



## Sales & Operations Planning Concepts and Practical Implications

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- Introduction to Sales & Operations Planning
- Strategy alignment and performance management
- S&OP Maturity
- Implications for S&OP
- S&OP in practice
- Pitfalls and lessons learned

# Introduction to Sales & Operations Planning

Some statements reflecting the high potential and expectations ...

“S&OP is the key to **superior business performance**”

“S&OP provides a single financial view that shows top management all information and assumptions about **revenue, margins and inventory**”

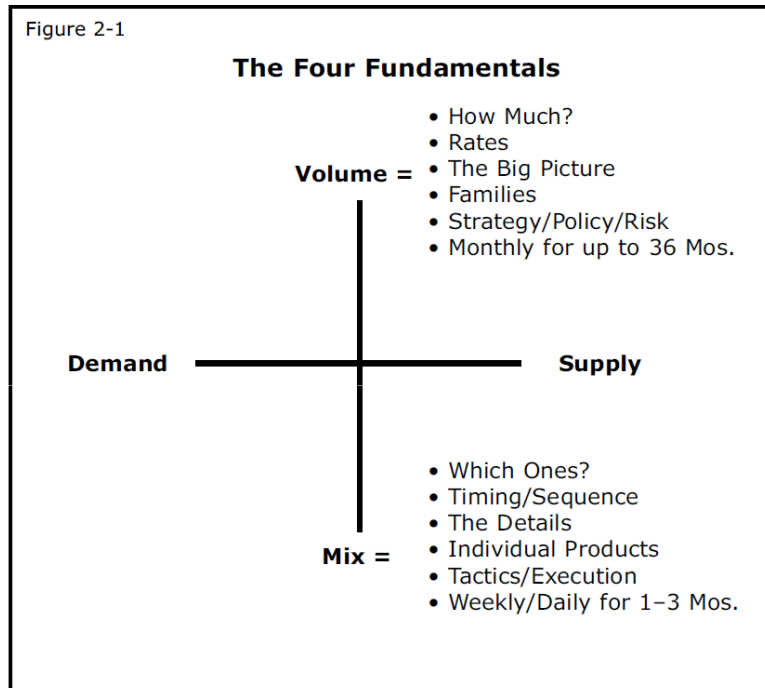
“An effective Sales & Operations Planning process supports the needs of the business on both the **strategic and tactical** levels”

“S&OP is a combination of **logistics** (demand, supply) and **financial** planning”

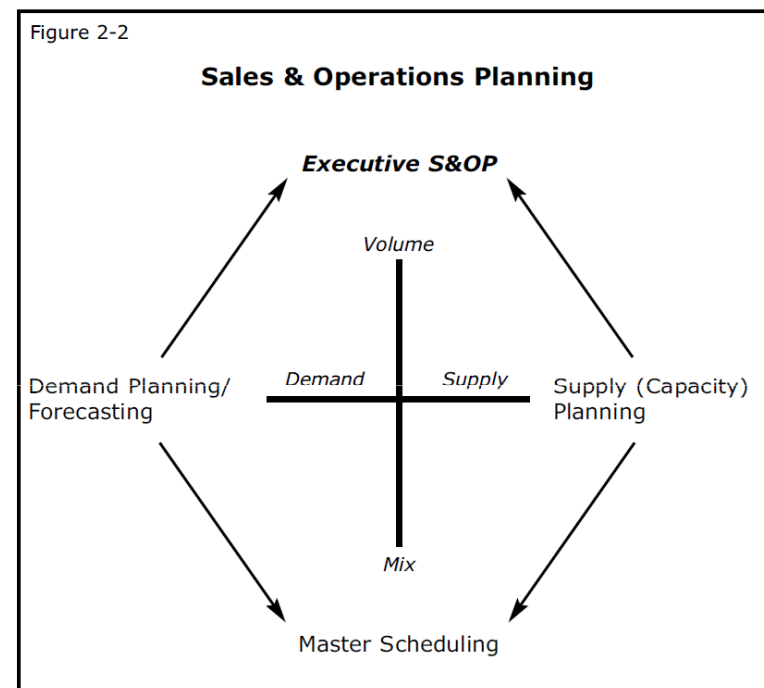
“S&OP provides an **integrated** link between **demand** and **supply management** and aligns demand and supply actions **across** the **organization** allowing the achievement of business objectives”

