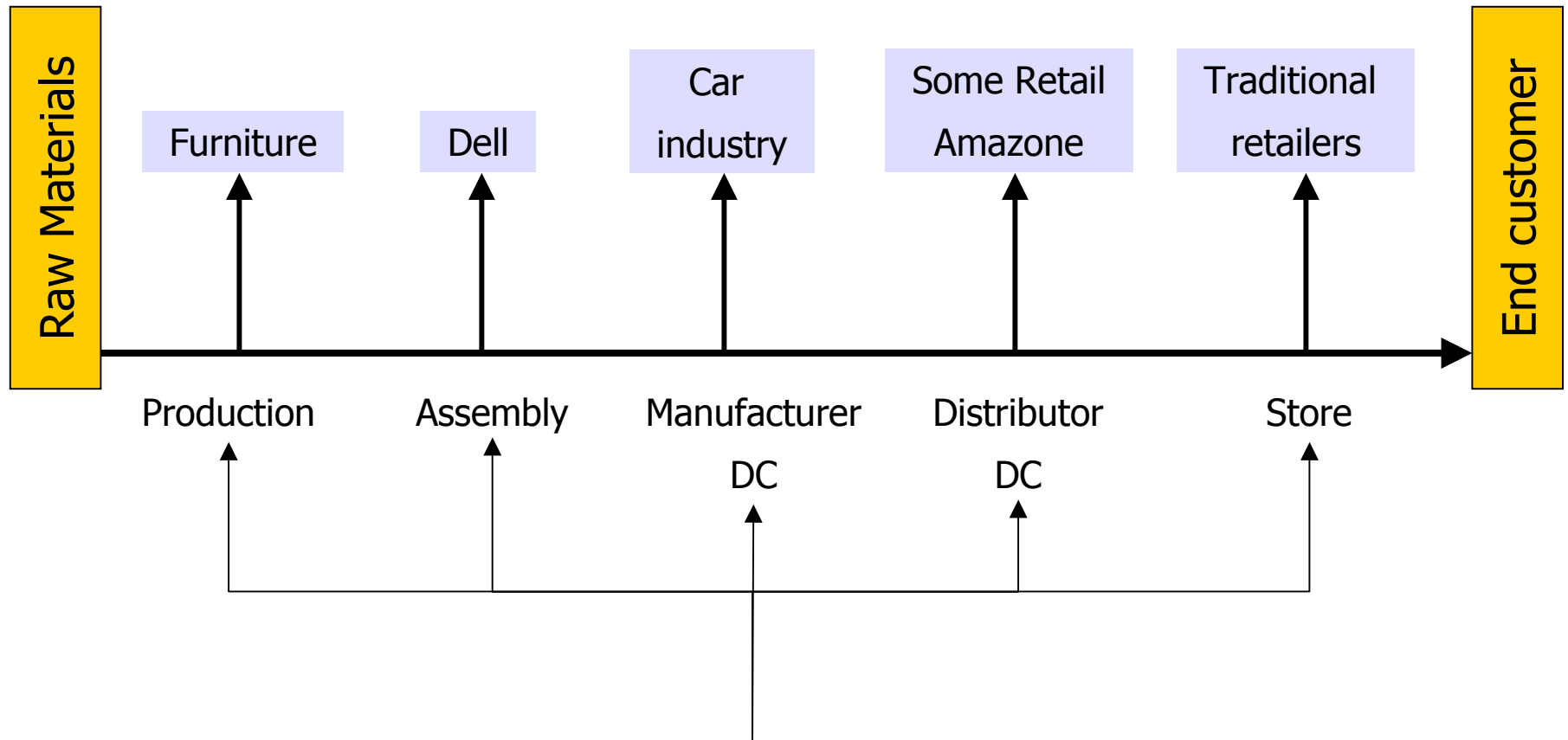
- The lower the demand uncertainty, the more we want to use **Push based strategies** (high predictability)

- The higher the transport cost*, the more we want to make use of **Push based strategies.** (aggregate shipments possibility)

- The lower the transport costs*, the more we are willing to use **Pull based strategies.**

