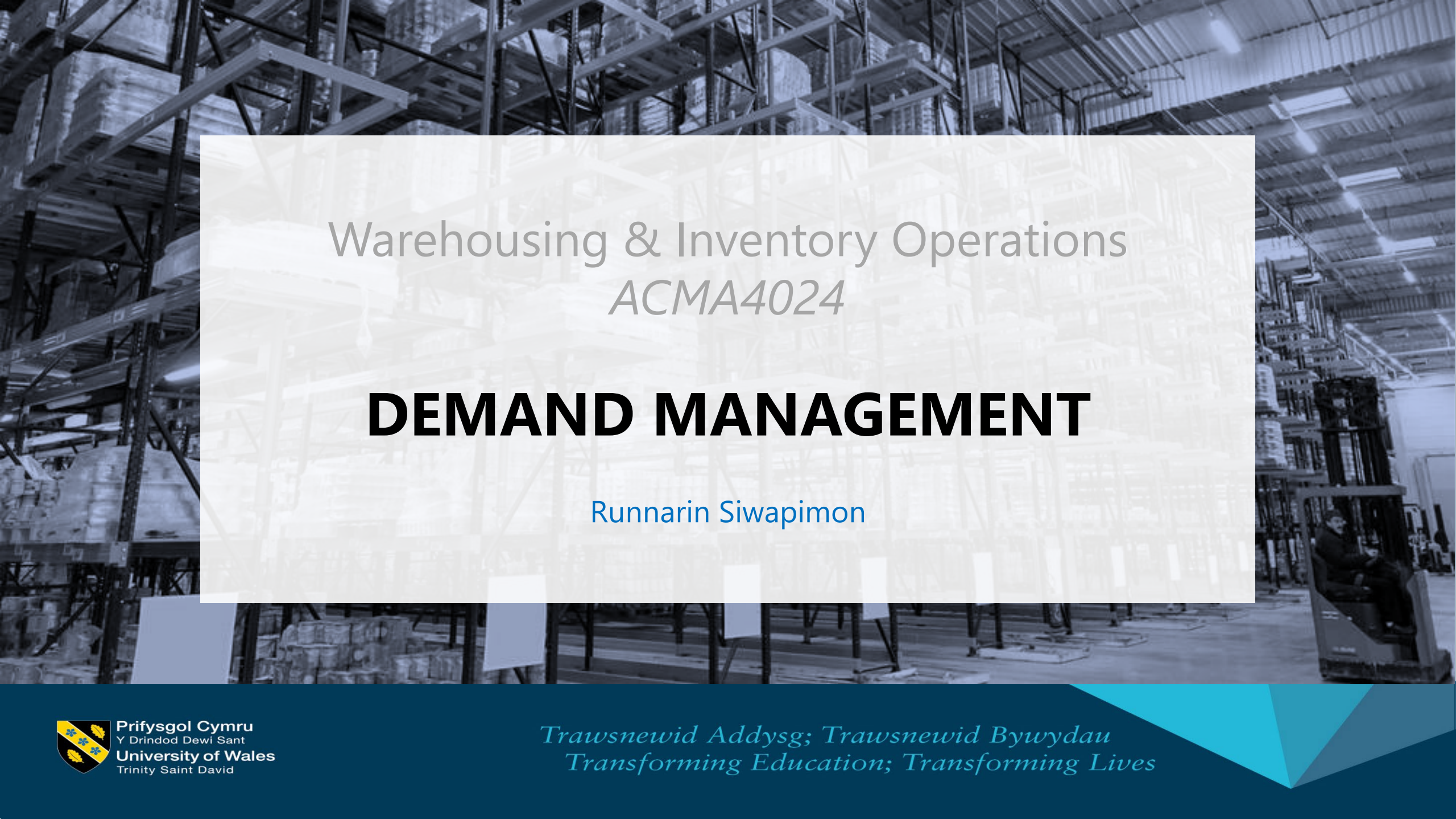




Warehousing & Inventory Operations *ACMA4024*

DEMAND MANAGEMENT

Runnarin Siwapimon

WHAT IS DEMAND?

What your customer wants, needs and expects from your products & services

It represents the future sales orders expected to be received.