“S&OP is the process to translate **business strategy** into **operational decision making**”

## Fundamentals



## Planning Processes



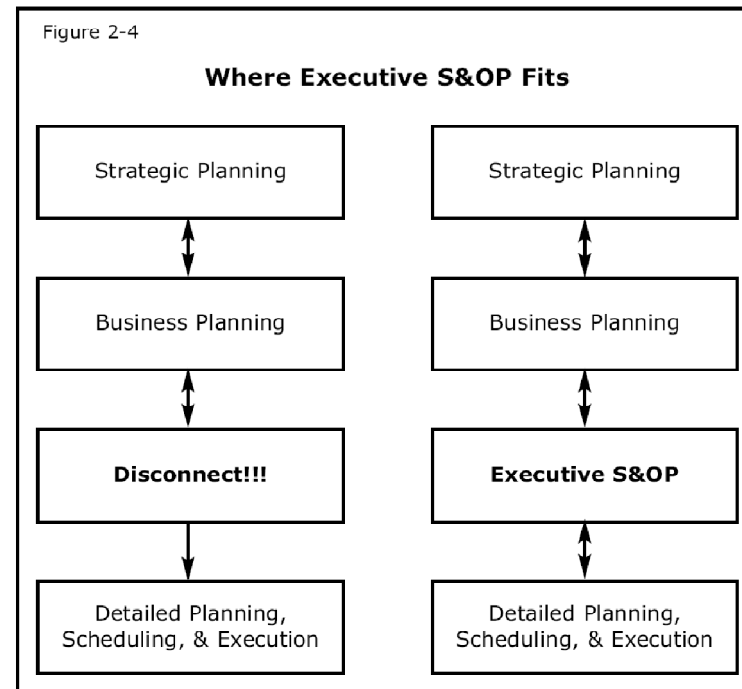
## Definitions

- **Sales and operations** planning (S&OP) is an **integrated** business management process through which the executive/leadership team **continually** achieves **focus, alignment** and **synchronization** among **all functions of the organization**.




- The S&OP plan includes an updated **sales** plan, **production** plan, **inventory** plan, **customer lead time** (backlog) plan, **new product development** plan, **strategic initiative** plan and **resulting financial** plan.


