MAY 6–8, 2019 | NEW ORLEANS, LOUISIANA USA

IBF RECERTIFICATION: 10 POINTS

PREDICTIVE BUSINESS ANALYTICS FORECASTING & PLANNING CONFERENCE

W/ HANDS-ON DATA SCIENCE & PREDICTIVE ANALYTICS WORKSHOP

Institute of Business Forecasting & Planning

PHONE: +1.516.504.7576 | EMAIL: info@ibf.org | WEB: ibf.org/events/neworleans2019/

MONDAY | MAY 6, 2019 | 1:30PM – 4:30PM

IBF MEMBERS OR GOLD PACKAGE ONLY

PRE-CONFERENCE: HANDS-ON DATA SCIENCE & PREDICTIVE ANALYTICS WORKSHOP

Hands-On Data Science & Predictive Analytics

This workshop will provide practical tips to incorporate into your own organization, where you'll learn to leverage the cutting-edge of analytics technology. We will focus on data science applications for forecasting and best practices using Python. Recent advances in forecasting, often called Predictive Analytics techniques, involve the use of Big Data, including analysis of textual data like that created by social media (Facebook etc.). In this workshop, you will fully develop and script your own analytics solutions while simultaneously learning Python and its capabilities. This ½ day masterclass will be especially helpful for demand planners and forecasters looking to implement the latest advancements and next-level techniques.

I. INTRODUCTION

II. SOFTWARE OVERVIEW
- Popular Data Science tools
- Python 101

III. ENVIRONMENT
- Reading and summarizing data
- Merging data objects
- Feature engineering
- Installing and initiating packages

IV. DATA CLEANSING & PREPARATION
- Feature Scaling
- Univariate vs Multivariate Outlier Detection
- DBSCAN clustering, anomaly extraction

V. MACHINE LEARNING MODULE 1 – REGRESSION
- Machine Learning Defined
- Comparison to Statistical Methods
- Artificial Neural Networks

VI. MODEL OPTIMIZATION
- K-Fold Cross Validation
- Parameter Selection
- Assessing model accuracy, stability
- Combining models to improve accuracy

VII. MACHINE LEARNING MODULE 2 – CLASSIFICATION
- Overview of Ensemble Modeling
- Random Forest Trees

VIII. MACHINE LEARNING MODULE 3 – ADVANCED TOPICS
- Gradient Boosted Trees
- Explaining model behavior
- Extended R Programming

IX. DATA VISUALIZATION
- Plotting Basics
- Advanced Graphics

X. TOPICS OF EXPLORATION

Arya Eskamani
Data Science Leader
Royal Caribbean Cruise Lines

EDUCATIONAL SESSIONS

KEYNOTE PRESENTATION

"How Machine Learning & Predictive Analytics Saved This Chicken Company From Being Barbecued"

Scott Pavel
Vice President of Technical Services
Tecumseh Poultry, a Tyson Foods Company

1 Bringing Advanced Data Science To Statistical Modeling: Large Scale Forecasting With Python and Facebook Prophet

High forecast accuracy should be the priority for any company. Why? Because it increases the likelihood of favorable outcomes in customer service and working capital through availability of the right mix of products at the right place and time. The data science team at Newell Brands has implemented a statistical demand forecasting platform, Apollo, written entirely in Python, incorporating a broad suite of modeling techniques, including Facebook's Prophet framework, and various spectral and classical decomposition methods. The platform is built to accommodate tens of thousands

of time series using parallel processing with robust out-of-sample testing and model hyperparameter tuning. A highly parametrized and generalized design allows for low overheads, switching across data sets (orders, invoices, point of sale units and levels of aggregation). Come to this session and I'll reveal how we incorporate exogenous factors such as event calendars, promotional data and macroeconomic drivers, as well as deployment, adoption and how we use model results to override existing statistical forecasts.

You will learn:

- Solutions to common technical challenges when building a forecasting system at scale, including parallelization, model hyperparameter tuning and out of-sample testing
- Our approach to deploying the forecasts including the initial rollout and ongoing maintenance
- Technical, organizational and business best practices that we adopted (code versioning on Github, partnership with demand planning and CoE teams, sponsorship from key leaders etc.)

Vikram Govindan, ACPF
Director of Data Science
Newell Brands

2 A Little Machine Learning Can Go A Long Way: Tools for Machine Learning in Demand Planning

Though by no means a nascent technology, Machine Learning (ML) is still in its infancy as a tool for demand forecasting. The current limited use of machine learning by demand planning organizations may be driven by a lack of need, a lack of internal data science expertise, or inadequate commercially available offerings. Whatever the case, the purpose of this presentation is to show you how you can implement a ML forecasting solution in your organization that requires minimal upfront investment with the potential for transformational results. I'll show you how to get started with the right tools and techniques, with lessons learned from our journey, and leave you with a practical roadmap to benefit from this technology right away.

You will learn:

- What tools make machine learning most accessible
- Our real-life experience in developing forecasting tools that include machine learning techniques
- How our demand planning process has been adapted to include machine learning techniques

Geoffrey Stamper
Director, R&D Portfolio Optimization and Global Demand Planning

Michael Devinoff
Vice President, Enterprise Strategy Analytics (ESA) Lead
Bristol-Myers Squibb

3 When Celebrities Ruin Your Forecasting: The Difficulties of Celebrity & Influencer New Product Launches

It's difficult enough to plan for a new product, especially in the Beauty industry. Brands usually look to add completely new products making it difficult to find the appropriate benchmarch or like products to provide an initial forecast. And this lack of forecast means challenges regarding regional relevance, distribution, changes to assortments, STT timing and digital and in-store activations. Add to that the star power behind major celebrities who can spike demand for your products by promoting it to their social media followers who will buy new, limited duration products immediately after seeing a tweet. These big names and short timing make it difficult to avoid holding and distributing wildly inaccurate inventory. The good news is, there are steps to take that can help mitigate this, and it all starts with analytics. Come to this session and I'll reveal how you can accurately forecast new products, allowing your supply chain to balance supply with demand, and increasing the odds of a successful launch.

