

INTERNATIONAL

# *Logistic Summit*

MÉXICO 2009

18 y 19 de Marzo de 2009, Hotel Sheraton Centro Histórico, México, D.F.

## **CONVIRTIENDO LA CADENA DE SUMINISTRO EN UNA CADENA DE DEMANDA**



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**Agile Supply Chains**

# Agile Supply Chains

## Converting the Supply Chain into a Demand Chain

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# Agenda

- Demand Chain Management
- Competing in turbulent markets
- Lean or agile?
- Characteristics of agile organizations
- The routemap to Supply Chain agility

# The Top 10 Supply Chains

1. Apple



2. Nokia



3. Dell



4. Procter & Gamble



5. IBM



6. Wal-Mart



7. Toyota



8. Cisco



9. Samsung



10. Anheuser-Busch



Source AMR, 2008

# Characteristics of world class supply chains

- Their processes are closely aligned to the company's value proposition
- They focus on responsiveness
- They constantly seek to drive out complexity from their supply chains
- Their supply chains are customer driven

# Demand chain management

## Traditional model

Marketing Function

Demand creation

Supply Chain Function

Demand fulfilment

Limited joint planning

Demand creation

Demand fulfilment

Alignment of strategy, processes, KPI's, etc

**Demand Chain  
Management**

**Alignment of demand creation and fulfilment processes across  
Functional and Organisational boundaries**

Suppliers Producer Customers

# From 'push' to 'pull'

## From

- Sequential supply chain
- Reactive and tactical
- Consumer at the end of the chain
- Limited information sharing
- DC movement information
- Multiple forecasts, make to stock

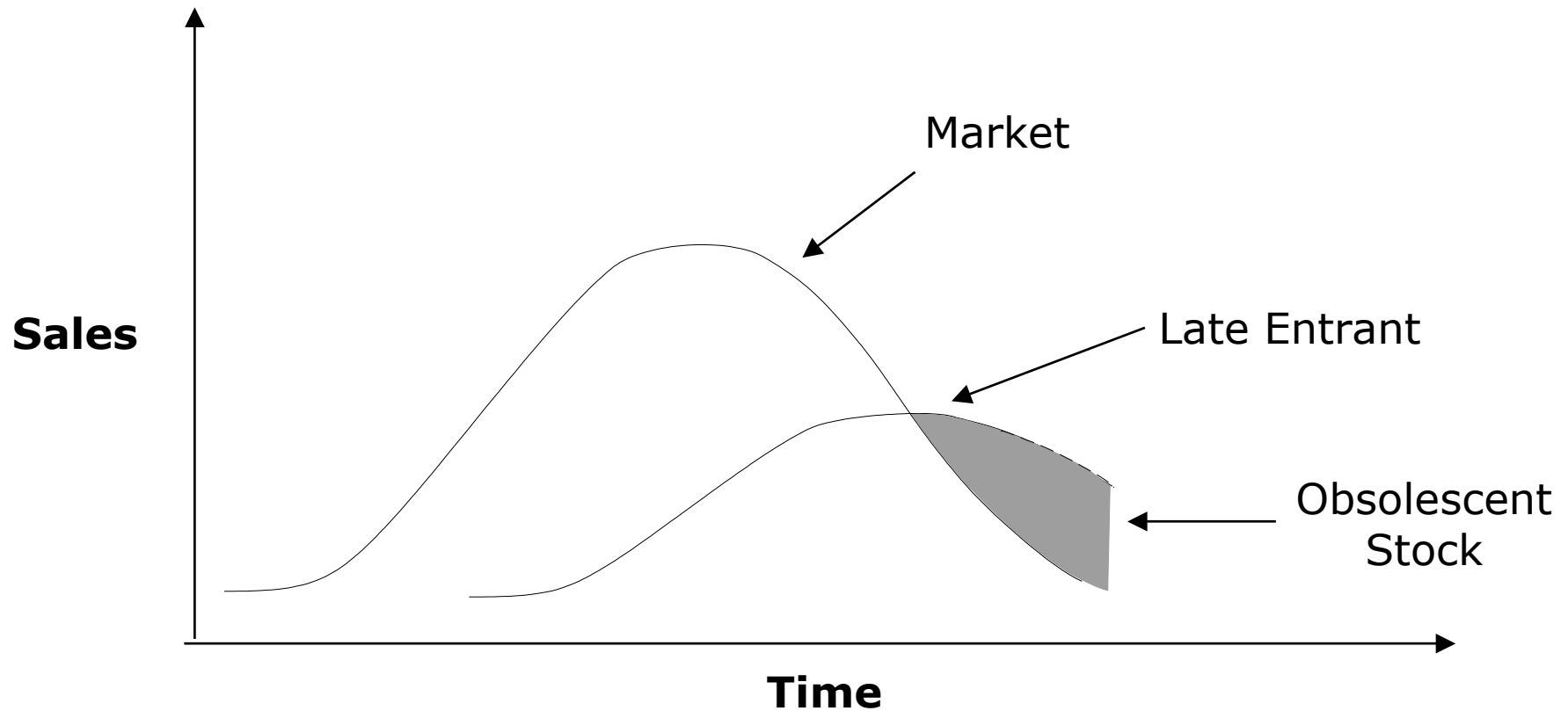
## To

- Collaborative supply chain
- Proactive and strategic
- Consumer at the start of the chain
- End-to-end visibility
- Actual consumption/ retail sku movement
- Single, shared forecast, consumer demand driven

# Competing in turbulent markets

- Product and technology life-cycles are shortening
- Competitive pressure forces more frequent product changes
- High levels of variety and product proliferation increase business risk
- Supply chain 'chaos' created through self-imposed actions
- Forecast-based management no longer viable: forecast for capacity, execute against demand

# Shorter life cycles make timing crucial



- Less time to make profit
- Higher risk of obsolescence

# Agility: a definition

**The ability to respond rapidly to unpredictable changes in demand.**

**Agility is not a single company concept, it extends from one end of the supply chain to the other.**

# Dictionary definitions

- Lean: “having no surplus flesh or bulk”
- Agile: “quick in movement: nimble”

