

# Best Practices in Demand Planning and Sales Forecasting



# Abstract



Organizations spend a lot of time and resource on forecasting efforts. Poor forecasting practices adopted by these organizations and a sub-optimal process design can actually hamper your goals of an accurate demand plan and a lean supply chain process.

In this workshop, we will walk you through the best practices necessary to improve demand planning and create supply chain efficiencies. We will also discuss the worst practices in demand planning so you can steer clear of these inefficient processes.



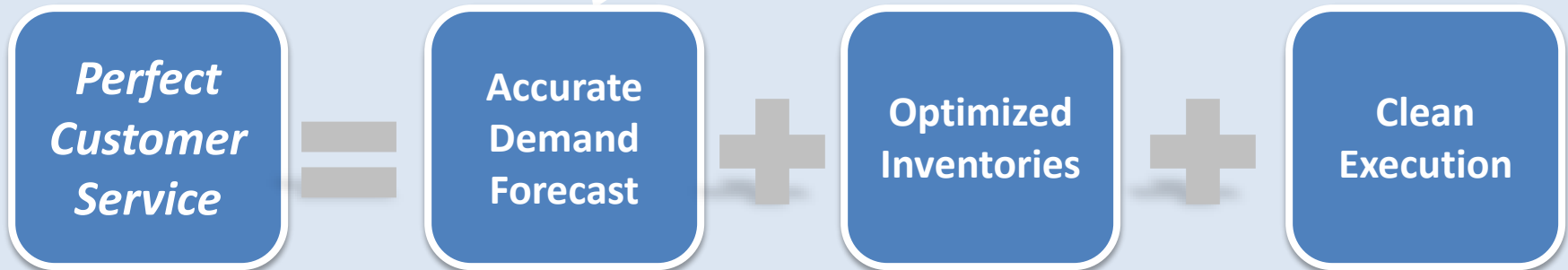
## WHY DO WE CARE ABOUT DEMAND PLANNING?

- Value creation through customer service
- Enables both service and working capital
- Top 10 best practices to improve demand planning

# Value Creation and Customer Service



50% of the corporate resources are devoted to forecasting, although NOT necessarily at the SKU level

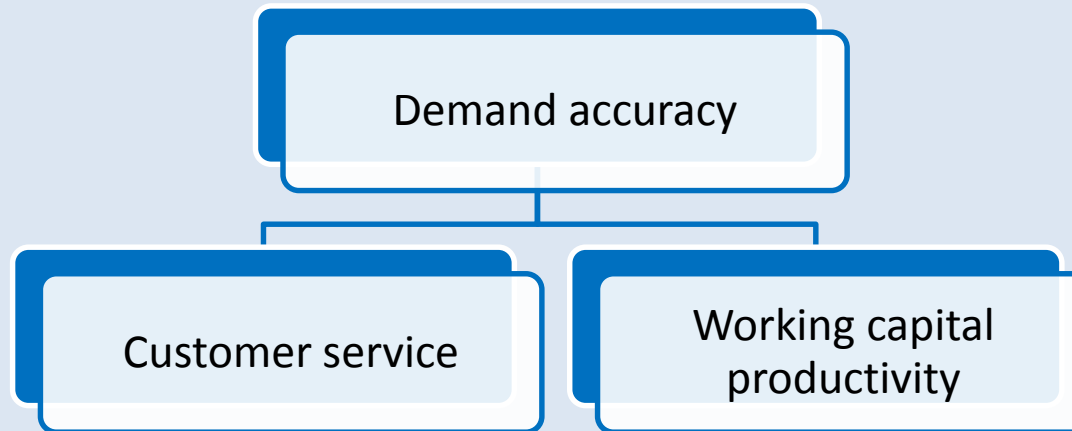


***Every function in the Value Chain controls one or more of these drivers of Customer Service!***

# Unbiased Demand Plan – The holy Grail



- Enable the Supply Chain to provide high levels of service
- Optimize the working capital resources – inventory, returns



- Thus Demand forecast accuracy is aligned with both Supply Chain Objectives.
- If demand forecast is not reliable, organizations will game the process and trade-off Service and Costs resulting in yo-yo behavior.