(*Transport costs as a percentage of a unit cost)

The Pull-Push boundary

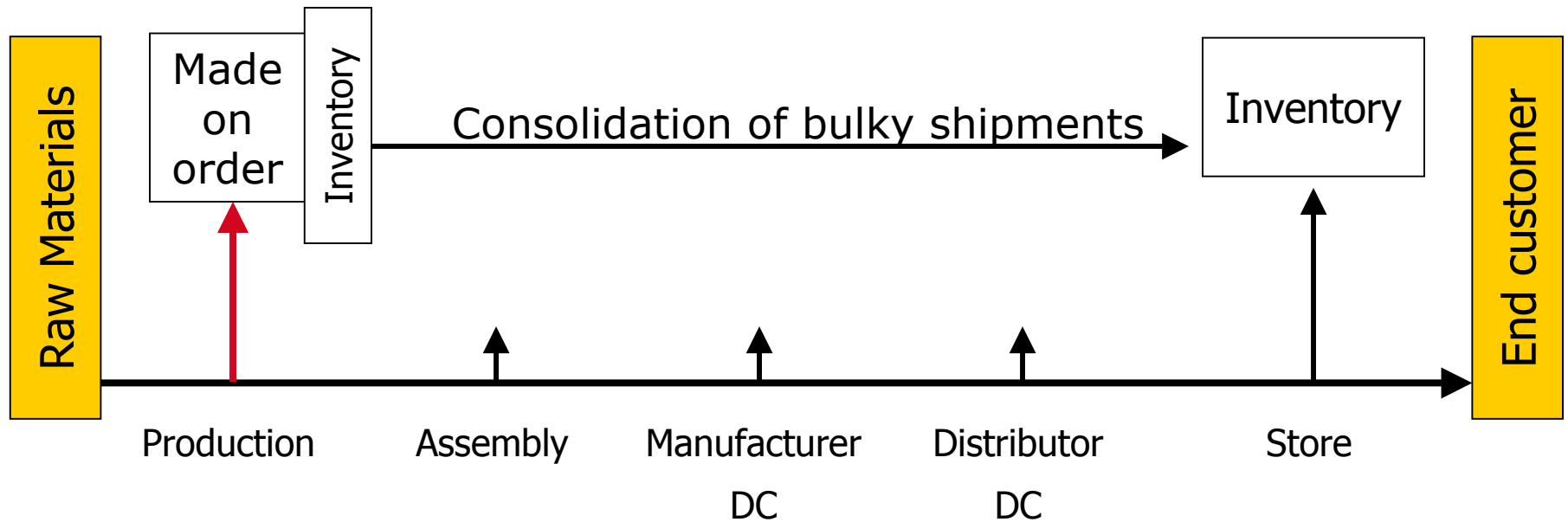


It is the inflection point where demand information exerts its influence on.....