You will learn:

- Planning for short life-cycle products, and issues, experiences and success factors
- How to plan and launch a new product for best results
- Utilizing analytics for new product launches and how to forecast demand for a new product

Thomas Matzner
Senior Manager, Demand Planning
BECCA Cosmetics

4 Introduction to Tools and Algorithms in Data Science & Machine Learning

People are well aware of the increasing importance of Data Science and Machine Learning, but many don't understand the tools/algorithms that power this technology. As with anything, understanding the core concepts and methodology behind software tools is key to getting the most out of them. This hands-on session is designed to introduce participants to a breadth of Machine Learning algorithms, including Linear Regression, K-Means, K-Nearest Neighbors, Decision Trees, and Support Vector Machines. The focus of the session will be on gaining a conceptual understanding of these tools, providing a solid foundation on which to learn how to use them. Demand planning and forecasting professionals with limited or no coding skills or statistics background will be able to comprehend the material. I'll leave you with the confidence and knowledge required to start the journey to leveraging Machine Learning in your organization.

You will learn:

- How machine learning works and its applications
- The terminology and uses of many of the most common data science tools
- The conceptual methodology of the most common data science algorithms

Wes Womer
FP&A Manager
BraunAbility

5 The Current State of New Product Forecasting

In 2018, a survey was conducted by SAS and the Virginia Commonwealth University School of Business to determine the current state of New Product Forecasting (NPF) practices during the commercialization stage. The results provide an in-depth view of the current state of new product forecasting (NPF) practices across all industries for launch and pre-launch. The findings paint a fascinating picture of the NPF landscape and we will share them with you in this interactive session. A focus on departmental responsibility and involvement in the NPF process, technique usage, technology usage, forecast accuracy, and forecast time horizon will be discussed. Attendees will get an understanding of the challenges, opportunities and best practices that will help in their own new product forecasting and planning process. A discussion as to how Artificial Intelligence and Machine Learning are being used to enhance the predictability of new product launches, filling the gap left by time series models and in the process turning the risk of new product launches into opportunity.

You will learn:

- What satisfied customers are doing to improve new product forecasting (NPF) launches.
- The biases companies must overcome when generating NPFs and which departments should be involved in the NPF process
- Key findings comparing NPF in manufacturing versus non-manufacturing companies
- How companies are using machine learning and sentiment analysis to improve NPF launches

Charles Chase, CPF
Executive Industry Consultant
SAS Institute

6 Jumping Across The S&OP Maturity Chasm: How To Use Predictive Analytics, Big Data & Risk Management Tools For Next Level S&OP

For almost 50 years, the operations/supply chain profession has embraced the S&OP process to balance supply and demand in complex supply chain networks. As a former S&OP process owner for three Fortune 100 manufacturers, I can identify with the challenges associated with developing and sustaining the process. With more and more tools emerging like Predictive Analytics, Big Data, probabilistic supply chain modeling, cognitive computing and risk management methodologies, the future looks very bright. Why? Because the tools allow us to adapt to the new normal, i.e., unstructured data in our supply chains. With this technology, we have an opportunity like never before to make the next-level jump to S&OP maturity and secure a competitive edge.

You will learn:

- The global digital landscape and how it relates to S&OP
- New tools and techniques that better handle uncertainty, complexity and risk in our supply chains, and can literally read, analyze and respond to unstructured data
- Recent use cases and ROI's achieved by organizations who are exploring these new approaches

Gregory Schlegel
VP/Principal
SherTrack LLC
Adjunct Professor, Supply Chain Risk Management,
Lehigh University

7 A Matter Of Life & Death: Improving Sales Forecast Accuracy in the Services Industry

This case study describes our journey at Southern Farm Bureau Life Insurance Company to create accurate and actionable annual sales forecast for the executive team. At this large life insurance company, our objective was to provide a mid-year forecast that would allow management to intervene in time to meet or exceed annual sales goals. This interactive session will cover the methodology we used to successfully improve forecast accuracy, and present the model results in an impactful way. It will also cover critical decision points including variable selection and transformation, model selection, determination of appropriate evaluation criteria, and deployment considerations. You'll leave this session with practical insight to drive forecast accuracy in your own organization, and know how to present it executive management.

You will learn:

- How forecasting can impact a business's financial goals
- How to set up the data for forecast modeling
- How to compare forecast models and select the right one

Kendell Churchwell, CPF
Senior Marketing Data Analyst
Southern Farm Bureau Life Insurance Company

8 More Than Just Accurate Forecasts: Using Intelligent Automation & Machine Learning to Boost FVA

Intelligent automation (IA) driven by Artificial Intelligence (AI) and Machine Learning (ML) is disrupting the way companies do business. IA techniques can be applied to all kinds of activities across your organization to reduce the everyday repetitive work while uncovering key insights to improve the effectiveness of your processes, as well as your workforce. IA will sense and synthesize vast amounts of data, guiding demand planners with surgical precision to make more value add to the demand planning process. In this session I will reveal how Demand Planners will be able to understand and analyze massive amounts of forecast information, respond quickly to complex inquiries, and make accurate overrides across the entire business hierarchy.

You will learn:

- How intelligent automation driven by machine learning (ML) techniques can enhance demand planning
- How you can automate repetitive work while providing intelligence to pinpoint where, when and by how much to manually adjust statistical forecasts
- The real benefits of ML recommendations. Know when to adjust forecasts and when not to for more accurate adjustments

Charles Chase, CPF
Executive Industry Consultant
SAS Institute

9 Optimistic About Inventory Optimization: Statistically Determined Safety Stock & Automated Procurement

Let's talk about something we all struggle with: deciding an acceptable safety stock level that is financially efficient while preventing risk of stock-out. In this hand-on session, you will be introduced to basic statistical tools such as Z-Scores and sample standard deviations as they relate to demand and inventory optimization. The concept of desired service levels and an ABC modeling approach will be explained and shown how it can be integrated into a statistical safety stock approach. Variations on the original base algorithm will be given to adjust for variations in lead time, demand, and other supply factors. Last but by no means least, an introductory re-order point model will be given utilizing an expanded form of the safety stock algorithm that can be implemented to automate procurement.

