

# Contents

## Part I Introduction

- 1 Advanced Methods for Modeling Markets (AMMM) .....** 3  
Peter S.H. Leeflang, Jaap E. Wieringa, Tammo H.A. Bijmolt,  
and Koen H. Pauwels

## Part II Specification

- 2 Advanced Individual Demand Models .....** 31  
Dennis Fok
- 3 Traditional Time-Series Models.....** 87  
Koen H. Pauwels
- 4 Modern (Multiple) Time Series Models: The Dynamic System .....** 115  
Koen H. Pauwels
- 5 State Space Models .....** 149  
Ernst C. Osinga
- 6 Spatial Models .....** 173  
J. Paul Elhorst
- 7 Structural Models .....** 203  
Paulo Albuquerque and Bart J. Bronnenberg
- 8 Mediation Analysis: Inferring Causal Processes in Marketing  
from Experiments .....** 235  
Rik Pieters
- 9 Modeling Competitive Responsiveness and Game Theoretic  
Models .....** 265  
Peter S.H. Leeflang
- 10 Diffusion and Adoption Models.....** 299  
Peter S.H. Leeflang and Jaap E. Wieringa

**Part III Modeling with Latent Variables**

- 11 Structural Equation Modeling** ..... 335  
Hans Baumgartner and Bert Weijters
- 12 Partial Least Squares Path Modeling** ..... 361  
Jörg Henseler
- 13 Mixture Models** ..... 383  
Jeroen K. Vermunt and Leo J. Paas
- 14 Hidden Markov Models in Marketing** ..... 405  
Oded Netzer, Peter Ebbes, and Tammo H.A. Bijmolt

**Part IV Estimation Issues**

- 15 Generalized Method of Moments** ..... 453  
Tom J. Wansbeek
- 16 Bayesian Analysis** ..... 493  
Elea McDonnell Feit, Fred M. Feinberg, and Peter J. Lenk
- 17 Non- and Semiparametric Regression Models** ..... 555  
Harald J. Van Heerde
- 18 Addressing Endogeneity in Marketing Models** ..... 581  
Dominik Papiés, Peter Ebbes, and Harald J. Van Heerde

**Part V Expected Developments**

- 19 Machine Learning and Big Data** ..... 631  
Raoul V. Kübler, Jaap E. Wieringa, and Koen H. Pauwels
- 20 The Future of Marketing Modeling** ..... 671  
Koen H. Pauwels, Peter S.H. Leeftang, Tammo H.A. Bijmolt,  
and Jaap E. Wieringa

**Author Index** ..... 685

**Subject Index** ..... 703

**About the Authors** ..... 709

**Appendix** ..... 723

Table of contents from *Modeling Markets*

Subject Index from *Modeling Markets*