



Demand Planning LLC Presents:

# MEASURING SUCCESS

SUPPLY CHAIN METRICS WORKSHOP

Presented by Mark Chockalingam Ph.D.

# Agenda

To mature and improve performance, organizations must measure themselves. To increase performance, incentives must be aligned with metrics.

The objective of this workshop is to review a holistic metrics process to create a balanced Value Chain. We will examine the inter-relationship between the various supply chain metrics – customer service metrics, inventory metrics, schedule adherence, and forecast accuracy. The workshop will also look at the mechanics behind the various metrics and how designing holistic metrics will help you to align incentives and address different behavioral biases. We will discuss the metrics pyramid and the hierarchy of metrics used across different functions in the supply chain.

## WHO SHOULD ATTEND?

- Demand Planners & Planning Managers
- Supply Planners
- Supply Chain Managers
- Inventory Planners
- Operations Planners
- Director of Forecasting & Demand Planning
- Director of Value Chain
- Director of Logistics
- Director of Customer Service
- Controller
- Chief Financial Officer
- VP of Planning
- VP of Supply Chain
- Director of S&OP

## YOU WILL LEARN TO...

- **Appreciate** the importance of a balanced Value Chain
- **Create** a performance measurement process
- **Calculate** customer service, inventory and execution metrics:
  - first time fill rates
  - order complete
  - inventory turns
  - Manufacturing Schedule Adherence
  - Supplier quality
- **Measure and use** forecast metrics in improving the organizational performance
- **Leverage** the Metrics pyramid to enhance decision making
- **Discover and address** the organizational bias
- **Set up** a balanced metrics system and align incentives

## DAY I

09:00 - 11:00

### I. Metrics and Value Chain Performance

- Introduction to Holistic Value Chains- The Value creation Process in the modern supply chain
- Demand Chain and Supply chain
- Balancing the Value Chain - Integration of objectives
- Top-line versus Bottom-line Metrics
- Hierarchy of the Value Chain Metrics

11:00 - 12:30

### II. Holistic Metrics and Incentive Alignment

- How to align the Value Chain Process & Objectives
- Compensation and Incentive Alignment
- Organizational Structure
- Balancing Metrics and Organization Structure
- Balancing Efficiency vs. Effectiveness

### III. Review of Case Exercise to be discussed through out the Seminar

12:30 - 1:30

Lunch

1:30 - 3:00

### IV. Demand Metrics

- Demand Volatility in the Supply Chain
- Understanding the components of demand
- Predictable and unpredictable volatility
- Demand volatility and Forecast Error
- Mean Absolute Deviation (MAD)
- Mean Percentage Error
- Mean Absolute Percentage Error (MAPE or PMAD)
- Weighted Mean Percentage Error (WMAPE)
- Forecast Bias and Sku Mix Error (SME)
- Evolution of Errors
- Relationship between Bias and Error

# Overview

# Agenda

3:00 to 3:30

## Coffee Break & Networking Exercise using Groups

3:30 - 5:00

## V. Case Discussion of Demand Metrics

- Computations of Demand Volatility
- Outline for computing other metrics required by the case study



## DAY 2

09:00 - 12:00

## VI. Customer Service Metrics

- Service – the lifeblood of supply chain
- Mechanics of Customer Service and Satisfaction Metrics
  - a. Fill Rates: Line Item, SKU weighted, Value Weighted
  - b. Perfect Order
  - c. On-Time Delivery – Customer Requested
  - d. On-Time Delivery vs. Fill Rates
- Decomposition of Supply Chain Execution
  - a. On-Time Inventory Availability
  - b. Ware House Fill Rate
- Outline for computing other metrics required by the case study

## VII. Manufacturing and Supplier Metrics

- Nurture the Supplier to satisfy the customer!
- Make versus source Metrics
- Mechanics of Supply Metrics
  - a. Manufacturing Schedule Adherence
  - b. Production Lead time
  - c. Vendor Performance
  - d. Vendor Inventory and Pricing
- Outline for computing other metrics required by the case study

12:00 - 1:00

## Lunch

1:00 - 2:30

## VIII. Cost to Serve Metrics

- Measuring an Efficient Supply Chain
- Productivity vs. Obsolescence
- Impact of Gross Margin Structure on Cost Metrics
- Mechanics of Cost Metrics
  - a. Inventory Turns
  - b. SLOBs percent
  - c. Expediting costs – Freight, Overtime
  - d. Capacity Utilization

2:30 - 3:30

## Case Study Deliberations

3:30 Break

3:45

## Conclusions

- Implications for Financial Planning
- Impact of Forecast Bias
- Supply Chain Imbalances
- Metrics Traps
  - a. Measure someone on what they control
  - b. Complicated organizational structures need complex Metrics Processes

# Credentials & Testimonials

## ABOUT THE WORKSHOP LEADER

Dr. Mark Chockalingam is Founder and Managing Principal, 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 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 & 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.

### Our clients include...

- NStar • Abbott Labs
- Au Bon Pain • Teva
- F. Schumaker • Wyeth
- Celanese • Nomacor
- Vistakon J&J, Malaysia
- Miller Brewing co.
- White Wave foods
- Fox entertainment
- Texas Instruments
- World Kitchen • FMC Lithium • Lifetime Products
- McCain Foods • Ross Products • Lnoppen, Shanghai
- Limited Brands • Pacific Cycle • Smead
- Campbell's Soups • Hewlett Packard

### Boston, October 2008

*"Dr. Chockalingam's presentation was simple, well organized, easy to follow, and contained plenty of interaction with the class. He knew the material well, and presented it in an interesting manner! Furthermore, the information was highly relevant and practical, and would be very useful in my work."*

### Mid-West, February 2006

Demand Planning Manager, CPG Company:

*"It was a good week of training. It was fun and also at the same time an insightful learning experience. Hope you had a good time too with our team. We would really appreciate your feedback, thoughts and suggestions on our processes."*

### IBF Conference, May 2006

*"Good information, some new insights learned to bring back to company. Great examples, good discussion on best practices and ideas."*

Bill Smith, VP Logistics, Cumberland Swan

*"I thoroughly enjoyed the presentation and think the learnings will be of value to us. Thank you."*

### Contact Us:

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