

AUGUST 14 & 15, 2008 | SEAPORT HOTEL | BOSTON, MASSACHUSETTS, USA

# BUSINESS FORECASTING & PLANNING:

A TUTORIAL AT **3** LEVELS

A HANDS-ON, STEP-BY-STEP PROGRAM!



*Do you have Demand Planning or Forecasting Responsibilities?  
This tutorial will give you the essential knowledge you need to improve  
forecasting & planning performance at your company!*

*You will learn:*

- *How to prepare more accurate forecasts, step-by-step*
- *How to design a Sales & Operations Planning (S&OP) process*
- *How to use forecasts to reduce inventory, avoid stock-outs, improve customer service, and increase profit margins*
- *How to measure forecasting performance, a key to continuous improvement*
- *How to do Consumption Based Forecasting with POS (Point of Sale) & Syndicated Data*
- *How to calculate safety-stocks with forecasts*
- *How to analyze, treat, and cleanse data before using your ERP System*
- *How to successfully present forecasts and gain buy-in from management.*
- *...And Much More!*



TEL: 516.504.7576 | FAX: 516.498.2029 | EMAIL: [info@ibf.org](mailto:info@ibf.org) | WEB: [www.ibf.org/0808.cfm](http://www.ibf.org/0808.cfm)

## REGISTRATION INFORMATION

### How to Register:

You may register by phone, fax, mail or our website. When registering, please state Key Code listed above your name on the address label.

### Payment:

Payment in full is required 15 days prior to scheduled date of tutorial. Unless payment is received by that day, your registration will be cancelled.

### Cancellation:

Registrant may cancel without penalty up to 15 days prior to the date of scheduled tutorial and receive a full refund. All cancellations must be submitted in writing. Cancellations received less than 15 days prior to scheduled tutorial are subject to a \$195 (USD) service charge. No refunds will be given for cancellations made on the date and thereafter of scheduled tutorial.

### Accommodations:

We have set up a special discounted rate of \$239 / night at the Seaport Hotel, Boston, Massachusetts. To be eligible for the discounted rate, please mention the IBF's Tutorial when reserving your room by July 14, 2008. Rooms are limited, so act fast! Hotel Reservations: 617.385.4514.

*The Institute of Business Forecasting & Planning reserves the right to substitute and/or eliminate speakers if necessary.*

### Testimonial—

*"It's really encouraging to find out about what other companies are doing to implement better forecasting systems and what could be the benefits in my company. The tutorial is great!"*

**R. Cardena**  
Forecasting & Production Planning Analyst  
CIA MANUFACTURERA LIBRA, SA DE CV

### Hotel Information:

#### Seaport Hotel

One Seaport Lane, Boston, MA 02210

RESERVATIONS: 617.385.4514  
SPECIAL IBF RATE: \$239/NIGHT\*  
\*Reserve by July 14, 2008

WEBSITE:  
<http://www.seaportboston.com>

TELEPHONE: 617.385.4514  
FAX: 617.385.4001



LARRY  
LAPIDE, PH.D.

Dr. Lapide managed the launch of MIT's Supply Chain 2020 Project. He is currently an advisor to it and the project director of CTL's Demand Management research programs. He is also responsible for its Strategy Alignment research and training program. He has extensive experience as a consultant, high-tech manager, and software market analyst. He is a frequent presenter at supply chain events and has written numerous publications, including his co-authorship of a book on e-business and SCM. He has worked at AMR Research, Accenture, Data General and A.D. Little. Dr Lapide holds an SMEE from MIT and a Ph.D. in OR from the Wharton School.



ROBIN  
SIMON

Robin has over 18 years of business experience, primarily in the consumer products industry. She has managed the forecasting process for several categories during her 12-year tenure at Kraft Foods. She has also done work for companies such as S.C. Johnson & Son, McNeil Labs/Johnson & Johnson, Alberto Culver, Tropicana, ConAgra Foods and Helene Curtis/Unilever. She has also conducted forecasting training workshops for GlaxoSmithKline, Nike, Molson and more. Robin received an MBA in Marketing and Statistics from the University of Chicago and undergraduate degrees in Applied Mathematics and Business from the University of Pennsylvania (Arts & Sciences and Wharton School).