You will learn:

- How implementing a statistically based safety stock system using algorithms can optimize inventory and be financially efficient
- The role of ABC modeling in statistical inventory management
- How a statistical safety stock and re-order point can automate procurement efficiently

Tim Plumadore
Materials Planner/MRP Controller
Beech-Nut Nutrition

10 Becoming A Story Teller Like Steven Spielberg: Build Your Career by Building a Narrative For Data Visualizations

Data is great, but what use is it without context, actionable insights and being able to present it in a way that people understand? This presentation focuses on the importance of making a good impression when presenting analytics, not just to make the most of your findings, but to further your career. Make no mistake, the way we present the findings of our analysis is key to climbing the corporate ladder. We do this by attaching a narrative to our data visualizations. In this session designed to help your progress in your career, I'll reveal what constitutes a narrative and why we must develop it before we prepare data visualizations, and how to use storyboards to build a narrative. Lastly, we break out the specifics between a successful written narrative with analytics, and a visual narrative with analytics. For ambitious analysts, data scientists and planners who want to get ahead, this is not one to miss.

You will learn:

- Why it is important to your career to learn to think in terms of the narrative, not just the data
- What attendees can learn from film director Steven Spielberg
- The best way to practice for a presentation for maximum engagement and impact

David Wehling
Manager, SIOP & Analytics, International Division
The Toro Company

11 Saving Lives With Demand Planning: Statistical Forecasting

Emergency Department (ED) overcrowding is a critical problem in hospitals nationwide. An excessive number of patients waiting to be seen for medical care stops ED's from treating people effectively and quickly. The impact of overcrowding on patients who require emergency care are dire because it doesn't just mean lower patient satisfaction, it means higher death rates. It also means more costs

the hospital has to bear that could be directed to better patient care. But could there be a solution to this problem? In this interactive session, I will reveal that if expected demand for ED services is known, then hospital systems can schedule the appropriate level of staff (supply) to the expected demand (patient visits). I will discuss real-life case studies where hospitals have implemented statistical forecasting methods for predicting ED patient arrival. We'll examine how these predicted volumes were evaluated and integrated to the hospital's decision making process and successfully met leadership expectations. The methods and approaches discussed are applicable to all industries.

You will learn:

- How to conceptualize and frame an analytical problem, linking research questions to data
- How different modeling techniques can help with predictions (GBM, Random Forest, Lasso, Time Series)
- How to successfully implement statistical modeling to support decision making process

Joe Ganancio, CPF
Data Science Director
Motorola

12 Your Bias Is Showing: Using Behavioral Economics to Improve Human Inputs in Forecasting

For nearly fifty years, the pioneering work of Tversky and Kahneman has demonstrated that a hybrid approach to forecasting – using both human inputs and a statistical baseline – will usually outperform a singular approach. And building on this foundation, recent advances in Behavioral Economics have put a host of powerful new insights and tools into the hands of demand planners that can mitigate common problems in the forecasting and planning process – namely biases from different functions that make their way into the forecast. By its nature, every human touchpoint includes a degree of subconscious bias and heuristics, but by identifying them we are able to put in place nudges and safeguards that minimize their impact, and improve the quality of forecasts. This presentation will provide attendees with some simple and highly effective practices to put into place to begin making use of behavioral economics in their own planning processes.

You will learn:

- How to identify some of the most common heuristics and biases at play in demand planning and forecasting
- What steps to take to minimize the risk of judgment bias in forecasts
- The value of FVA and other practices to improve forecast accuracy

Jonathon Karelse
Chief Strategy Officer
Factors Group of Nutritional Companies

13 How Much Is Forecast Error Costing Your Company? Dollarizing Forecast Error With WMAPE & BIAS

WMAPE and BIAS are just 2 KPIs that capture your local/regional error or SKU level error. Understanding how to calculate these values is key for demand planners because it allows us to gauge the impact of forecast error on inventory levels, operating income and service levels. And when we know our forecast accuracy, we can start the process of improving it. In this interactive session I will discuss how to use these KPIs to understand forecast error, complete with explanation of the formulas. I will also reveal how you can calculate financial benefit of WMPAE, putting a dollar value on forecast accuracy which helps convince leadership of the value of investing in forecasting tools and resources. I'll leave you with the ability to identify relationships between WAMPE and operating income, invoices, service levels measured as fill rates, stockout rates and loss of sales.

You will learn:

- WMAPE and BIAS concepts to improve your forecast accuracy
- Benefits of improved WMAPE on the business and how to relate error to operating income, service levels and stockouts
- Formulas to calculate the financial benefit to the company of improving WMAPE

Mike Guerra
Sr. Manager, Operations
Jose Cuervo

14 Inventive Solutions For Inventory Problems: How To Slash Inventory Using Signal Processing & Machine Learning

Forecasting the number of items in inventory is an important factor in reducing direct and indirect inventory carrying cost and reducing stockouts. This problem can be considered as a time series forecasting problem and as such many of us try to solve it using time series techniques. But due to the complexity and number of parameters, neither time series modeling nor deep learning models are able to provide decent forecast accuracy. An elegant approach to this complex problem is the use of signal processing, specifically wavelet transformations. In this interactive session, I will discuss how we decomposed time series signals into their components. Using these signals, we built an architecture of classifiers to predict the respective signal and then recombined these predictions using inverse wavelet transformation. I will also reveal how we obtained even higher prediction accuracy including stationarity analysis on wavelet components using auto-regression, lag analysis using auto-correlation, and more, resulting in inventory reduction by almost 75%.

