Table of Contents

Decision Analysis & Methods I

Simultaneous Consideration of Remanufactured and New Products in Optimal Product Line Design
Ridvan AYDIN, C.K. KWONG, Ping JI
1

The Optimal Ordering Quantity with Uncertain Food's Safety Environment
Shu-Yen HSU, Tyrone T. LIN
6

Reduced Recursive Inclusion-exclusion Principle for the Probability of Union Events
Shin-Guang CHEN
11

A Bi-level Algorithm for Product Line Design and Pricing
Shuli WU, Songlin CHEN
14

An Optimal Electricity Consumption Decision with a Limited Carbon Emission Concept
Tyrone T. LIN, Hui-Chen LAN
19

An Integrated Data Envelopment Analysis (DEA) and Hedge Accounting Approach for Risk Management Efficiency Measurement: Evidence From Derivative Market in Asia-pacific Banks
Shahssuzan ZAKARIA, Sardar M. N. ISLAM
24

Decision Analysis & Methods II

A Fuzzy Linguistic Representation Model for Decision Making Under Uncertainty
Wen-Tao GUO, Van-Nam HUYNH
29

Post Optimality Analysis of Pareto Optimal Set Through Weights Robustness
Maria KALININA, David SUNDGREN
34

Adapting the ISO31000:2009 Enterprise Risk Management Framework Using the Six Sigma Approach
Bennie Seck-Yong CHOO, Jenson Chong-Leng GOH
39

A Framework to Identify Sustainability Indicators for Product Design
Sam Yeon KIM, Seung Ki MOON, Hyung Sool OH, Taezoon PARK, HaeJin CHOI, Hungsun SON
44

An Interactive Bi-criteria Heuristic Algorithm for the Coherent System Assembly
Abdel-Aziz M. MOHAMED
49

Optimal Trial Number for D-optimal Designs Based on Efficiency-cost Ratio Analysis
XiuTing LIU, Sen LIN, Jun YANG
54

Swarm Based Mean-variance Mapping Optimization (MVMO’s) for Economic Dispatch Problem with Valve - Point Effects
Khoa TRUONG, Pandian VASANT, Balbir Singh MAHINDER SINGH, Dieu VO
59

Operations Research I

A Multicriteria Decision Model for Technology Readiness Assessment for Energy Based on PROMETHEE Method with Surrogate Weights
Adiel ALMEIDA, Danielle C MORAIS, Luciana ALENCA R, Tharcylla CLEMENTE, Eduardo KRYM, C. Z. BARBOZA
64
An Imperialist Competitive Algorithm for the Job Shop Scheduling Problems
Hamid PIROOZFARD, Kuan Yew WONG

Impact Evaluation of MGNREGA Using Data Envelopment Analysis
Devaraj HANUMAPPA, Parthasarathy RAMACHANDRAN, T. G. SITHARAM

Critical Literature Review on Maturity Models for Business Process Excellence
Saja ALBLIWI, Jiju ANTONY, Norin ARSHED

A Modified Genetic Algorithm for Precedence Constrained Operation Sequencing Problem in Process Planning
Yuliang SU, Xuening CHU, Dongping CHEN, Dexin CHU

Building Master Surgery Schedules with Leveled Bed Occupancy and Nurse Workloads
Zakaria ABDELNASOL, Nermine HARRAZ, Amr B. ELTAWIL

Operations Research II

Resolution of Resource Conflicts in the CCPM Framework Using a Local Search Method
Hiroki KOGA, Hiroyuki GOTO, Eishi CHIBA

A Heuristic Algorithm for the Prize Collecting Steiner Tree Problem
Yuki HOSOKAWA, Eishi CHIBA

3D Loading Problem Formulation Using Mixed Integer Nonlinear Programming
Mojahid SAEED OSMAN, Bala RAM

A Hybrid PSO-TS Approach for Proportionate Multiprocessor Open Shop Scheduling
Tamer ABDELMAGUID

An Improved Approach for the Quay Crane Assignment Problem with Limited Availability of Internal Trucks in Container Terminal
A. KARAM, Amr B. ELTAWIL, Nermine HARRAZ

Asset Integrity of Deepwater Petroleum Production Facilities
Mayang KUSUMAWARDHANI, Tore MARKESET

Standardization Programs in the Industrial Plant Business: Best Practices and Lessons Learned
Michael GEPP, Jan VOLLMAR, Thomas SCHAFFLER

Quality Control & Management I

Modeling Autocorrelated Process Control with Industrial Application
Siaw Li LEE, Maman Abdurachman DJAUHARI, Ismail MOHAMAD

Estimation of Population Generalized Variance: Application in Service Industry
Revathi SAGADAVAN, Maman Abdurachman DJAUHARI, Ismail MOHAMAD

Factors Affecting Quality in a Manufacturing Environment for a Non-repairable Product
Rene LOMBARD, Corro VAN WAVEREN, Kai-Ying CHAN

Improving Quality of Operations via Industry-specific Empowerment Antecedents: A Study of the Oil and Gas Industry
Ngozi ONYEMEH, Chan Wai LEE

Application of Six Sigma in Oil and Gas Industry: Converting Operation Data into Business Value for Process Prediction and Quality Control
Wai Kit CHENG, Amir Farid AZMAN, Mohamad Hisham HAMDAN, Rachel FRAN MANSA
Mishandled Baggage Problem: Causes and Improvement Suggestions
Imad ALSYOUF, Fatima HUMAID, Shaima AL KAMALI

Service Innovation & Management I

Priority Investment Components of Emotional Intelligence Effective on Marketing with AHP Method
Parissa TAVAKOLI-TARGHI, Yousef GHOLIPOUR KANANI

Workforce Planning for Global Network Delivery Model
Sumit RAUT, Kishore PADMANABHAN, Muralidharan SOMASUNDHANRAM, Natarajan VIJAYARANGAN