# The origins of 'lean'

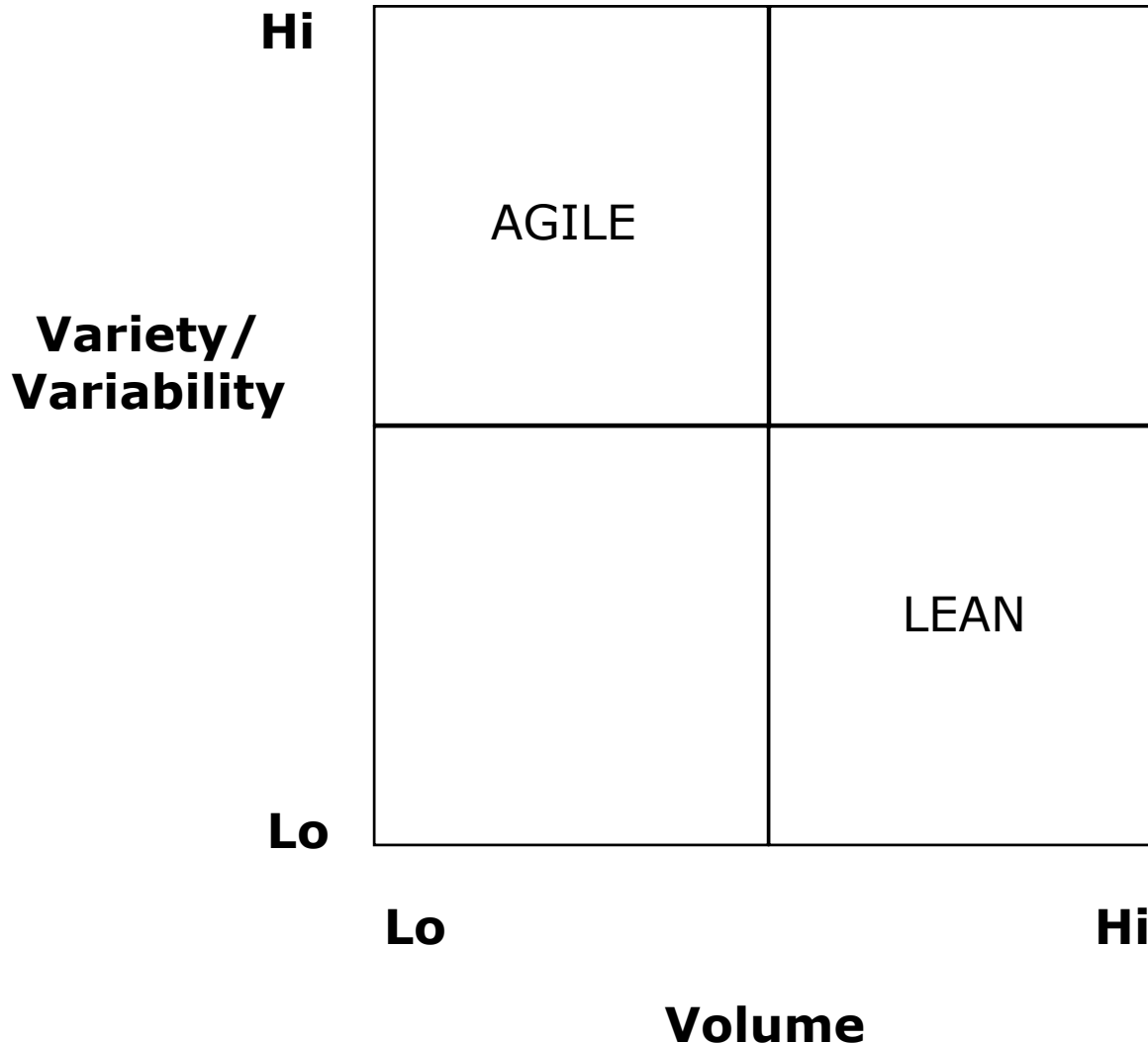
Lean thinking emerged from the Toyota Production System (TPS) developed in the early 1970s. Underpinning TPS was the objective of the reduction or elimination of waste ("muda").

It came to be associated with 'just-in-time' manufacturing and standard processes with a focus on the reduction of process variation through 'Six Sigma' methods.

# Lean works best when.....

- Volume is high
- Variety is low
- Demand variability is low
- Where supply chain risk is low

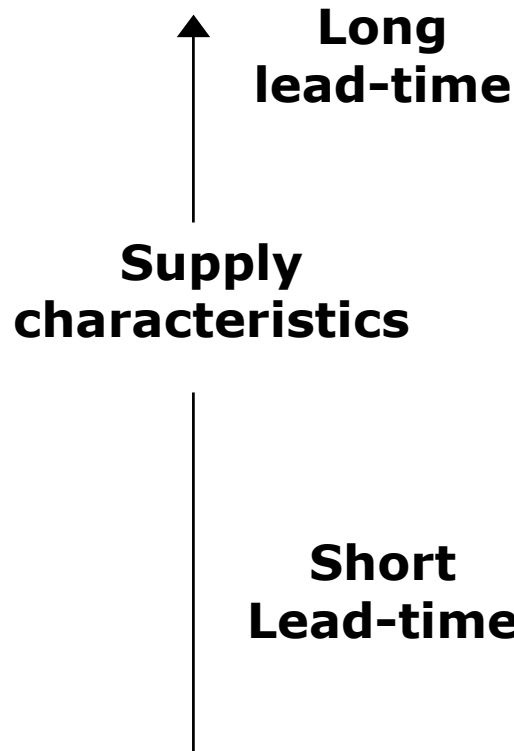
# Agile or lean?



“Lean” works best in high volume, low variety and predictable environments.

“Agility” is needed in less predictable environments where the demand for variety is high.

# Demand/supply characteristics determine supply chain strategy



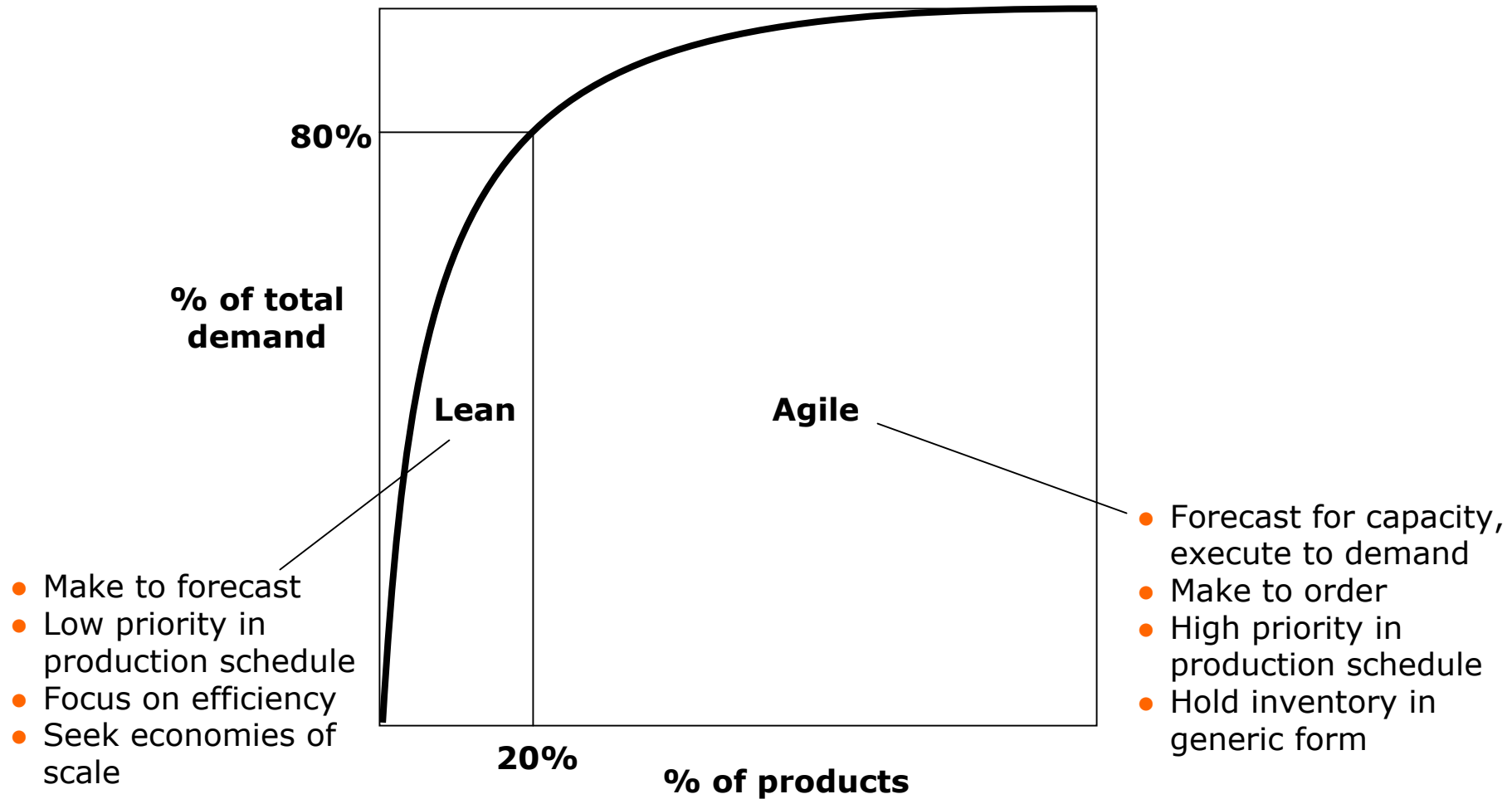
Plan & execute (lean)	Delayed configuration (postponement)
Continuous replenishment	React & execute (agile)