You will learn: -

- Problems and solutions to inventory forecasting
- Signal processing using wavelet transformation and time series analysis
- Time series forecasting using Machine Learning techniques

Rauf Ahmed
Director, Supply Chain & Distribution Solutions

Mehdi Ranjbar
Data Scientist
Visionet Systems Inc.

15 How To Use Cluster Analysis For More Accurate Forecasts

Cluster analysis can identify groups of like customers or products which is valuable because it enables more precise forecasts. Cluster analysis uses customer or product attributes, along with their demand history, to form such groups. The result is groups with values that are as similar to each other as possible, and the groups as a whole are as different to each other as possible. In this hands-on session, we'll examine the assumptions behind cluster analysis, the two main types of cluster analysis and how to identify the optimal attributes of clusters for maximum effect. This methodology is an effective way of improving forecast accuracy, and I'll leave you with the knowledge you need to implement it in your own organization.

You will learn:

- The logic behind cluster analysis and comparison of two key types of methods (hierarchical and partitioning)
- How to identify clustering methods for both statistical forecasting and machine learning
- Measures of demand history "RFM" (recency, frequency and monetary) and how clusters are chosen and evaluated

Sara Brumbaugh
Managing Principal
Ceres Analytics

16 Quick Reflexes: Machine Learning For Real-Time Demand Planning with IoT Data and More

Modern day planners are bombarded with large volumes of both historical and real time data. Planning systems must rapidly identify trends, exclude outliers, and turn data exceptions into actionable insights, which is why Supply Chain Planning is a natural candidate for machine learning. Thanks to the IoT, there is more and more real-time data available to us, providing visibility into demand for the short-term horizon. In this interactive presentation, we will discuss how machine learning and demand sensing change the demand planning game. I will leave you with a practical roadmap to gathering, cleansing and analysing your company's data for short-term planning that'll allow your organization to react faster to opportunities and threats.

You will learn:

- The not-so-obvious Big Data sources to create demand signal insights
- How to filter, cleanse and structure data to add value to demand planning
- How to use machine learning to predict make-to-order demand and the importance of intelligent clustering in demand planning

Shaun Phillips
Global Product & Marketing Manager
QAD Dynasys

17 Successful Digital Transformation for Supply Chain: 5 Key Pitfalls to Avoid

When demand planning and supply chain digital transformations are implemented successfully, it creates a better analytics capability, cost reductions, and improved customer satisfaction. But the reality is that 70% of digital transformation projects fail to reach their stated goals. Achieving these benefits requires a continuous improvement plan that balances the necessary technology, people and processes. In this interactive session we will address key questions such as: what digital transformation means for your company, and how can it be integrated into the current way of operating. Find out how Escalade Sports is successfully creating a digital transformation for supply chain and discover the practical implications of digital technologies, including the business changes needed for successful implementation.

You will learn:

- The common pitfalls to avoid when managing change with real-life case studies
- What a digital supply chain transformation means for your company
- How to use machine learning and technology to improve planning accuracy to support decision making

Eric Wilson, CPF
Director of Planning
Escalade Sports

FORECASTING & PLANNING ROUND ROBIN, ROUND-TABLE DISCUSSIONS

Increase your networking opportunities at IBF's Conference by joining us at our very popular 1-hour Round Robin, Round-Table Discussion session. Take this opportunity to bring up the most challenging questions facing your team, share your own war stories from the field and hear and share best practices. Attend 3 timely and practical topics provided for your professional enhancement. These sessions will add new dimensions to the services you provide your customers, and increase your contact base in the S&OP, demand planning & forecasting community. All experience levels are invited and welcome.

Included With Your Conference Registration

TOPICS:

- ***Technology for Analytics, Forecasting, and Planning***
- ***Talent Management in Analytics, Forecasting, and Planning***
- ***Analytics, Data Management, & Improving Forecast Accuracy***
- ***New Products: Successfully Forecasting & Planning the Success of Innovation***

BECOME A CERTIFIED PROFESSIONAL FORECASTER (CPF)

Master Demand Planning, Forecasting, and S&OP with IBF Certification

Benefits of IBF Certification

FOR EMPLOYEES:

- Accelerate your career growth, leadership opportunities, marketability, and job security
- Validate your professional experience, knowledge, and skill-sets in the field
- Build confidence knowing that you're prepared for today's rapidly changing marketplace
- Complement your supply chain education & certifications with IBF
- Become more recognized at your company, as well as in the field
- Master demand planning, forecasting and S&OP

FOR EMPLOYERS:

- Save time and resources as IBF certified individuals are pre-qualified, allowing you to quickly identify the right person for a forecasting/demand planning job
- Gain assurance that an IBF Certified individual has the background to help improve forecasting performance and hit the ground running
- Increase the value of your forecasting and demand planning staff, department, and company
- Save time and resources in training — CPF or ACPF professionals already have a verified body of knowledge

GET CERTIFIED AFTER THE CONFERENCE!

Please visit www.ibf.org for additional exam dates and locations.

Register on our website, www.ibf.org or call us @+1.516.504.7576 for more details.

EARN 10 POINTS TOWARD RE-CERTIFICATION BY ATTENDING THIS CONFERENCE!

IBF'S BODY OF KNOWLEDGE
$124.95 USD

Hotel Information:

HARRAH'S HOTEL
228 POYDRAS STREET
NEW ORLEANS, LOUISIANA 70130

Reservations: +1.877-466-7847 or +1.504.533.6000

Online Reservations: http://bit.ly/2tn5xJ2

Group Code: S05IBF9

Special IBF Group Rate:

$219/ night + tax when you reserve your room by April 15, 2019

*Harrah's will assess a $15 fee for all reservations made via the telephone call center. This fee will not apply to reservations made via the internet.

EVENT SPONSORS

o9 Solutions | JOHN GALT | SAS

Exhibit Space is Available!