CSF in Product Innovation Process: A Comparative Study of Three Malaysian Manufacturing SMEs
Noor Hidayah ABU, Baba MD DEROS, Mohd Fitri MANSOR

Supporting the Cross-disciplinary Development of Product-service Systems Through Model Transformations
Thomas WOLFENSTETTER, Konstantin KERNSchMIDT, Christopher MÜNZBERG, Daniel KAMMERL, Suparna GOSWAMI, Udo LINDEMANN, Birgit VOGEL-HEUSER, Helmut KRCMAR

Structural Investigation of a Healthcare Value Chain: A Social Network Analysis Approach
Vipul JAIN, Sumit SAKHUJA

Supply Chain Management I

Supplier Selection Activities in the Service Sector: A Case Study in Nigeria
Dotun ADEBANJO, Matthew TICKLE, Frank OJADI, Petros IEROMONACHOU, Tritos LAOSIRIHONGTHONG, Roula MICHAELIDES

Managing Supply Disruption in a Three-tier Supply Chain with Multiple Suppliers and Retailers
Sanjoy Kumar PAUL, Ruhul SARKER, Daryl ESSAM

Collaborative Inventory Distribution Management in a Supply Chain: A Simulation Perspective
Joby GEORGE, Nimmy J.S., V. Madhusudanan PILLAI

In-house Capacity Investment and Outsourcing Under Competition
Tarun JAIN, Jishnu HAZRA

Optimization of Multi-commodities Consumer Supply Chains Part II: Simulation Modeling
Zeinab HAJIABOLHASANI, Romeo M. MARIAN, Lee LUONG

Identifying Critical Success Factors for Green Supply Chain Management Implementation Using Fuzzy DEMATEL Method
Rakesh Kumar MALVIYA, Ravi KANT

Warehouse Storage Assignment: The Case Study of a Plastic Bag Manufacturer
Chompoonoot KASEMSET, J. SUDPHAN

Manufacturing Systems I

Comparing Malaysian and Scottish Firms on Practices for Strategic Capability Management
Rob DEKKERS, Kanagi KANAPATHY
The Moderation Effect of the Cultural Dimension "Individualism/Collectivism" on Toyota Way Deployment - A Global Study on Toyota Facilities
Nihal JAYAMAHA, Jurgen WAGNER, Nigel GRIGG

Assessment of the Teamwork Organization in a Production Plant of a Major German Automobile Manufacturer
Robert STRANZENBACH, Philipp M. PRZYBYSZ, Susanne MÜTZE-NIEWÖHNER, Stephan SCHEEL, Christopher M. SCHLICK

Modeling Cognitive Network of a Physical System Using Design Knowledge Base
Shah LIMON, Om Prakash YADAV, Bimal NEPAL

Theoretical considerations for Make-or-buy Decisions During ‘Product Design and Engineering’: Three Indian Case Studies
Rob DEKKERS

Lean Transformation Efforts of the Wood Industry in Virginia
Omar ESPINOZA, Urs BUEHLMANN, C FRICKE

Optimal Control Synthesis for a Flexible Manufacturing System Based on Minimal Cuts
Sadok REZIG, Zied ACHOUR, Nidhal REZG, Mohamed-Ali KAMMOUN

Technology & Knowledge Management I

A Behavioral Loyalty Model of Portable Computers
Mohammad Reza SHAHRIARI, Ali HAJIHA, Sara DEHGHAN

Regionalization of Engineering - Framework and Scenarios
Thomas SCHAEFFLER, Rudolf KODES, Michael GEPP, Nadja HOßBACH, Arndt LÜDER

The Marketing Strategy for Successful Product Development Performance in Iranian Nanotechnology-based Enterprises
Naser KHOSRAVI, Mohsen SADEGHI

Forecasting of Diffusion Pattern: A Case Example of OLED Technology
Pawat TANSURAT, Nathasit GERDSRI

Nguyen Thi Duc NGUYEN, Atsushi AOYAMA

Identifying Knowledge Components in Software Requirement Elicitation
Laleh TAHERI, Noraini CHE PA, Rusli ABDULLAH, Salfarina ABDULLAH, Mohammad Yaser SHAFAZAND

Information Processing & Engineering I

A Bayesian Accelerated Degradation Studies on Nitrile Rubber O-ring
Lizhi WANG, Xiaohong WANG, Yuxiang LI, Wenhui FAN

Interview Study: Decisions and Decision Criteria for Development in Industry
Danilo Marcello SCHMIDT, Sebastian SCHENKL, Eduard MUNKHART, Susanne NILSSON, Markus MÖRTL

Theoretical Analysis of RFID Security Protocols
Azam ZAVVARI, Mohammad Tariqul ISLAM, Masoud SHAKIBA, Mandeep Jit SINGH

Analyzing and Visualizing News Trends Over Time
Lubaba Farin TANISHA, Bishwajit Banik PATHIK, Manzur H. KHAN, Md. Mamun HABIB

vi
A Novel Tool for Reducing Time and Cost at Software Test Estimation: An Use Cases and Functions Based Approach
Shaiful ISLAM, Bishwajit Banik PATHIK, Manzur H. KHAN, Md. Mamun HABIB

Self-focusing Appearance in Ultra-compact 3×3 Multimode Interference Coupler Based on Silicon on Insulator
Mehdi TAJALDINI, Mohd Zahir MAT JAFRI

Healthcare Systems & Management
Healthcare Platforming for Healthcare Service Development in Hospitals
Linda L. ZHANG, Michel ALDANONDO, Arun KUMAR

Design of a Dynamic Bi-objective Relief Routing Network in the Earthquake Response Phase
Shadab SHISHEHGAR, Reza TAVAKKOLI-MOGHADDAM, Ali SIADAT, Mehrdad MOHammadi

