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Titolo	Inventory Analytics
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ISBN	9781800641778 180064177X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (186 pages)
Soggetti	Economic theory & philosophy Biography & True Stories Social research & statistics Economics, finance, business & management Stochastics Business & management Management of specific areas Probability & statistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Introduction -- Inventory Systems -- Introduction -- The role of inventory in supply chain management -- A simple inventory system -- Inventory costs -- Deterministic supplier lead time -- Deterministic Inventory Control -- Introduction -- Accounting for costs -- The Economic Order Quantity -- Quantity discounts -- Planned backorders in the EOQ -- Finite production rate: The Economic Production Quantity -- Production on a single machine: The Economic Lot Scheduling -- Synchronising production: The Joint Replenishment Problem -- Time-varying demand: Dynamic Lot Sizing -- Planned backorders in Dynamic Lot Sizing -- Order quantity capacity constraints in Dynamic Lot Sizing -- Demand Forecasting -- Introduction -- Time series -- Four simple forecasting methods -- Naïve method -- Drift method -- Seasonal Naïve method -- Evaluating

forecasting accuracy -- Prediction Intervals -- Box-Cox transformations -- Exponential Smoothing -- ARIMA models -- Stochastic Inventory Control -- Introduction -- The Newsvendor -- Service level constraints in inventory systems -- Simulating stochastic inventory systems -- The multi-period Newsvendor -- The base-stock policy -- The modified base-stock policy -- The (s,S) policy -- The modified (s,S) policy -- Nervousness of control -- The (R,S) policy -- The (s,Q) policy -- The (R,Q) policy -- The (R,s,S) policy -- Multi-echelon Inventory Systems -- Introduction -- Serial systems -- Assembly systems -- Distribution systems -- General systems -- Appendix -- Introduction -- Poisson processes -- Discrete Event Simulation -- Stochastic Dynamic Programming -- Bibliography -- Index.

Sommario/riassunto

Inventory Analytics provides a comprehensive and accessible introduction to the theory and practice of inventory control - a significant research area central to supply chain planning. The book outlines the foundations of inventory systems and surveys prescriptive analytics models for deterministic inventory control. It further discusses predictive analytics techniques for demand forecasting in inventory control and also examines prescriptive analytics models for stochastic inventory control.