# Top 10 Demand Planning Mantras



1. GIGO – Define your demand history right before developing forecasts and plans.

- 
- 
- 

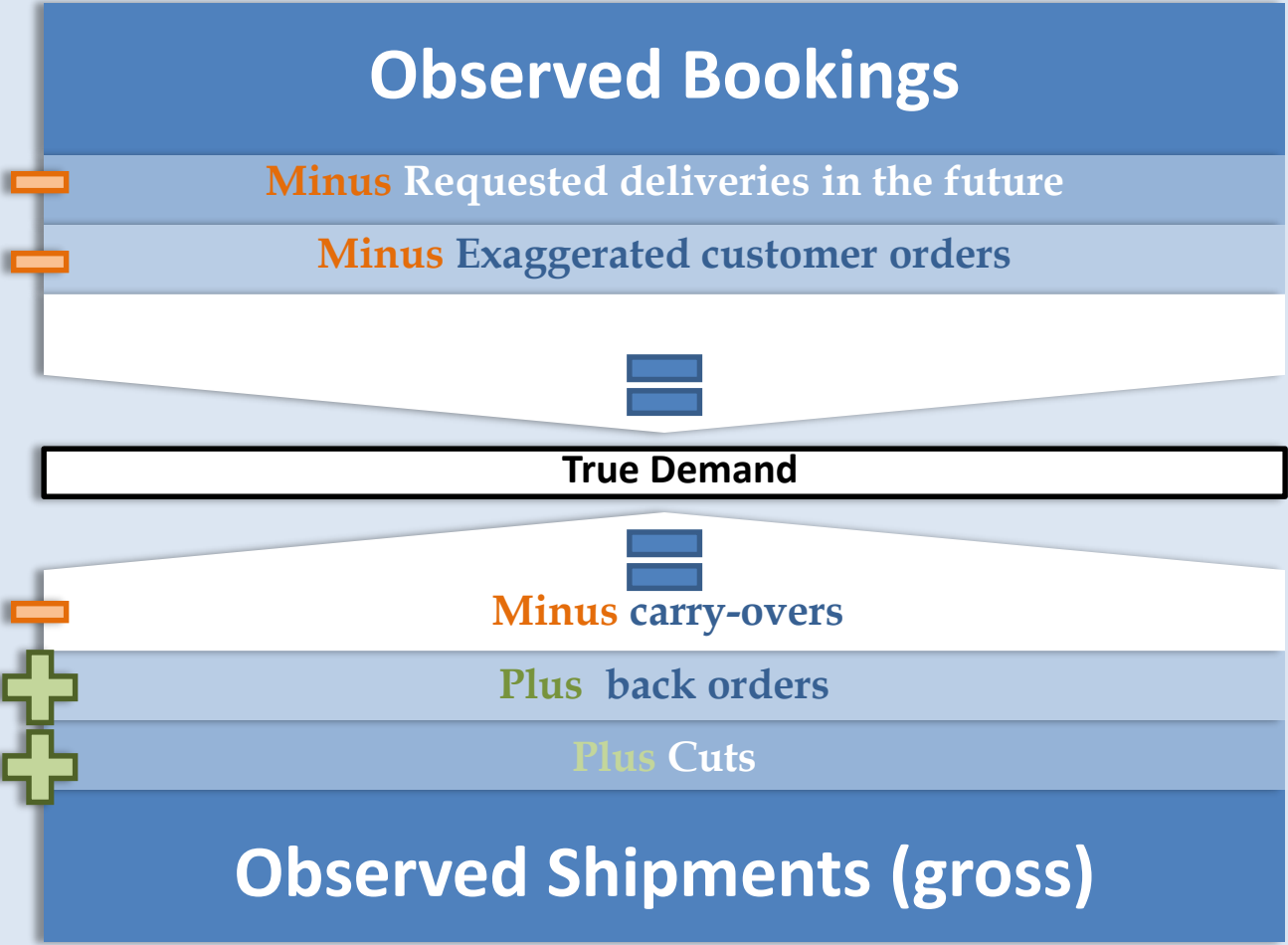
10. If you have a choice, KNOW the future, so you don't have to forecast it!