Towards an Instrumented Tissue Expander
Annette BÖHMER, Alexander ZÖLLNER, Ellen KUHL, Udo LINDEMANN

Health System Design: A Financial Perspective
Hans-Jakob LUETHI, C. MANDL, Philippe WIDMER

An Employee Assistance Program by Analyzing the Correlation Between Work Stress and Dreams for Chinese Employees
Kuei-Chen CHIU, Tsai-Wei HUANG, Shulan HSIEH

A Novel Simulated Metamorphosis Algorithm for Homecare Nurse Scheduling
Michael MUTINGI, Charles MBOHWA

Education Management in Healthcare Communities
Juha PUUSTJÄRVI, Leena PUUSTJÄRVI

Intelligent Systems I
Study on the Production Forecasting Based on Grey Neural Network Model in Automotive Industry
Bin LIN, Seng Fat WONG, Weng Ian HO

The Need for Integrating Statistical Process Control and Automatic Process Control
Abdul-Wahid A. SAIF

Modeling Novices in Decision-problem Structuring for Collective Intelligence
Dianne Lee-Mei CHEONG

Survey on Tools and Systems to Generate ER Diagram from System Requirement Specification
Wasana C. UDUWELA, Gamini WIJAYARATHNA

A Methodology for Fuzzy Multi-criteria Decision-making Approach for Scheduling Problems in Robotic Flexible Assembly Cells
Khalid ABD, Kazem ABHARY, Romeo M. MARIAN

Application of a Fuzzy Multi-criteria Decision-making Approach for Dynamic Scheduling in Robotic Flexible Assembly Cells
Khalid ABD, Kazem ABHARY, Romeo M. MARIAN

Overtime Capacity Expansion in Order Acceptance with Node Based Estimation of Distribution Algorithms
Watcharee WATTANAPORNPRom, Tieke LI, Warin WATTANAPORNPRom, Prabhas CHONGSTITVATANA
Systems Modeling & Simulation I

Dynamic Modeling and Analysis of LM6000 Gas-turbine Synchronous Generator
Roozbeh ESHRAGHNIA, Randy J. KLEEN 389

Simulation Based Lean Six Sigma Approach to Reduce Patients Waiting Time in an Outpatient Eye Clinic
Weidong LIN, Xianfei JIN, Sie Yong CHIA 394

Combining Set-based Concurrent Engineering and Function- Means Modelling to Manage Platform-based Product Family Design
Dag RAUDBERGET, Marcel MICHAELIS, Hans JOHANNESSON 399

Simulation of New System Departure Terminal Soekarno-Hatta International Airport
Dimas NOVRISAL, Nuraida WAHYUNI, Nadia HAMANI, Abderrahman ELMHAMEDI, Tresna SOEMARDI 404

Numerical Simulation of Stress Distribution of a Femur-Menisci-Tibia Bone During Normal Standing, Normal Walking, and Standing with a Cane
Angkhana PROMMARAT, Athassawat KAMMANEE, Thitikom PUAPANSAWAT, Farida CHAMCHOD 409

Statistical Analysis and a Social Network Model Based on the SEIQR Framework
Benjamas CHIMMALEE, Wannika SAWANGTHONG, Rawee SUWANDECHOCHAI, Farida CHAMCHOD 414

Placing a Liaison with Long Communication Lengths to the Same Level in an Organization Structure
Kiyoshi SAWADA 419

Project Management I

Setting Up An Intellectual Properties Intermediary Service: DMAIC Way
Kim SIOW 423

Modular, Building Blocks - Based Approach for Information and Documentation Management in Planning Projects
Daniel OEHME, Ralph RIEDEL, Egon MÜLLER 428

Establishing the Development Mechanism of ERP Report
Te- King CHIEN, Hou-Yi LIN 433

Multi-objective Optimization and Risk Assessment in System Engineering Project Planning by Ant Colony Algorithm
Pablo BAROSO, Thierry COUDERT, Eric VILLENEUVE, Laurent GENESTE 438

Analyzing Implementation of Lean Production Control with the Viable System Model
Fatos ELEZI, Michael Timo SCHMIDT, Iris TOMMELEIN, Udo LINDEMANN 443

Development of QuicKaizen™ Technique for Productivity Execution Management for Singapore SMEs
Chin Wei GAN, Ming Hon TOH, Roland LIM, Bin MA, Puay Siew TAN, Amrik Singh BHULLAR 448

The Resource-constrained Project Scheduling Problem with Stochastic Activity Durations
Stefan CREEMERS 453

A Comparative Study Among Stakeholders on Causes of Time Delay in Malaysian Multiple Design and Build Projects
Ramanathan CHIDAMBARAM, Narayanan SAMBU POTTY 458
Human Factors I

Enhancing Work System Design and Improvement by Further Developments of Value Stream Mapping
Peter KUHLANG, Thomas EDTMAYR, Alexander SUNK, Thomas MÜHLBRADT

Influence of Human Factors Over Idea Generation: a Qualitative and Quantitative Analysis of an Enterprise of the Graphic Sector in Medellin
Manuela ESCOBAR SIERRA, Luz Dinora VERA ACEVEDO

The Effect of Font Size on Typing Performance and Sitting Posture
Haruetai LOHASIRIWAT, Temsin WATTANAPANICH, Panmeq SAECHAN

Improvement of Workstation by Providing Ergonomically Designed Chair and Table for the Water Hyacinth Weaving Department of the Villar Foundation
Devie Ann GAMATA, Ralph OROZCO, J K. C. LASERNAA, J. A. MEDINA, Sheily MENDOZA, R J. U. GARCIA

The Effect of Psychosocial Stress on Trapezius Muscle Activity During Computer Work: A Review
Mohd Firdaus MOHD TAIB, Myung Hwan YUN