## Positioning



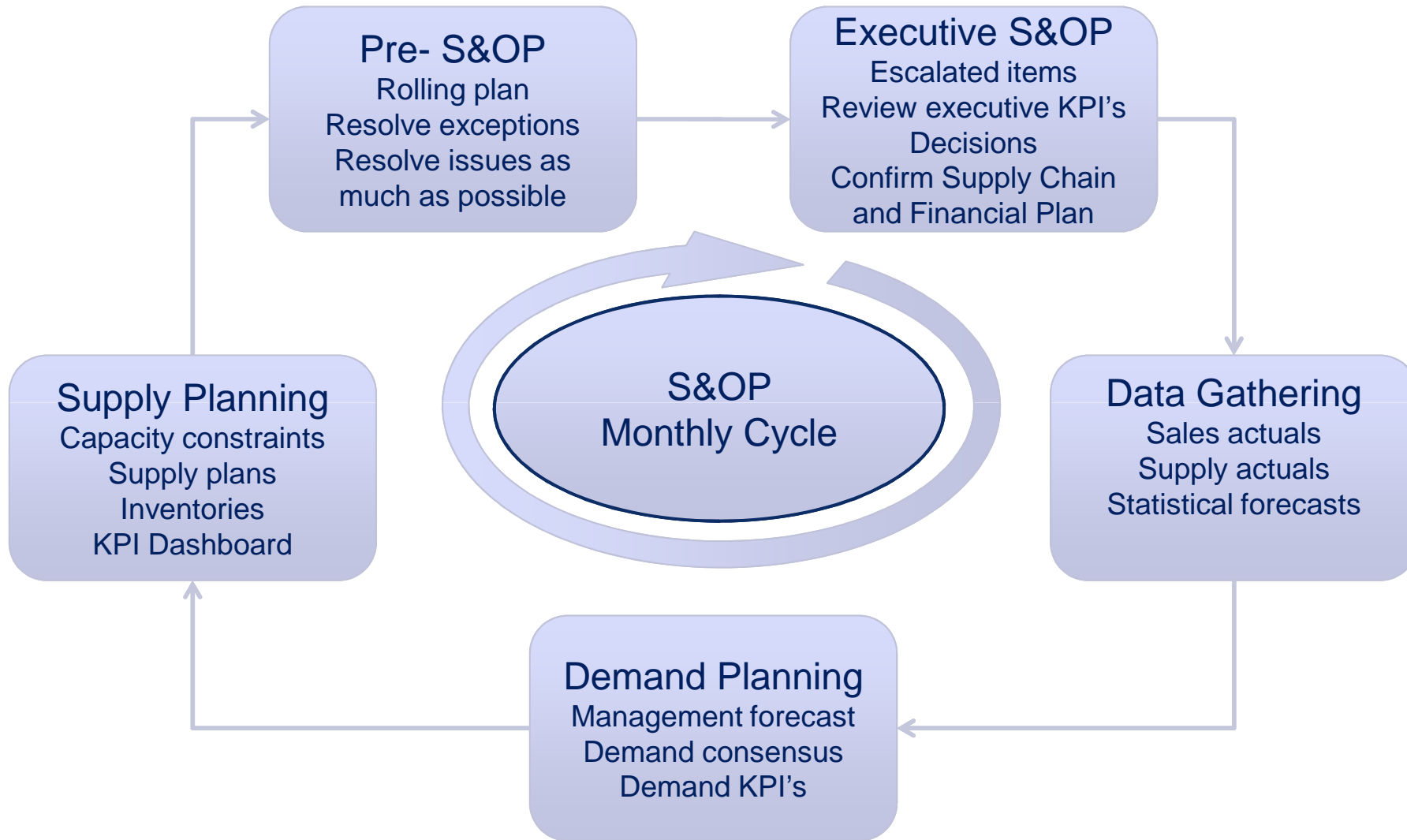
- Is an **executive** decision-making process
- Balances **demand** and **supply**
- Deals with volume in both **units** and **\$\$\$**
- Ties **operational** plans to **financial** plans: one set of numbers
- Is the forum for setting relevant **strategy** and **policy**
- S&OP aligns **volume** (how much) and **mix** (what)
- S&OP provides **continuous** alignment between sales and operations
- S&OP provides **continuous** iterations between strategic planning and operational planning



