

# CDMP Certified Demand Management Professional Education Course

Demand Chain Institute of Shanghai University | Best Practice and Case Study | Shanghai/Shenzhen

## Course Background

Demand is the starting point of supply chain. But in traditional supply chain management, enterprises focused on the operational level optimization, which makes the demand management far behind other functions. Especially in today's competitive era, the demand accuracy will directly affect operational costs and customer satisfaction, while the demand department is almost the most blamable and helpless one. The lack of quality historical data, analysis tools, assessment standard, confidence in holding market change are common causes poor quality of demand, but the most fundamental reason is "negligence of planning, over emphasis on execution". This training will consist of a series of customized professional courses, and focuses on cultivating demand management talents who will have both strategic management view and practical capability.

## Course Objectives

- ✦ Understand impact of demand management on business performance and related KPI selection.
- ✦ Establish effective demand management system and operational process for enterprises based on industry characteristics.
- ✦ Master basic statistical techniques and their application and other important forecast techniques.
- ✦ Build executable performance metrics system based on reasonable KPIs.
- ✦ Define promotion forecasting management process, and master techniques of various promotion forecasting.
- ✦ Define forecasting management procedure for new products, master techniques and application of new products forecasting
- ✦ Grasp historical data cleaning skills and method to establish sound baseline forecast.
- ✦ Grasp techniques of setting up sales target and related sale target disaggregation skills.
- ✦ Understand how to encourage the sales, marketing and customer to actively and collaboratively participate in the prediction process.
- ✦ Understand the industry benchmark, and find areas to improve through the industry case studies sharing.
- ✦ Through real case studies, systematically grasp demand forecasting theory and Practice.

## Other Benefits

- ✦ Complimentary template including 17 types' statistic techniques will be offered for free.
- ✦ 1 complimentary books of demand forecasting management will be offered for free.
- ✦ Complimentary evaluation report on demand management in different enterprises will be offered for free.
- ✦ CDMP members can attend industry practice sharing and counseling seminars for free. (at least 6 times per year, 3 hours each time).

## Target Audiences

Request 3 years' working experience. Practitioners from Demand management, S&OP, Sales, Marketing, Operations, Finance, Customer Service etc.

## Agenda & Investment

Course ID	Course Description	Course Duration	Course Fee RMB
DF01	Demand Forecasting Intensive Training & Case Study	16 hours	4800
DF02	Simulation of Statistical Techniques Application	6 hours	2800
DF03	CDMP Club Salon		Free
	CDMP Certificate Examination	2 hours	1600
	<b>CDMP Certification Course Package</b>	<b>24 Hours (3 days)</b>	<b>7800</b>
<b>Course Time</b>	<b>Apr 17th-19th 2014</b>	<b>July 17th-19th 2014</b>	<b>Oct 23th-25th 2014</b>

On completion of 3 days of training, participate who pass the exam will obtain the CDMP certificate issued by International Institute of Forecasters, and are free to go to CDMP's salon activity. Each activity lasting 3 hours, will be held at least 3 times a year. You can also choose to participate in part of the courses. Each class has less than 25 people, including meals and lecture fees. 12:30-13:30 lunch, 10:30-11:00 break, 15:00-15:30 break.

### About IIF ([www.forecasters.org](http://www.forecasters.org))



The International Institute of Forecasters (IIF), a non-profit organization founded in 1981, is dedicated to developing and furthering the generation, distribution, and use of knowledge on forecasting through the following objectives:

- ✧ Develop and unify forecasting as a multidisciplinary field of research drawing on management, behavioral sciences, social sciences, engineering, and other fields.
- ✧ Contribute to the professional development of analysts, managers, and policy makers with responsibilities for making and using forecasts in business and government.
- ✧ Bridge the gap between theory and practice, with practice helping to set the research agenda and research providing useful results.
- ✧ Bring together decision makers, forecasters, and researchers to improve the quality and usefulness of forecasting.

### About Demand Chain Institute of Shanghai University ([www.demand-chain.org.cn](http://www.demand-chain.org.cn))



Demand Chain Institute of Shanghai University was established in October, 2009 by Shanghai University. Its mission is to develop the demand chain theory, methodology and management practice in order to promote and perfect the models of demand chain management. AS the premier research team in China for the demand chain management, we develop and perfect a blanket solution to demand chain management for Chinese enterprise. The Solution help businesses constructing new models of demand chain management and winning new competitive advantages.

## Introduction of Lectures

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### Lecture Ms. Ivy Zhao



Ivy has 10 years of management, 5 years consulting & 3 years R&D experience in the supply chain management area. She has a wide range of experience in multiple roles including supply chain manager, IT manager, SAP consulting manager & supply chain planning solution architect. Furthermore, she has worked as demand forecasting solution architect at SAP Labs, working with SAP AG experts to design demand planning and has accumulated a wealth of solution development experience, specializing at demand planning & supply chain planning optimization. Ivy's consulting work has included companies such as Wyeth Nutrition, Nippon Paint, Heinz Group, Abbott, SEVES Glass and Jinan Sino Truck etc.