Parametric Modeling of 3D Human Faces Using Anthropometric Data
Chun-Yang TSENG, I-Jan WANG, Chih-Hsing CHU

Chien-Sing LEE, K. Daniel WONG

Production Planning & Control I

Process Family Planning: An Optimization-based Approach
Roel LEUS, Linda L. ZHANG, Daniel KOWALCZYK

Efficient Symmetry-breaking Formulations for Grouping Customer Orders in a Printing Shop
Philipp BAUMANN, Norbert TRAUTMANN

Continuous Precise Workload Control Method
Hakan AKILLIOGLU, Joao-Dias FERREIRA, Antonio MAFFEII, Pedro NEVES, Mauro ONORI

Economic Level of Detail for Assembly Planning
Achim KAMPKER, Peter BURGGRÄF, Yvonne BÄUMERS

Scheduling a Dynamic Flowshop to Minimize the Mean Absolute Deviation from Distinct Due Dates
Ahmed W. EL-BOURI

A Hybrid EOQ and Fuzzy Model to Minimize the Material Inventory in Ready Mixed Concrete Plants
Mehdi RAVANSHADNIA, Milad GHANBARI

A Structural Equation Model Linking Forecasting, Planning and Controlling with SME Performance
Biju PUTHANVEETTIL, Bhasi MARATH

Decision Analysis & Methods III

Design for Open Innovation (DFOI) - Product Structure Planning for Open Innovation Toolkits
Maik HOLLE, Udo LINDEMANN
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects of Different Classifiers in Detecting Infectious Regions in Chest Radiographs</td>
<td>541</td>
</tr>
<tr>
<td>Wan Siti Halimatul Munirah WAN AHMAD, Rajasvaran LOGESWARAN, Mohammad Faizal AHMAD FAUZI, Wan Mimi Diyana WAN ZAKI</td>
<td></td>
</tr>
<tr>
<td>Parallelization of Industrial Process Control Program Based on the Technique of Differential Evolution Using Multi-threading</td>
<td>546</td>
</tr>
<tr>
<td>Rajeev AGRAWAL, Abhinav GOYAL, Debjani SAMBASIVAM, Arya K BHATTACHARYA</td>
<td></td>
</tr>
<tr>
<td>Weibull Component Reliability Evaluation With Masked Data</td>
<td>551</td>
</tr>
<tr>
<td>Jieqiong MIAO, Xiaogang LI, Renxi LUO</td>
<td></td>
</tr>
<tr>
<td>An Extension of PROMETHEE to Divisive Hierarchical Multicriteria Clustering</td>
<td>555</td>
</tr>
<tr>
<td>Yves DE SMET</td>
<td></td>
</tr>
<tr>
<td>Effectiveness Assessment for Waste Management Decision-support in the Arctic Drilling</td>
<td>559</td>
</tr>
<tr>
<td>Yonas Zewdu AYELE, Abbas BARABADI, Javad BARABADI</td>
<td></td>
</tr>
</tbody>
</table>

**Decision Analysis & Methods IV**

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afshan NASHEEM, Shoaib Ahmed KHAN, Asad WAQAR MALIK</td>
<td></td>
</tr>
<tr>
<td>An Approach to Analyse Key Renewable Energy Technologies: A Case from Sri Lanka</td>
<td>570</td>
</tr>
<tr>
<td>Amila WITTHANARACHCHI, Julian NANAYAKARA, Chamli PUSHPAKUMARA</td>
<td></td>
</tr>
<tr>
<td>Bibliometric Methodology to Detect Collaborative and Competitive Countries</td>
<td>575</td>
</tr>
<tr>
<td>Shino IWAMI, Francisco TACOA, Junichiro MORI, Yuya KAJIKAWA, Ichiro SAKATA</td>
<td></td>
</tr>
<tr>
<td>Fuzzy Decision Making in Shape Feature Design for Product Development</td>
<td>580</td>
</tr>
<tr>
<td>Ching-Hu YANG, Chung-Shing WANG, Chin-Fu CHEN, P.Y. LIN, Chung-Chuan WANG</td>
<td></td>
</tr>
<tr>
<td>An ANP-based Multi Criteria Decision Making Model for Supplier Selection</td>
<td>585</td>
</tr>
<tr>
<td>Hisham ALIDRISI</td>
<td></td>
</tr>
<tr>
<td>Multi-granules Evaluation Model Through Fuzzy Random Regression Analysis</td>
<td>589</td>
</tr>
<tr>
<td>Nureize ARBAIY</td>
<td></td>
</tr>
</tbody>
</table>

**Decision Analysis & Methods V**

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Case Study on Mining Social Media Data</td>
<td>593</td>
</tr>
<tr>
<td>Hing Kai CHAN, Ewelina LACKA, Rachel W. Y. YEE, Ming K. LIM</td>
<td></td>
</tr>
<tr>
<td>Understanding Sustainability in Healthcare Systems: A Systems Thinking Perspective</td>
<td>597</td>
</tr>
<tr>
<td>Michael MUTINGI, Charles MBOHWA</td>
<td></td>
</tr>
<tr>
<td>Mitigating the Effort for Engineering Changes in Product Development Using a Fuzzy Expert System</td>
<td>602</td>
</tr>
<tr>
<td>Tobias KINDSMULLER, Florian G. H BEHNCKE, Benjamin STAHL, Klaus DIEPOLD, Martina WICKEL, Daniel KAMMERL, Konstantin KERNSCMIDT</td>
<td></td>
</tr>
<tr>
<td>Information Communications Technology (ICT) Infrastructure Impact on Stock Market- Growth Nexus: The Panel VAR Model</td>
<td>607</td>
</tr>
<tr>
<td>Rudra P PRADHAN</td>
<td></td>
</tr>
<tr>
<td>A Mathematical Formulation for Low Carbon Electricity Planning in the Presence of Technology and Policy Interventions</td>
<td>612</td>
</tr>
<tr>
<td>Amrutha APPIYAH, Muthu MATHIRAJAN, Balachandra PATIL</td>
<td></td>
</tr>
</tbody>
</table>
Five Factors That Make Pervasive Business Intelligence a Winning Wager
Riccardo COGNINI, Flavio CORRADINI, Alberto POLZONETTI, Barbara RE

