

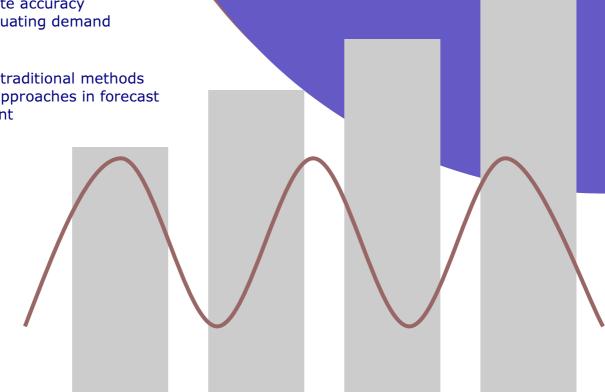
# Certified Professional in **Demand Forecasting** (Level I: Principles)

# **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 forecasts techniques.
- 4. Identify appropriate accuracy measures for evaluating demand forecasts.
- 5. Complement non-traditional methods with established approaches in forecast model development



Program is aligned with International Institute of **F**orecasters requirements



#### WHY STUDY WITH US?

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

# Who Should Attend?

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

# Our Training Partner

# DEPHIS

Delphus Inc. is a privately held corporation, headquartered in Morristown, New Jersey. Since it was 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. Through RobinWilliams R&D consulting (www.robinwilliams-randd.com), we also offer assistance to companies in creating or changing their research or R&D departments. Delphus clients list contains names like: Kodak, Lucent Technologies, IBM, TAP Pharmaceutical, Pfizer, and more.

# Program leader DR. Hans Levenbach

Hans 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 also serves on the editorial board of FORESIGHT, the practitioner journal published by the 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 in Demand Forecasting" (CPDF) curriculum.

# 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 thirty year-old non-profit organisation whose purpose is to advance knowledge and research in forecasting, has endorsed it. The CPDF programme is a 200 hour curriculum comprised of three modules, Beginner, Master and Pro. 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.

# **CPDF Level I: hands-on workshop** overview

### Day 1

Part 0 - Pre-course reading

Part I - Demand Forecasting in the Supply Chain

- 1. What is demand forecasting
- 2. Revolution of SCM
- 3. Role of demand forecasting in SCM
- 4. Forecasting data structure
- 5. Factors affecting demand forecasting (good factors)

Workshop 1: Assessing the Impact of Factors:

#### Part II - Exploring Time Series

- 1. Data exploration for forecasting
- Quantitative vs. qualitative methods (NEW)
- 3. Time series
- 4. Documenting data validation steps
- 5. Unusual events and outliers
- 6. PEER model

Workshop 2 -Establishing Trend and Seasonal Components

#### Part III -How Do to Use Components of a Time Series

- 1. Time series decomposition (trend, cycle, seasonal, and irregular)
- Averages
- 3. Seasonal decomposition
- 4. Creating projections with decomposition Technique

**Workshop 3** - Seasonal Adjustment – Ice Cream and Tourism

#### Day 2

#### Part IV - The Exponential Smoothing Methods

- 1. Naïve forecasting technique
- 2. Exponential smoothing technique
- 3. Smoothing weights
- 4. Applying Univariate Time Series Techniques
- 5. Handling Special events with Exponential smoothing models
- 6. Scenario Forecast
- 7. Product lifecycle

Workshop 4 - Forecasting With Short-term Forecasting Models

#### Part V - Measuring Forecasting Accuracy

- 1. Forecasting accuracy vs. forecasting errors (NEW)
- 2. Bias and Precision
- Goodness of fit versus forecast accuracy
- Cost of inaccurate forecasts
- 5. Forecasts errors

**Workshop 5** – *Measuring Forecast Accuracy* 

#### Part VI - Tracking Tools

- 1. Ladder chart for monitoring forecast results
- 2. Prediction-Realization Diagram
- 3. Prediction intervals for time series forecasts
- 4. Creating tracking signals
- 5. Cumulative sum (CUSUM) forecast error with prediction intervals
- Monthly forecast errors and prediction limits
- 7. Trigg's Tracking Signal

Workshop 6 - Creating a Time-Phased Order Forecast

# **CPDF Certification** Curriculum Overview

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:

**Level I : CPDF Principles -** Certificate in Demand Forecasting Practice

90 Training Hours

15 hours hands-on workshop

75 hours, 6 work sheets E-learning

Level II: CPDF Master - Certificate in Demand Forecasting Proficiency

60 Training Hours

15 hours hands-on workshop

45 hours, 6 work sheets E-learning

Level III: CPDF Pro - Certificate in Demand Forecasting Professionalism

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!!



### Day 3

Part VII - Practical Uses of the Forecast

- 1. Marketing
- Sales
- 3. Operations
- 4. Finance (budget projections)

Workshop 07 - Simulated Forecasting Case - GLOBL Case

Part VIII - Implementing a Forecasting Process

- 1. Successful Implementation
- 2. Forecasting Cycle
- 3. Integration with Supply Chain
- 4. Sales and Operations Planning (S&OP)
- 5. Best -in-breed demand management **Review and Open Questions**

# Certified Professional in Demand Forecasting Training Program

## **How to Register?**

**E-mail:** <a href="mailto:cpdf@prime-hrs.com">cpdf@prime-hrs.com</a>

**Web:** <u>www.prime-hrs.com/cpdf.htm</u>

Tel & Fax: +966 9 2000 9 505

Mail: Prime HR Solutions

P.O Box: 395853 Riyadh 11375

Kingdome of Saudi Arabia

# **Group and Early Birds Discounts Available**

## Program Fees: CPDF Level I -

Certificate in Demand Forecasting Practice

3 Days Hands-on Workshop

SAR 6,000

E-Learning Exercises

SAR 1,950

Program Fees cover workshop manual, FREE excel Add inns, 50% book discount: *Forecasting: Practice and Process in Demand Management,* Discount on a one-year subscription to IIF Practitioner Journal (*Foresight*), and coffee/tea breaks with lunch.

#### Registrations are made on first-come first-served basis

Participants Information			
1.	Name:		
	Company:		
	Job Title:		Email:
	Tel:	Fax:	Mobile:
2	Namo		
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	Company:		
	Job Title:		Email:
	Tel:	Fax:	Mobile:

## **Payment Terms**

Registration confirmation is based on receiving the full payment prior to the event. Our team will send to delegates /sponsor a confirmation note and invoice upon receipt of the program payment. Please note that full payment must be received not later than 48 hours before the event. Only those delegates whose fees have been paid in full will be admitted to the event. Bank charges shall be paid by participant or sponsor.

#### **Cancellation Policy**

- Participants who cancel before 2 weeks or more will be subject to SAR 750 registration charge.
- Cancellation less than 2 weeks will be charged the full amount of the week.
- Substitutions are welcome any time before program first week.

#### **Visa Arrangements**

Please consider that a visa is required for non-GCC citizens to enter Saudi Arabia so it has to be arranged before enough time to avoid any possible disappointments!!



www.prime-hrs.com/cpdf.htm