**Predictable**

**Unpredictable**

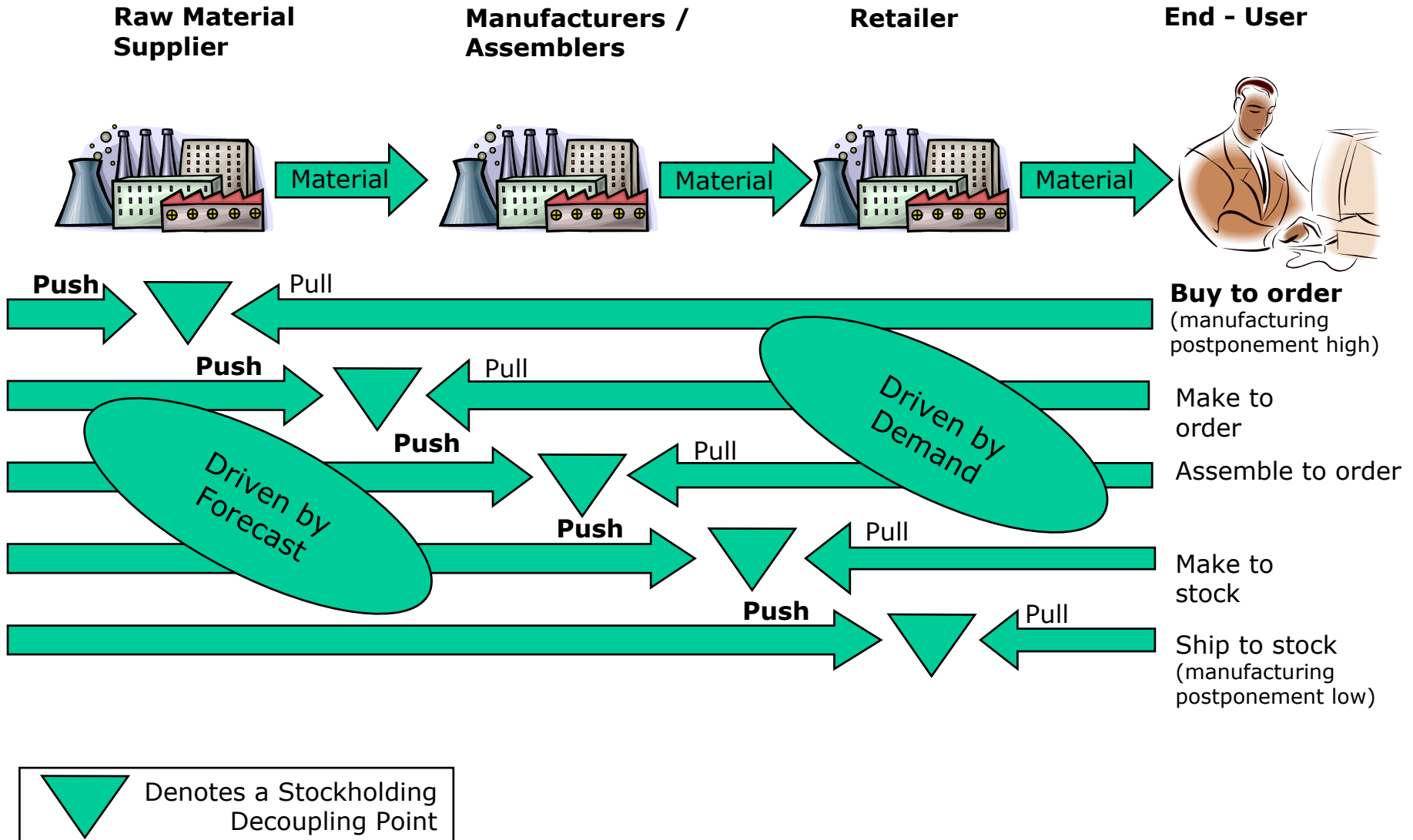
**Demand characteristics** →

# The pareto distribution

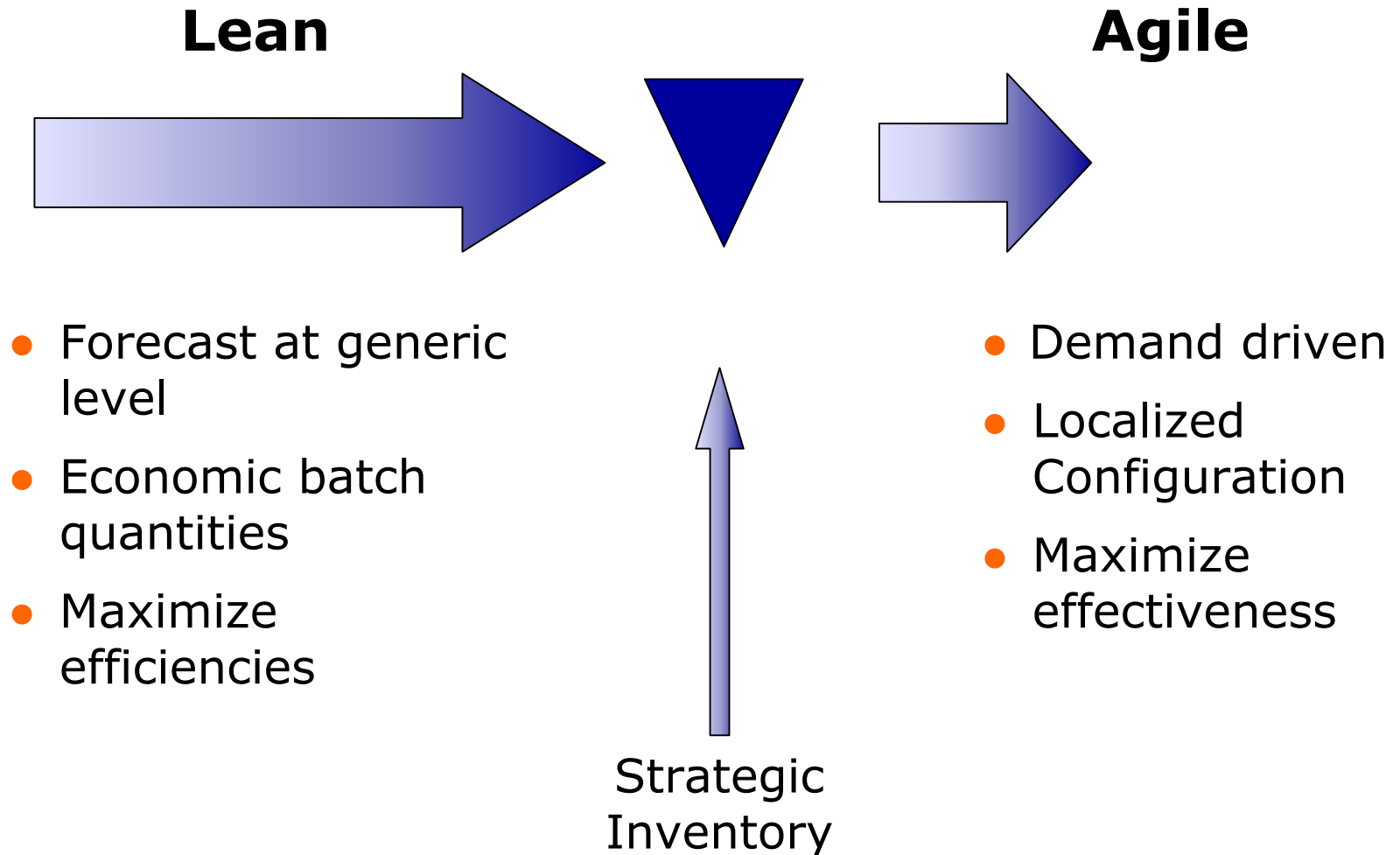




