

Current Research Issues in Production Economics

Introduction

This Special Issue includes a selection of papers originally presented and discussed at the Twentieth International Working Seminar on Production Economics, Innsbruck, February 19–23, 2018, and subsequently extended and improved.

Production Economics was established in the 1970s as an academic discipline focusing on scientific topics treating the interface between engineering, management, and economics with a special emphasis on financial consequences of decisions in the production domain. The subject is interdisciplinary in nature and it therefore contains a wide range of topics. The Working Seminar included sessions such as supply chain management, innovation management, general production economics, productivity and performance analysis, service management, risk management in production, inventory control, scheduling, forecasting, simulation applications, green and reverse logistics, manufacturing strategy, production planning and control, investment and financial planning. The 20th Working Seminar had 183 participants from 29 countries and provided an excellent opportunity for the participants to broaden study horizons, exchange research ideas and promote development of the unique production economics community.

The Seminar was opened with a Welcoming Address by the Vice Rector for Research, University of Innsbruck, Professor Dr Ulrike Tanzer, followed by a Keynote Lecture “Text Mining for Data Collection in Production Economics Research” by Professor Ou Tang, Linköping Institute of Technology.

As members of this stimulating community we would like to thank the Organisation Committee of the Working Seminar:

Robert W. Grubbström, Linköping Institute of Technology
Hans H. Hinterhuber, Universität Innsbruck
Janerik Lundquist, Linköping Institute of Technology
Andrea Mayr, Universität Innsbruck

the members of the Programme Committee

Marija Bogataj, University of Ljubljana
Dilay Çelebi, Istanbul Technical University
Attila Chikán, Corvinus University, Budapest
Huiping Ding, Beijing Jiaotong University
Alexandre Dolgui, IMT Atlantique, Nantes
Günter Fandel, Fern-Universität Hagen
Ludo F. Gelders, Katholieke Universiteit, Leuven
Richard F. Hartl, Universität Wien
Giovanna Lo Nigro, Università di Palermo
Hiroaki Matsukawa, Keio University, Yokohama
Stefan Minner, Technische Universität München
Christopher O'Brien, University of Nottingham
Costas Pappis, University of Piraeus
Lorenzo Peccati, Università Commerciale Luigi Bocconi, Milan
John Rowcroft, University of New Brunswick
Ruud H. Teunter, University of Groningen
Markku Tuominen, Lappeenranta University of Technology

Stephan M. Wagner, Eidgenössige Technische Hochschule, Zürich
D. Clay Whybark, University of North Carolina, Chapel Hill

and the Chairmen of the sessions and the Discussants who contributed to the Twentieth International Working Seminars on Production Economics.

As Guest Editors, we gratefully acknowledge the contribution from all of the authors and the referees that generously offered their precious time and expertise to this publication.

Among the 140 papers presented in the Working Seminar, 87 papers were submitted to this special issue and finally 25 papers were accepted. All selected papers have been through a thorough refereeing process entailing the authors to revise their manuscript several times and improve it significantly.

This Special Issue covers a rich mix of topics related to Production Economics as Performance Measurement, Production Planning and Control, Supply Chain Management and Supply Chain Strategy, Game theory applications, Servitization, Lean production. The accepted papers are listed below.

The twenty-first Working Seminar will be held in Innsbruck February 24–28, 2020.

Newark, Palermo, London, August 2019

Layek Abdel-Malek
New Jersey Institute of Technology
University Heights
Department of Mechanical & Industrial Engineering
Newark, New Jersey US
E-mail address: layek.abdel-malek@njit.edu

Giovanna Lo Nigro
Department of Engineering,
University of Palermo,
Palermo, Italy
E-mail address: giovanna.lonigro@unipa.it

Li Zhou
Business School, Systems Management and Strategy Department
University of Greenwich
London, UK
E-mail address: li.zhou@greenwich.ac.uk

References

- Oussama Ben-Ammar, Belgacem Bettayeb, Alexandre Dolgui, Optimization of multi-period supply planning under stochastic lead times and a dynamic demand, *This issue*
- Violetta G. Cannas, Jonathan Gosling, Margherita Pero, Tommaso Rossi, Engineering and production decoupling configurations: An empirical study in the machinery industry, *This issue*