What You Get:

- Area for the exhibitor's 10' pop up booth, 6' skirted table and two chairs
- Access for up to 2 people to man your booth
- Networking opportunities with attendees during breaks and all food functions

Exhibitor Fees: $3200 (USD)

For further information:
Phone: +1.516.504.7576
Email: smurray@ibf.org

Become a Sponsorship Partner!

Available Top Tier Sponsorships

- Breakfast Sponsorship
- Cocktail Reception

PRESENTERS

KEYNOTE SPEAKER | Scott Pavel, *Vice President of Technical Services,* **Tecumseh Poultry, a Tyson Foods Company**

Rauf Ahmed, *Director, Supply Chain & Distribution Solutions,* **Visionet Systems Inc.**

Felix Anane, *Director of Demand Planning and Analytics,* **Wonder Workshop**

Felix is currently Director of Demand Planning and Analytics for a fast-growing educational robotics startup called Wonder Workshop. He oversees all things data regarding supply chain operations and sales marketing. Felix's past experience includes supply chain planning, having worked for Japanese electronics conglomerate Fujitsu where he was in charge of supply chain planning for the Americas. Felix is based in the heart of Silicon Valley, Santa Clara, California, and is very involved in the tech and startup community. Felix holds a Bachelor of Science in Electrical Engineering and MBA from Arizona State University.

Sara Brumbaugh, *Managing Principal,* **Ceres Analytics**

Sara Brumbaugh is Managing Principal of Ceres Analytics, a consultancy specializing in applied mathematics, statistics, and machine learning. Sara's roots are in business forecasting: she's worked with the IBF for over 20 years, and is the 2015 recipient of IBF's Lifetime Achievement Award. Sara's work in predictive analytics began with construction of forecast drivers to predict stock returns for mutual funds. She has developed customer-level response models in marketing, along with product optimizations in market research. Her current work focuses on bioinformatics in medicine and science. Sara holds a masters in Economics from Florida State University.

Charles Chase, CPF, *Executive Industry Consultant,* **SAS Institute**

Mr. Chase is an author, thought leader and trusted advisor delivering demand planning and forecasting solutions to improve consumer packaged goods companies supply chain efficiencies. Prior to that, he worked for various companies, including the Mennen Company, Johnson & Johnson, Consumer Products Inc., Reckitt Benckiser PLC, Polaroid Corporation, Coca Cola, Wyeth-Ayerst Pharmaceuticals, and Heineken USA. He has more than 20 years of experience in the consumer packaged goods industry, and is an expert in sales forecasting, market response modeling, econometrics, and supply chain management. He is the author of several books, including Next Generation Demand Management: People, Process, Analytics, and Technology and Demand-Driven Forecasting: A Structured Approach to Forecasting. In addition, he is co-author of Bricks Matter: The Role of Supply Chains in Building Market-Driven Differentiation. He is also the second recipient of the IBF Lifetime Achievement Award.

Kendell Churchwell, CPF, *Senior Marketing Data Analyst*, **Southern Farm Bureau Life Insurance Company**

Kendell Churchwell is a senior analyst with Southern Farm Bureau Life Insurance where she is responsible for the implementation of marketing predictive analytics projects. Her career started at IBM as an IT specialist before moving on to business analysis and analytics roles at C Spire where she spent 10 years. She is a Certified Analytics Professional (CAP®, INFORMS), a certified IBM SPSS Modeler Professional, and Project Management Professional (PMP). Kendell has BS in Mathematics and Computer Science and an MBA from Mississippi State University.

Michael Devinoff, *Vice President, Enterprise Strategy Analytics Lead,* **Bristol-Myers Squibb**

Michael Devinoff is currently Vice President, Enterprise Strategy Analytics Lead at Bristol-Myers Squibb Co (BMS). He created and leads a 50-person strong, company-wide team focusing on strategic long-range forecasting, manufacturing supply planning, enterprise resource allocation and other cross-business unit advanced analytics. Michael has been with BMS for 18 years working in different areas of the business including Marketing Research, Forecasting, and Advanced Analytics. Prior to his time with BMS, Michael spent four years with NFO-Migliara/Kaplan Associates, an industry-leading Marketing Research consulting company. There he successfully built a multi-million-dollar base of client business and led a broad team of research analysts addressing strategic business questions across the entire range of products. Michael holds an MBA in Marketing from Rutgers University Graduate School of Management, and a BS in Biology/Genetic Engineering from Binghamton University.

Arya Eskamani, *Data Science Leader*, **Royal Caribbean Cruises**

Arya Eskamani currently holds the role of Senior Predictive Analytics Analyst for Restaurant Services, Inc. where he is responsible for all complex analytical and forecasting projects. He has over five years of experience applying predictive analytics in a variety of professional fields including technology, healthcare, and manufacturing. Arya received his Bachelors in Business Economics from the University of Central Florida and a M. S. in Economics from Florida Atlantic University.

Joe Ganancio, CPF, *Data Science Director,* **Motorola**

Joe Ganancio is a Data Science Director at Motorola (owned by Lenovo) and has developed and implemented practical data science solutions with state-of-the-art predictive modeling in the consumer electronics and health care industries. This is a role he has held for 5 years but has spent 19 of the last 22 years working at what is now Lenovo, starting out at IBM before moving to Motorola. Joe's expertise includes Data Science, Marketing Analytics, Supply Chain Operations, Program Management, and Strategic Planning. Joe has a master's degree in Predictive Analytics from Northwestern University, an executive MBA from the University of Pittsburgh, a master's in Project Management from George Washington University and a bachelor's in Engineering from the University of Campinas.

Vikram Govindan, ACPF, *Director of Data Science,* **Newell Brands**

Vikram Govindan is Director of Data Science at Newell Brands, based in Hoboken, NJ. In this role, he leads a team of data scientists focused on supply chain reporting and statistical demand forecasting at scale. Before taking this role, he founded and led the data science practice at C&S Wholesale Grocers, a $30 Billion privately held wholesale grocer. Prior to that, he spent nearly 8 years at Monsanto Company, holding various data science roles of increasing responsibility, with the latter half of his career focused on supply chain. Vikram holds B. Tech and M. Tech degrees in Chemical Engineering from IIT Bombay, and an MBA from Washington University in Saint Louis. He also holds CPF, ACPF, APICS, CPIM and CSCP certifications.