Demand management is all focus about managing material flow to fulfil customer's demand through supply and operation plan



Types of demand



Independent demand

From external factors
outside organization
e.g. sales forecast,
customer's orders



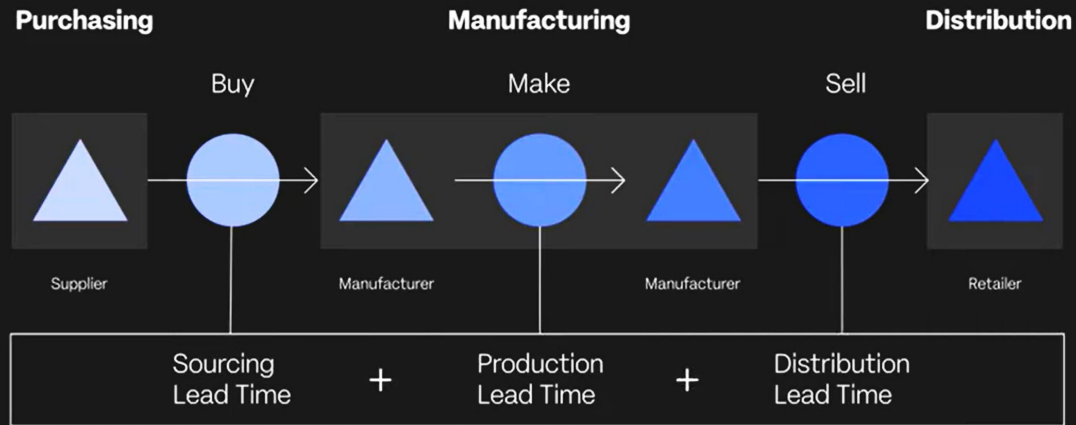
Dependent demand

Driven by signals of
independent demand
e.g. demand from BOM
requirements

Aligning supply and demand

Supply Chain Activity Lead Time

Customer Expected Lead Time



Demand planning is done to ensure the right amount of materials purchased and available to make and deliver the products in time to meet customer service levels.

1 mth

Customer Expected Lead Time

-

3 mths

Supply Chain Activity Lead Time

=

2 mths

Demand Planning

77%

of participants expect demand planning to become increasingly important in the future.

2/3rd

of the participants confirm that seasonality and volatility are factors they have to take into account.

1/3rd

of the participants say they are satisfied with the accuracy of their plan.

42%

do not match demand planning maturity and business complexity.

19%

only confirm they are able to use alternative planning scenarios.

43%

of participating companies confirm that Excel is their primary planning tool.

55%

of companies do not receive market information in advance.

57%

of participating companies do not plan collaboratively.

61%

say they receive support from their top management.

42%

of participating companies do not use any KPI's.

DEMAND

SUPPLY

PROCESS

ORGANIZATION

KPI's

Results are based on a survey with 168 companies across Europe

BearingPoint.



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

*Trawsnewid Addysg; Trawsnewid Bywydau
Transforming Education; Transforming Lives*



Forecasting

Analyse to understand current demand & predict the future sales



Planning

Consensus action plans for demand fulfilment according to the forecast



Influencing

influence demand behaviour for ordering the products



Prioritizing

Ongoing manage & optimize demand across the channels

Core components of demand management

DEMAND MANAGEMENT IS;

Efforts & procedures that business uses to balance between supply & demand by predicting customer's demand and shaping operations to meet the demand effectively.



Forecasting

Analyse to understand
current demand & predict the
future sales

Demand Forecasting

In order to keep a business running we have
to make some educated guesses about our
demand. Forecast is a starting point for
inventory management & business
processes

Demand Forecasting

OBJECTIVE OF FORECASTING

Sales forecast in volume (which customers will want which products, how many and when)

Quantitative Forecast

Using historical statistic & analyse the trends & cycles to predict the future trends