S. M. MOUSAVI, Hossein GITINAVARD, Ali SIADAT

Operations Research III

A New DEA Model for Six Sigma Project Selecting: Case Study on Esfahan Province Electricity Distribution Co (EPEDC)
Ali YOUSEFI, Amir Reza AQAMOHAMMADI

Khaoula HAMDI, Nacima LABADIE, Alice YALAOUI

Electricity System Sustainability Transitions : An Integrated Methodology
Taran SHARMA, Patil BALACHANDRA

Multi-project Flexible Resource Profiles Project Scheduling with Ant Colony Optimization
Elena ROKOU, Manos DERMITZAKIS, Konstantinos KIRYTOPOULOS

An Efficient Solution Framework for a Large Scale Delivery Problem
Suyan TENG, Edmund CHAN, Changjun YANG, Mingyen YU, Siow Hwei TAN

Second Order-response Surface Model for the Automated Parameter Tuning Problem
Aldy GUNAWAN, Hoong Chan LAU

Operations Research IV

A Bootstrap Data Envelopment Analysis (BDEA) Approach in Islamic Banking Sector: A Method to Strengthen Efficiency Measurement
Shahsuzan ZAKARIA, Mad Ithnin SALLEH, Shamsuriati HASAN

A Rule-based Heuristic Procedure for the Container Pre-marshalling Problem
Mohamed GHEITH, Amr B. ELTAWIL, Nermine HARRAZ

Operational Excellence Frameworks - Case Studies and Applicability to SMEs in Singapore
Amrik Singh BHULLAR, Chin Wei GAN, Andy ANG, Bin MA, Roland LIM, Ming Hon TOH

A Mathematical Model and a GRASP Metaheuristic for a Faculty-course Assignment Problem for a University in Saudi Arabia
Khaoula HAMDI

Multi-objective Vehicle Refueling Planning Using Mixed Integer Programming
Shieu-Hong LIN

Solving the Toll Optimization Problem by a Heuristic Algorithm Based Upon Sensitivity Analysis
Vyacheslav KALASHNIKOV, Nataliya KALASHNYKOVA, Roberto Carlos HERRERA-MALDONADO

Global Manufacturing & Engineering

Drivers and Barriers in Sustainable Manufacturing Implementation in Malaysian Manufacturing Firms
Norani NORDIN, Hashullah ASHARI, Mohamad Ghozali HASSAN
Choose Whom to Date Wisely: Explaining the Performance Variation in Strategic Alliances
Mait RUNGI, Valeria STULOVA 692

Smart Factories in Industry 4.0: A Review of the Concept and of Energy Management Approached in Production Based on the Internet of Things Paradigm
Fadi SHROUF, Joaquin ORDIERES, Giovanni MIRAGLIOTTA 697

Application of Lean Manufacturing in Mass Production System: A Case Study in Indian Manufacturing Unit
Mahadevan KISHORE KUMAR, A. JOHN RAJAN, R. KAHA BANTHA NAVAS, S. SAHAYA RUBINSON 702

Simultaneous Configuration of Product Families and Supply Chains for Mass Customization Using Leader-follower Game Theory
Dong YANG, Roger J. JIAO 707

Operations Research V

Management of the Care Activities in Home Health Care Services: the Routing and Scheduling of Caregivers Level
Rabeh REDJEM, Eric MARCON, Xiaolan XIE 712

Optimal Cost Drivers in Activity Based Costing Based on Artificial Neural Network
Noppadol AMDEE, Kawin SONTHIPERMPHOON, Thongchai ARUNCHAI, PhanboonmeewWARAWUT 719

Icing and Performance of Offshore Production Facilities in Cold Climate Region
Rezgar ZAKI, Abbas BARABADI 724

Petri Net Representation for 0-1 Integer Programming Problems
Akito KODAMA, Tatsushi NISHI 729

Algorithms for the Min-max Regret Generalized Assignment Problem with Interval Data
Wei WU, Manuel IORI, Silvano MARTELLO, Matsunori YAGIURA 734

Network Optimization for Capturing and Transporting CO2
Ho-Yoeng YUN, Lianxi BAI, Kyung-Sup KIM, Suk-Jae JEONG 739

Laboratory Measurement: Chlorophyll-a Concentration Measurement with Acetone Method Using Spectrophotometer
Fairooz JOHAN, Mohd Zubir MAT JAFRI, Hwee San LIM, Wan Maznah WAN OMAR 744

Quality Control & Management IV

Comparative Analysis of Taguchi’s Crossed Array Approach vs Combined Array Approach to Robust Parameter Design: A Study Based on Apparel Industry
Pramila GAMAGE, Nihal JAYAMAHA, Nigel GRIGG, Manjula NANAYAKKARA 749

Total Quality Management in Product Life Cycle
Dinh Son NGUYEN 754

Fuzzy Mean and Range Control Charts for Monitoring Fuzzy Quality Characteristics: A Case Study in Food Industries Using Chicken Nugget
S. Mojtaba ZABIHINPOUR, M. K. A. ARIFFIN, S. H. TANG, A. S. AZFANIZAM, Omid BOYER 759

One Hotelling T2 Chart Based on Transformed Data for Simultaneous Monitoring the Frequency and Magnitude of an Event
Yuan CHENG, Amitava MUKHERJEE 764
Quality Operating of Information Systems and Service Level Agreement  
David TCHOFFA, El Mouloudi DAFAOUI, Abderrahman ELMHAMEDI, Luminita DUTA  