# GIGO – Garbage in Garbage Out Get your Data right!



10. GIGO – Define your demand history correctly before developing the forecast.

# Orders Vs. Shipments





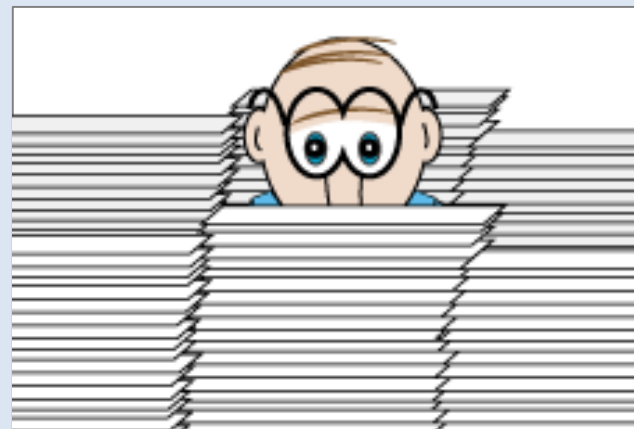
# All you need to know about forecasts, you need to start from the Data Garden.



9. Understand your data and make appropriate adjustments before beginning the forecasting process.

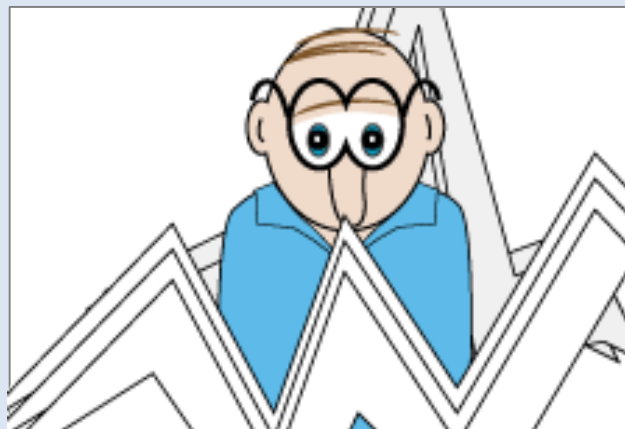
You need the “**Corrected History**” to start with!

# All I need to know about Data, I learned in Kindergarten!



**More is not  
always better**

*right size the  
historical data for  
modeling!*



**These can  
add volatility:**

- ▶ *Bullwhip effects*  
artificial "saw tooth" volatility
- ▶ *Outliers*  
programs that do not repeat
- ▶ *Missing data*  
or Partially aggregated data



**More detail=  
More noise**

- ▶ *More noise* at SKU level  
than at category level
- ▶ *More noise* at category  
than at aggregate level
- ▶ *Trend becomes more  
visible* when granular  
data is aggregated