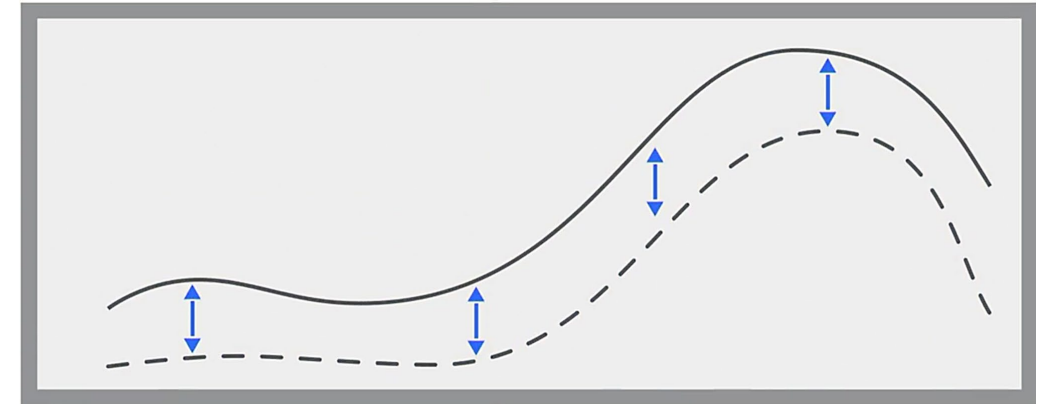


Qualitative Forecast

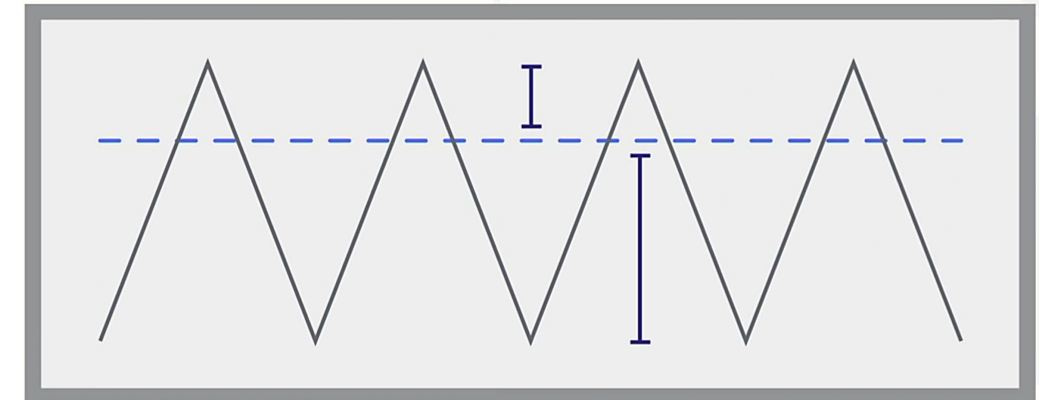
Using knowledge of the product, customers and the marketplace to estimate the trend



VARIANCE: The difference between forecast vs actual



BIAS: The forecast errors between forecast vs actual



Why is a good sales volume forecast important?

Forecast is just an estimate, it will always be wrong. The key is to estimate as near perfect as possible...

To fulfill the needs of consumers, products have to be **delivered to our customers** (on time and in ordered quantities)

To prepare the production, the sales estimation is used to buy **raw materials and packaging material**

The goods need to be first **purchased or produced**. Good Sales Forecast helps to have the correct quantity available on stock.

Mid term **production and logistics capacities** are based on the Sales Forecast



The Vicious circle

An inaccuracy in the forecast...
... can have big consequences!