- Kuen-Suan Chen, Ching-Hsin Wang, Kim-Hua Tan, Developing a Fuzzy Green Supplier Selection Model Using Six Sigma Quality Indices, *This issue*
- Huiping Ding, Xiangbo Chen, Kuanhai Lin, Yunbing Wei, Collaborative Mechanism of Project Profit Allotment in Petroleum Engineering Service Chain with Customized Integration, *This issue*
- Xiaoyu Gua, Li Zhou, Petros Ieromonachou, An Imperfect Information Game in Subsidising the Electric Vehicle Supply Chain, *This issue*
- Robert W. Grubbström, The Dependence of the Incremental Risk Rate of Interest on Absolute Risk Aversion - Applying the Laplace Transform to Risk Preference Evaluation, *This issue*
- Peng He, Yong He, Henry Xu, Channel Structure and Pricing in a Dual-Channel Closed-Loop Supply Chain with Government Subsidy, *This issue*
- Jiangtao Hong, Yi Liao, Yibin Zhang, Zhefu Yu, The effect of supply chain quality management practices and capabilities on operational and innovation performance: Evidence from Chinese manufacturers, *This issue*
- Qinghua Huang, Shilei Yang, Victor Shi, Yibin Zhang, Strategic Decentralization under Sequential Channel Structure and Quality Choices, *This issue*
- Malin Johansson, Jan Olhager, Comparing offshoring and backshoring: The role of manufacturing site location factors and their impact on post-relocation performance, *This issue*
- Bart L. MacCarthy, Lina Zhang, Luc Muyldermans, Best Performance Frontiers for Buy-Online-Pickup-in-Store Order Fulfilment, *This issue*
- B. Marchi, S. Zanoni, L.E. Zavanella, M. Y. Jaber, Supply chain models with greenhouse gases emissions, energy usage, imperfect process under different coordination decisions, *This issue*
- Giovanni F. Massari, Ilaria Giannoccaro, Giuseppe Carbone, Are distrust relationships beneficial for group performance? The influence of the scope of distrust on the emergence of collective intelligence, *This issue*
- Andreas Myrelid, Jan Olhager, Hybrid manufacturing accounting in mixed process environments: A methodology and a case study, *This issue*
- Grigory Pishchulov, Alexander Trautrimis, Thomas Chesney, Stefan Gold, Leila Schwab, The Voting Analytic Hierarchy Process Revisited: A Revised Method with Application to Sustainable Supplier Selection, *This issue*
- Dinh Anh Phan, Thi Le Hoa Vo, Anh Ngoc Lai, Thi Lan Anh Nguyen, Coordinating contracts for VMI systems under manufacturer-CSR and retailer-marketing efforts, *This issue*
- Patricia Rogetzer, Lena Silbermayr, Werner Jammerneegg, Sustainable Sourcing including Capacity Reservation for Recycled Materials: A Newsvendor Framework with Price and Demand Correlations, *This issue*
- Paolo Roma, Umberto Panniello, Giovanna Lo Nigro, Sharing economy and incumbents' pricing strategy: The impact of Airbnb on the hospitality industry, *This issue*
- Levente Szász, Béla-Gergely Rácz, Maïke Scherrer, Patricia Deflorin, Disseminative capabilities and manufacturing plant roles in the knowledge network of MNCs, *This issue*
- Sarah Van der Auweraer, Robert Boute, Forecasting Spare Part Demand using Service Maintenance Information, *This issue*
- James M. Wakiru, Liliane Pintelon, Peter N. Muchiri, Peter K. Chemweno, A simulation-based optimization approach evaluating maintenance and spare parts demand interaction effects, *This issue*
- Yingli Wang, Meita Singgih, Jingyao Wang, Mihaela Rit, Making sense of blockchain technology: How will it transform supply chains? , *This issue*

Matthias Gerhard Wichmann, Christoph Johannes, Thomas Stefan Spengler, Energy-oriented lotsizing and scheduling considering energy storages, *This issue*

Yi Zhang, Guowei Hua, T.C.E. Cheng, Juliang Zhang, Vicenç Fernandez, Risk pooling through physical probabilistic selling, *This issue*

Xiao-Xue Zheng, Zhi Liu, Kevin W. Li, Jun Huang, Ji Chen, Cooperative Game Approaches to Coordinating a Three-echelon Closed-loop Supply Chain with Fairness Concerns, *This issue*