*“Most companies spend more than 95% of their time on mix issues.”*



*“Many companies set their volumes no more than once per year.”*





### Hard benefits

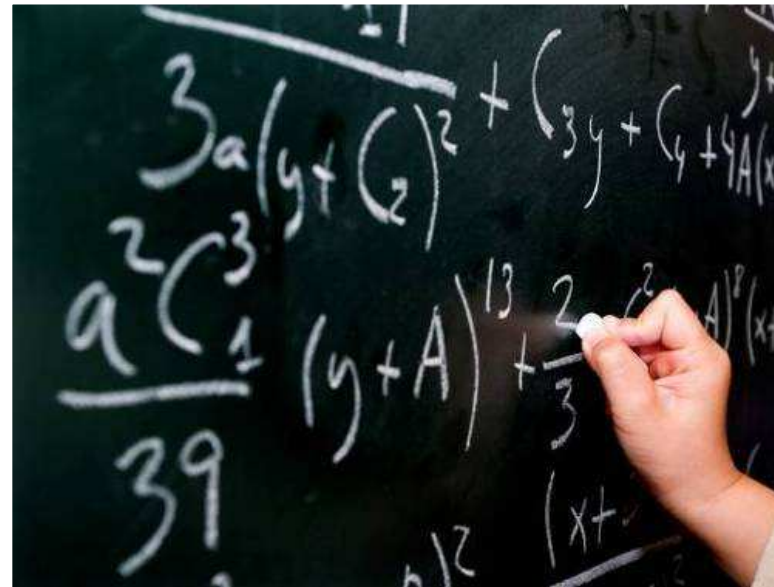
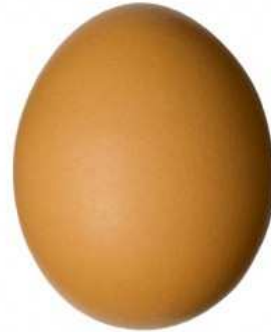
- Higher customer service
- Lower finished goods inventories
- Shorter customer order backlogs, hence shorter lead times
- More stable production rates, hence higher productivity
- Shorter supplier lead times
- Reduced obsolescence
- Reduced premium freight costs

### Soft benefits

- Enhanced teamwork in the executive and mid-management groups
- Structured communications
- Better decisions with less effort
- One set of numbers, units and dollars, with which to run the business
- A tight linkage between strategic plans and day-to-day activities
- A "window into the future" and thus enhanced decision making

Benefits	Percent change	
	Range	Median
On time delivery	+ 10-40%	25%
Inventory levels	- 12-70%	41%
Manufacturing downtime	- 20-50%	35%
Plant efficiency	+ 2-33%	17%
Transportation costs	- 5-30%	17%

# Very promising, but how difficult is S&OP?



## Basics

### Objective function

$$\text{Max } f(x)$$

### Constraints

$$\text{Subject to } Ax \leq b$$

### Decision variables

$$x \in \{0, 1\}^n$$

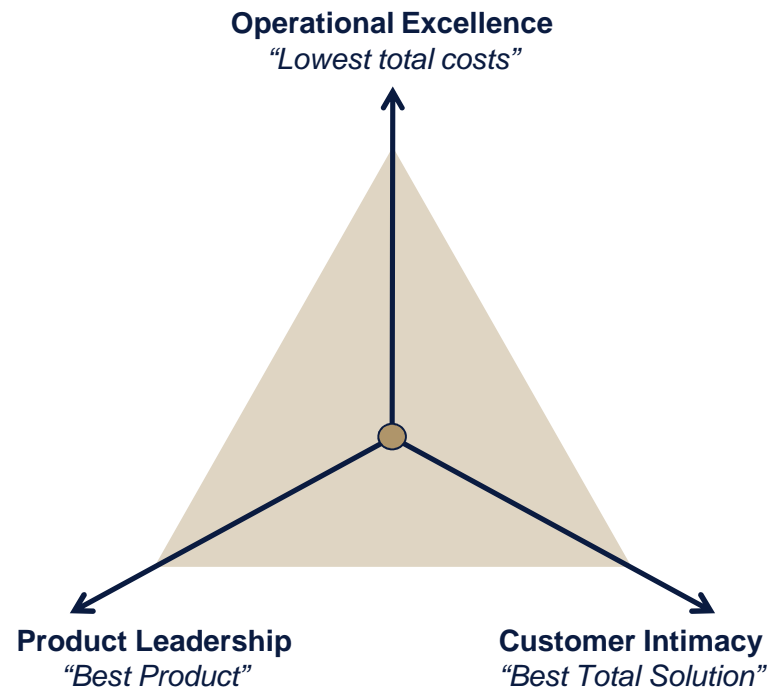
## Considerations

- Logistics versus financial goals
- Cost, revenue, margin, delivery performance
- Metrics and targets
  
- Lead time, inventory levels, capacity, demand
  
- Level of aggregation, horizon
- Volumes, inventory levels

## Strategy Alignment

Supported by value tree analysis and performance management

## Treacy and Wiersema



## Value disciplines

- Operational excellence (lowest total costs)
- Product leadership (best product, product innovation)
- Customer intimacy (best total solution, close to the customer)