Under-Forecast

Sales Forecast is too low

- Out of Stock situation (OoS)
- Reduced Service Level, unsatisfied customer

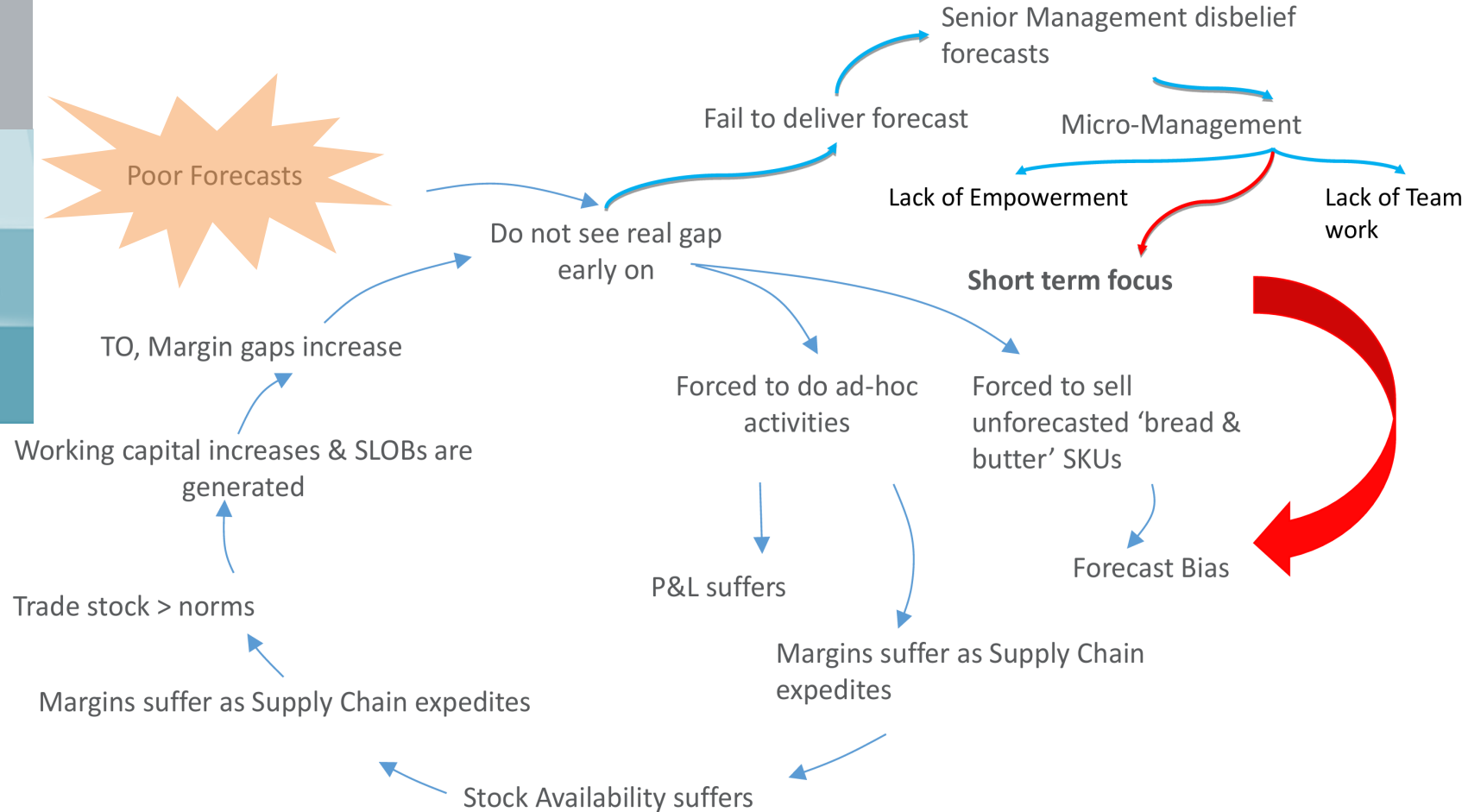
Over-Forecast

Sales Forecast is too high

- Overstocks dramatically increase costs (warehouse costs, Net Working Capital, destruction)
- Block of production capacity and space in warehouse for needed goods

Sales Forecast has Wrong Timing

- Forecast was too late: low Service Level, overstock
- Forecast was too early: high stock costs, wasted production capacities, risk of deliveries of goods to other clients





Planning

Consensus action plans for demand fulfilment according to the forecast

Demand Planning

Demand Planning is a core supply chain activity to balance demand and supply in business. To achieve this, cross-functional departments need to closely collaborate and align functional action plans according to the consensus.

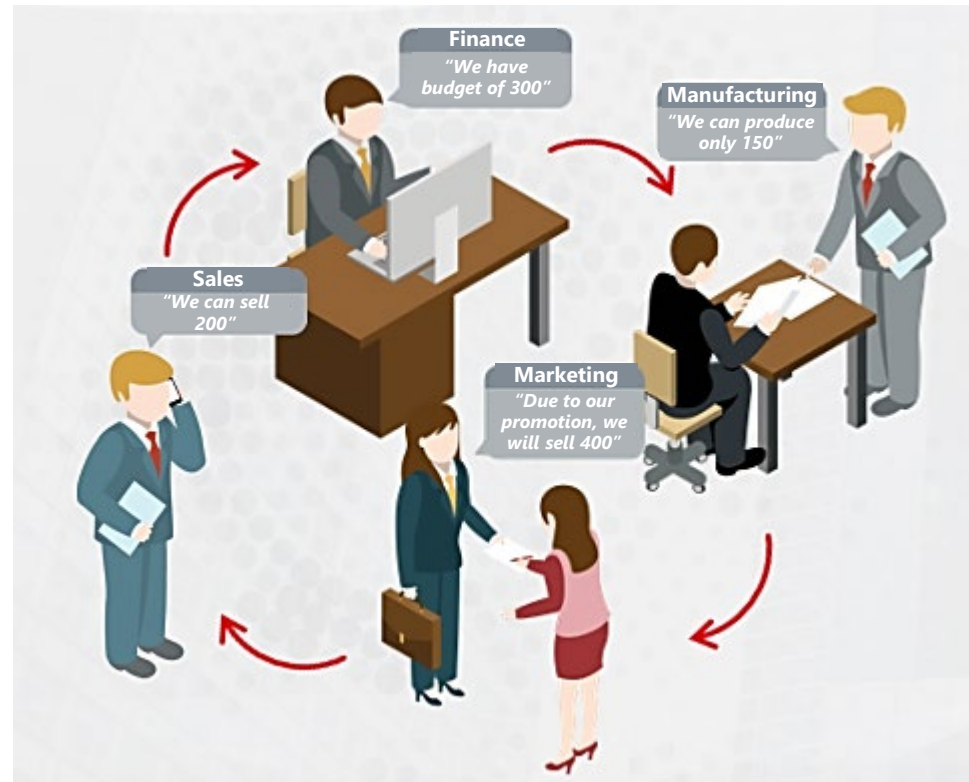
The Forecast Dilemma

- Finance:

- Looking for a stable growth for the P&L.
- Willing to give the least possible budget as much as possible to promote
- Trying to rationalize the product mix to minimize SLOBs.
- Hoping to release the minimal possible budget for promotions.