### Testimonials—

*"It has been useful. I have gained new ideas from both this tutorial and other delegates' experiences"*

— Adam Henry  
DENTSPLY INTERNATIONAL

*"Everything was great! Speakers were easy to follow."*

D. Winaudy, Demand Planner/Forecast Analyst  
CULLIGAN INTERNATIONAL



**CURTIS  
BREWER**

Curtis Brewer is the Head of Forecasting for the Consumer Products group of Bayer Cropscience. In this role Curtis is responsible for the overall forecasting process and facilitates the S&OP process. Before Bayer, Curtis spent 4 years with Novozymes as the Demand Planner for the Americas Region (which encompassed North America, Mexico, and Brasil). This position was responsible for the development of a monthly demand plan that used both qualitative and quantitative methods to determine demand over an 18 months horizon. Previous to Novozymes, Curtis worked for 3 years at Square D Company in Materials Planning, and 1 year with Nomaco as a Supply Chain Analyst. With these jobs he worked with materials management, production planning, capacity management, and demand planning. Curtis holds a Bachelor of Science in Operations Management from North Carolina State University, a Masters of Business Administration in Supply Chain Management from Auburn University, and is a Certified Professional Forecaster. In addition to his involvement with IBF, Curtis is also a past president of the Triangle Chapter of APICS and holds both CPIM and CSCP designations.



**SARA  
BRUMBAUGH**

Sara has extensive experience in forecasting and applied econometrics. Most recently, she has worked with boutique consulting firms in forecasting market share and impacts of marketing strategy. Previously, she contributed econometric research in telecommunications through the MIT Sloane School of Management. The breadth of her experience includes forecasting stock returns for a major financial services firm, managing the forecasting group in an electric utility company, and developing marketing strategies for a national retailer. Sara is a member of the IBF Board of Advisors. She holds a Master of Science degree in Economics.



**STEVEN S.  
SHWIFF, PH.D.**

Dr. Shwiff has been a Professor of Economics at Texas A&M University –Commerce since 1990 and is guest professor of the China University of Geosciences–Beijing. He has published numerous articles, studies, and books. Dr. Shwiff also spent 10 years working in the corporate sector as manager of research and analysis in the public affairs department of the Adolph Coors Company, Vice President for Strategic Planning, the Schuck Corporation, and President of the Colorado Center and think tank funded by the Corporation. Dr. Shwiff has also taught at the Catholic University of Brasilia, and Monterrey Technological Institute–Mexico City. He has twice been awarded the Outstanding Teaching Professor Award at Texas A&M –Commerce. Dr. Shwiff has a bachelor degree from the University of Texas. He is also a Certified Professional Forecaster (CPF).



**MARK  
LAWLESS**

Mark is a Senior Consultant for the Institute of Business Forecasting & Planning, IBF, and has extensive experience in the field. He has held planning, forecasting, and financial management positions in the automotive, business systems, hospitality/foodservice, consumer goods, financial services, publishing, and other industries. He has published numerous articles in the IBF's Journal of Business Forecasting, as well as served as an editorial advisor to the publication. Mark has made a variety of presentations to practitioners, served as IBF's Keynote speaker, and has moderated IBF programs, including its Executive Forum geared towards Senior Executives. He has participated in the development of the IBF's Certification Program and has provided on-site training for companies such as Sanford Brands, America Online (AOL), Bombardier, Wyeth Healthcare Products, Tyco Healthcare, Gap Inc., Gerber/ Nestle, Cadbury, Rolls Royce, SC Johnson, Micron Technologies, Johnson & Johnson, Cummins and more. Mark has dedicated most of his professional career to business forecasting and planning and holds an undergraduate degree in Economics, and graduate degrees in Economics, Finance, and Accounting.



**JEFF  
MARTHINS**

Jeff joined TastyKakes in 1985 and has worked in all facets of manufacturing and planning. Recently, Jeff has been promoted to Director of Supply Chain Operations and oversees the Demand Planning Department. His background includes several years of manufacturing, which provided him with a solid background for scheduling and planning. In 1998, Jeff accepted a position in the planning and scheduling department and has been intimately involved with it ever since. In 2004, Jeff led the production module of a SAP implementation and took on a new role in Demand Planning. In 2006, Jeff completed the requirements for the for the Institute of Business Forecasting's Certified Professional Forecaster.



**ROBERT K.  
BURROWS**

Burrows is the managing principal and founder of On-Point Group. He has more than 25 years of experience pioneering and working with demand-based systems. Burrows also has 15 years of experience improving strategic business units. He holds a bachelor of science from Iowa State University and a master of business administration from Case Western Reserve University.



**ROBERT P.  
BURROWS**

Burrows is a principal with the On-Point Group focusing on network modeling, business performance measurement, and supply chain education, including rate-based planning and demand-based manufacturing. He has more than 12 years of experience in supply chain with emphasis on shop floor management. Burrows has also led training programs and developed custom educational curriculum for On-Point Group clients. He holds a bachelor of science from Grove City University.