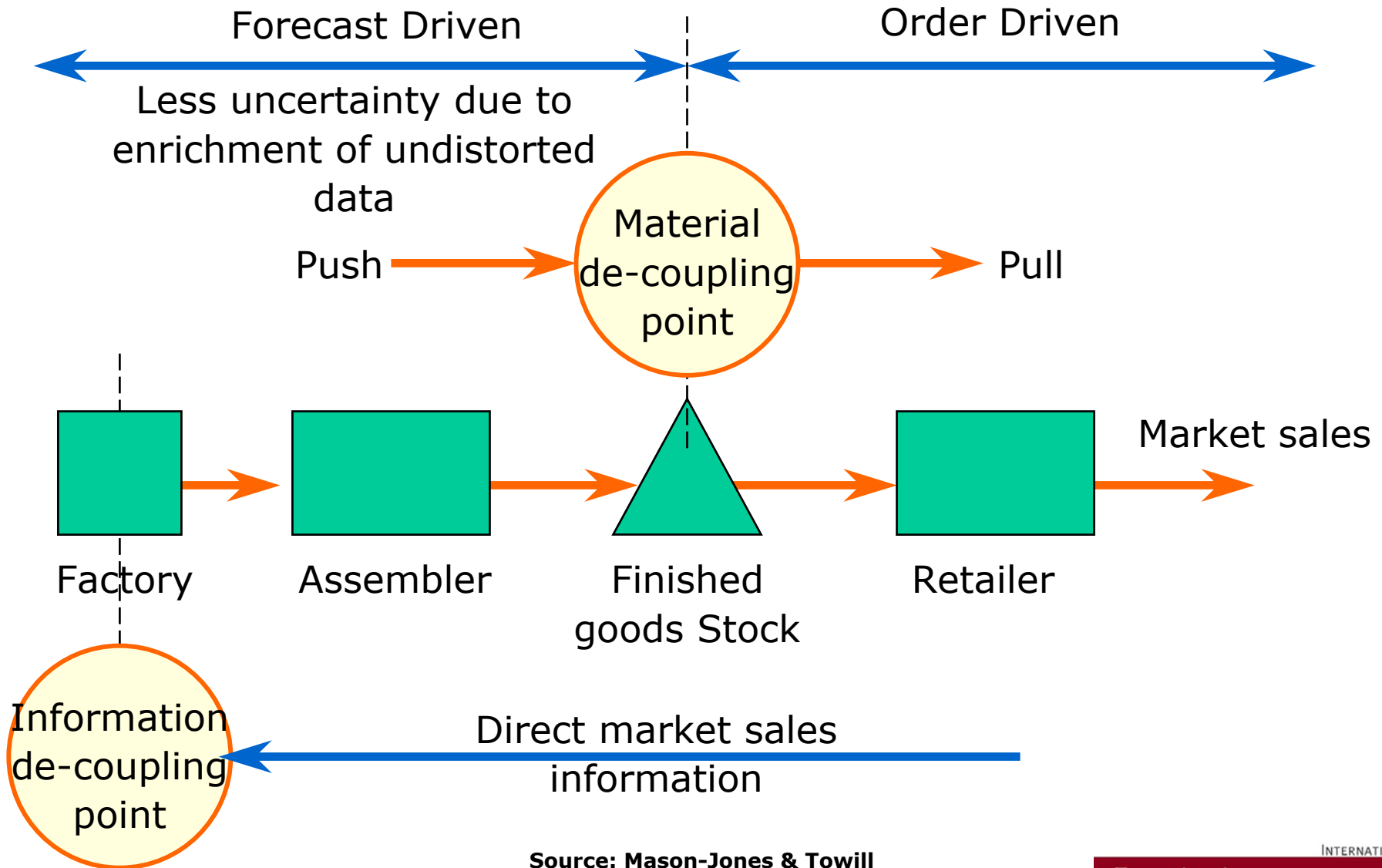
# Strategic inventory and the decoupling point



# The decoupling point

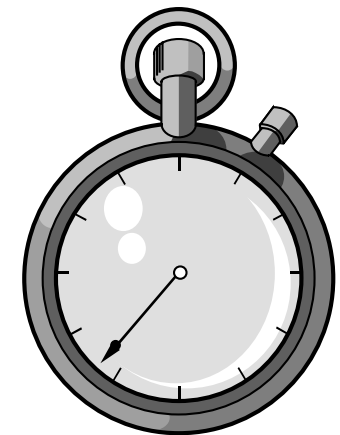
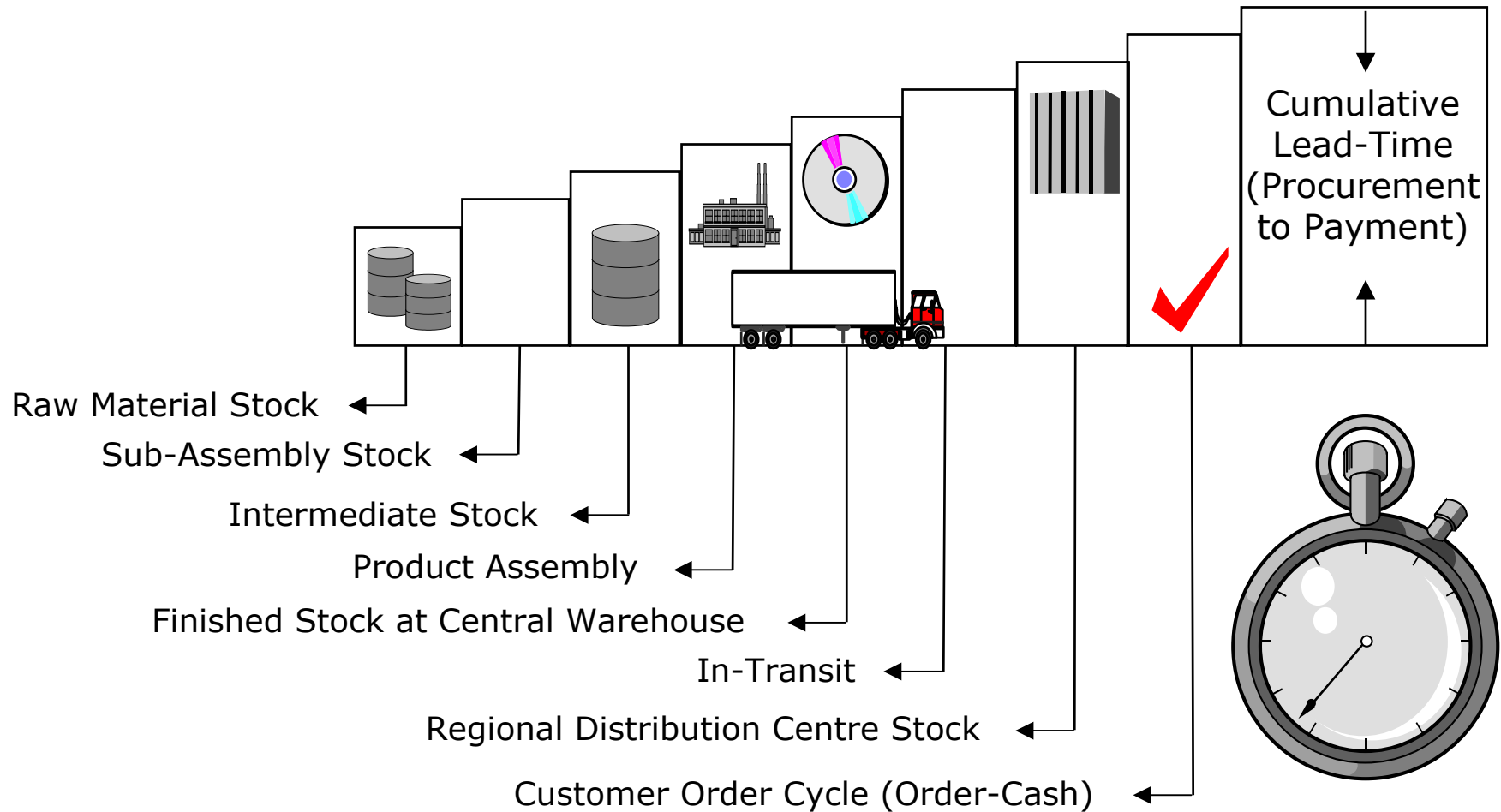