The furniture industry

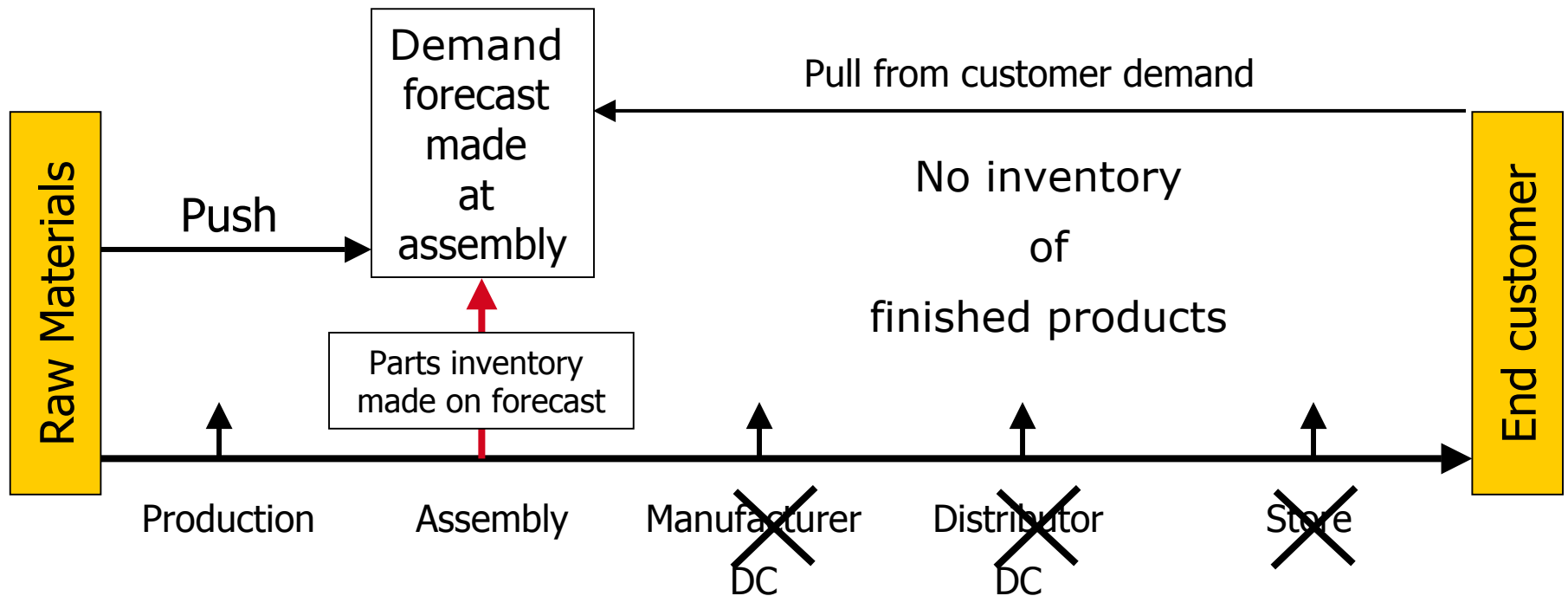
- High level of demand uncertainty
- High delivery cost (% to the unit price)

Many different type of fabrics, colors decided on order.