# BEGINNER DAY 1

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|---|--|--|--|
| <p><b>Thursday – August 14, 2008</b></p> <p><b>7:30 am – 8:30 am</b></p> <p>Continental Breakfast   Registration</p> <p><b>8:30 am – 9:00 am</b></p> <p>Welcome &amp; Opening Remarks</p> <p><b>9:00 am – 11:30 am</b></p> <p><b>Fundamentals of Forecasting – People, Process, Methods, and Systems</b></p> <p><b>1. Role of Forecasting in an Organization</b></p> <ul style="list-style-type: none"> <li>Value of forecasting to businesses</li> <li>Development of an effective forecasting process</li> <li>Participant roles in the forecasting process and role of the forecaster</li> <li>Relationship of forecasting and planning and how to interface them</li> <li>Impact of forecasting on business decisions and business operations</li> <li>Forecasting best practices</li> </ul> <p><b>2. Forecasting Process</b></p> <ul style="list-style-type: none"> <li>Organization stakeholders and their roles</li> <li>Interface to business planning processes</li> <li>Management goals and expectations</li> <li>Organization design and organization culture considerations</li> <li>Importance of participation of key functions</li> <li>Importance of consensus meetings</li> <li>Differentiating between planning process and forecasting process</li> </ul> | <ul style="list-style-type: none"> <li>Unconstrained forecasts vis a vis S&amp;OP operating plans</li> <li>Importance of consistent forecasting assumptions across organizations</li> <li>Forecast communication</li> <li>Process assessment and remediation</li> </ul> <p><b>3. Designing a Framework for Forecasting Software Systems</b></p> <ul style="list-style-type: none"> <li>Establishment of management information needs and goals</li> <li>Determination of business drivers and general business model</li> <li>Definition of forecast problem(s) and user needs</li> <li>Data definition</li> <li>Data sources</li> <li>Analytical needs and expectations</li> <li>Relevant time horizons</li> <li>Data transformation needs</li> <li>Data creation flexibility &amp; leads, lags, transformations, etc.</li> <li>Use of POS and syndicated data</li> <li>Report writing and presentation Needs of the organization</li> </ul> <p><b>4. Software Evaluation and Selection Fit with Design Framework (#3 Above)</b></p> <ul style="list-style-type: none"> <li>Appropriate statistical models</li> <li>Artificial intelligence attributes &amp; data analysis, model specification, model selection, and forecasting</li> <li>Ease of data collection</li> <li>Ease of data manipulation</li> <li>Analytical capability</li> <li>Ease of use for all process participants</li> <li>Interface to other planning, data management, and transaction processing systems</li> </ul> <p><b>5. Introduction to Forecasting Methods – Family of Forecasting Models</b></p> | <ul style="list-style-type: none"> <li>Types of methods and models</li> <li>Time series models</li> <li>Cause and effect models</li> <li>ARIMA models</li> <li>Qualitative methods</li> </ul> <p><i>Senior Consultant</i><br/><b>INSTITUTE OF BUSINESS FORECASTING &amp; PLANNING</b></p> <p><b>11:30 am – 12:30 pm</b></p> <p>Luncheon</p> <p><b>12:30 pm – 3:00 pm</b></p> <p><b>How to Design a Business Forecasting Process</b></p> <p><b>1. Introduction to Forecasting Processes and Methods</b></p> <ul style="list-style-type: none"> <li>Why forecast?</li> <li>Forecasting organization</li> <li>“Single number” forecasting</li> <li>The sales and operations planning (S&amp;OP) process</li> <li>Measuring forecast performance</li> <li>Forecast methods</li> </ul> <p><b>2. Case Study</b></p> <ul style="list-style-type: none"> <li>Case activity on forecast process design</li> <li>Group activity on a case study</li> <li>Discussion of group solutions</li> </ul> <p><i>Director, Demand Management</i><br/><b>MIT CENTER FOR TRANSPORTATION &amp; LOGISTICS</b></p> | <p><b>3:00 pm – 5:30 pm</b></p> <p><b>The Demand Management Game</b></p> <p><i>The Demand Management Game is an interactive board game designed to teach participants how to match supply with demand and improve business performance.</i></p> <p><b>1. S&amp;OP – Hands-On FUN FUN FUN</b></p> <ul style="list-style-type: none"> <li>A board game</li> <li>Teams run a company for a year</li> <li>Basic operations planning compared to advanced S&amp;OP</li> <li>Part I – normal method</li> <li>Part II – advanced S&amp;OP</li> </ul> <p><b>2. Case Study in Value Space Design (Short Version)</b></p> <ul style="list-style-type: none"> <li>Case includes customer research</li> <li>Strategic problem solving using the DHSSD model</li> <li>Teams define basic customer values</li> <li>Transformation into planning groups</li> </ul> <p><b>3. Advanced S&amp;OP Played Out</b></p> <ul style="list-style-type: none"> <li>Value spaces to enhance customer-centricity</li> <li>Value metrics are defined</li> <li>Demand planning put to work within value spaces</li> <li>Rates are used to improve accuracy</li> <li>Production throughout management concepts applied</li> </ul> <p><b>4. New Planning Tools Introduced</b></p> <ul style="list-style-type: none"> <li>Advanced S&amp;OP dash board</li> <li>Rate mix planning</li> <li>Capacity balancing charts for promotional and seasonal businesses</li> </ul> |
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# BEGINNER DAY 2