Drilling Waste Minimization in the Barents Sea  
Rezgar ZAKI, Abbas BARABADI  

Service Innovation & Management II  

Influence of Task Characteristics on Team Performance  
Philipp M. PRZYBYSZ, Sönke DUCKWITZ, Christopher M. SCHLICK  

Multi-screen Services Adoption and Use-diffusion: The BEST Model Perspective  
Hung Chih LAI, Yao Cheng YU, Yi-Min TUAN, Hui Shan KUO  

Effects of the Electromobility on Rescue Service Provisions  
Francoise MEYER, Alexander RANNACHER, Sönke DUCKWITZ  

TRIZ Based Approach to Improve Public Bus Service Quality  
Christina WIRAWAN, Astrid AYU  

Design and Development Waste Management System in Hong Kong  
Carman Ka Man LEE, Trevor WU  

Maximizing Service Value: A Case Study of Online Hotel Reservation  
Napaporn RIANTHONG, Aussadavut DUMRONGSIRI, Youji KOHDA  

Quality Control & Management II  

Driving 'Soft' Factors for Sustaining Quality Excellence: Perceptions from Quality Managers  
Mehran DOULATABADI, Sha'ri MOHD YUSOF  

Robust On-line Monitoring for Univariate Processes Based on Two Sample Goodness-of-fit Test  
Chen ZHANG, Nan CHEN  

Critical Success Factors of Six Sigma: An Overview  
Diego TLAPA, Jorge LIMON, Yolanda BAEZ, Delia VALLES-ROSALES  

Human Values for Implementation of Total Quality Management: Proposed Conceptual Framework of an Automated Tool  
Muhammad Noman MALIK, Sha'ri MOHD YUSOF  

Factors that Impact Project Quality at a Nuclear Power Plant in South Africa  
Stanley FORE, W. GALETTA  

Improving Overall Equipment Effectiveness (OEE) Through the Six Sigma Methodology in a Semiconductor Firm: A Case Study  
Kam-Choi NG, Kuan Eng CHONG, Gerald Guan Gan GOH  

Quality Control & Management III  

Optimal Integrated Maintenance Policy Based on Quality Deterioration  
Meriem KOUKI, Sofiene DELLAGI, Zied ACHOUR, Walid ERRAY  

A Study on the Optimization of Wafer Pre-treatment Conditions for Thin Film Stability Monitor  
Taicheng Kevin GONG, Yanju Lisa YU, Yan Kaily CAO, Xueliang Ruben ZHANG, Kaiyuan Kevin CHANG, Weiting Kary CHIEN
Monitoring Correlation Structures Stability in Foreign Exchange Market  
Siew Lee GAN, Maman Abdurachman DJAHARI, Zuhaimy ISMAIL  
848

Control of pH Neutralization System Using Nonlinear Model Predictive Control with I-controller  
Ayman HERMANSSON, SYAFIIIE  
853

An Efficient Discrete Particle Swarm Optimization for Solving Multi-mode Resource-constrained Project Scheduling Problems  
Jianshuang CUI, Liruoyang YU  
858

Reliability Analysis Based on Three-dimensional Stochastic Differential Equation for Big Data on Cloud Computing  
Yoshinobu TAMURA, Kenta MIYAOKA, Shigeru YAMADA  
863

Supply Chain Management II

Sourcing Decision with Correlated Supplier Disruption: An MV Framework  
Pritee RAY, Mamata JENAMANI  
866

A Brief Review on Information Sharing within Supply Chains  
Farnoush FARAJPOUR, Mohammad Taghi TAGHAVIFARD  
872

Ant Colony Optimization for One-to-Many Network Inventory Routing Problem  
Lily WONG, Noor Hasnah MOIN  
877

Analysis of Quantity Discounts for Multi-period Production Planning for Single Supplier and Retailer Under Uncertain Demands  
Okhiro YOSHIDA, Tatsumi NISHI, Guoqing ZHANG  
882

The Cluster Policies to Nation Competitiveness Based on Business Ecosystem Perspective - Case Study of Taiwanese Smart Phone Industry  
Yan-Ru LI  
887

Mitigating Supply Chain Risk: A Real Options Approach  
Nuzzia CARBONARA, N. COSTANTINO, Roberta PELLEGRINO  
892

Supply Chain Management III

SCM Trends and Challenges - Implications from a Cross-industry Analysis  
Felix FRIEMANN, Markis GERSCHBERGER, Kathrin REITNER, Paul SCHÖNSLEBEN  
897

Vehicle Routing with Time Window for Regional Network Services - Practical Modelling Approach  
Iman NIROOMAND, Amir H. KHATAIE, Masoud RAHIMINEZHAD GALANKASHI  
903

Development of a General Collaboration Model - Basis for the Establishment of a Collaboration Compass  
Xiao-li CHEN, Antonia MAHLING, Ralph RIEDEL, Egon MÜLLER  
908

Solving Inventory Routing Problem with Backordering Using Artificial Bee Colony  
Huda Zahrah ABS HALIM, Noor Hasnah MOIN  
913

Big Data Analytics for Supply Chain Management  
Jens LEVELING, Matthias EDELBROCK, Boris OTTO  
918

Multi Objective Supply Chain Network Design Considering Customer Satisfaction  
Mahdi BASHIRI, Hanieh KHORASANI, Mahdyeh SHIRI  
923

Supply Chain Risk Management: A Method and Tool Contributing to the Operational Aspects  
Élena ROKOU, Konstantinos KIRYTOPoulos  
928
# Manufacturing Systems II

Joint Optimization of Production-maintenance Plans Based on Optimal Production Rates  
*Jeremie SCHUTZ*  
933