Mike Guerra, *Sr. Manager, Operations,* **Jose Cuervo**

Mike is a Global Supply Chain leader with 20 years' experience in the automobile, aerospace, food and beverages, and telecommunication industries with a proven track record in delivering complex transformation system projects from scoping and planning to final delivery. His current role is Sr. Manager, Supply Chain Operations, at Jose Cuervo where he oversees the Demand, Supply, Bulk and Manufacturing Alliances planning teams. Mike has led the production module of JDA and other software implementations across retail and manufacturing environments. His background includes many years of manufacturing, demand, supply and consultancy areas. Prior to joining Jose Cuervo, he was Director of Planning and Customer Supply Chain at The Hershey Company. He holds an MBA from the University of Monterrey

Dr. Kenneth Kahn, *Senior Associate Dean–School of Business,* **Virginia Commonwealth University**

Kenneth B. Kahn, Ph. D. is a Professor of Marketing and Senior Associate Dean of the School of Business at Virginia Commonwealth University. His teaching and research interests address product innovation, product management, and demand forecasting of current and new products. He has been published in numerous journals including the Journal of Product Innovation Management, Journal of Business Research, and Business Horizons. He also authored the books Product Planning Essentials and New Product Forecasting: An Applied Approach, and served as editor of the PDMA Handbook on New Product Development. Prior to joining Virginia Commonwealth University, Kenneth was a Professor at Purdue University and Assistant Professor at the University of Tennessee. He holds both a bachelor's and master's in Industrial and Systems Engineering, and a PhD in Marketing.

Jonathon Karelse, *Chief Strategy Officer*, **Factors Group of Nutritional Companies**

Jonathon's professional career has consisted of leadership roles in transportation, finance and health products, beginning in supply chain and demand planning roles and culminating in a vice president position in strategic planning and corporate development. Currently, he functions as the Chief Strategy Officer at the Factors Group of Nutritional Companies. He is a recognized thought leader in demand planning and is co-founding partner of the S&OP consultancy NorthFind Partners. Jonathon has been a long-term contributor to the IBF's body of knowledge, with a specific focus on forecasting metrics and diagnostics and forecast value-add. He studiedeconomics at the University of Western Ontario before moving to Vancouver to study law atthe University of British Columbia. Jonathon went on to study operations and value chainmanagement at the MIT Sloan School of Management.

Thomas Matzner, *Senior Manager, Demand Planning,* **BECCA Cosmetics**

Thomas Matzner 's career has focused on planning, maintaining a focus on building successful brands. Thomas joined BECCA in 2017 to lead the demand planning team and create inventory and demand plans for global customers, multiple warehouses and 3, 000+ finished goods and components. Quickly taking on additional responsibilities, he launched the company's first visual analytical tool for dynamic sales information. Thomas also guided the creation of a proprietary algorithm which calculates the potential revenue or "Size of Prize" for new product launches. Prior to BECCA, Thomas was COO and co-founder of PRUV Vodka, and prior to that, a retail planning analyst for Lacoste. He holds a BS in Management and Finance, and post-Graduate diplomas from New York University and MIT.

Shaun Phillips, *Global Product & Market Manager,* **QAD DynaSys**

Shaun joined QAD DynaSys in 2017 and has more than 20 years of experience in delivering business value via enterprise technology with domain competencies in supply chain and process manufacturing. As a Global Product & Market Manager, Shaun is responsible for the strategic direction of the QAD DynaSys Demand & Supply Chain Planning suite with a focus on driving S&OP/IBP as well as go-to-market enablement and market development. Shaun has an international focus having started his career in Australia with Infor, spending many years serving the APAC region before spending several years in Germany. Shaun holds an MBA from the Sorbonne in Paris.

Tim Plumadore, *Materials Planner/MRP Controller,* **Beech-Nut Nutrition**

Tim is currently Materials Planner/MRP Controller with Beech-Nut Nutrition in Amsterdam, NY. In his current role he has instituted several new methods for inventory optimization including a safety stock algorithm. Last quarter he received the Beech-Nut Goodness of Nature award in recognition of his accomplishments in implementing the safety stock process now governing the company's raw material and packaging. Prior to this, he worked in the defense industry at Raytheon as a Supply Chain Automation Specialist where he managed the entire automated procurement process, responsible for about $25 Million in order volume. Tim holds a Bachelors in Supply Chain Management from Rochester Institute of Technology in Rochester, NY, with a concentration in statistics.

Mehdi Ranjbar, *Data Scientist,* **Visionet Systems Inc.**

Gregory Schlegel, *VP/Principal,* **SherTrack LLC**
Adjunct Professor, Supply Chain Risk Management, **Lehigh University**

Greg has over 25 years of experience with several Fortune 100 companies across multiple industries. He has held executive positions in the systems, staff and plant operations environments and has been Supply Chain Director, Materials Director, Logistics Manager, Plant Operations Manager, CIO and Systems Director with companies such as Hercules Chemical, Sandvik Specialty Steel, International Harvester, Schlumberger, Loral Aerospace & Defense Electronics, GAF/ISP Specialty Chemicals and IBM Supply Chain Solutions. Greg is presently teaching MBA supply chain risk management at Lehigh University. Plus, he is VP Business Development/Principal for SherTrack LLC that provides Demand-Driven Predictive Manufacturing solutions. He has also implemented CPFR, collaborative planning, forecasting & replenishment systems, S&OP Processes, and more. Greg was APICS' 1997 International Society President. He is a frequent speaker at IBF conferences and seminars, globally. Greg is widely published in many well known supply chain and logistics publications, including IBF's Journal of Business Forecasting. He is a graduate of Penn State, holding a B.S. in Operations Research and Computer Science, and has attended Lake Forest College of Graduate Studies.