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| <p><b>Friday – August 15, 2008</b></p> <p><b>7:30 am – 8:30 am</b></p> <p>Continental Breakfast</p> <p><b>8:30 am – 11:00 am</b></p> <p><b>How to Prepare Forecasts with Time Series Models</b></p> <p><b>1. Background: Time-Series Concepts You Already Know</b></p> <ul style="list-style-type: none"> <li>Rolling the dice and the random walk</li> <li>You’re only as good as your last ____ (deal, product, etc.)</li> <li>Events that shift the course of history</li> </ul> <p><b>2. What is Time-Series Forecasting and When To Use it?</b></p> <ul style="list-style-type: none"> <li>Learning from the past</li> <li>Time-series vs. other methods</li> <li>Advantages and limitations</li> <li>Current use and practice</li> <li>Data preparation</li> </ul> <p><b>3. Time-Series Methods</b></p> <ul style="list-style-type: none"> <li>Simple averages (level, percent change, and weighted percent change)</li> <li>Moving averages (level and percent, single and double)</li> <li>Smoothing models: exponential and other</li> </ul> | <ul style="list-style-type: none"> <li>Cause-and-effect/Regression</li> <li>Combination approach</li> </ul> <p><b>4. Identifying Patterns and Decomposing Series</b></p> <ul style="list-style-type: none"> <li>Level, trend, seasonality, cyclicity, intervention</li> <li>Seasonal indexes and seasonal adjustment</li> <li>Leading indicators of the business cycle</li> <li>Tracking special events</li> <li>Recognizing noise in the data</li> </ul> <p><b>5. Pulling it all Together (Case Study with MS-Excel)</b></p> <ul style="list-style-type: none"> <li>Constructing the Forecast</li> <li>Evaluating the Forecast (RMSE, MAD, MAPE)</li> </ul> <p><b>6. Successful Presentation: Understanding &amp; Explaining Forecasts</b></p> <p><b>MS-EXCEL WILL BE USED FOR DEMONSTRATION/ EXERCISES. BRING ALONG YOUR LAPTOP (OPTIONAL)</b></p> <p><i>Senior Consultant</i><br/><b>INSTITUTE OF BUSINESS FORECASTING &amp; PLANNING</b></p> | <p><b>11:00 am – 12:00 pm</b></p> <p>Software Demonstrations<br/><i>TBA</i></p> <p><b>12:00 pm – 1:00 pm</b></p> <p>Luncheon</p> <p><b>1:00pm – 3:30pm</b></p> <p><b>How to Present Forecasts to Upper Management</b></p> <p><i>Understand the unique aspects of presenting forecast to upper management. Learn what is important to them and how to communicate that in a compelling way.</i></p> <p><b>1. Forecast Priorities of Upper Management vs. Other Functions</b></p> <ul style="list-style-type: none"> <li>Full plate/limited time</li> <li>Different constituencies</li> <li>Educational and functional background</li> </ul> <p><b>2. Presentation Content</b></p> <ul style="list-style-type: none"> <li>Consistent agenda</li> </ul> | <ul style="list-style-type: none"> <li>Maintenance vs. new vs. discontinued products</li> <li>Accuracy of past forecast</li> <li>Future forecast - vs. plan, year-to-date and year-to-go</li> <li>Key measures - sales, inventory, customer service level, etc.</li> </ul> <p><b>3. Forecast Delivery – Speak The Right Language</b></p> <ul style="list-style-type: none"> <li>Relevant vocabulary</li> <li>“Our” forecast, not mine</li> <li>The big picture</li> </ul> <p><b>4. Conflict Resolution – Minimize Politics</b></p> <ul style="list-style-type: none"> <li>Demand vs. supply</li> <li>Risk analysis</li> <li>Use other “influencers”</li> </ul> <p><b>5. Exercise</b></p> <p><i>Senior Consultant</i><br/><b>INSTITUTE OF BUSINESS FORECASTING &amp; PLANNING</b></p> |
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# INTERMEDIATE DAY 1

