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