A New Bi-objective Mathematical Model for Sustainable Dynamic Cellular Manufacturing Systems  
*Farzad NIAKAN, Armand BABOLI, Thierry MOYAX, Valerie BOTTA-GENOULAZ*  
938

Optimization of Green Electrical Discharge Machining Using an Integrated Approach  
*JAGADISH, Amitava RAY*  
943

*Rashmi SINGH, Mathu MATHIRAIIAN*  
948

Applying Lean and TOC to Improvement Delivery Performance for Machine Tool Manufacturers  
*Chuang-Chun CHIOU, T.W. JHANG, Y. X. DENG, J.T. TSII, C. PERN*  
953

Interactive Virtual Machining System Using Informative Data Structure and On-site Machine Tool Status  
*Aini Zuhra ABDUL KADIR, Xun XU*  
958

A Simulation Based System for Manufacturing Process Optimisation  
*Hossam ISMAIL, Lina WANG, Jenny POOLTON*  
963

# Manufacturing Systems III

Multi-skeleton Model for Top-down Design of Complex Modular Products  
*Dexin CHU, Xuening CHU, guolin LV, Yuliang SU, Dongping CHEN*  
968

Optimized Tool Path Planning in 5-Axis Flank Machining using Electromagnetism-like Algorithms  
*Chi Lung KUO, Chih-Hsing CHU, Ying LI, Xinyu LI, Liang GAO*  
973

Signal Propagation Model Calibration Under Metal Noise Factor for Indoor Localization by Using RFID  
*Seng Fat WONG, Xue NI*  
978

Experiential Learning: Lean Team at Virginia Tech  
*Urs BUEHLMANN, Omar ESPINOZA*  
983

The Backward Growing Method for Constructing 3D Process Models in the Machining Process Planning  
*Jinfeng LIU, Xiaojuin LIU, Yalong CHENG, Zhonghua NI*  
988

Proposal of a Decision Making Model to Select the Best Fitting Cost Estimation Technique in an ETO-MC Environment  
*Aldo DUCHI, Golboo POURABDOLLAHIAN, Davide SILLI, Matteo CIOFFI, Marco TAISCH*  
993

# Information Processing & Engineering II

Development of a Methodology for Cost-oriented Ramp-up Design  
*Achim KAMPKER, Christoph DEUTSKENS, Andreas MAUE*  
998

Discovering Product Feature and Affective Associations Through Collaborative Tagging  
*S. C. Johnson LIM, Suhaibi JAWARIS*  
1003

Construction of an Interactive Behavioral and Feature Structure Model for Facebook  
*Tsung-Yi CHEN, Meng-Che TSII, Yuh-Min CHEN*  
1008
Technology & Knowledge Management III

Fasten Your Seatbelts, Turbulence Ahead: Environmental Turbulence as a Determinant of Absorptive Capacity
Valeria STUĽOVA, Mait RUNGI

A Preliminary Survey on Modeling Customer Requirements from Product Reviews Under Preference Uncertainty
Anies ZAKARIA, S. C. Johnson LIM

Hybrid Intelligent Patent Mapping for Offshore Wind Industry Analysis
Chin Yuan FAN, Shou Hao CHANG, P. S. FAN, L. F. KAO

Users' Acceptance of IT and Its Impact on Knowledge Sharing: A Case in the South African Banking Industry
Abdulkadir Kolawole BELLO, Kai-Ying CHAN

Interpretive Structural Model of Key Performance Indicators for Sustainable Manufacturing Evaluation in Cement Industry
Elita AMRINA, Annike LUTFIA VILSI

What Innovation Managers Really Do - An Empirical Study About Tasks, Skills and Traits of Innovation Managers in Germany
Maximilian A. MAIER

E-Business & E-Commerce

Adoption of Near Field Communication for Mobile Payment: Evidence from Macau
Kin Meng SAM, Chris CHATWIN, Jing Xin ZHANG

The Implementation Strategy of Key Task for ERP Activities
Te-King CHIEN, Ming-Sian CHENG

Consumer Attitudes Toward Online Video Advertising: An Empirical Study on YouTube as Platform
Keng-Chieh YANG, Conna YANG, Chia-Hui HUANG, Po-Hong SHIH, Su Yu Yang YANG

The Role of Perceived Value on Customer E-shopping Intention Using Technology Acceptance Model, (TAM)
Ali HAJHHA, Mohammad Reza SHAHRIARI, Nayereh VAKILIAN

Probation of the Private Enterprises' Informatization in Wenzhou
Jindong LI, Jixuan FENG

Cloud Manufacturing for a Service-oriented Paradigm Shift
Yuqian LU, Xun XU

Reliability & Management Engineering

Software Hazard Rate Modeling with Multiple Change-Point Occurrences
Shinji INOUE, Shigeru YAMADA

Reliable System Design Under Uncertainty
Mengqi LI, Minghong HAN, Jiaqi XU

Integration of Failure Prediction Bayesian Networks for Complex Equipment System
Weitao SI, Zhiqiang CAI, Shudong SUN, Shubin SI
Prediction of Vehicle further Operation and Fault Based on Tribo-diagnostic Data
David VALIS, Libor ZAK, J. CHALOUPEKA

Estimation of System Residual Useful Life Based on Selected Tribo Data
David VALIS, Ondrej POKORA

Project Management II

Knowledge Transfer in Project-based Organizations. A Conceptual Model for Investigating
Knowledge Type, Transfer Mechanisms and Transfer Success
Corro VAN WAVEREN, Leon OERLEMANS, Marthinus PRETORIUS

Hybrid Fuzzy Model of AHP-DEA
Kirannmayi PULIPAKA, Mathu MATHIRAJAN

A Recommendation on PLUS Highway Development: A Social Network Analysis Approach
Norhaidah MOHD ASRAH, Maman Abdurachman DJAUHARI