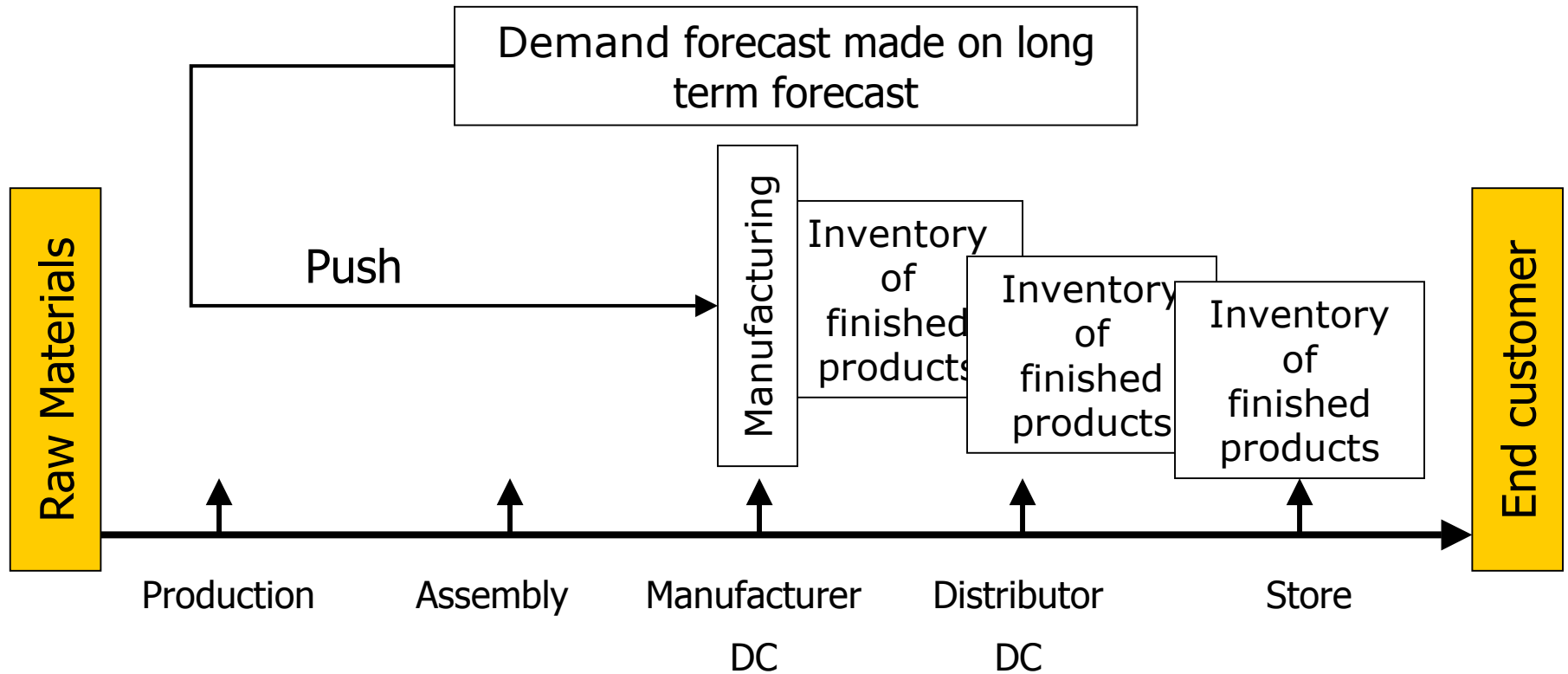
Dell - the Pull-Push boundary

- High level of demand uncertainty
- Low delivery cost (% to the unit price)