# Two decoupling points

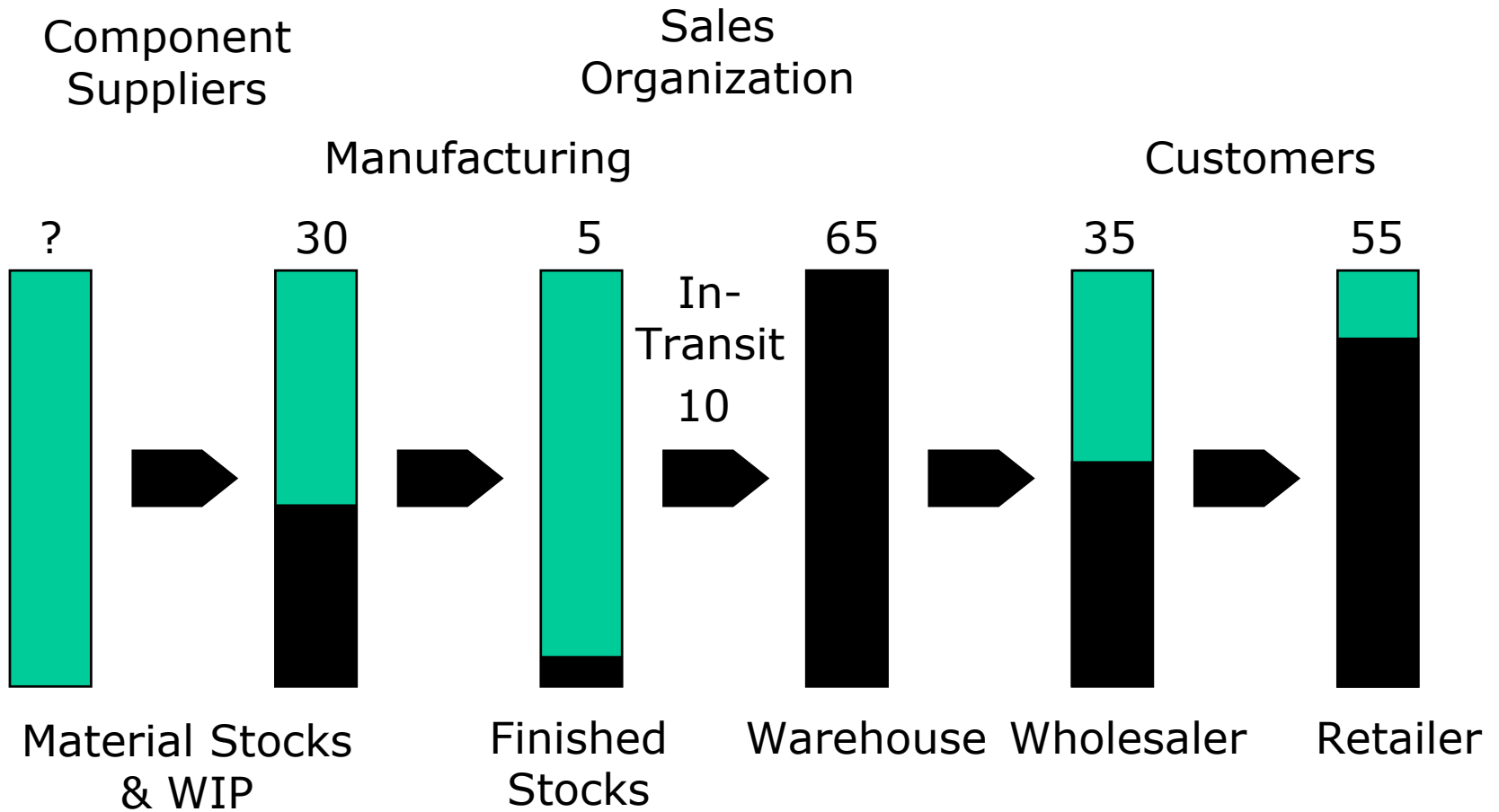


Source: Mason-Jones & Towill

# How long is the logistics pipeline?

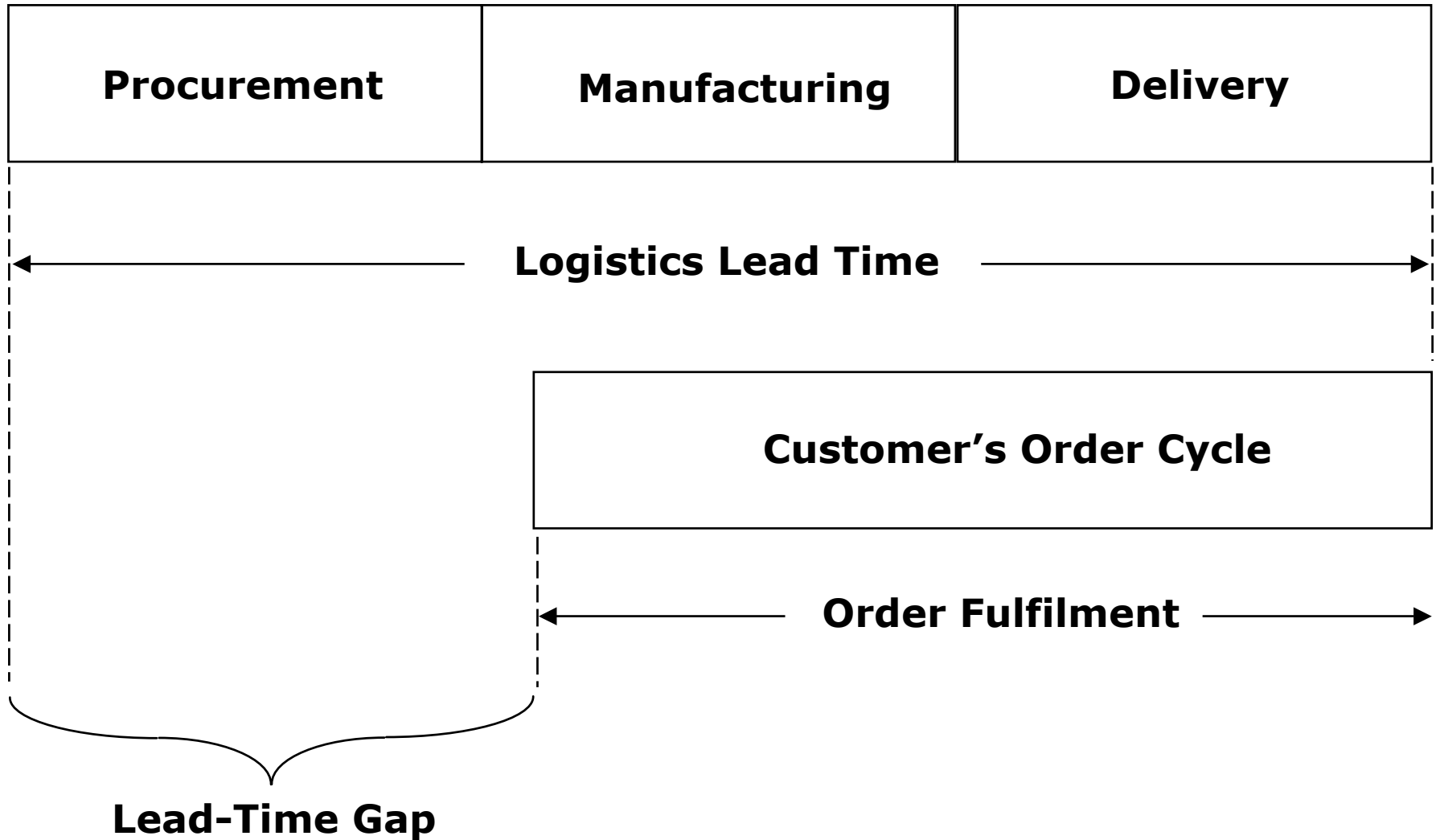


# International logistics pipeline

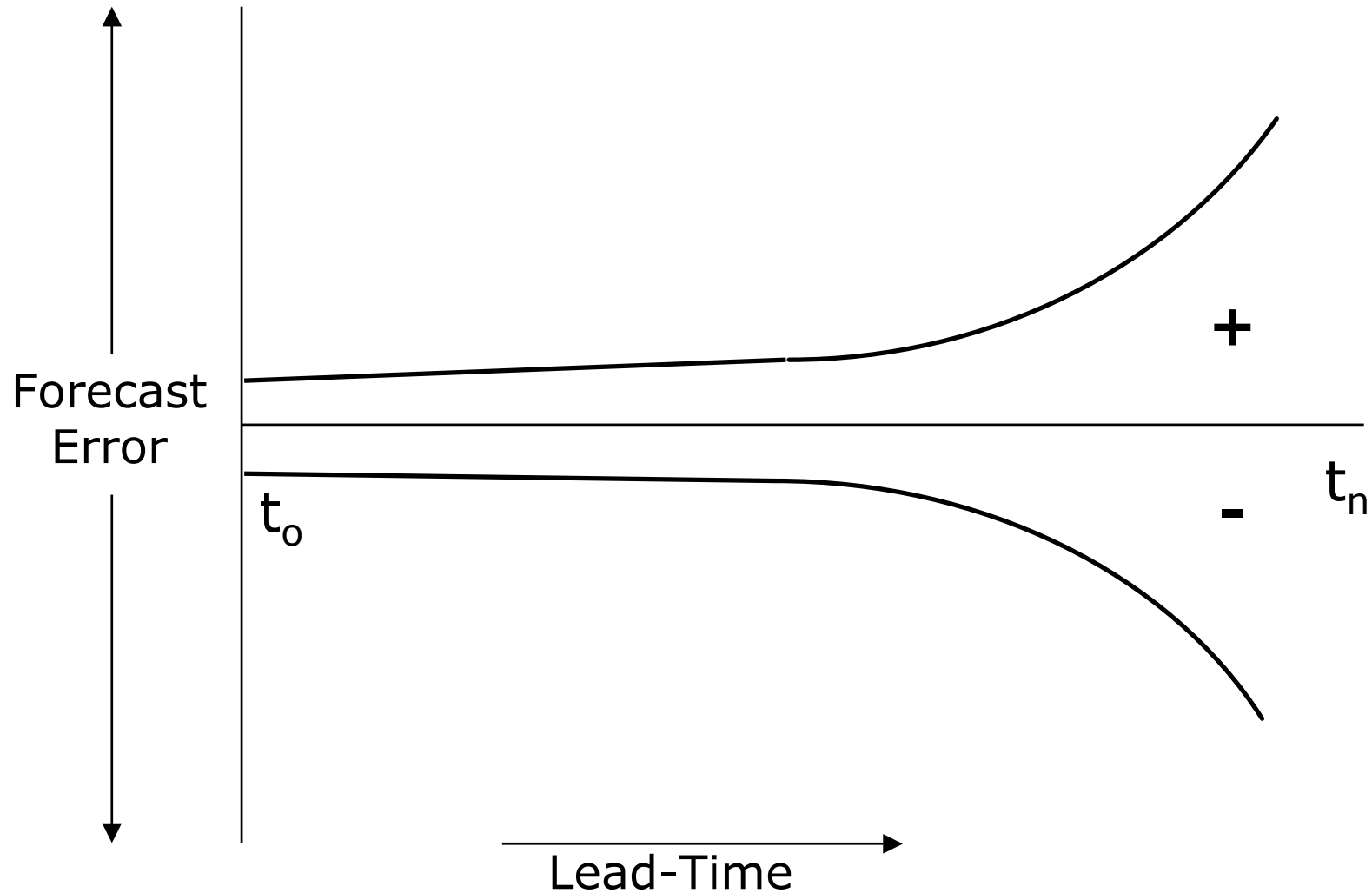