Ivy will deliver 2 days of workshop of DF01 "Demand Forecasting Intensive Training and Case Study".

### Lecture Professor Gao Junjun



Professor Gao Junjun, University of Pennsylvania's Wharton School visiting scholar, Director of Demand Chain Institute at Shanghai University. With over ten years of demand management, inventory control, logistics and supply chain management consulting experience, Prof. Gao has led supply chain management projects and developed demand management and decision support system for a number of leading enterprises. She has profound theoretical knowledge and practical experience in the field of demand forecasting and inventory control and has provided consulting and training services for Shanghai Electric Power, China Aviation, Sinopec, Mengniu, etc. Prof. Gao also is a reviewer for the Journal of Systems Management and the Journal of Management and an expert for China National Natural Science Foundation.

Professor Gao will deliver 1 days of workshop of DF02 "Simulation of Statistical Techniques Application".

## Best Practice Sharing and Coaching



We will invite demand professionals from variable industries to share mindset, operation process and experiences of practice. The depths of the sharing plus the previous systematic professional training combine theories and practices of demand management perfectly, which will deepen and enrich the students' knowledge of demand management system, strengthen their operational ability. At the same time the enterprise coach and students together will explore the problems, and provide a more broad management perspective and solutions.

**Day 1 | 09:00 – 17:30****1 Demand Management Overview, Value & Metrics**

- ✦ Demand-Driven Supply Chain Vs. Traditional Supply Chain
- ✦ Business scope & value of demand forecasting management
- ✦ Strategic Vs. Tactical demand forecasting management
- ✦ Constrained demand Plan & Replenishment Plan
- ✦ Synchronize finance forecast with supply chain forecast
- ✦ Understand the multi-dimension of assessment views
- ✦ Understand the pros & cons of various KPI metric
- ✦ Understand how to select the best fit KPIs by various industry

**2 Establish & Optimize Demand Accountability**

- ✦ Understand relationship between demand forecast & sales plan
- ✦ Understand 3 roles in demand forecasting management
- ✦ Understand how can be a qualified demand owner
- ✦ Understand how to gain commitment from forecast supporters
- ✦ Typical working calendar of demand and S&OP owner

**3 Demand Management Processes**

- ✦ Best planning process under a complete accountability
- ✦ Define the planning period based on promotion lead time
- ✦ Input & output in forecasting procedures (S&OP meeting)
- ✦ Forecasting meeting (S&OP) shareholders and topics
- ✦ How supply chain involved in forecast to achieve finite forecast
- ✦ Set up communication platform based on data and facts
- ✦ Collaboration effect in forecasting and S&OP process
- ✦ Forecasting process is more important than forecasting result

**4 Demand Forecast Management Techniques**

- ✦ Forecasting by classification of product and customer
- ✦ Understand internal & external factors of demand forecast
- ✦ Understand adjustment note is more important than data
- ✦ Master typical statistical techniques' logic & usage
- ✦ Understanding of the historical data correction (Outlier)
- ✦ Understand how to apply trends damping technology
- ✦ learn how to do forecast simulation & best fit model selection

**5. Promotion & New Product Forecasting Methodologies**

- ✦ Promotion forecasting accountability and planning process
- ✦ Baseline forecast, promotion forecast & promotion plan
- ✦ Cannibalization effect in promotion forecast
- ✦ Promotion evaluation and ROI rating
- ✦ NPI (Phase-out) forecasting accountability and planning process
- ✦ Understand new product forecasting model (Liking model)
- ✦ Assumption based scenario planning in NPI forecasting

**Day 2 | 09:00 – 17:30****1. Case Studies & Round Table Discussion**

Through the sharing of application case, combined with the first day of theoretical training, deeply understand what the best demand forecast operating practice is. Analyze the pros & cons of example enterprise in the field of demand forecasting, and discuss the following topics:

- ✦ Who should demand forecasting function report to?
- ✦ What level should effective demand forecast be? SKU?
- ✦ How to get commitments to reach consensus forecast finally?
- ✦ What is best process of S&OP? what are topics in this process?
- ✦ How to choose the best fit KPIs as per industry characteristics?
- ✦ Share experience of your demand forecast practice.

**2 Case Study 01: CPG Industry Case Study**

CPG companies have more expectation on demand forecast due to the marketing model and have more practice as well, but it is only for international companies. Most of domestic companies still need to be educated. How to create baseline demand based on historical data and statistical techniques, how to handle frequent promotion forecast and new product introduction are still key challenges for CPG.