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| <p><b>Thursday – August 14, 2008</b></p>  | <p><b>2. How Do POS &amp; Syndicated Data Relate to Other Data Sources and When Should They be Used?</b></p> <ul style="list-style-type: none"> <li>Different dimensions: Product, Geography, Period, Measure</li> <li>Strategic vs. tactical forecasts</li> <li>Exercise</li> </ul>   | <p><b>12:30 pm – 3:00 pm</b></p> <p><b>How to Select, Clean, and Manage Data for the Forecasting Process</b></p> <ul style="list-style-type: none"> <li>How to select data to be used for forecasting</li> <li>The nature and characteristics of data</li> <li>Forecasting data vs. transaction data</li> <li>Analysis and plotting of data</li> <li>Measures of central tendency</li> <li>Measures of dispersion</li> <li>Data distribution and its implications</li> <li>Linkages between data structure and expected error in forecasting</li> <li>Data decomposition</li> <li>Data synchronization</li> <li>Evaluating relationships between data sets</li> <li>How to handle outliers</li> <li>How to handle data shifts</li> <li>How to handle structural changes</li> <li>How to handle missing data</li> <li>How to handle extraordinary events</li> <li>Data transformations and their application</li> <li>Lead and lag relationships in data</li> <li>How to estimate seasonal factors</li> </ul> | <p><b>3:00 pm – 5:30 pm</b></p> <p><b>The Demand Management Game</b></p> <p><i>The Demand Management Game is an interactive board game designed to teach participants how to match supply with demand and improve business performance.</i></p>  |
| <p><b>7:30 am – 8:30 am</b></p> <p>Continental Breakfast   Registration</p>   | <p><b>3. Real-Life Example (Fast-Growing Grocery Product) Using POS Data to Forecast Consumer Demand</b></p> <ul style="list-style-type: none"> <li>Basic concept of regression</li> <li>Identifying possible model inputs</li> <li>Selecting model inputs and final model</li> <li>Producing a forecast</li> <li>Simulating different future scenarios</li> </ul> | <p><b>MS-EXCEL WILL BE USED FOR DEMONSTRATION/ EXERCISES. BRING ALONG YOUR LAPTOP (OPTIONAL)</b></p>   | <p><b>1. S&amp;OP – Hands-On FUN FUN FUN</b></p> <ul style="list-style-type: none"> <li>A board game</li> <li>Teams run a company for a year</li> <li>Basic operations planning compared to advanced S&amp;OP</li> <li>Part I – normal method</li> <li>Part II – advanced S&amp;OP</li> </ul>  |
| <p><b>8:30 am – 9:00 am</b></p> <p>Welcome &amp; Opening Remarks</p>  | <p><b>4. Case Study</b></p> <p><b>5. Summary</b></p>   | <p><i>Senior Consultant</i><br/><b>INSTITUTE OF BUSINESS FORECASTING &amp; PLANNING</b></p>  | <p><b>2. Case Study in Value Space Design (Short Version)</b></p> <ul style="list-style-type: none"> <li>Case includes customer research</li> <li>Strategic problem solving using the DHSSD model</li> <li>Teams define basic customer values</li> <li>Transformation into planning groups</li> </ul>  |
| <p><b>9:00 am – 11:30 am</b></p> <p><b>Consumer Based Forecasting, How to Prepare Forecasts with POS &amp; Syndicated Data</b></p> <p><i>Understand what POS and syndicated data are and how they can be used to forecast. Use regression in Excel to build a forecasting model with syndicated data</i></p> <p><b>1. What are POS &amp; Syndicated Data?</b></p> <ul style="list-style-type: none"> <li>Definitions</li> <li>Sources (EDI, IRI, Nielsen, SPINS, retailer systems, etc.)</li> <li>Importance to CPFR</li> </ul> | <p><b>11:30 am – 12:30 pm</b></p> <p>Luncheon</p>  | <p><i>Senior Consultant</i><br/><b>INSTITUTE OF BUSINESS FORECASTING &amp; PLANNING</b></p>  | <p><b>3. Advanced S&amp;OP Played Out</b></p> <ul style="list-style-type: none"> <li>Value spaces to enhance customer-centricity</li> <li>Value metrics are defined</li> <li>Demand planning put to work within value spaces</li> <li>Rates are used to improve accuracy</li> <li>Production throughout management concepts applied</li> </ul> <p><b>4. New Planning Tools Introduced</b></p> <ul style="list-style-type: none"> <li>Advanced S&amp;OP dash board</li> <li>Rate mix planning</li> <li>Capacity balancing charts for promotional and seasonal businesses</li> </ul> |