- Sales:

- Little bit conservative, and sometimes pessimistic too.
- Probably knows the markets the best.
- Always pointing out to stock availability issues and its effect on sales.
- Always playing it as safe as possible.
- Wishing to have the biggest product mix to fulfill all customers needs.



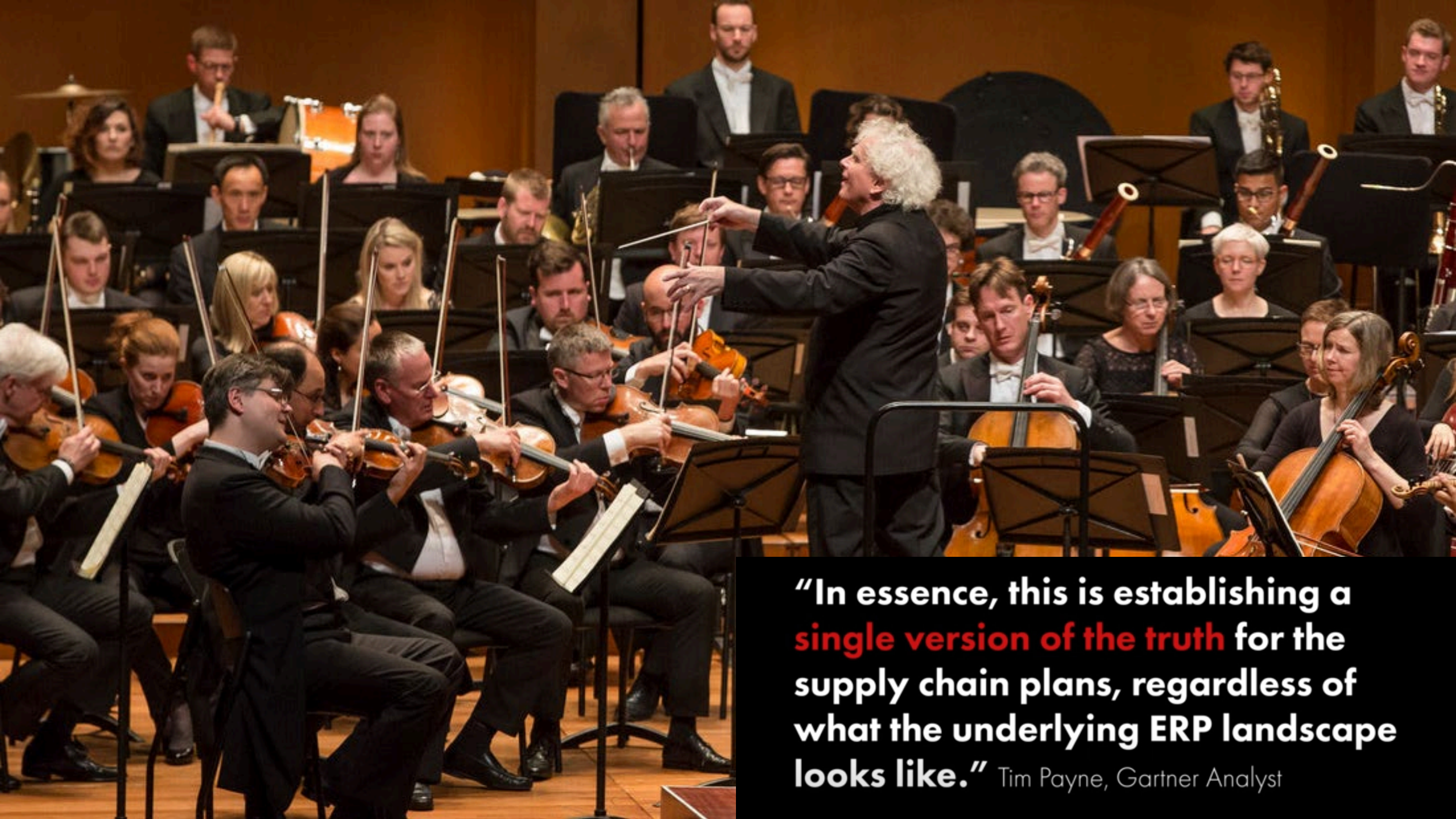
- Supply Chain & Operations:

- Looking for a & growth to gain economies of scale.
- Looking for stability to better utilize assets.
- Trying to rationalize the product mix to the minimize the changeovers.
- Always emphasizing on lead times.