**3 Case Study 02: Industrial Goods Case Study**

Demand management has more variants in industrial goods, but the management level is still lag behind the CGP. Most of companies have no full time demand planning role and relevant KPI, forecast is collected and not predicted. How to get commitment from top management, how to involve in sales & marketing and how to provide more support to sales force instead of challenge them.

**4 Practice: Hands-On Demand Forecasting Simulation**

In this section, you will experience the whole process of forecasting and S&OP preparation, forecast adjustment and review based on a typical business scenario in system environment, including history outlier, statistic simulation, create baseline forecast, prepare promotion forecast, managerial adjustment, pre-S&OP meeting, S&OP meeting and KPI tracking and tracing. It is totally new experience and practice in your demand forecasting journey.

**5 Practice Sharing, Discussion & Summary**

Every group will discuss based on practice experience:

- ✦ Summary problems in the simulation
- ✦ Sharing the understanding on best practice
- ✦ Make suggestions for your company: Accountability/Process/Technique/Matrix and so on.

**6 Feedback & Suggestions Collection**

1 complimentary books of demand forecasting management will be offered for free: [info@demand-chain.org.cn](mailto:info@demand-chain.org.cn)

**Day 3 | 09:00 – 17:30****Course Introduction**

Demand management strongly depends on statistical techniques, which are significantly different from other business management approaches and therefore scientific and rational prediction requires statistical technology. The course will help students from a pragmatic perspective to master the fundamentals of statistical techniques and application skills in business forecasting and 17 typical statistical techniques will be chosen and explained, in depth. Forecasting system simulation will be demonstrated to experience the process.

**Course Profile****1 Fundamental of statistics**

- ◇ Statistics introduction
- ◇ Qualitative statistics techniques
- ◇ Quantitative statistics techniques – Regression methods
- ◇ Quantitative statistics techniques – Time series methods
- ◇ Statistics evaluation and composite statistics application

**2. Master application of 17 classic statistical models**

This section will introduce 17 classic statistical techniques, business logic & application skills through system simulation and you will learn how to select the best model based on history pattern, as well as the basic skills of how to optimize the model parameters based on changes in the statistical errors. This includes.

- ◇ Master 17 typical statistical techniques' logic & usage
- ◇ The difference between time series & regression models
- ◇ Understanding of the historical data correction (Outlier)
- ◇ Understand how to apply trends damping technology
- ◇ Understand new product forecasting model (Liking model)
- ◇ Understand cannibalization technique in promotion forecasting
- ◇ Understand the principles and applications of statistical errors calculation (ET, MAD, MAPE, MSE, TS etc.)
- ◇ How to select Best Fit model for your business

**3. Training on statistical forecasting techniques application**

- ◇ History cleaning manually or automatically (outlier)
- ◇ How to select forecasting model type via history pattern.
- ◇ Practice how does forecasting model parameters work.
- ◇ How to run forecasting simulation and get best fit model.
- ◇ What does different statistic errors mean in model selection.

**4. Experience Sharing**

- ◇ Share statistic application experience of your company

**5. Feedback collection****Half Day: 14:00 – 17:30 (3 times per year)****CDMP Club Salon Introduction**

This course aims to provide students with a platform for constant sharing and continuing improvement. Especially when students complete 3 days of professional training, and have practical experience in the business world, they once again return to the classroom to share with the coach the experiences and problems and get new inspiration and practices from other enterprises as well. Experienced coaches will continue to lead the students to explore and solve problems. The training will consist of a variety of themes and invite demand practitioners from leading companies to share their best practices. The selection of seminar topics will cover these principles:

- ◇ Based on business or operation process
- ◇ Based on industry characteristics or management model
- ◇ Each topic lasts half a day ( 3 hours )

**1. Topics cover questions below**

- ◇ How to measure the value of demand management
- ◇ What is the best demand accountability? Who is owner?
- ◇ How to select best fit KPI for your business model?
- ◇ NPI & promotion forecasting techniques and tips
- ◇ Share experience in statistic techniques application.
- ◇ How to involve marketing & sales in forecasting process?
- ◇ How to define S&OP meeting template
- ◇ How to reach consensus forecast in S&OP meeting?
- ◇ How to create baseline forecast?
- ◇ How to distribute sales target into product and sales reps level?
- ◇ How to track demand plan execution?

**2. Topics cover industries below**

- A. Consumer goods
- B. Cold chain industry
- C. Pharmaceutical manufacturing
- D. Pharmaceutical distribution
- E. Industrial goods --- Standard product
- F. Industrial goods --- Customizing product
- G. Industrial goods --- Project based
- H. Industrial goods --- Configure to order
- I. Catering industry
- J. Garment industry
- K. Automotive parts industry
- L. Trading industry
- M. Others

**3. Feedback collection**

One set of statistic technique model will be offered for free, more information: [info@demand-chain.org.cn](mailto:info@demand-chain.org.cn)