Contents

Part I Intelligent Systems

| 1 | Average Run Length Performance Approach to Determine the Best Control Chart When Process Data is Autocorrelated Ana Sofia Matos, Rogério Puga-Leal and José Gomes Requeijo | 3 |
|---|--|----|
| 2 | Evolution Mechanism of Scale Invariant Knowledge Network Influenced by Exogenous Factors | 13 |
| 3 | Assessment of Hardware Product Design Defects by Fuzzy Neural Network Based on Genetic Algorithm Huimeng Zheng, Weidong Liu, Chengdi Xiao and Weili Hu | 25 |
| 4 | Game Analysis and Improvement of the Medical Expenses Payment | 35 |
| 5 | Incorporation of EU Harmonized Classifications to Enhance Traditional Methods of Risk Analysis | 45 |
| 6 | A Bilevel Programming Model for an Agriculture Production-Distribution System with Fuzzy Random Parameters | 59 |
| 7 | A Multi-attribute Reverse Auction Decision Making Model Based on Multi-objective Programming Yazhen Chen, Longbo Qiu, Tianyu Cao and Zhineng Hu | 73 |
| 8 | The Efficiency Evaluation of Chinese Film and Television Industry Listed Companies Based on DEA Method | 83 |

| 9 | A Balanced Transfer Learning Model for Customer Churn Prediction | 97 |
|-----|--|-----|
| 10 | Assessment Employee Empowerment Through Combination of FAHP and VIKOR Methods | 105 |
| 11 | Research on Innovation Capability of National High-tech Zones: Model Building and Empirical Analysis | 117 |
| 12 | Who Knows What and Who is Reliable: Transactive Memory System in Multiactivity Task Environment | 131 |
| 13 | Research on the Construction Safety Investment Regulation Evolutionary Game and Application | 145 |
| 14 | A Rumor Spreading Model Considering Latent State Yi Zhang and Chong Chen | 155 |
| 15 | Linguistic Distribution Assessments with Interval Symbolic Proportions | 163 |
| 16 | Interval Forecasting Model with ARIMA for Monitoring Indicators of Small and Micro Enterprises in Sichuan Province Rui Wang, Shuang Zhao and Ting Peng | 175 |
| 17 | Modeling Business Interoperability in a Context of Collaborative Supply Chain Networks | 187 |
| Par | t II Decision Support Systems | |
| 18 | Mathematical Models of Moving Particles and Their Application for Traffic | 203 |

Contents xvii

| 19 | Decision Making via Binary Decision Diagrams: A Real Case Study | 215 |
|----|--|-----|
| 20 | Portfolio Delivery Approach to Township Sewage Treatment Facilities in China: A Case Study Chuan Chen, Nini Wu and Igor Martek | 223 |
| 21 | Research on the Design of the Selective Contract Under SMEs' Financial Demand | 231 |
| 22 | The Identification of Recessive Community Organization in Group Decision Making | 241 |
| 23 | A Superiority Index Based Method for MCDM Under Uncertain Linguistic Setting | 253 |
| 24 | Evaluation of the New Media's Influences in College Student Based on Analytic Hierarchy Process | 265 |
| 25 | A New Approach to Job Evaluation Through Fuzzy SIR Hossein Safari, Mohammad Aghighi, Fatemeh Mirzaei Rabor and Virgílio António Cruz-Machado | 273 |
| 26 | Venture Capital and Entrepreneurial Innovation: Research on the Data of GEM in China | 291 |
| 27 | Employee's Perception of Occupational Hazards and Health Complaints in the Financial Sector (Portuguese Sample) José Miquel Cabeças and Mário Rui Mota | 303 |
| 28 | Research on Construction and Analysis of the Six-Dimension Integrated Strategic Transformation Modeling | 315 |
| 29 | Analysis on Regional Difference in Relationship Between Financial Development and Urban-Rural Income Gap Limin Yang, Liuliu Kong, Yanni Shen and Yuanyaun Ge | 325 |

| 30 | Strategic Analysis of Garden City of Chengdu with SWOT Method Based on Ecological Civilization Mao Lu, Wenke Wang, Hui Li and Yalan Yang | 337 |
|-----|--|-----|
| 31 | DYNAMOD—An Agent Based Modeling Framework: Applications to Online Social Networks | 349 |
| 32 | The Research on Treasury Bond Futures Market Liquidity Measuring Index Based on OSA Algorithm Jun Hou, Wenke Wang, Mao Lu and Yan Hu | 363 |
| 33 | The Method of Knowledge Chain Partner Selection Based on Improved TOPSIS Hong Peng and Zongxin Liu | 375 |
| 34 | A Relationship Model of Brand Marketing Strategy and Agribusiness Dynamic Capability Yu Ding, Wensheng Li and Yi Peng | 385 |
| 35 | Competitive Forces, IT Strategy and Business Strategy: An Empirical Study on Japanese SMEs | 397 |
| Par | t III Manufacturing | |
| 36 | Identifying Innovation Patterns: Some Insights on Portuguese Manufacturing Companies | 415 |
| 37 | Integrated System Health Management for Environmental Control and Life Support System in Manned-Spacecraft Fan Li and Yusheng Wang | 429 |
| 38 | Research on Big Data Under Enterprise Technological Innovation Management | 443 |
| 39 | Application of Multi-objective Optimization Based on Genetic Algorithms in Mining Processing Enterprises Yue He, Mengxiang Zhang and Liming Yao | 455 |