- Marketing:

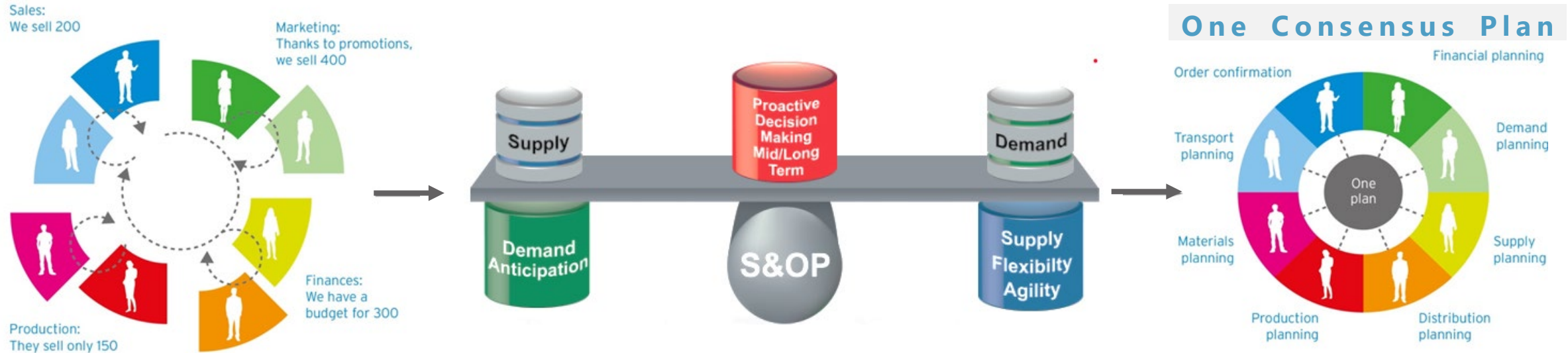
- High growth rates and sometimes exponential especially in the long term.
- Intensive promos & innovations.
- High budget to make it happen.
- Try to maximize the product mix to meet all consumers needs.

Demand Planning is about defining demand into consensus sales volume, then building inventory through supply & related plans to ensure stock availability for sale. To achieve this, cross-functional collaboration and alignment is done through S&OP Process.



“In essence, this is establishing a **single version of the truth for the supply chain plans, regardless of what the underlying ERP landscape looks like.”** Tim Payne, Gartner Analyst

Sales & Operation Planning



Market Complexity

- Custom-fit Promotions
- Short Time to Market
- Market Driven by Innovation
- Multiple Competitors
- Consumer Behavior Volatility

Financial Targets

- Profitability
- Net Sales
- Working Capital...