**Total Pipeline Time 200 Days**

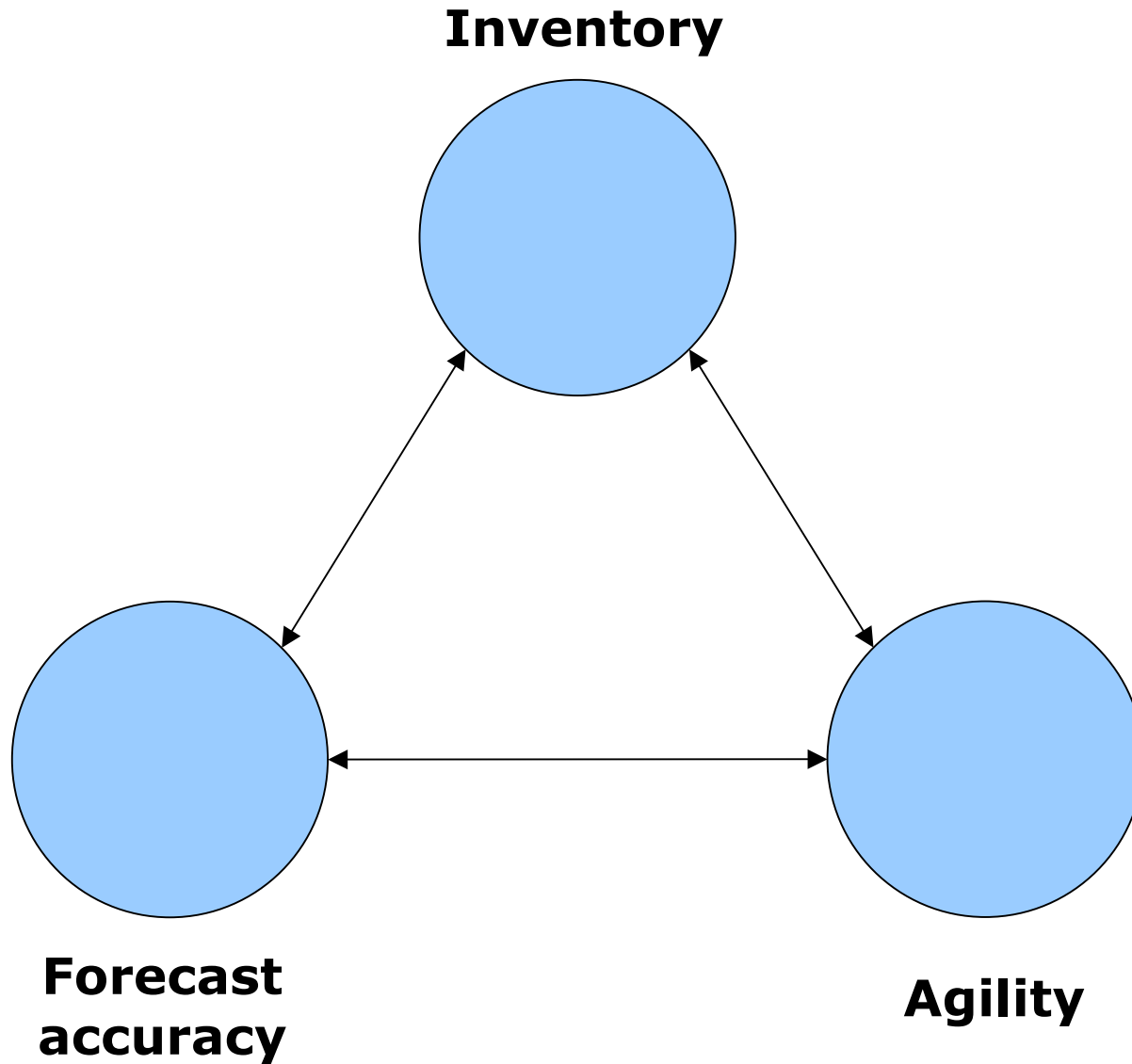
# The lead-time gap



# Forecast error and lead time

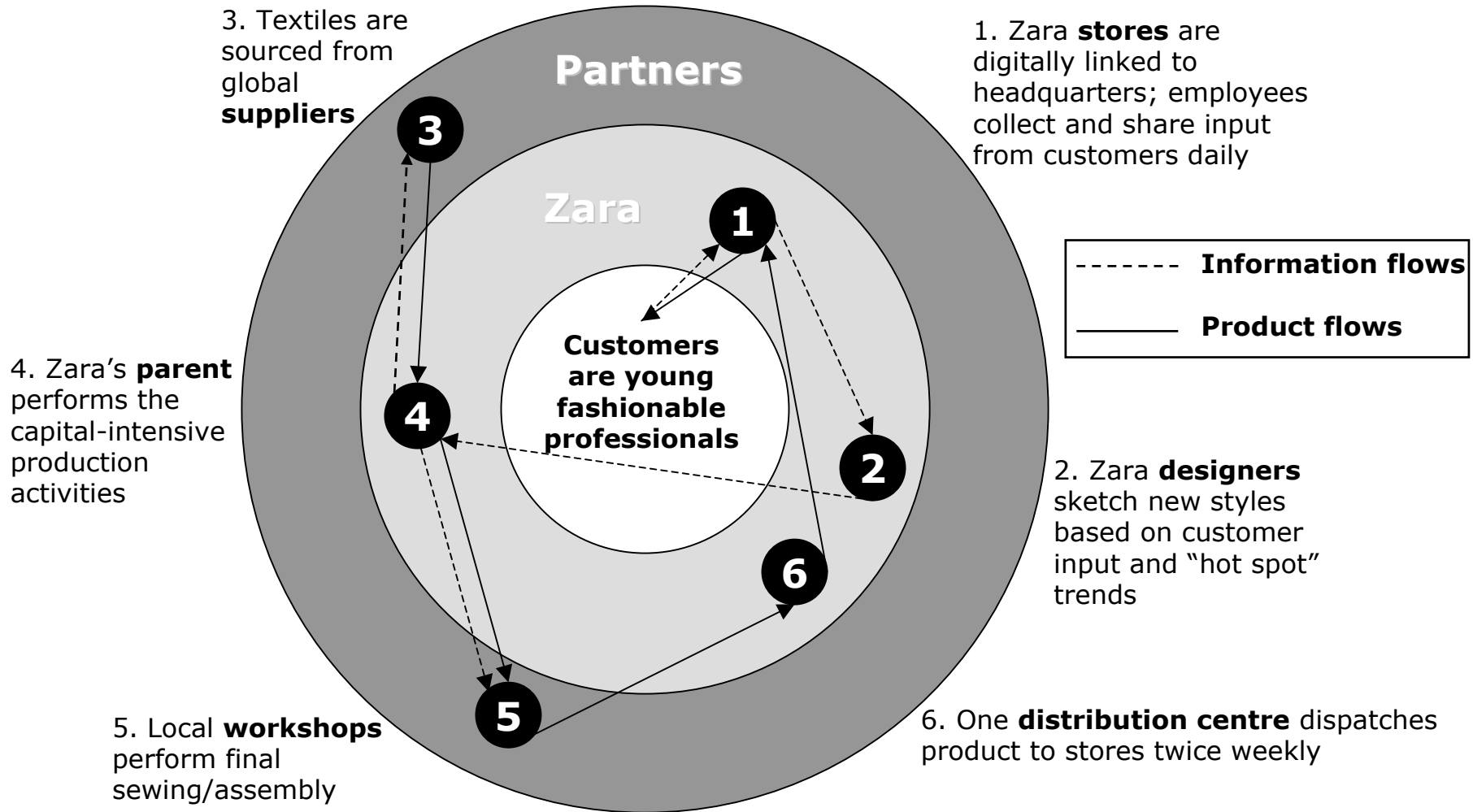


# Alternative ways to match supply and demand





# Zara's value net design brings fashion to