



# Certified Professional in Demand Forecasting Workshop

(CPDF III — Rolling Forecast Process Simulation, Collaboration and Business Process Integration)

## Key Learning Objectives:

1. Establish a framework for demand forecasting in the supply chain
2. Introduce a four-step process for streamlining the forecasting cycle
3. Define, interpret, visualize major demand forecasting techniques.
4. Identify appropriate accuracy measures for evaluating demand forecasting methods and models.
5. Complement established approaches with non-traditional methods in forecasting model development and evaluation



Program is endorsed by  
the International Institute  
of Forecasters (IIF)  
[www.forecasters.org](http://www.forecasters.org)

## Part I – The Demand Forecasting and Integrated Business Planning Process in The Supply Chain

- Concepts of Change and Chance in demand forecasting
- Role of demand forecasting in the supply chain
- Contrasting simple, complicated and complex processes
- Understanding the perspective roles of demand forecasters, demand planners and demand managers
- Establishing a Budget Forecasting Cycle for a forecasting Simulation game
- The PEER Model
- Internal and external drivers of demand (good factors)

### Computer Workshop 28– Targeting the Environment for a Rolling Budget forecasting Process

- Define factors affecting demand for GLOBL's product lines
- As a prelude to developing statistical forecasting models, how can you quantify the impact of a factor over time?
- Evaluate the overall impact of the environment on demand

## Part II – A Data Framework for Creating a Forecast Decision Support System

- Ways to characterize demand
- Types of activity being forecast
- Budget data for a rolling forecast
- Lead –times and rolling forecast horizons
- The on demand dashboard and forecasting system
- Who is the customer?: Determining forecasting requirements by organization
- Internal factors likely to influence forecast
- Establishing a database framework for efficient storage and retrieval of data and information

### Computer Workshop 29 – Understanding the Data Structure in the Rolling Budget Forecasting Game

## Part III – Creating Rolling Baseline Forecasts for a Budget Forecasting Cycle

- Improving the quality of data in preparation of a statistical forecast
- Selecting the appropriate aggregation level at which statistical forecasting engine to create unconstrained rolling baseline forecasts
- Allocating unit and revenue forecasts to lowest levels: SKU and Customer/Locations
- Recognizing the implications of making subjective judgments and overrides to multi-level forecasts

### Computer Workshop C –Adjusting Baseline Forecasts With Managed Overrides

## Part IV– Goals and Objectives of the Forecast Simulation Game

- Define the objectives of the forecasting cycle
- Recognize the drivers of demand
- Create a rolling baseline forecast for a multi-period horizon
- Evaluate forecasting performance over the horizon with multiple metrics
- Recognize and document adjustments and overrides necessary to reflect changes in the business environment and updated assumptions
- Re- forecast for another multi-period horizon
- Re-evaluate forecasts (CHANGE), associated prediction limits (CHANCE), and base assumptions and a rationale for advice to management and forecast users

Start of Competitive Forecasting Game

## Part V– Bias and Precision: Establishing Forecast Error Metrics with Statistical Models

- Defining Bias and Precision as the basis for determining forecast accuracy
- Interpreting prediction limits in statistical models
- Identifying accuracy measures for evaluating demand forecasts
- Defining Key Performance Indicators (KPI) for uses of forecasts

### Computer Workshop 31– Handling Exceptions—How to Use Evaluation Criteria to Measure Forecasting Performance

Submission of Third and Final Rolling Forecast

Management Presentations by Teams

## Part VI - Recap of Simulation Game

### Presentation of Game Awards

### Workshop Takeaways and Closing Remarks

Each Level of the CPDF program consists of both instructor-led workshop training hours, and independent hours to be accomplished through self-paced e-learning environment. The successful completion of each level will qualify participants to earn a certificate, CPDF levels & certificates are described below:

**CPDF I Level : Certificate in Demand Forecasting**

90 Training Hours	15 hours hands-on workshop
	75 hours, 6 work sheets E-learning

**CPDF II Level : Certificate in Demand Forecasting**

60 Training Hours	15 hours hands-on workshop
	45 hours, 6 work sheets E-learning

**CPDF III Level: Certificate in Demand Forecasting**

50 Training Hours	20 hours hands-on workshop
	30 hours, 6 work sheets E-learning

**Program Requirements:**

- College degree or Job experience
- Reasonable experience in MS Excel
- Acceptable level of English language

**Program Assessment:**

- Full attendance of hands-on workshops is required
- Successful submission of required worksheets through e-learning system
- CPDF is not a test-based program.

**It's a hand-on workshop. Please bring your own laptops to run the computer exercises!!**



**Who Should Attend?**

Demand Forecasters  
 Operations Specialists  
 Demand planners  
 Supply planners  
 Production Managers  
 Operations Managers  
 Financial analysts  
 Market analysts  
 Researchers  
 Forecasters  
 Economists  
 Strategists  
 Marketing & Sales managers

**WHY STUDY WITH US?**

1. International trainers
2. Trainers have long and global experience in demand management and forecasting.
3. High quality and excellent style of delivery with participative debate and discussion, case studies.
4. E-learning service through a unique Online Web Platform designed exclusively for CPDF Students.
5. 100% Student pass rate, endorsed by past and present students in the region.
6. Abilities to enhance local demand data with international experience and theories.
7. Interchange demand forecasting experience management with local culture and knowledge.

## Our Training Partner

# DELPHUS

Delphus Inc. ([www.delphus.com](http://www.delphus.com)) is a privately held corporation, headquartered in Morristown, New Jersey. Established in 1987, the company has been dedicated to providing strategic market analyses, forecasting software tools and data mining solutions for sales and marketing managers, inventory and production planners in manufacturing, distribution, retail firms and hospital management operations.

Delphus clients list contains names like: Kodak, Lucent Technologies, IBM, TAP Pharmaceutical, Pfizer, and more.

## Program Leader

**Dr. Hans Levenbach** is the founder and President of Delphus Inc., which specializes in predictive-analytic solutions for demand planning in supply chain organizations. He is also an elected Fellow, former President and Treasurer of the International Institute of Forecasters (IIF). He is also a member of APICS, INFORMS, American Statistical Association and an elected member of the International Statistics Institute. Hans has been instrumental in designing the "Certified Professional Demand Forecaster" (CPDF®) curriculum ([www.cpdftraining.org/curriculum.htm](http://www.cpdftraining.org/curriculum.htm)). He is the author of the book: **Change & Chance Embraced: Achieving Agility with Demand Forecasting in the Supply Chain**



## What is The CPDF®?

This is a certification program for demand forecasters and planners working in supply chain industries. The International Institute of Forecasters (IIF), a non-profit membership organization founded in 1980 whose aim is to advance knowledge and research in forecasting, has endorsed it. The CPDF program is a 200 hours curriculum comprised of three modules, CPDF I, CPDF II, and CPDF III. Certification can be earned at each of the three levels. The CPDF qualification will address multidimensional job roles in demand forecasting such as data display and validation, database management, dashboard display, understanding quantitative and qualitative projection techniques, model creation and execution, forecast accuracy measurement, model and forecaster performance analysis, organization, and collaborative planning.