# INTERMEDIATE DAY 2

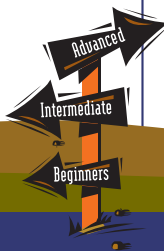
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| <p><b>Friday – August 15, 2008</b></p>   | <p>So, for efficient replenishment, a company must streamline production and reduce changeovers.</p>   | <p><b>11:00 am – 12:00 pm</b></p> <p>Software Demonstrations<br/><b>TBA</b></p>  | <ul style="list-style-type: none"> <li>Leveraging an accurate forecast to drive the manufacturing process</li> </ul>   |
| <p><b>7:30 am – 8:30 am</b></p> <p>Continental Breakfast</p>   | <p><b>3. Role of Forecasts in Managing Safety Stocks</b></p> <ul style="list-style-type: none"> <li>Dynamic safety stock: forecasts drive safety stocks. They increase with an increase in demand forecasts. But there are risks if forecasts don't prove to be accurate. So, forecasts should be monitored very closely.</li> <li>Inventory management: with more accurate forecasts, we can manage our inventory better. We will show you how to reduce finished goods inventory and increase customer fulfillment rates.</li> <li>Cycle turns: this is also a function of inventory management. We will show you how to avoid products sitting and aging in a warehouse, and quickly turn inventory to distribution.</li> </ul> | <p><b>12:00 pm – 1:00 pm</b></p> <p>Luncheon</p>   | <p><b>3. CPFR in Practice</b></p> <ul style="list-style-type: none"> <li>POS forecasting and collaboration</li> <li>Order forecasting as an afterthought</li> <li>Integration into regular forecasting process</li> <li>Shared single forecast</li> </ul>  |
| <p><b>8:30 am – 11:00 am</b></p> <p><b>How to Calculate Safety-Stocks &amp; Manage Inventory with Forecasts</b></p> <p><b>1. What and Why of Safety Stocks</b></p> <ul style="list-style-type: none"> <li>What are safety stocks?</li> <li>Why do we need them?</li> </ul> <p><b>2. Factors Affecting the Size of Safety Stocks</b></p> <ul style="list-style-type: none"> <li>Variations in the demand: it is measured by standard deviation</li> <li>Lead time: time required in procuring raw materials and then converting them into finished products</li> <li>Cycle time: it deals with inventory turn over. For example, because of short shelf life at Tastykake we cannot have 3 days worth of products in safety stock if the shelf life is 8 days.</li> <li>Replenishment times: although a company could probably produce any variety of products on any given day, there are costs for such decisions.</li> </ul> | <p><b>4. Calculation of Safety Stock</b></p> <p><b>5. Examples from Tastykake, Inc.</b></p>  | <p><b>1:00 pm – 3:30 pm</b></p> <p><b>How to Start a Collaborative Planning, Forecasting, Planning, &amp; Replenishment (CPFR) Process</b></p> <p><b>1. Collaborative Partnerships Overview</b></p> <ul style="list-style-type: none"> <li>Leveraging information exchange to maximize the value of the partnership</li> <li>Continuous replenishment programs defined</li> <li>VMI, CRP and CMI</li> <li>Information exchanges and communication between trading partners</li> </ul> <p><b>2. Why CPFR?</b></p> <ul style="list-style-type: none"> <li>Holistic linking of the partner value chains</li> <li>Collaborate on forecast (retail sales, promotional, DC &amp; store)</li> <li>Forecast accuracy as the driver for both supply chains</li> </ul> | <p><b>4. Demand Driven Supply Networks</b></p> <ul style="list-style-type: none"> <li>Integration of retail intelligence into the supply chain process</li> <li>Customer's internal order creation process</li> <li>Promotional dynamics</li> <li>Inventory dynamics</li> <li>Creation of the order forecast using customer POS and inventory</li> </ul> <p><b>5. The New Supply Chain Future</b></p> <ul style="list-style-type: none"> <li>Medium term supply planning driven by forecast</li> <li>Short term planning adjusted by real-time demand information</li> <li>Process and systems to create holistic DDSNs</li> </ul> |
|  | <p><i>Director Supply Chain Operations</i><br/><b>TASTYKAKE, INC</b></p>   |  | <p><i>Sr. Forecast Analyst/S&amp;OP Process Manager</i><br/><b>BAYER CROSCIENCE</b></p>  |

