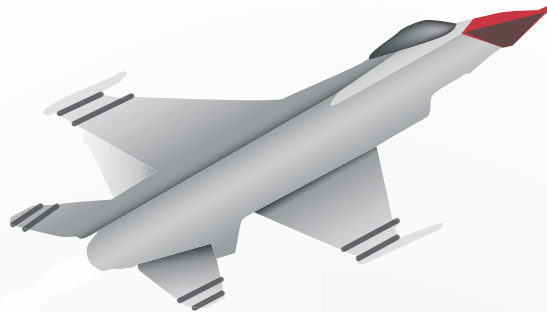


Presents:

# **Demand Planning and Forecasting: On-Demand Workshop**

with a brief introduction to Sales and Operations Planning  
live instruction by Mark Chockalingam, Ph.D.



## **We Will Show You How to...**

- ✓ *Set up a Demand Planning Process for your business*
- ✓ *Leverage Collaboration (internal and external) to increase forecast Accuracy*
- ✓ *Reconcile the top-down category forecast and the bottom-up sku level Demand Plan*
- ✓ *Track, measure and use Forecast Accuracy*
- ✓ *Leverage an accurate Demand Plan in your Sales & Operations Planning Process*

# Demand Planning and S&OP - Overview

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Demand Planning is the science of accurately forecasting the demand for your supply chain. In this workshop, you will learn how to develop a baseline statistical forecast and leverage a collaborative process to add customer intelligence. The result is a more accurate plan that may include promotional activity, customer intelligence, and display activity. An accurate demand plan helps you reduce inventory costs and increase customer service levels. When properly implemented and used in the Value Chain Process, the demand plan helps create a lean and customer centric supply chain.

The Sales and Operations Planning process evaluates the Sales Plan against operational capability to arrive at the consensus plan for the organization to execute. The end product of this process is an executable plan and various operational constraints that will be decision variables for senior management.

Many top Fortune 500 companies have some form of Sales and Operations Planning Process implemented in their supply chains. It is just now being adopted in small and medium tier companies.

This two-module intensive workshop will outline how to set up an effective demand planning process and how to leverage an accurate demand plan in the Sales and Operations Planning Process.

## We will Discuss...

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- ✧ Demand Planning Overview
- ✧ Historical Data – Sources and Analysis
- ✧ Mechanics of Forecast Modeling
- ✧ Collaborative Demand Planning
- ✧ Consensus Demand Plan
- ✧ Forecast Performance Metrics
- ✧ Sales & Operations Planning Process

## Join us if you're...

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- ✧ Demand Planners & Directors
- ✧ Forecast Analysts and Managers
- ✧ Director of Value Chain
- ✧ Analysts in the Supply Chain
- ✧ Inventory and Operations Planners
- ✧ Financial Analysts
- ✧ Director of Logistics
- ✧ Marketing Managers
- ✧ Product Managers
- ✧ Sales Managers
- ✧ Customer Business Managers



## You will learn to...

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- ✓ Formulate accurate baseline models
- ✓ Set up a consensus demand planning process
- ✓ Measure and use forecast accuracy
- ✓ Reconcile top down forecasts and bottom up demand plan
- ✓ Leverage the S&OP process to improve the supply chain
- ✓ Reduce inventory costs and improve service levels

# Module 1

3 hours

## Brief Introduction

approx. 5 minutes

## Demand Forecasting Overview

approx. 30 minutes

- a. Demand Forecasting Basics
- b. Key Terminology & Concepts
- c. Demand Process
- d. Organization Structure and Culture
- e. Role of the Demand Forecaster

## Data Analysis & Model Selection

approx. 60 minutes

- a. Data Analysis
- b. Central Tendency and measures of Dispersion
- c. Outliers and Missing Data
- d. Structural Changes and Data Shifts
- e. Trend
- f. Seasonality
- g. Cyclicity
- h. Relationship of Data Characteristics to Error
- i. Model Assumptions About Data and Error
- j. Ex Post Forecasting
- k. Optimal Model Selection

## Modeling and Graphical decomposition

approx. 75 minutes

## Q&A Session

approx. 10 minutes

## Wrap-up

# Module 2

3 hours

## Modeling – Smoothing models

approx. 90 minutes

- a. Time series Averages
- b. Smoothing Methods
- c. Exponential Smoothing
- d. Decomposition Models
- e. Brief introduction to ARIMA models and causal Models

## Demand Forecasting Error Metrics

approx. 45 minutes

- a. Mean Absolute Deviation
- b. Mean Error
- c. Mean Percentage Error
- d. Mean Absolute Percentage Error
- e. Weighted Mean Percentage Error
- f. Mean Squared Error
- g. Forecast Bias
- h. Appearance and Expected Value of Error

## Brief introduction to S&OP

approx. 30 minutes

- a. Core components of S&OP
- b. Demand and Supply balancing
- c. Communication of constraints
- d. Setting up the S&OP calendar

## Q&A Session

approx. 15 minutes

## Wrap-up

# About Us

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DemandPlanning.Net, founded in 2001, is provided as an exclusive web resource by Demand Planning, LLC, a boutique consulting firm specializing in Business Process and Strategy consulting in the fields of Demand Forecasting and S&OP for medium-sized businesses. We offer specialized consulting services in the following practice areas:

- Demand Forecasting and Management
- Sales and Operations Planning (S&OP)
- Supply Chain Analytics and Measurement
- Inventory and market share forecasting
- Account Based Forecasting and CPFR©



Through our knowledge portal DemandPlanning.Net, we offer a variety of training programs, webinars and customized on-site workshops as well as on-demand e-learning courses.

## Mark Chockalingam Ph.D.

Founder and Managing Partner

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Dr. Mark Chockalingam is Managing Principal, Demand Planning LLC, a Business Process and Strategy Consultancy helping clients across industries: Pharmaceuticals, Consumer Products, Chemicals and Fashion Apparel. His specialty consulting areas include Sales forecasting, Supply Chain Analytics, and Sales and Operations Planning. He has conducted numerous training and strategy facilitation workshops for a variety of clients in the US and abroad. Mark has worked with a variety of companies from the Fortune 500 such as Wyeth, Miller SAB, FMC, Colgate-Palmolive, Teva to the small and medium size companies such as Au Bon pain, Multy Industries, Ticona, a division of Celanese AG.

With significant expertise in business forecasting and modeling, he is a frequent speaker at major supply chain events on topics ranging from demand management to sales and operations planning.

Prior to establishing his consulting practice, Mark has worked with manufacturing companies in important supply chain positions. Mark was Director of Market Analysis and Demand Planning for the Gillette Company, now part of Procter and Gamble. Before Gillette, Mark led the Suncare, Footcare and OTC forecasting processes for Schering-Plough Consumer HealthCare in Memphis.

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.