## Questions

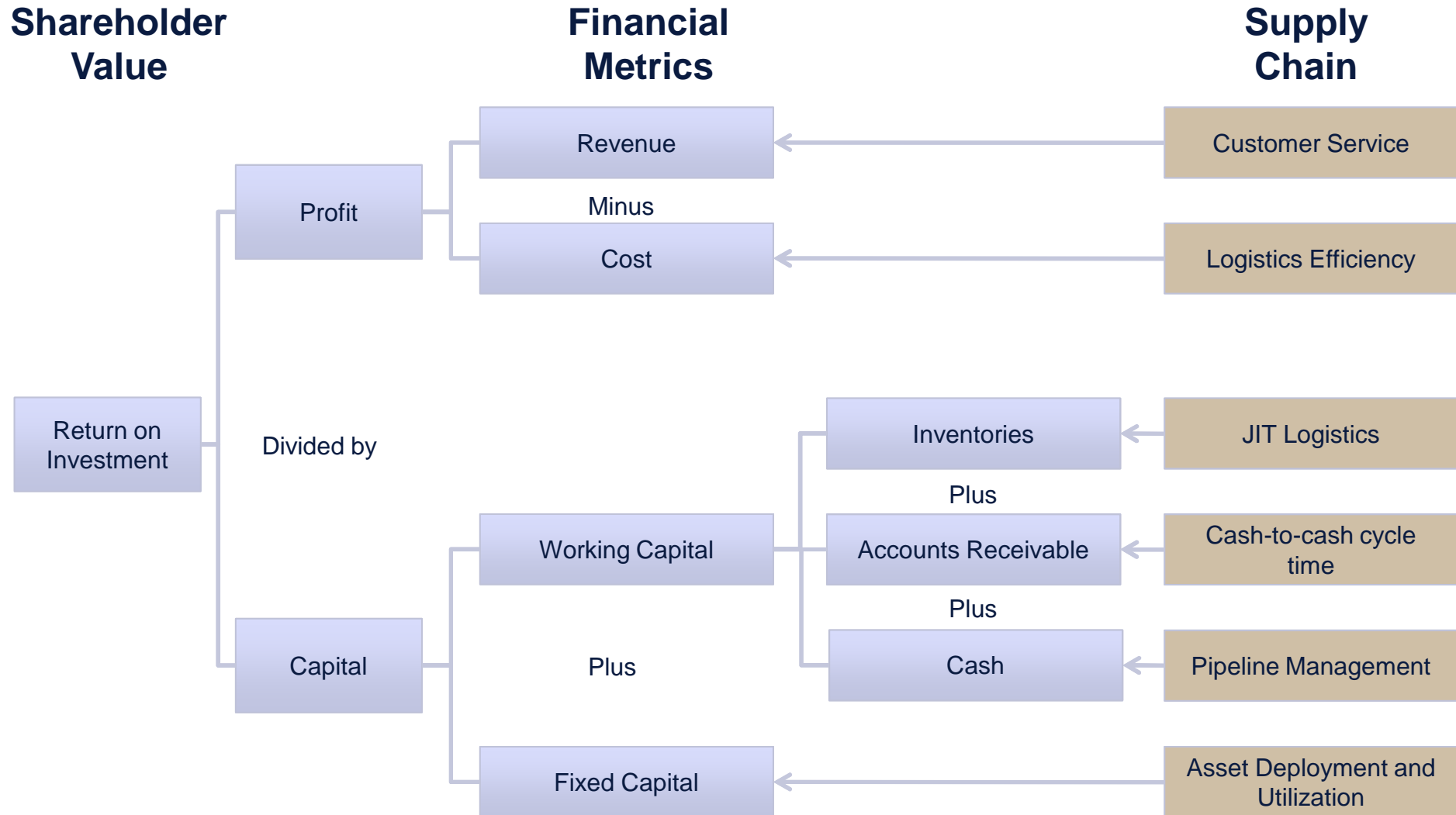
- Where is your company nowadays?
- Where should your company be (vision / strategy)?
- What about choices for
  - the whole company
  - different markets / segments

