



Martec International

Martec International is a leading consulting and training firm specializing in the retail industry. Its client base includes retailers from around the globe, technology suppliers to retail and manufacturers of consumer packaged goods and consumer durables.

Martec's professional staff are all former retailers with at least 10 years retail experience and have held at least one management position in a significant retailer.

Martec's training portfolio includes instructor-led classes, e-learning programs and blended learning solutions.

Forecasting E-Learning Course

Target Audience

Martec's forecasting e-learning course is designed for everyone involved in forecasting including merchandisers, buyers and supply chain managers. IT departments and vendors supplying and selling forecasting systems will benefit from a better understanding of the key processes and methods.



Objectives of the Program

The course provides a thorough grounding in key forecasting principles and concepts. It is suitable for retailers operating in both category management and merchandise management environments. By the end of the program, students will be able to do the following:

- Explain the theory, principles and practice of forecasting.
- Describe best practice forecasting processes.
- Be able to judge which are the best forecasting techniques to use in your business.

Course Overview

Forecasting is a self-paced web-based training program. All the student needs to run the program is access to a PC and web browser. The program provides about 3 hours of training and access is valid for 12 months. We recommend that students study in 30-40 minute segments to maximize learning retention. Within the purchased period, students can revisit the material as often as they wish.

The program includes a variety of interest generating features and exercises. The student sees his or her own test scores immediately and can review explanations for the correct answers, as appropriate. Companies who buy a group of licences will be given access to the reporting facilities in the Learning Management System. This enables management to track which students have started and completed the training and their test scores.

Study Time

3 hours



Program Contents

Introduction

- Simple forecasting
- Pre-requisites to support good forecasting
- Demand forecasting
- Characteristics of an item

Forecasting Methods

- Simple moving average
- Weighted moving average
- Setting weights
- Averages or weighted moving average – limitations for forecasting
- Variance against plan
- Forecast profiles
- What is a profile?
- Using profiles
- Forecasting promotional lift using profiles

Forecasting accuracy

- Inventory review horizons
- Chain vs. store forecasting
- Chain or warehouse vs. store forecasting
- Measuring forecast error

More advanced forecasting

- Forecasting at a price
- Exponential smoothing
- Adjusting smoothing based on length of sales experience
- Smoothing factors
- Exponential smoothing with trend and seasonality
- Trend modifier
- Using seasonality factors
- New product profile
- Forecast profiles – advanced

Other Courses Available from Martec

Fundamentals of Retail Suite (Induction)

Buying & Merchandising

Store Operations

Forecasting

Sales and Inventory Management

Omni-Channel Retailing

Fundamentals of the Consumer Goods Business

Forecasting strategy

- Practical comments
- Category management
- Forecasting and allocation / replenishment
- Forecasting across the supply chain

Mastery Test

This course is self-paced and online. You will have access to the course for 12 months. Students who score 80% or higher in the post course mastery test will be able to download a certificate of completion for the course.

Exponential Smoothing

Benefits	Limitations
<ul style="list-style-type: none">• Gives more weight to recent data• Incorporates all past history• Lower data storage requirements• Fast calculation - good when '000s forecasts to compute• Easily adapted to different conditions.	<ul style="list-style-type: none">• Does not react quickly if values (weights) set incorrectly or a sudden change takes place• Skewed by periods of abnormal trade• Applies the same smoothing factor to all periods, unless the replenishment specialist manually intervenes.

Using Seasonality Factors

Month	1	2	3	4	5	6	Total
Seasonal Factor	1.0	1.09	0.73	0.82	1.09	1.27	
Actuals/forecast	1130	1250	800	900	1200	1400	6680
De-seasonalize history	1130	1148					
Generate forecast			1139	1139	1139	1139	
Apply seasonality to forecast	1130	1250	831	934	1242	1447	6834

Seasonality factors are used as shown in this example. Firstly, the current sales for this season are de-seasonalized. In other words the seasonal effect is removed. In period 3 the seasonal factor is 1.0, therefore there is no seasonal impact on that period and hence no change to the sales number.

Period 2 is normally 9% higher than period 1 because of seasonal influences. The sales for period are reduced by 9% to bring them back to "normal". Sales for period 3 would be higher "normally" so the seasonal factor increases them. The de-seasonalize calculation is to divide the period sales (or forecast) by the seasonality factor as shown here.

The de-seasonalized history is then used to generate a forecast using which