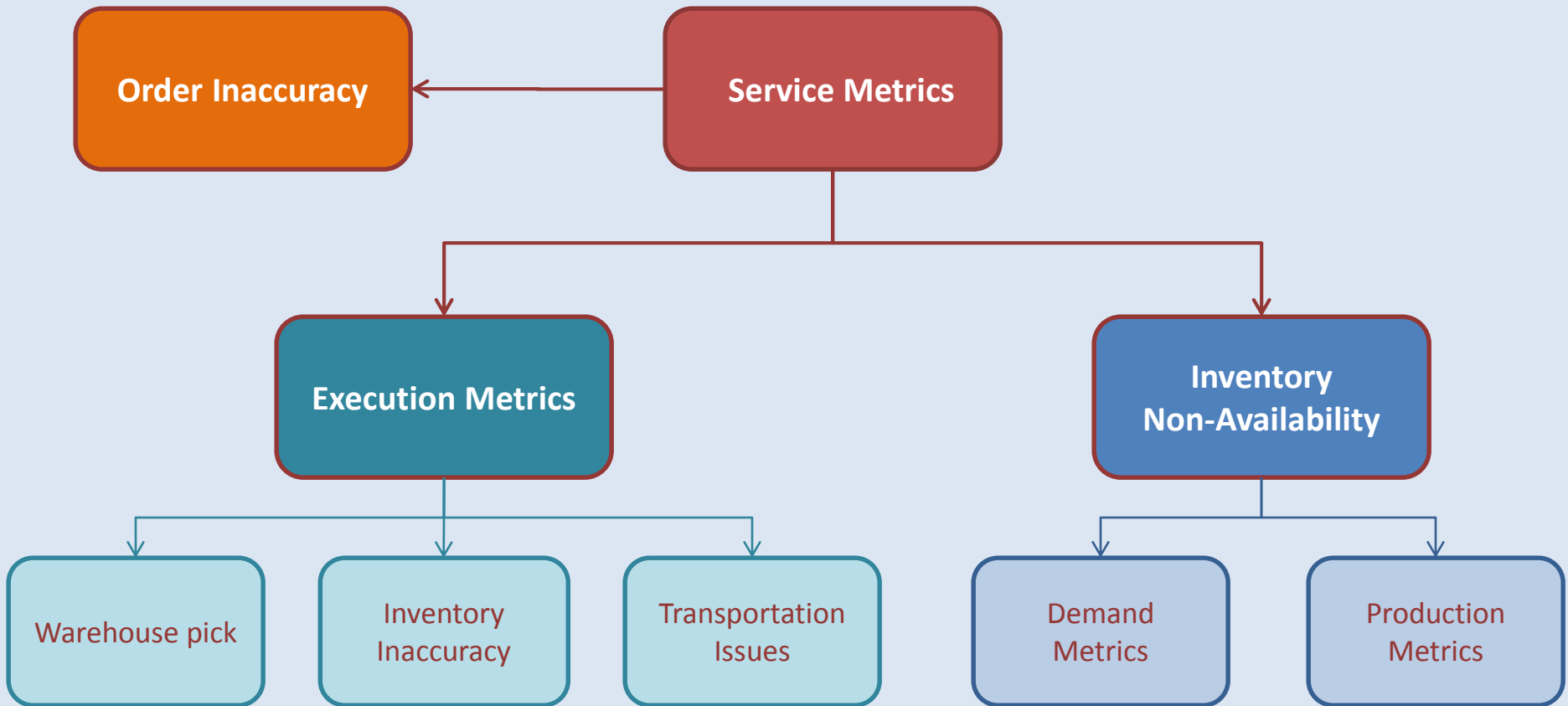
# Measure to mature! Define consistent Metrics!