market... fast



# Pathways to time compression

## Supply Side

- Strategic sourcing
- Synchronized production & sequencing
- Co-location

## Internal

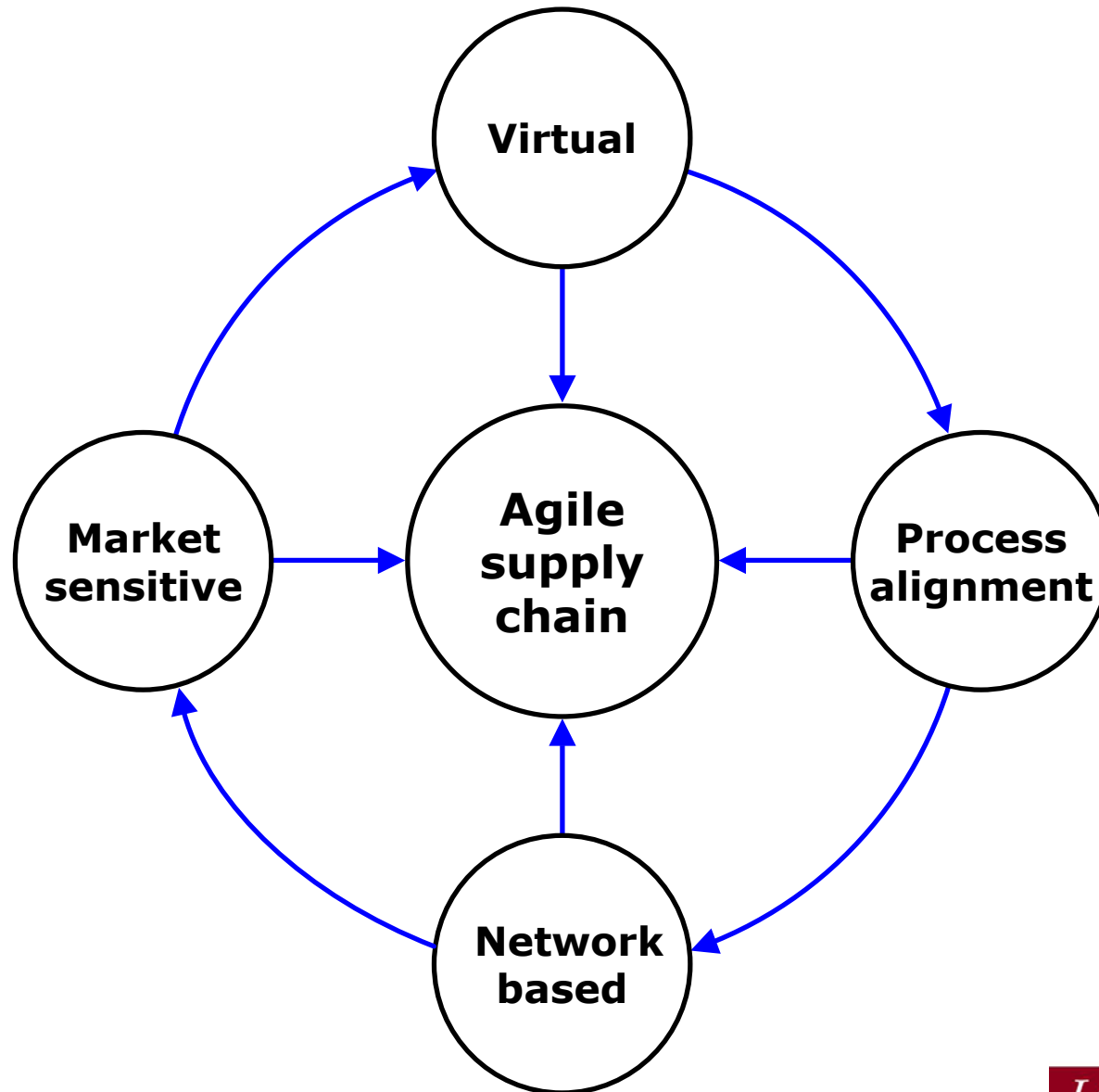
- Reduce non-value adding time
- Reduce complexity
- Postponement