	Attribute	Description, Metric
Customer	Reliability	Consistently getting the orders right, product meets quality requirements → <i>Perfect Order Fulfillment</i>
	Responsiveness	The consistent speed of providing products/services to customers → <i>Order Fulfillment Cycle Time</i>
	Agility	The ability to respond to changes in the market (external influences) → <i>Supply Chain Adaptability / Flexibility</i>
Internal	Cost	The cost associated with managing and operating the supply chain → <i>SCM Cost; Cost of Goods Sold</i>
	Assets	The effectiveness in managing the supply chain's assets in support of fulfillment → <i>Cash to cash cycle time</i> → <i>Return on working capital</i> → <i>Return on fixed assets</i>

# Competitive Requirements

Competitive Requirements		For each channel prioritize strategic performance using 1x Superior, 2x Advantage and 2x Parity		
		Operational Excellence	Customer Intimacy	Product Leadership
Customer	Reliability	Advantage	Advantage	<b>Superior</b>
	Responsiveness	Parity	Advantage	Advantage
	Agility	Parity	<b>Superior</b>	Advantage
Internal	Cost	<b>Superior</b>	Parity	Parity
	Asset Management Efficiency	Advantage	Parity	Parity





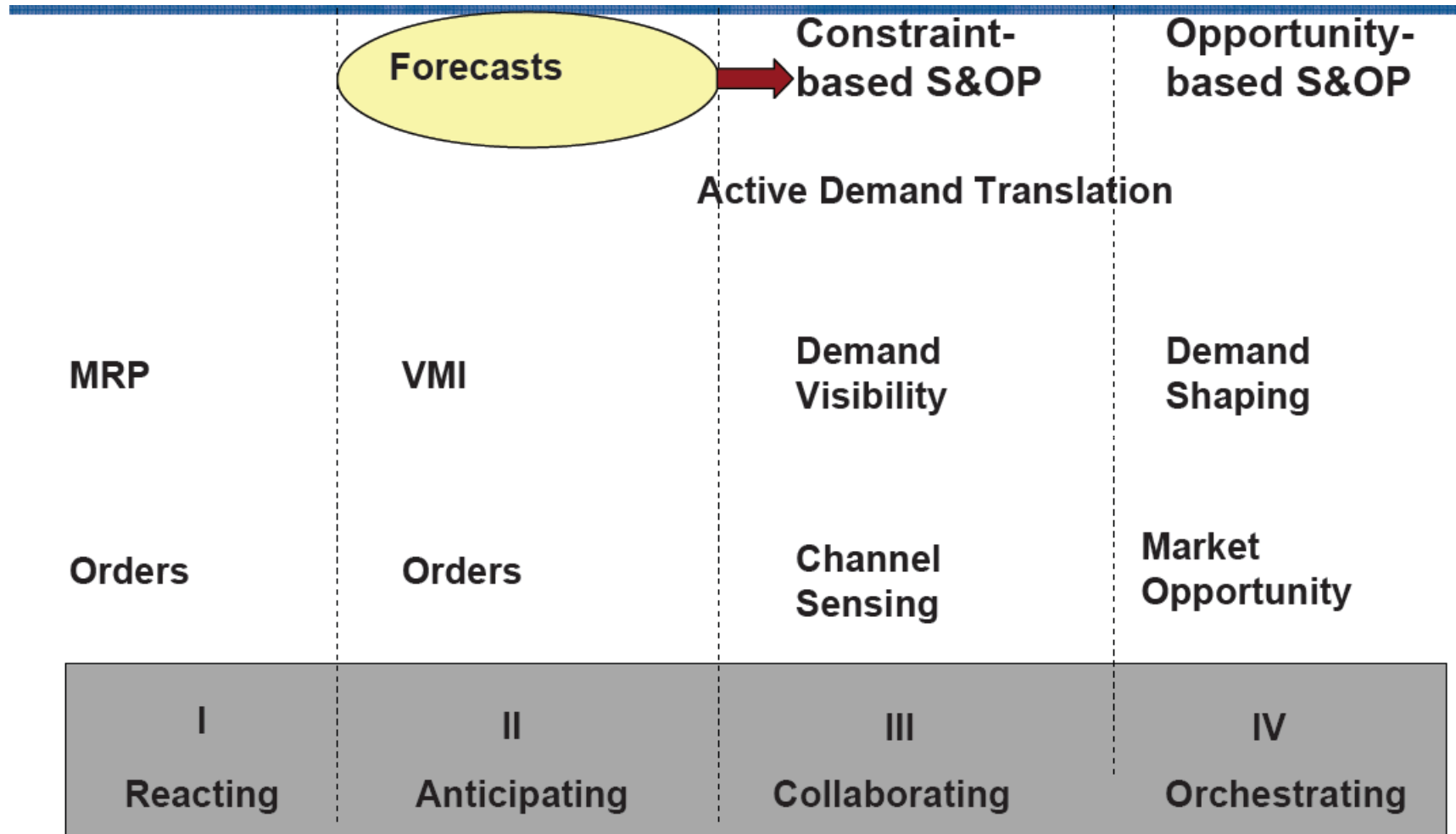
## S&OP Maturity

# Gartner S&OP Maturity Model

	27%	40%	19%	14%
Stage	I Reacting	II Anticipating	III Collaborating	IV Orchestrating
Balance: S&OP				
Goal	Development of an operational plan	Demand and supply matching	Profitability	Demand sensing, and conscious tradeoffs for demand shaping to drive an optimized demand-response
Ownership	S = Sales OP = Factory capabilities	S = Sales and Marketing OP = Production plans and factory capabilities	S = Go to Market Plans OP = Design of demand driven plan, make & deliver processes	S = Go to Market Strategies and Solutions OP = Translation of demand into plan, make, deliver, source and service strategies, with connection to execution
Metrics	Order fill rate, asset utilization, inventory levels	Order fill rate, forecast error, inventory turns, functional costs	Demand error, customer service, working capital, total costs	Demand risk, customer service, cash flow, market share and profit

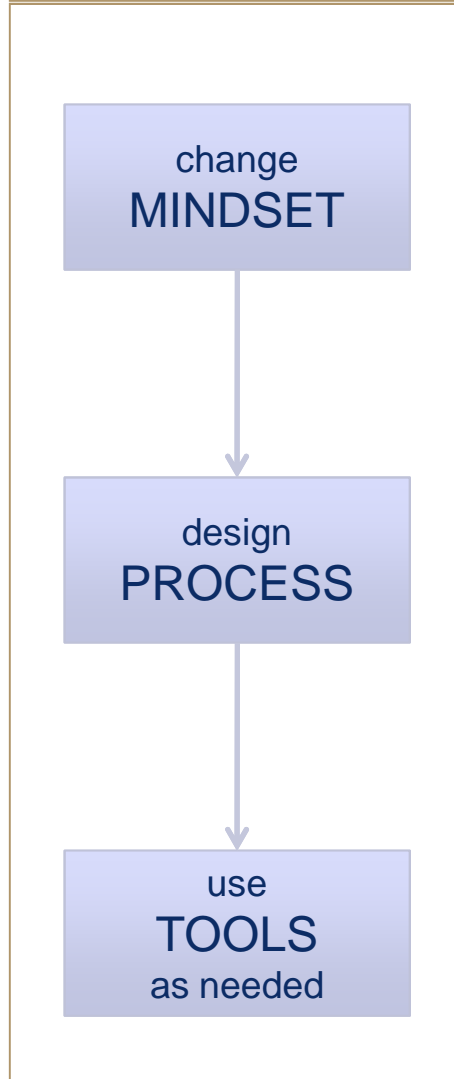
67% of companies cannot get beyond stage 2