8. You cannot improve the process unless you measure where it is right now. Design and deploy the right set of Metrics.

- ❖ Service
- ❖ Demand
- ❖ Supply

# Right Set of Metrics



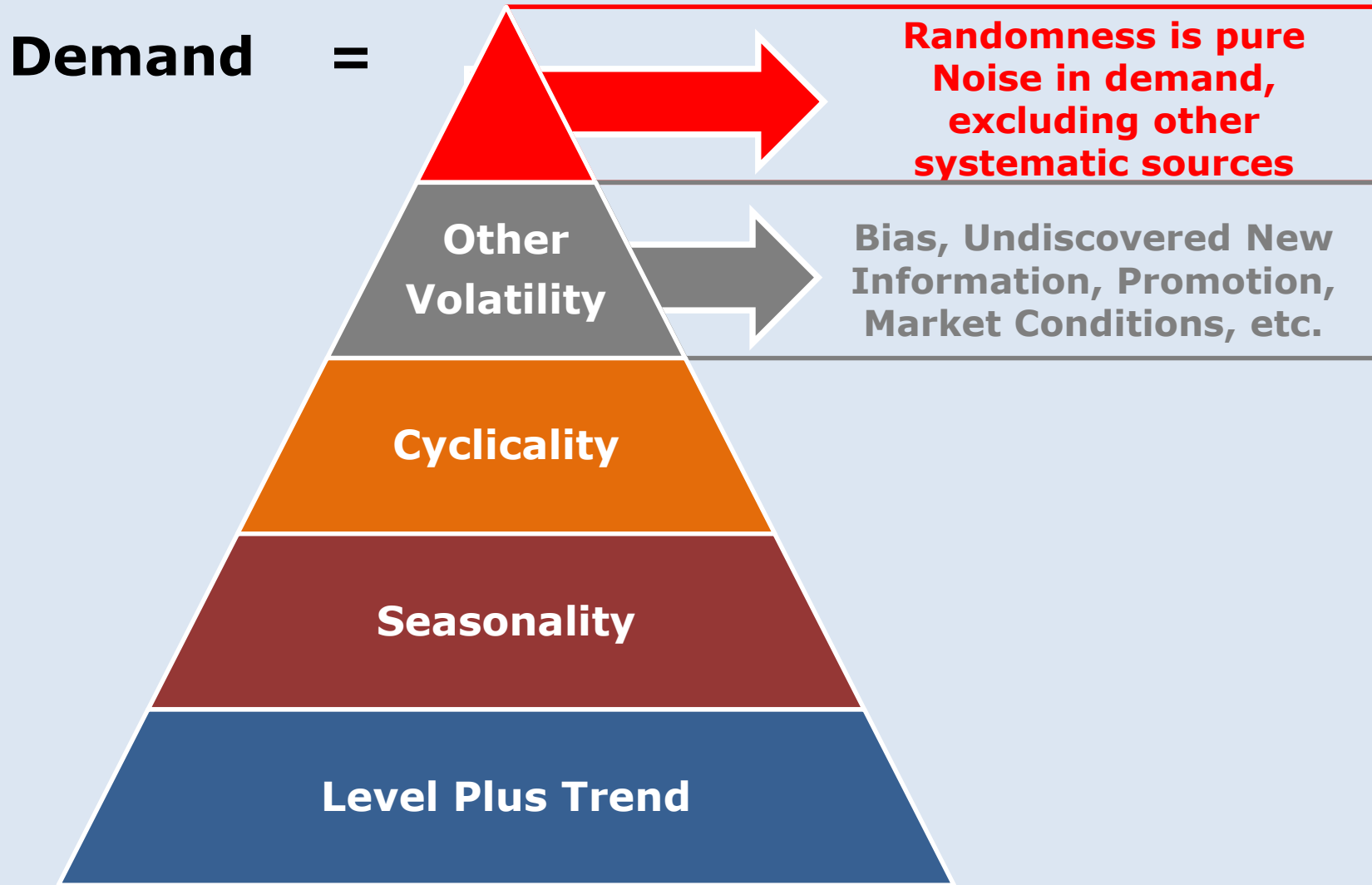
# Know your Stats! Leverage your Software!



7. It helps to start with a good statistical modeling tool to develop baseline forecasts.

A good software package should ***at least*** help you model the basic demand components!