# ADVANCED DAY 1

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|---|---|--|--|
| <p><b>Thursday – August 14, 2008</b></p>  | <p><b>11:30 am – 12:30 pm</b></p> <p>Luncheon</p>   | <p><b>4. Validation of Regression Models</b></p> <ul style="list-style-type: none"> <li>R-squared: a measure of explanatory power</li> <li>F-Statistics, overall performance of a model</li> <li>T-Statistics, significance of a variable</li> <li>Durbin Watson Statistic</li> </ul>  | <p><b>3:00pm – 5:30pm</b></p> <p><b>The Demand Management Game</b></p> <p><i>The Demand Management Game is an interactive board game designed to teach participants how to match supply with demand and improve business performance.ance.</i></p>   |
| <p><b>7:30 am – 8:30 am</b></p> <p>Continental Breakfast   Registration</p>   | <p><b>12:30 pm – 3:00 pm</b></p> <p><b>How to Prepare Forecasts with Regression Models</b></p>  | <p><b>5. Case Study (MS-Excel)</b></p> <p><b>6. Evaluating the Model and the Forecast</b></p> <ul style="list-style-type: none"> <li>Measures of accuracy for model-building</li> <li>How to take your model for a test drive</li> <li>Measures of forecast performance</li> <li>Finalizing the model: The statistical part</li> <li>Finalizing the model: Incorporating business expertise</li> </ul> | <p><b>1. S&amp;OP – Hands-On FUN FUN FUN</b></p> <ul style="list-style-type: none"> <li>A board game</li> <li>Teams run a company for a year</li> <li>Basic operations planning compared to advanced S&amp;OP</li> <li>Part I – normal method</li> <li>Part II – advanced S&amp;OP</li> </ul>  |
| <p><b>8:30 am – 9:00 am</b></p> <p>Welcome &amp; Opening Remarks</p>  | <p><b>1. Regression Background</b></p> <ul style="list-style-type: none"> <li>X-Y scatter plots and rise over run</li> <li>From two dimensions to three and more</li> </ul>   | <p><b>7. Successful Presentation of a Regression-Based Forecast</b></p>  | <p><b>2. Case Study in Value Space Design (Short Version)</b></p> <ul style="list-style-type: none"> <li>Case includes customer research</li> <li>Strategic problem solving using the DHSSD model</li> <li>Teams define basic customer values</li> <li>Transformation into planning groups</li> </ul>  |
| <p><b>9:00am – 11:30am</b></p> <p><b>How to Design a Sales &amp; Operations Planning (S&amp;OP) Process</b></p> <ol style="list-style-type: none"> <li>Introduction to S&amp;OP processes and technologies             <ul style="list-style-type: none"> <li>Importance of S&amp;OP</li> <li>How is S&amp;OP done with examples</li> <li>Success factors and improving the S&amp;OP process</li> <li>Diagnosing a company's process</li> </ul> </li> <li><b>Case Study</b> <ul style="list-style-type: none"> <li>Case activity on S&amp;OP process design</li> <li>Group activity on a case study</li> <li>Discussion of group solutions</li> </ul> </li> </ol> | <p><b>2. Business Applications of Regression Forecasting</b></p> <ul style="list-style-type: none"> <li>“What if” scenario analysis</li> <li>Business strategy and measuring impacts</li> <li>The value of business knowledge and the role of the forecaster</li> </ul> <p><b>3. The Building Blocks of Regression Analysis</b></p> <ul style="list-style-type: none"> <li>Dependent Variable (Y): what you forecast</li> <li>Independent Variable (X): what you use to predict it</li> <li>R-squared: a measure of explanatory power</li> <li>Theory meets practice: the statistician's assumptions</li> <li>What can go wrong</li> <li>How to check for violation of assumptions</li> <li>How to fix violation of assumptions</li> <li>A picture is worth a thousand words</li> </ul> | <p><b>MS-EXCEL WILL BE USED FOR DEMONSTRATION/EXERCISES. BRING ALONG YOUR LAPTOP (OPTIONAL)</b></p> <p><i>Senior Consultant</i><br/> <b>INSTITUTE OF BUSINESS FORECASTING &amp; PLANNING</b></p>   | <p><b>3. Advanced S&amp;OP Played Out</b></p> <ul style="list-style-type: none"> <li>Value Spaces to enhance customer-centricity</li> <li>Value metrics are defined</li> <li>Demand planning put to work within value spaces</li> <li>Rates are used to improve accuracy</li> <li>Production throughout management concepts applied</li> </ul> <p><b>4. New Planning Tools Introduced</b></p> <ul style="list-style-type: none"> <li>Advanced S&amp;OP dash board</li> <li>Rate mix planning</li> <li>Capacity balancing charts for promotional and seasonal businesses</li> </ul> |
| <p><i>Director, Demand Management</i><br/> <b>MIT CENTER FOR TRANSPORTATION &amp; LOGISTICS</b></p>   |   |  |  |