Geoffrey Stamper, *Director, R&D Portfolio Optimization and Global Demand Planning,* **Bristol-Myers Squibb**

Geoff Stamper is the Director of R&D Portfolio Optimization and Global Demand Planning in the Enterprise Strategy Analytics organization at Bristol-Myers Squibb. Geoff's career at BMS has included roles in strategic forecasting, market forecasting, and strategic planning and decision analysis. These roles supported revenue forecasting of both pipeline and inline brands. Prior to BMS, Geoff was at Abbott Laboratories where he held roles in the discovery organization as a scientist and in the R&D portfolio management organization as a decision analyst. Geoff has a bachelor's degree in Biochemistry from the University of Missouri and a doctorate in Biophysics from Brandeis University.

David Wehling, *Manager, SIOP & Analytics, International Division,* **The Toro Company**

Dr. David Wehling (Doctor of Business Administration) has been responsible for Forecasting and Analytics for the International Division of the Toro Company for 23 years. He is also an adjunct instructor at the graduate, undergraduate, and executive education level for the past 10 years. He is the author of "A Practical Leadership Model for Frontline and Mid-level Managers Based on the Writings of American Hall of Fame Sports Coaches". He holds a B.S in Business/Mathematics from the University of Wisconsin River Falls, an MBA from the University of St Thomas, and a doctorate from Globe University.

Eric Wilson, CPF, *Director of Planning,* **Escalade Sports**

Eric is a predictive analytics and business planning innovator, author, and speaker. He is the Director of Demand Planning at Escalade Sports. Prior to this he worked as the Director of Demand Planning at Berry Plastics, and Director of Demand Planning & S&OP at Tempur Sealy International. In 2016, he received the Excellence in Business Forecasting & Planning award from the IBF. He is a Certified Professional Forecaster (CPF) with over 20 years of experience. Eric is a visionary in his field, a frequent speaker and panelist for many executive forums and professional conferences, and has written numerous articles in publications such as The Journal of Business Forecasting and APICS Magazine. He is also the author of the book Cultural Cycles.

Wes Womer, *FP&A Manager,* **BraunAbility**

Wes Womer's first love is Finance, having started his career as a financial analyst at Body Shop of America. He then spent 5 years as a Demand Planning Manager at Stanley Black & Decker, before returning to Finance to take up his current role as Financial Planning & Analytics Manager at BraunAbility. He currently finds himself pursuing a Master of Science in Data Science from Indiana University. He intends to merge his skills in demand planning and Finance, and complement them with data science to leverage big data and machine learning in his organization. Wes holds law degrees from Indiana University and The University of Alabama, and a bachelor's in Accounting from Butler University. He is studying his master's in Data Science from Indiana University Bloomington.

MONDAY | MAY 6, 2019		
12:30 pm – 1:30 pm	PRE-CONFERENCE WORKSHOP REGISTRATION	
1:30 pm – 4:30 pm	HANDS-ON DATA SCIENCE & PREDICTIVE ANALYTICS WORKSHOP (IBF MEMBERS ONLY)	
5:00 pm – 7:00 pm	EARLY CONFERENCE REGISTRATION | VISIT WITH EXHIBITORS	
TUESDAY | MAY 7, 2019		
7:00 am – 8:00 am	MORNING REFRESHMENTS & REGISTRATION | VISIT WITH EXHIBITORS	
8:00 am – 8:15 am	WELCOME & OPENING REMARKS	
8:20 am – 9:15 am	1 **Bringing Advanced Data Science to Statistical Modeling: Large Scale Forecasting With Python and Facebook Prophet** Vikram Govindan, ACPF *Director of Data Science* NEWELL BRANDS	2 **A Little Machine Learning Can Go A Long Way: Tools for Machine Learning in Demand Planning** Geoffrey Stamper, *Director, R&D Portfolio Optimization and Global Demand Planning* Michael Devinoff, *Vice President, Enterprise Strategy Analytics (ESA) Lead* BRISTOL-MYERS SQUIBB
9:20 am – 10:15 am	3 **When Celebrities Ruin Your Forecasting: The Difficulties of Celebrity & Influencer New Product Launches** Thomas Matzner *Senior Manager, Demand Planning* BECCA COSMETICS	4 **Introduction to Tools and Algorithms in Data Science & Machine Learning** Wes Womer *FP&A Manager* BRAUNABILITY
10:15 am – 10:25 am	MORNING BREAK | VISIT WITH EXHIBITORS	
10:25 am – 11:20 am	5 **The Current State of New Product Forecasting** Charles Chase, CPF *Executive Industry Consultant* SAS INSTITUTE	6 **Jumping Across The S&OP Maturity Chasm: How To Use Predictive Analytics, Big Data & Risk Management Tools For Next Level S&OP** Gregory Schlegel *VP/Principal* SHERTRACK LLC *Adjunct Professor, Supply Chain Risk Management* LEHIGH UNIVERSITY
11:25 am – 12:20 pm	7 **A Matter Of Life & Death: Improving Sales Forecast Accuracy in the Services Industry** Kendell Churchwell, CPF *Senior Marketing Data Analyst* SOUTHERN FARM BUREAU LIFE INSURANCE COMPANY	8 **More Than Just Accurate Forecasts: Using Intelligent Automation & Machine Learning to Boost FVA** Charles Chase, CPF *Executive Industry Consultant* SAS INSTITUTE
12:20 pm– 12:50 pm	LUNCH	
12:50 pm– 1:30 pm	KEYNOTE PRESENTATION | **How Machine Learning & Predictive Analytics Saved This Chicken Company From Being Barbecued** Scott Pavel, *Vice President of Technical Services* TECUMSEH POULTRY, A TYSON FOODS COMPANY	
1:30 pm – 2:00 pm	VISIT WITH EXHIBITORS	
2:00 pm –2:55 pm	9 **Optimistic About Inventory Optimization: Statistically Determined Safety Stock & Automated Procurement** Tim Plumadore *Materials Planner/MRP Controller* BEECH-NUT NUTRITION	10 **Becoming a Story Teller Like Steven Spielberg: Build Your Career by Building A Narrative For Data Visualizations** David Wehling *Manager, SIOP & Analytics, International Division* THE TORO COMPANY
3:00 pm – 3:55 pm	11 **Saving Lives With Demand Planning: Statistical Forecasting** Joe Ganancio, CPF *Data Science Director* MOTOROLA	12 **Your Bias Is Showing: Using Behavioral Economics to Improve Human Inputs in Forecasting** Jonathon Karelse *Chief Strategy Officer* FACTORS GROUP OF NUTRITIONAL COMPANIES
3:55 pm – 4:10 pm	AFTERNOON BREAK | VISIT WITH EXHIBITORS	
4:10pm – 5:10 pm	ROUND ROBIN ROUNDTABLE DISCUSSIONS	
5:15 pm – 6:15 pm	IBF COCKTAIL RECEPTION	
WEDNESDAY | MAY 8, 2019		
8:30 am – 9:15 am	MORNING REFRESHMENTS & REGISTRATION | VISIT WITH EXHIBITORS	
9:20 am – 10:15 am	13 **How Much Is Forecast Error Costing Your Company? Dollarizing Forecast Error With WMAPE & BIAS** Mike Guerra *Sr. Manager, Operations* JOSE CUERVO	14 **Inventive Solutions For Inventory Problems: How to Slash Inventory Using Signal Processing & Machine Learning** Rauf Ahmed *Director, Supply Chain & Distribution Solutions* Mehdi Ranjbar *Data Scientist* VISIONET SYSTEMS INC.
10:20 am – 11:15 am	15 **How To Use Cluster Analysis For More Accurate Forecasts** Sara Brumbaugh *Managing Principal* CERES ANALYTICS	16 **Quick Reflexes: Machine Learning For Real-Time Demand Planning with IoT Data and More** Shaun Phillips *Global Product & Marketing Manager* QAD DYNASYS
11:15 am – 11:30 am	MORNING BREAK | VISIT WITH EXHIBITORS	
11:30 am – 12:25 pm	17 **Successful Digital Transformation for Supply Chain: 5 Key Pitfalls to Avoid** Eric Wilson, CPF *Director of Planning* ESCALADE SPORTS	
12:25 pm – 12:35 pm	CLOSING REMARKS & GIVEAWAYS	
CONFERENCE CONCLUDES		