# Demand Components

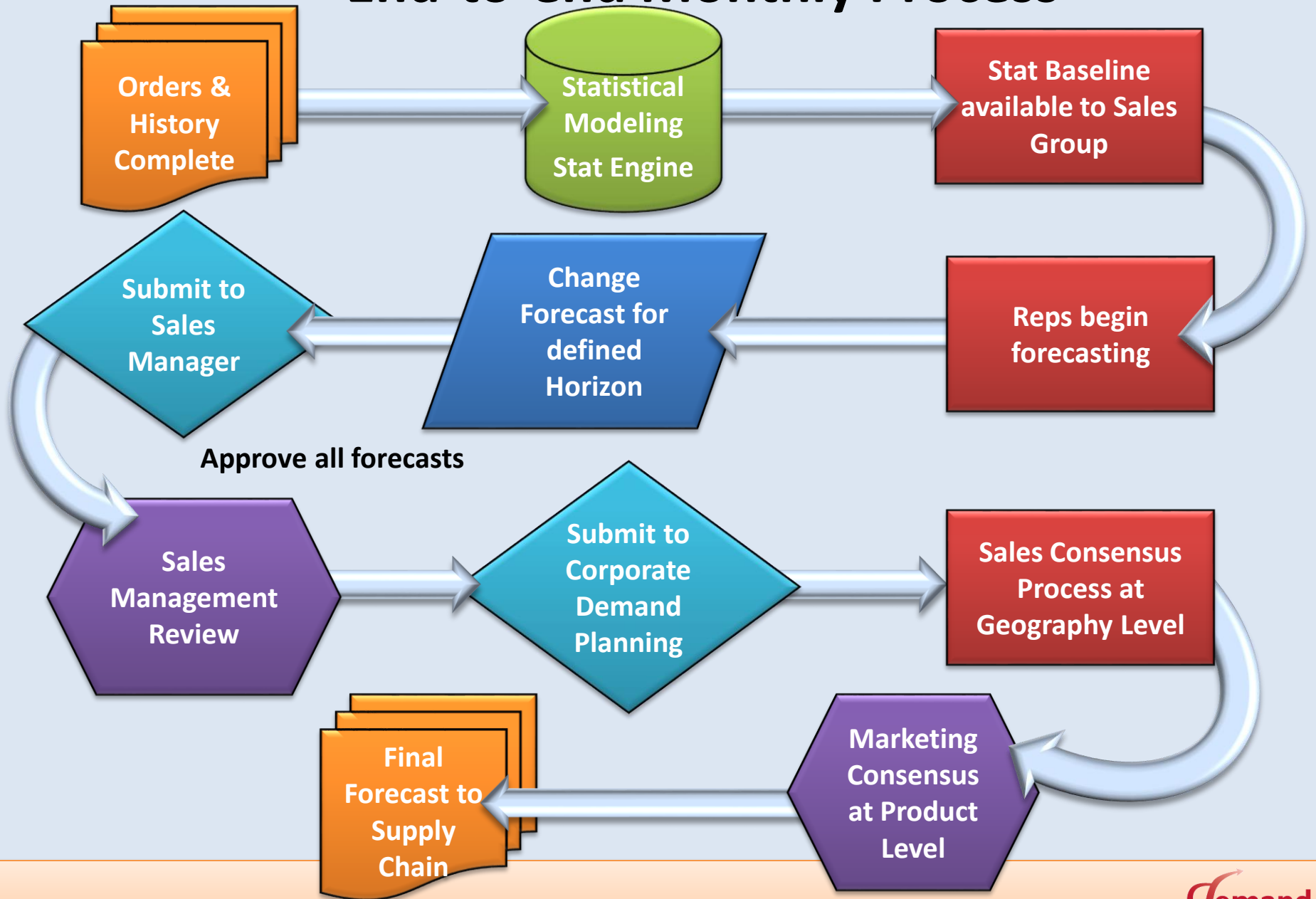


# Define and communicate process flow and key calendar dates.



6. Define a monthly process that defines the process triggers and ends with the forecast agreement!

# End-to-end Monthly Process





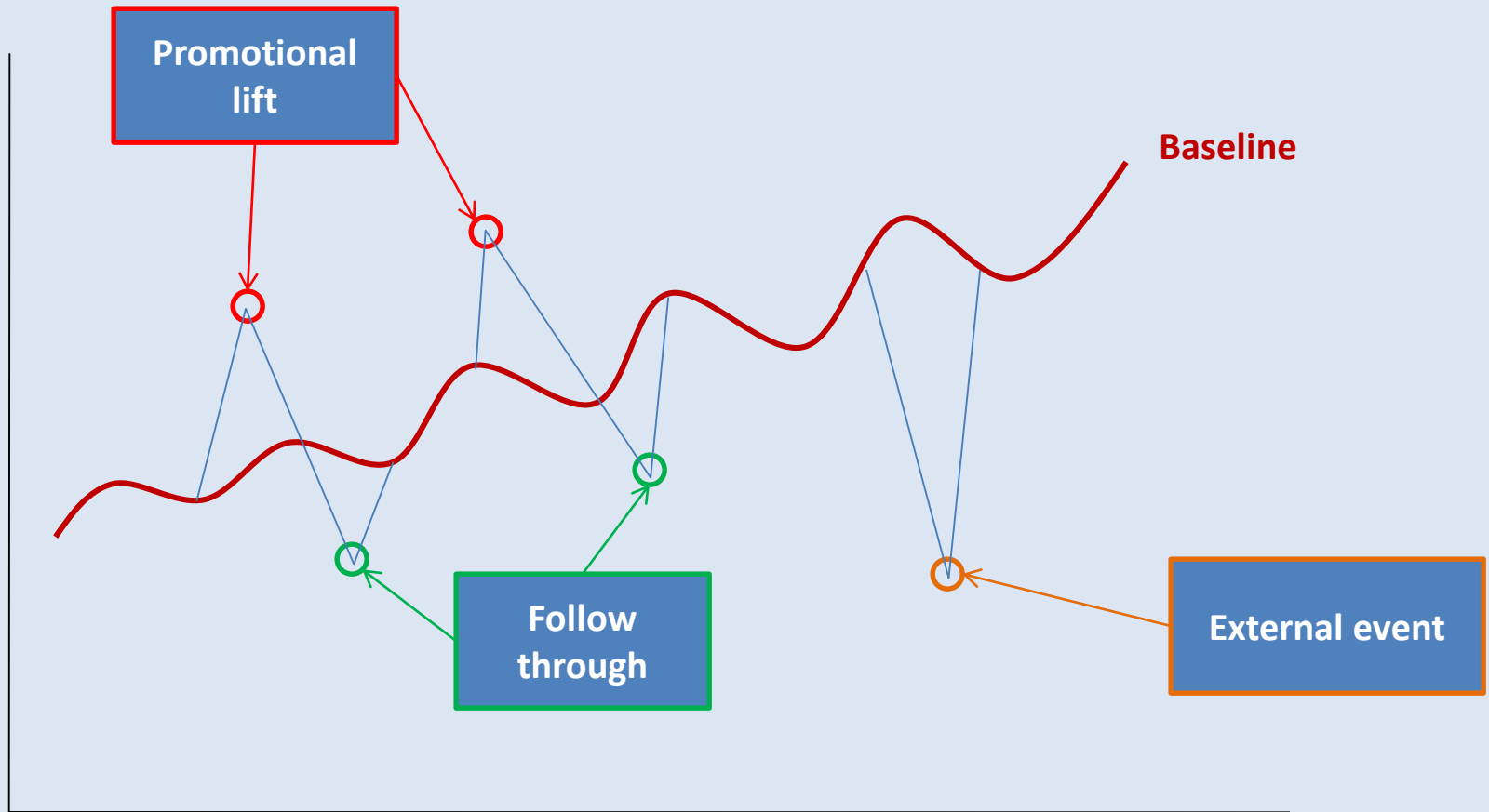
# Assess and quantify your promotion! Differentiate Baseline vs. incremental



5. Get promotional intelligence and do event modeling and planning.

- ❖ Infancy - Sales Intelligence and Judgment
- ❖ Advanced – Quantitative Analytics and causal modeling.

# Baseline Vs. Incremental



# Agree to Disagree! Seek Consensus!



4. Drive towards an one-number Plan. Get inputs from Marketing, Sales, and Finance in developing a consensus forecast!

# Demand and Supply Balance



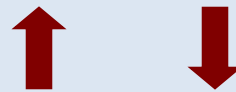
- Volume is important to the Demand Side – so are the volume driven by events namely new product launch and promotions
- Mix is important to the Supply Side – What, when and how much to produce. This can affect pricing for \$\$ calculations.

***I am ready to execute! Give me a detailed SKU plan***



***Volume***

***New***



***Pricing***

***Mix***

***We know the \$\$ Sales Target by Region. Will that work?***



# Be pro-active and responsive in planning ahead!



3. Ask what is our action plan for risks and opportunities to the latest forecast and the corporate plan.

# Follow the 90-20 rule. Manage by Exception!



2. 20% of your products and customers drive 90% of your revenues, sales volume and profits.