# ADVANCED DAY 2

|   |   |   |  |
|---|---|---|--|
| <p><b>Friday – August 15, 2008</b></p>  | <p><b>11:30 am – 12:30 pm</b></p> <p>Luncheon</p>   | <p><b>12:00 pm – 1:00 pm</b></p> <p>Luncheon</p>  | <p>–Using the ACF and PACF</p> <ul style="list-style-type: none"> <li>Diagnosis of model adequacy</li> </ul>   |
| <p><b>7:30 am – 8:30 am</b></p> <p>Continental Breakfast</p>  | <p><b>2. Summary</b></p> <p><b>3. Shape/Timing of Demand</b></p> <ul style="list-style-type: none"> <li>Product life cycle</li> <li>Diffusion/Logistic/Gompertz/Logit/Bass</li> <li>Test market/ Trial &amp; repeat</li> <li>Analog/Looks-like</li> </ul> | <p><b>1:00 pm – 3:30 pm</b></p> <p><b>Forecasting with Univariate Box-Jenkins</b></p>   | <p>–Coefficient restrictions</p> <p>–Residual analysis</p>   |
| <p><b>8:30 am – 11:00 am</b></p> <p><b>How to Prepare Forecasts for New Products &amp; Services</b></p> <p><i>Gain a better understanding of the new product development process and how/when forecasting fits in. Learn about specific techniques that can be used to help develop more accurate year 1 aggregate forecasts. Understand the “product life cycle” and how it relates to forecasting the shape and timing of year 1 sales.</i></p> <ol style="list-style-type: none"> <li><b>New Product Development Process</b></li> <li><b>Sizing the Opportunity</b> <ul style="list-style-type: none"> <li>Qualitative/Judgment</li> </ul> </li> </ol> | <p><b>4. Summary</b></p> <p><b>5. Group Exercises</b></p> <p><i>Senior Consultant</i><br/> <b>INSTITUTE OF BUSINESS FORECASTING &amp; PLANNING</b></p> <p><b>11:00 am – 12:00 pm</b></p> <p>Software Demo</p>   | <p><b>1. The Box – Jenkins Method Where Does This Technique Fit Into Your Toolkit?</b></p> <ul style="list-style-type: none"> <li>What are the advantages and disadvantages of using it?</li> <li>What are the underlying assumptions?</li> <li>Techniques for identifying determinism within your data             <ul style="list-style-type: none"> <li>–The time series plot</li> <li>–The ACF and PACF</li> </ul> </li> </ul> <p><b>2. Modeling with Univariate Box-Jenkins (ARIMA)</b></p> <ul style="list-style-type: none"> <li>Tentative identification             <ul style="list-style-type: none"> <li>–Weak stationarity</li> </ul> </li> <li>Model estimation</li> </ul> | <p><b>3. Forecasting Case Studies</b></p> <ul style="list-style-type: none"> <li>The pure AR form: change in business inventories</li> <li>The pure MA form: housing permits</li> <li>A seasonal model: air carrier freight</li> <li>Mixed models</li> </ul> <p><b>4. Putting It All Together: Regression with Box-Jenkins</b></p> <p><b>5. Modeling with Multivariate Box-Jenkins</b></p> <p><b>MS-EXCEL WILL BE USED FOR DEMONSTRATION/EXERCISES. BRING ALONG YOUR LAPTOP (OPTIONAL)</b></p> |
| <p><i>Professor</i><br/> <b>TEXAS A&amp;M UNIVERSITY-COMMERCE</b></p>   |   |   |  |



As more companies of all sizes and regions recognize that forecasting and demand planning is critical in business, these firms are grappling with two problems. First, what kind of skill set should a forecaster have to succeed in the forecasting function? Second, which prospective candidate has all of what is needed to perform this role efficiently and effectively? The IBF Certification Program will help solve both problems.

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P.O. Box 670159  
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