Chapter Outline

# Chapter 13: Demand Forecasting Methods

***See pages: 436-498.***

Operations Profile: Challenges in Forecasting Demand for L.L. Bean’s Famous “Duck Boots,”

Introduction to Forecasting and Its Applications

The Characteristics of Good Forecasts

Qualitative Versus Quantitative Forecasting Methods

Qualitative Methods

Quantitative Methods

Types of Quantitative Methods: Time Series Forecasting

Short-Term Time Series Forecasting Methods

Operations Profile: Using Forecasting to Solve Hospital Staffing Challenges

Medium- to Long-Term Time Series Forecasting Methods

Techniques for Evaluating Cyclical Variations

Types of Quantitative Methods: Causal or Associative Methods

Measuring and Monitoring the Accuracy of Forecasting Methods

Mean Absolutes Deviation (MAD)

Cumulative Sum Error (CSE) and Bias

Mean Squared Error (MSE)

Mean Absolute Percentage Error (MAPE)

Monitoring and Controlling Forecasts

Forecasting for Supply Chains

Consider This 13.1: Forecasting Using Excel

Ethical Issues

Chapter Summary

Key Terms

Discussion and Review Questions

Solved Problems

Problem

Case Study 13.1: Forecasting Ticket Demand for the Super Bowl

Case Study 13.2: Ethical Forecasting: If You Torture the Numbers Long Enough, They Can Tell You Anything!

Video Case

Critical Thinking Exercises

Littlefield Laboratories