## Demand Side

- Collaborative planning
- Co-managed inventory
- Visibility of real demand

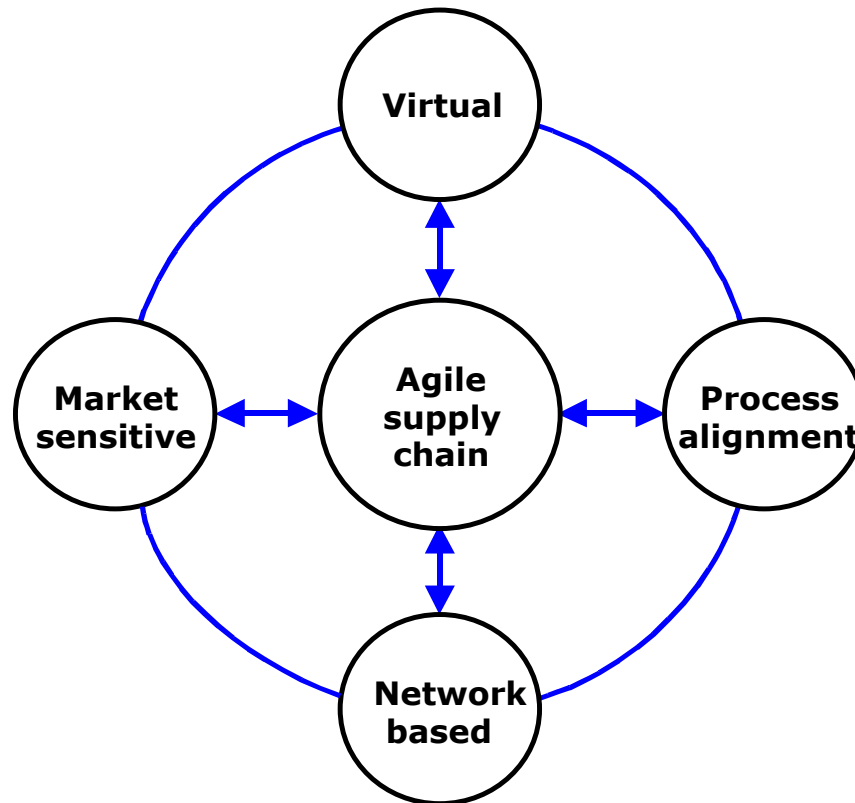
← Manage the extended enterprise →

# The agile supply chain



# The foundations for agility in a short life-cycle market

- Shared information on real demand
- Collaborative planning
- End-to-end visibility



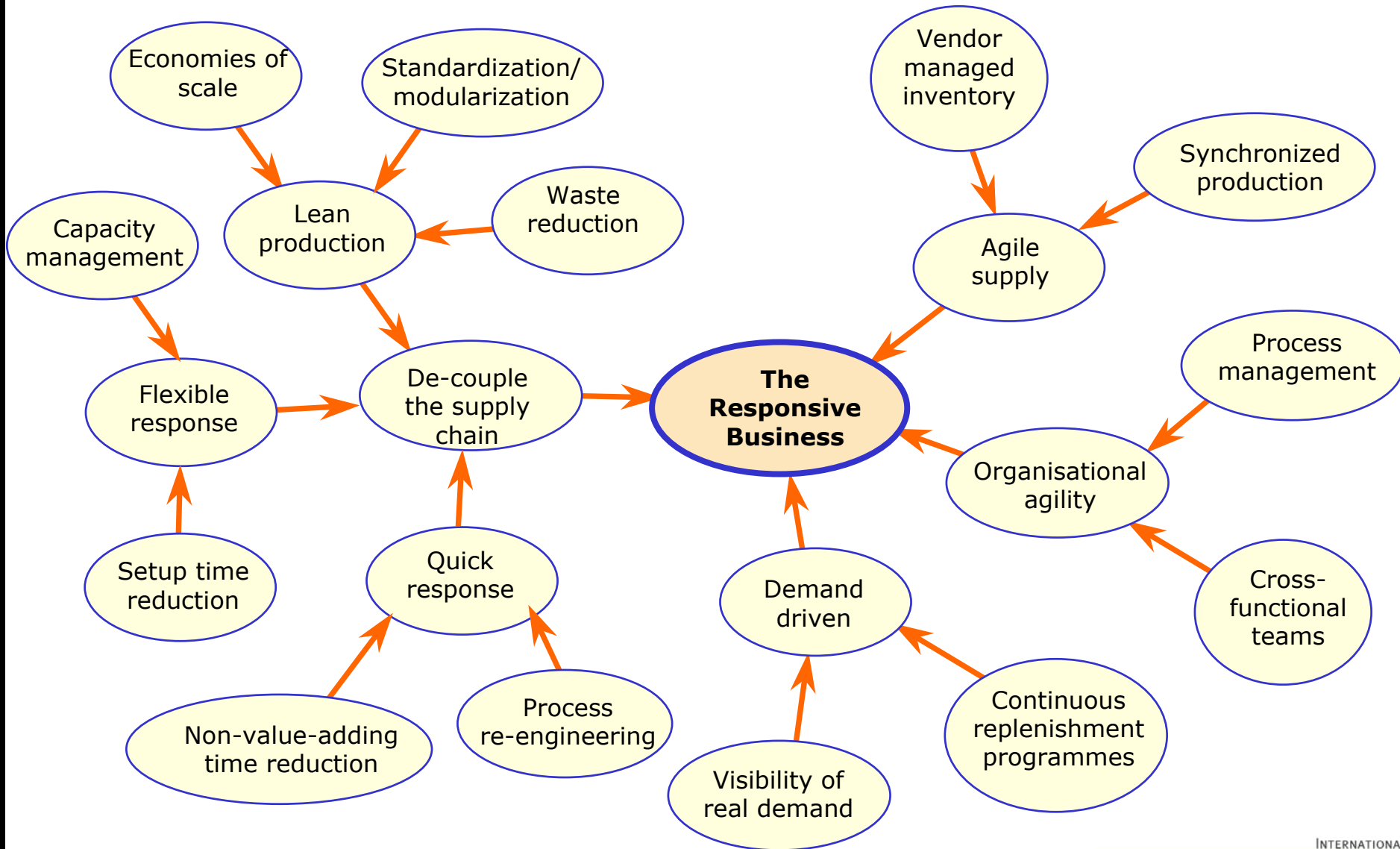
- Daily P.O.S feedback
- Capture emerging trends
- Listen to consumers

- Co-managed inventory
- Collaborative product design
- Synchronous supply

- Leverage partners' capabilities
- Focus on core competencies
- Act as network administrator

Based on the model originally developed by Harrison, Christopher & van Hoek (1999)

# Route map to the responsive business



# Seven steps to agility

- Substitute information for inventory
- Work smarter, not harder (eliminate or reduce non-value adding activities)
- Partner with suppliers to reduce in-bound lead-times
- Seek to reduce complexity (not necessarily variety)
- Postpone final configuration/assembly of products
- Manage processes not just functions
- Utilize appropriate performance metrics, e.g. end-to-end pipeline time

# Thank you

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**Análisis de Performance 3PLs**  
**Sales & Operations Planning**  
**Estrategias de Negocio**  
**Liderazgo y cultura organizacional**  
**Reverse Logistics and Returns Management**  
**Relaciones Colaborativas**  
**Agile Supply Chains**