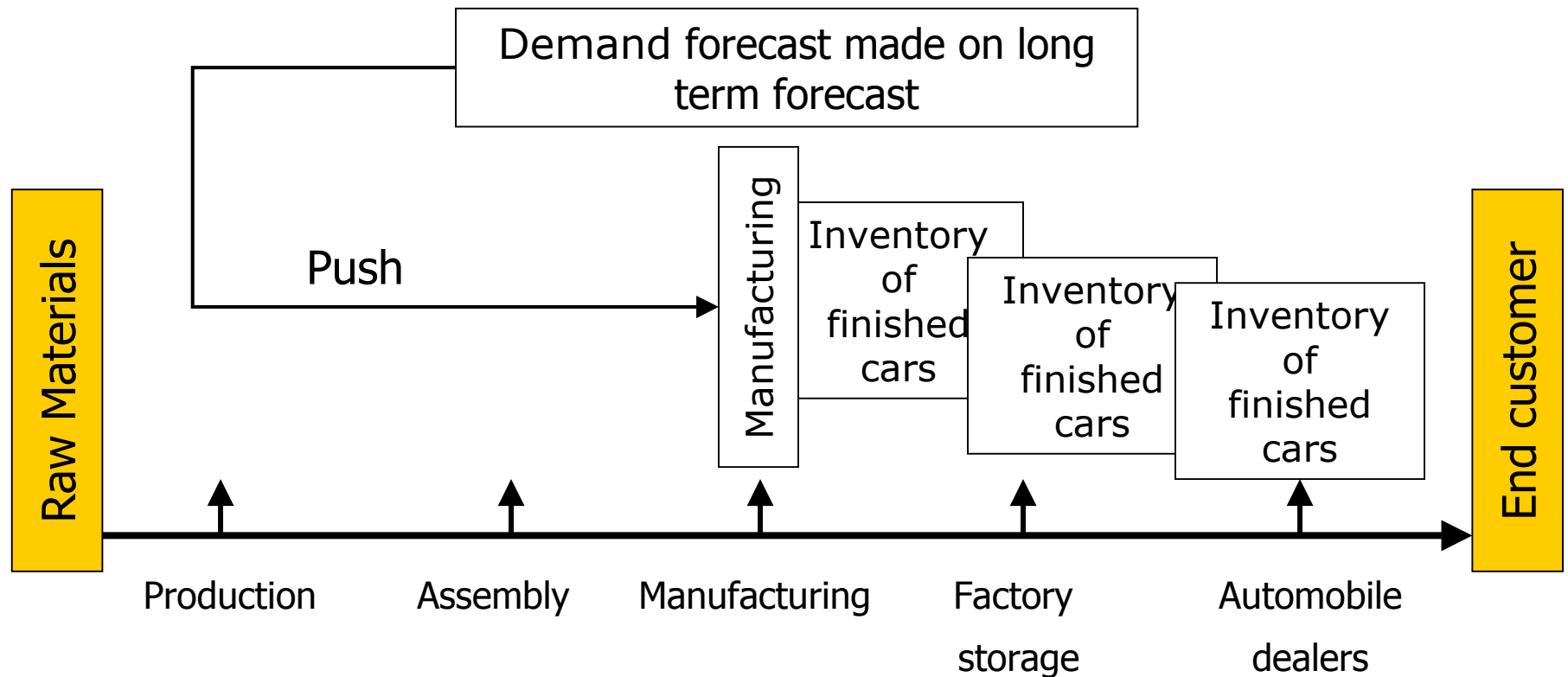
Traditional computer industry

- High level of demand uncertainty
- Low delivery cost (% to the unit price)



Car industry

- High level of demand uncertainty
- High delivery cost (% to the unit price)

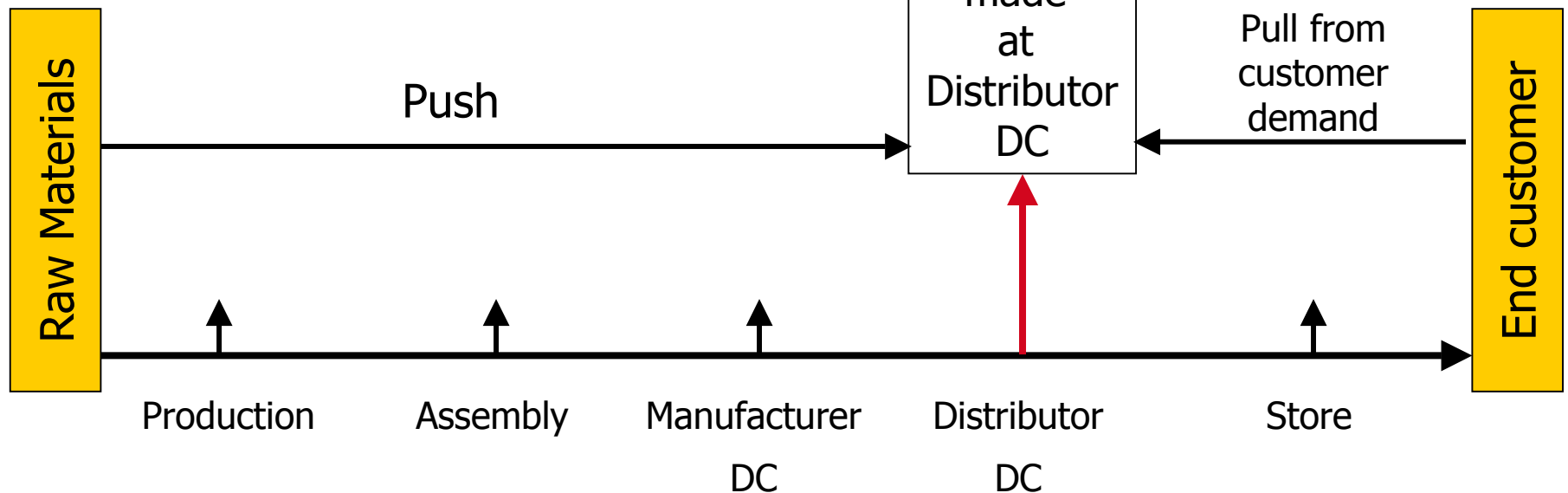


The Grocery Pull-Push boundary (case one)

- Low level of demand uncertainty
- High delivery cost (% to the unit price)

Very predictable distribution patterns.
Because high level of predictability,
orders can be made on long-term forecast

Pasta
Soup
drinks



The Grocery Pull-Push boundary (case two)

- Low level of demand uncertainty
- High delivery cost (% to the unit price)