MAY 6–8 2019 | NEW ORLEANS, LOUISIANA USA

PREDICTIVE BUSINESS ANALYTICS FORECASTING & PLANNING CONFERENCE

W/ PREDICTIVE BUSINESS ANALYTICS WITHIN THE SUPPLY CHAIN WORKSHOP

REGISTRATION OPTIONS	SILVER	GOLD	SILVER GROUP PACKAGE (2 PEOPLE)	GOLD GROUP PACKAGE (2 PEOPLE)	4th FREE! GOLD GROUP (4 PERSONS FOR PRICE OF 3)	IBF MEMBERS ONLY PRE-CONFERENCE: HANDS-ON DATA SCIENCE & PREDICTIVE ANALYTICS WORKSHOP	GOLD CERTIFY PACKAGE
EARLY BIRD PRICING | EXPIRES MARCH 22, 2019	$1,499	$1,649	$2,898	$3,198	$4,947	$0	$2,849
REGULAR PRICING | EXPIRES MAY 3, 2019 , 2019	$1,599	$1,749	$3,098	$3,398	$5,247	$0	$2,949
ONSITE PRICING	$1,699	$1,849	$3,298	$3,598	$5,547	$0	$3,049
IBF Membership Discount | $100 OFF	Elgible	Included	Max Discount Included	Included +			N/A
CONFERENCE | MAY 6–8, 2019	✔	✔	✔	✔	✔		✔
BREAKFAST & REFRESHMENTS	✔	✔	✔	✔	✔	✔	✔
LUNCH	✔	✔	✔	✔	✔		✔
EVENING COCKTAIL RECEPTION | MAY s6, 2019	✔	✔	✔	✔	✔		✔
PRE-CONFERENCE: HANDS-ON DATA SCIENCE & PREDICTIVE ANALYTICS WORKSHOP APRIL 23, 2018 (IBF MEMBERS or GOLD PACKAGE ONLY)		✔		✔	✔	✔	✔
IBF MEMBERSHIP (1 YEAR)		✔		✔	✔		✔
IBF CPF CERTIFICATION EXAMS							✔
FUNDAMENTALS OF DEMAND PLANNING & FORECASTING BOOK							✔

CERTIFICATION FEE (OPTIONAL)

Non-Members: ❍ **$425** (USD) per exam

IBF Members: ❍ **$375** (USD) per exam

Please circle which Exam(s) you are interested in taking 1 2 3 4 5

PLEASE REGISTER THE FOLLOWING: (Photocopy if more than 1 Registrant)

First Name _____ Last Name / Surname _____

Job Title _____ Company _____

Address _____ MS/Suite _____

City _____

State / Province / County _____ Zip / Postal Code _____ Country _____

Telephone _____ Fax _____

Email _____ Industry _____

❍ Check ❍ Payment Enclosed ❍ Bill Company ❍ Credit Card

Visa / Mastercard / American Express / Discover

Exp. Date _____

Signature _____

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

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

The Institute of Business Forecasting & Planning - IBF, reserves the right to substitute, eliminate, and/or reschedule sessions and speakers if necessary. Plus, as a registrant, you agree that you may be included in group pictures or videos taken at the event that could be used for IBF marketing purposes in the future.

Institute of Business Forecasting & Planning

TEL: +1.516.504.7576 | EMAIL: info@ibf.org

WEB: ibf.org/events/neworleans2019/