# Modeling Segmentation



A well designed planning process uses forecasting by exception.

***Majority of items***

- **Use simple forecasts and automatic forecasts**

- First order or second order exponential smoothing
- Automatic Models
- Moving average models

***Items with High Volume/  
Volatility/ Critical Importance***

- **Use advanced models**
- Review carefully
- Adjust for market intelligence

**Exception!**

# KNOW the future! This is better than forecasting.



1. If you have a choice, know the future, so you don't have to forecast it! Talk to people, customers, Sales reps and other gurus who have information about the future.






# YOUR BEST PRACTICES??



# YOUR WORST PRACTICES??



# Questions & Answers



## ABOUT US

- Who is the author?
- What is Demand Planning LLC?
- Who are Demand Planning LLC clients?
- How can you contact the author of this paper?

# About The Presenter



**Dr. Mark Chockalingam is Founder and President, Demand Planning LLC, a Business Process and Strategy Consultancy firm. He has conducted numerous training and strategy facilitation workshops in the US and abroad, and has worked with a variety of clients from Fortune 500 companies such as Wyeth, Miller SAB, FMC, Teva to small and medium size companies such as Au Bon pain, Multy Industries, Ticona- a division of Celanese AG.**

**Prior to establishing his consulting practice, Mark has held important supply chain positions with several manufacturing companies. He was Director of Market Analysis and Demand Planning for the Gillette Company (now part of P&G), and prior to that he led the Sun care, Foot care and OTC forecasting processes for Schering-Plough Consumer HealthCare.**

**Mark has a Ph. D. in Finance from Arizona State University, an MBA from the University of Toledo and is a member of the Institute of Chartered Accountants of India.**

# About Demand Planning LLC



Demand Planning LLC is a consulting boutique comprised of seasoned experts with real-world supply chain experience and subject-matter expertise in demand forecasting, S&OP, Customer planning, and supply chain strategy.

We provide process and strategy consulting services to customers across a variety of industries - pharmaceuticals, CPG, High-Tech, Foods and Beverage, Quick Service Restaurants and Utilities.

Through our knowledge portal DemandPlanning.Net, we offer a full menu of training programs through in-person and online courses in Demand Forecast Modeling, S&OP, Industry Forecasting, collaborative Forecasting using POS data.

DemandPlanning.Net also offers a variety of informational articles and downloadable calculation templates, and a unique Demand Planning discussion forum.

## Demand Planning LLC has worked with...

- **Abbott**
- **Honeywell**
- **Wyeth**
- **Au Bon Pain**
- **Teva**
- **Celanese**
- **Hill's Pet Nutrition**
- **Campbell's Soups**
- **Miller Brewing co.**
- **Sabra Foods**
- **Hewlett Packard**
- **Jack Daniels**
- **Mead Johnson**
- **FMC Lithium**
- **McCain Foods**
- **Lnoppen, Shanghai**
- **North American Breweries**
- **Pacific Cycles**
- **Smead**
- **White Wave foods**
- **Ross Products**
- **Fox entertainment**
- **Limited Brands**
- **Nomacorc**
- **F. Schumaker**

# Contact Us



Demand Planning, LLC  
26 Henshaw st  
Woburn, MA 01801

Email: [office@demandplanning.net](mailto:office@demandplanning.net)

Web: [www.demandplanning.net](http://www.demandplanning.net)

Phone: (781)995-0685

Follow us on:

 <http://tinyurl.com/demandnet>

 <http://twitter.com/planningnet>

 <http://forecastingblog.com>

 <http://tinyurl.com/facebook-demandplanning-net>

Keep up-to-date on the latest in Demand Planning by using our recourses we make readily available to you. Sign up for our monthly Newsletter at:

[www.demandplanning.net/Newsletter\\_subscribe.php](http://www.demandplanning.net/Newsletter_subscribe.php)