Supply Chain Constraints

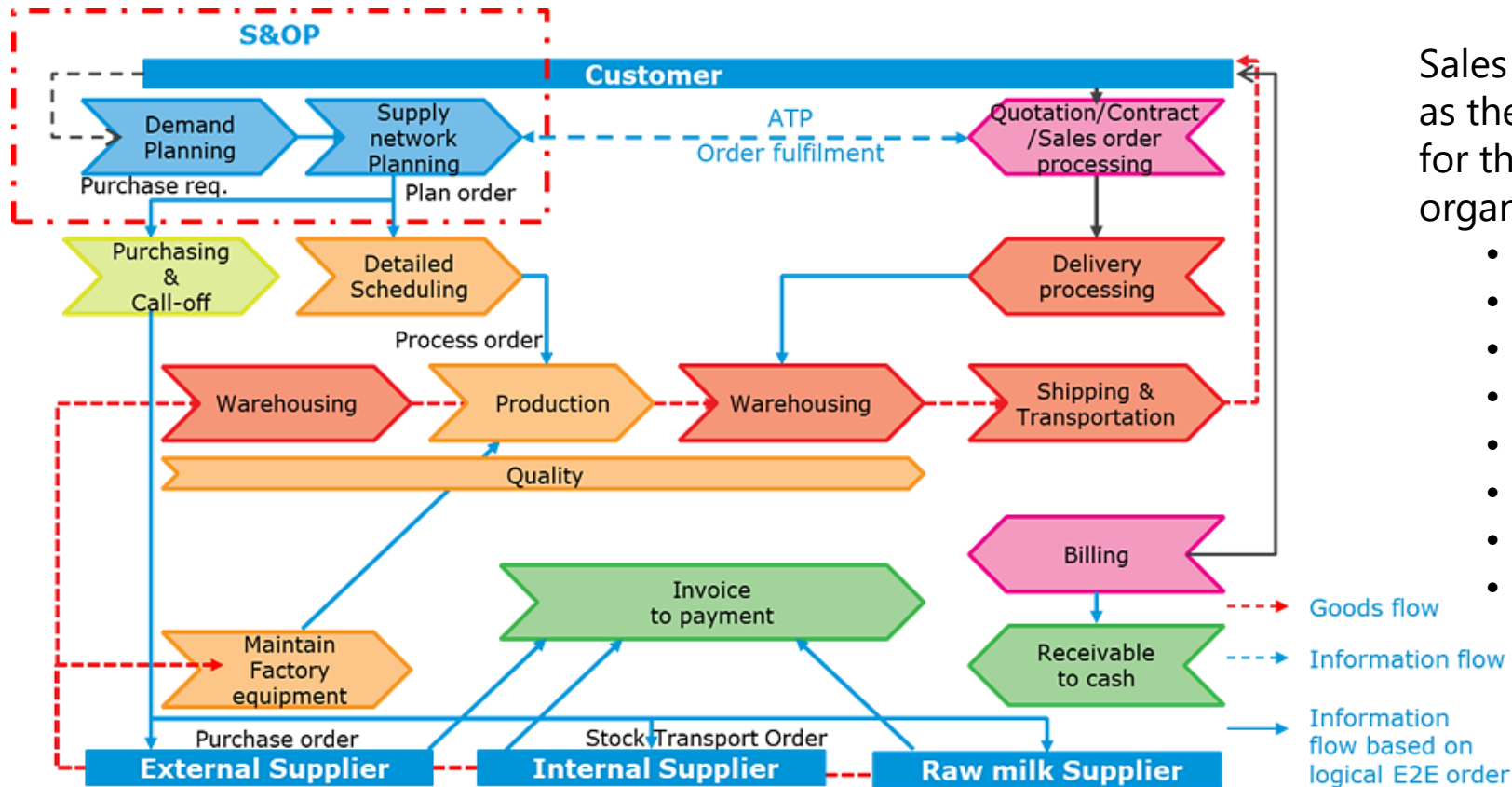
- Target Service Level
- Global Operations
- Lead Time
- Costs
- Production Capacity

Balance demand and supply to increase product availability with lower inventories

S&OP STRUCTURE



What can be done from one consensus plan



Sales & Operations Planning is important as the consensus plan agreed on is leading for the operational activities within any organisation;

- Procurement
- Material management
- Production scheduling
- Inventory
- Warehousing
- Transport
- Order-to-cash management
- Customer service

Influencing demand management



Influencing

influence demand behaviour
for ordering the products

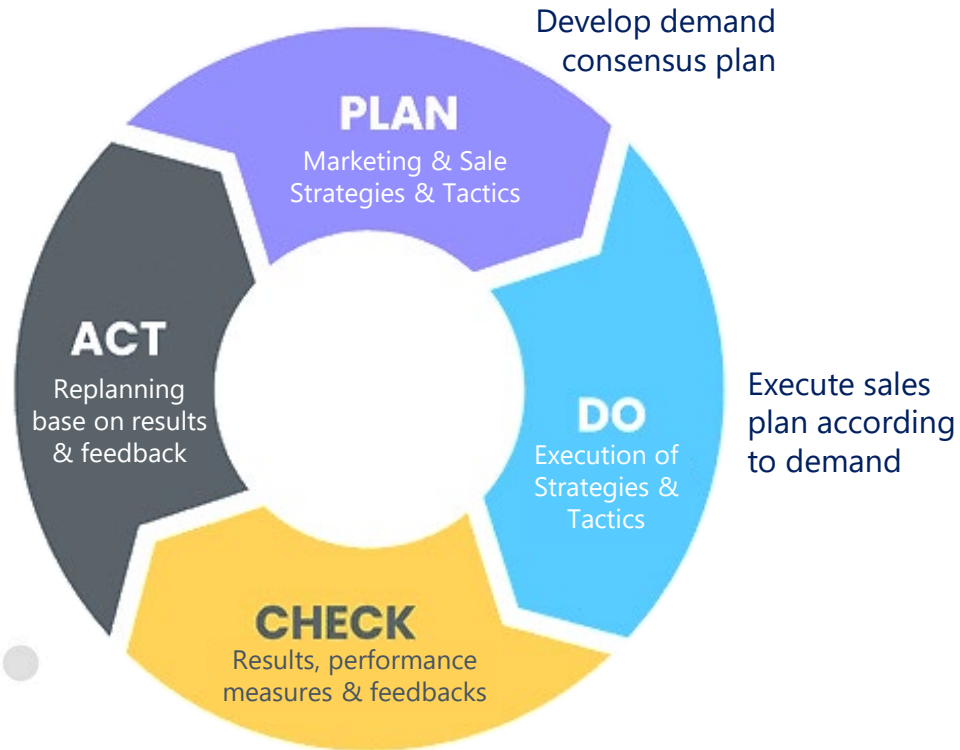
The purpose of demand influencing is to convince customers to buy as to support company's objectives.