## Implications for S&OP

## Proper approach



## Not rocket science, but:

### Mindset

- It needs a shared vision
- It requires alignment between business strategy and supply chain strategy and between logistics and finance: one common goal

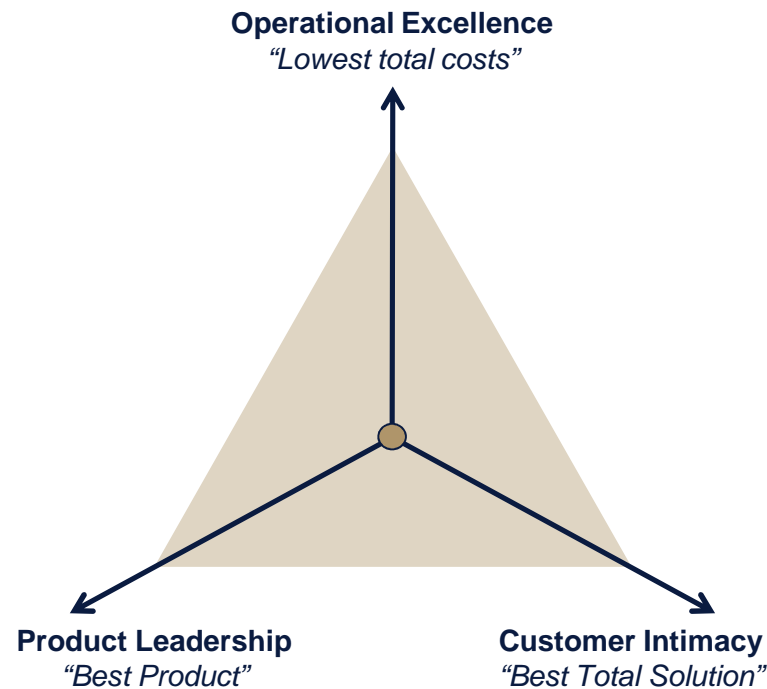
### Process

- It should be addressed at the proper level of aggregation
- KPI's should be cross functional, meaningful and derived from business objectives
- The design of the right S&OP model requires understanding of current maturity and a realistic ambition
- Value tree analysis can assist in building the case for S&OP and explains the power of performance measurement

### Tools

- Forecasting, planning, optimization and metrics analysis enable the results

## Value disciplines



## S&OP Focus

- Customer Intimacy and Product Leadership: Operational S&OP
- Operational Excellence: Strategic / tactical S&OP

## S&OP in Practice





## Pitfalls and lessons learned

The real issue ...

Is not understanding S&OP. That's easy. The hard part is . . .

- Organizational Behavior Change
- Changing the way we do our jobs

**“The hard stuff is the soft stuff”**

60% Change management, 30% process, 10% tools

- Clarity of goal
- Alignment to strategy
- Reward systems
- What is a good decision?
- Governance
- The Role of the Forecast
- Connection of planning to execution

### The 5 most stupid mistakes in S&OP

1. One size fits all planning
  - Different products / channels → different forecast and planning methods
  
2. Too much detail in planning...
  - Forecast less and get better results!
  
3. There is only one S&OP...
  - Use scenario planning
  
4. Use ERP systems for planning...
  - ERP systems must be enhance by best-of-breed planning tools
  
5. A supply chain that is not designed well, can not be managed!
  - The supply chain must be designed in line with business needs and goals

### S&OP keeps these four characters in check

There were four people named **Everybody**, **Somebody**, **Anybody** and **Nobody**. There was an important job to be done and **Everybody** was asked to do it. **Everybody** was sure **Somebody** would do it. **Anybody** could have done it, but **Nobody** did it. **Somebody** got angry about that, because it was **Everybody's** job. **Everybody** knew **Anybody** could do it but **Nobody** thought that **Nobody** would do it. It ended up that **Everybody** blamed **Somebody** when **Nobody** did what **Anybody** could have done.