| 40 | Input Analysis in Simulation: A Case Study Based on the Variability in Manufacturing Lines | 465 |
|----|---|-----|
| 41 | Corporate Governance and the Use of Raised Capital: Evidence from China's Growth Enterprise Market | 479 |
| 42 | An Empirical Study on the Impact of Person-Organization Fit on Organizational Effectiveness | 491 |
| 43 | Firms' Financial Risk Forecasting Based on the Macroeconomic Fluctuations | 501 |
| 44 | Relationship Between Social Responsibility and Economic Benefits of Liquor Industry | 513 |
| 45 | Dissimilar Welding Using Spot Magnetic Pulse Welding Guillaume Racineux, Arun Prasath Manogaran, Diogo Pereira and Rosa M. Miranda | 525 |
| 46 | Lean Services: An Approach for Supply Chains Based on the Gaps Model of Service Quality | 533 |
| 47 | Ship Building Production in Jiangsu Province Based on DEA Efficiency Analysis | 541 |
| 48 | The Substitution Effect of Trade Credit Financing in an Emerging Economy: Empirical Evidence from China Qianwei Ying, Wanqing Guo and Tian Yang | 551 |
| 49 | Inquiring into the Economic Structural Breakpoints and Postwar U.S. Business Cycle | 563 |
| 50 | The Macroeconomic and Financial Effects of Oil Price Shocks Song Zhou and Dong Wang | 571 |

| 51 | The Multi-objective Optimization Model of the Industrial Structure in the Processes of Urbanization: A Case Study of Shizhong District, Neijiang City | 581 |
|-----|--|-----|
| 52 | Multi Objective Production-Distribution Decision Making Model Under Fuzzy Random Environment Muhammad Nazim, Muhammad Hashim, Abid Hussain Nadeem, Liming Yao and Jamil Ahmad | 591 |
| Par | t IV Supply Chain Management | |
| 53 | A Cross-Case Analysis of RFID Deployment in Fast Fashion Supply Chain | 605 |
| 54 | Capacity Allocation Model of Air Cargo with the Differences in Transport Time | 619 |
| 55 | Profit Allocation Mechanism of Supply Chain with Bilateral Asymmetric Costs Information Xinhui Wang, Hongmei Guo, Xianyu Wang and Jie Zhong | 633 |
| 56 | Lean and Green Supply Chain Performance: A Balanced Scorecard Perspective | 645 |
| 57 | Study for Preventive Maintenance Plans and Strategies of High-Value Equipment in Radiation Department of General Hospital Based on Appointment Amount Analysis Yueyu Li | 655 |
| 58 | Inter-organizational Similarity as a Driver of Knowledge Sharing Within Supply Chains | 665 |
| 59 | Study of Trade Credit Strategies and Conditions in Supply Chain Based on Perfectly Competitive Suppliers | 677 |

| 60 | The Trade Credit Will in Supply Chain Transactions Hong Cheng, Hongmei Guo and Xianyu Wang | 68 |
|-----|--|-----|
| 61 | Supply Chain as a Collaborative Virtual Network Based on LARG Strategy | 70 |
| 62 | Supplier Evaluation and Selection Using Restricting Weights Method in Fuzzy Environment. Abid Hussain Nadeem, Muhammad Nazim, Muhammad Hashim, Muhammad Kashif Javed and Liming Yao | 713 |
| 63 | Multiobjective Decision-Making Model in Cold Chain Logistics Inventory System Under Complex Random Phenomenon | 725 |
| 64 | Process-Based Supply Chain Performance Measurement | 737 |
| 65 | δ-Shock Supply Chain Reengineering Decision Model Under Weibull Distribution Manyi Tan, Xiaoying Bao, Dan Ding and Feng Lin | 749 |
| 66 | Role of Talent Management, Diversity Trainings and HRD on Effective Implementation of HR Practices in Telecom Sector in Pakistan | 761 |
| 67 | Cooperative Quality Investment in Outsourcing and Its Impact on Supply-Chain Performance | 771 |
| 68 | A Fuzzy Relationship Model of FMEA for Quality Management in Global Supply Chains | 785 |
| 69 | Designing Lean Supply Chains: A Case Study | 791 |
| Aut | thor Index | 809 |