Influencing demand includes influencing your company to meet the customers expectations.

Principles of Influencing Demand

To recover sales volume;

- Salesforce was redeployed temporary to cover the region
- Recruiting was accelerated



SOME PRINCIPLES FOR INFLUENCING DEMAND

- Determining the appropriate product mix to maximize profits
- Include customer's feedback to run business
- Demarketing to delay purchases or offering substitute products when demand is greater than supply
- Influence demand to change buying behaviours can lead to negative impacts in long term.

Issue spotted;

In S&OP meeting, sales performance for a particular region were less than planned due to less salespeople.



Influencing Demand



External demand influence methods

-  Price Variation
-  Reduce Promotions
-  Reservation Systems
-  Incentivize Smaller, More Frequent Orders



Internal demand influence methods

-  Reduce Mistakes
-  Reduce Lead Times
-  Reduce Set-Up / Changeover Times
-  Don't Overreact
-  Late Customization



Managing & Prioritizing Demand

Change is inevitable.

The purpose of prioritizing demand is to continuously manage for optimum demand performance. It is about optimizing demand across the network when actual demand is not as planned or forecasted.



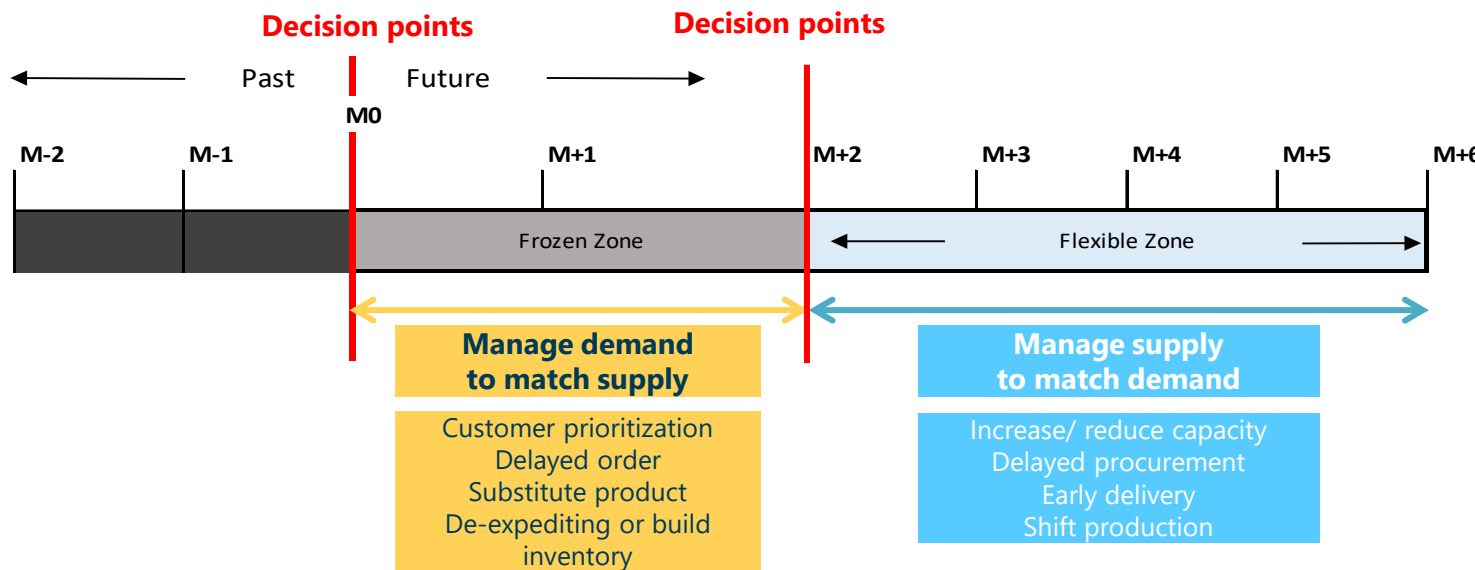
Prioritizing

Ongoing manage & optimize demand across the channels

Managing & Prioritizing Demand

Situations required managing and prioritizing demand:

- Unexpected supply constraints make it necessary to adjust the demand plan to rebalance demand and supply
- Actual demand is more or less than anticipated in the demand plan in a time frame where cannot make changes
- When there is a one-time, nonrecurring demand opportunity that impacts service to other customers, costs, and profits





THANK YOU