Evaluating Risk Factors in the Operation of Virtual Teams in ICT Projects
Nikos RASSIAS, Konstantinos KIRYTOPoulos

Instructional Design for Online Course Delivery in Engineering Management: Synthesizing Learning
Styles, Pedagogical Perspectives and Contingency Factors
Senevi KIRIDENA, Premaratne SAMARANAYAKE, David HASTIE

Identifying Critical Project Management Techniques and Skills for Construction Professionals to
Achieving Project Success
Jui-Sheng CHOU, Ngoc-Tri NGO

Systems Modeling & Simulation II

An Ising-based Approach to the Study of Inter-organizational Team Dynamics
Ilaria GIANNOCARO, Ilario DE VINCENZO, Giuseppe CARBONE

Individual Versus Integrated Simulation Techniques in Healthcare Applications
Mohammed ABDELGHANY, Amr B. ELTAWIL

CFD Analysis of Chlorine Gas Dispersion In Indoor Storage: Temperatures with Wind Velocities
Effect Studies
Mohsen SAFAKAR, S SYAFIEEE, Robiah BT. YUNUS

Depicting Product-service Systems in the Early Phase of the Product Development
Daniel KAMMERL, Martin ENSELEIT, Robert ORAWSKI, Danilo Marcello SCHMIDT, Markus MÖRTL

No Clutch Fuzzy Logic-controlled Hybrid Transmission
Essam ESMAIL, Hamed HUSSAIN, Rahman HUSSAIN

Fractional Order PI Controller for Wind Farm Supervision
Boualem BENLAHBIB, Noureddine BOUARROUDJ, Farid BOUCHAFAA, Bachir BATION

Multi-objective Genetic Algorithm in Green Just-in-time Logistics
Ashkan MEMARI, Abdul Rahman ABDUL RAHIM, Robiah AHMAD
### Safety, Security & Risk Management

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Taxonomy of Security and Privacy Requirements for the Internet of Things (IoT)</td>
<td>1244</td>
</tr>
<tr>
<td>Friction Measurements on Floors Under Solid Contaminated Conditions</td>
<td>1249</td>
</tr>
<tr>
<td>Understanding Hazards and Risks in Modern Sociotechnical Systems: Systemic Approach to Identify Human, Organizational and Technical Factors</td>
<td>1253</td>
</tr>
<tr>
<td>Effects of Demography and Occupational Traits on Consequence of Injury of Underground Coal Miners</td>
<td>1260</td>
</tr>
<tr>
<td>Risk Analysis and Rescue Operation for Machine Roomless Lift: A Case Study</td>
<td>1265</td>
</tr>
<tr>
<td>Modeling of Tolerable Repair Time Without Affecting System Reliability</td>
<td>1270</td>
</tr>
</tbody>
</table>

### Production Planning & Control II

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and Scheduling across the Supply Chain: Simulation-based Validation of the Unitary Structuring Technique</td>
<td>1275</td>
</tr>
<tr>
<td>Optimal Planning of Biodiesel Supply Chain Using a Linear Programming Model</td>
<td>1280</td>
</tr>
<tr>
<td>A Simple Multiple Objective Linear Programming Model on Customization Manufacturing for Metal Steel Making Effectiveness</td>
<td>1285</td>
</tr>
<tr>
<td>Mixture of Two Different Scheduling Policies in a Class of Discrete Event Systems</td>
<td>1290</td>
</tr>
<tr>
<td>A Cloud-based Approach for Collaboration of Serviced-enhanced Products</td>
<td>1295</td>
</tr>
</tbody>
</table>

### Human Factors II

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selecting a Shift System Based on the Analytical Hierarchy Process</td>
<td>1300</td>
</tr>
<tr>
<td>Differentiated Customer Needs’ Analysis for User Experience</td>
<td>1305</td>
</tr>
<tr>
<td>Deriving the Relationship Between User Satisfaction on Engine Sounds and Affective Variable Sets Based on Classification Algorithms</td>
<td>1310</td>
</tr>
<tr>
<td>Gesture Interface Appropriateness Analysis on Smart TV Functions</td>
<td>1314</td>
</tr>
<tr>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Employee Involvement and Training in Environmentally Conscious</td>
<td>1317</td>
</tr>
<tr>
<td>Manufacturing Implementation for Indian Manufacturing Industry</td>
<td></td>
</tr>
<tr>
<td>Perminderjit SINGH, Kuldip Singh SANGWAN</td>
<td></td>
</tr>
<tr>
<td>A Toolkit Based on NK Fitness Landscape for Behavioral Investigation</td>
<td>1322</td>
</tr>
<tr>
<td>in Complex Supply Chains</td>
<td></td>
</tr>
<tr>
<td>Ilaria GIANNOCARO</td>
<td></td>
</tr>
<tr>
<td><strong>Intelligent Systems II</strong></td>
<td></td>
</tr>
<tr>
<td>A Priority Based Optimization Algorithm for Multi-objective Integrated</td>
<td>1327</td>
</tr>
<tr>
<td>Process Planning and Scheduling Problem</td>
<td></td>
</tr>
<tr>
<td>Muhammad Farhan AUSAF, Xinyu LI, Liang GAO</td>
<td></td>
</tr>
<tr>
<td>The Knowledge Sharing Model on Supply Chain Simulation Using</td>
<td>1332</td>
</tr>
<tr>
<td>Recurrent Neural Network</td>
<td></td>
</tr>
<tr>
<td>Fumiaki SAI TOH</td>
<td></td>
</tr>
<tr>
<td>Implementation of Line Tracking Algorithm using Raspberry Pi in</td>
<td>1337</td>
</tr>
<tr>
<td>Marine Environment</td>
<td></td>
</tr>
<tr>
<td>Samreen AMIR, Ali Akbar SIDDiqui, Nimrah AHMED, Bhawani Shankar</td>
<td></td>
</tr>
<tr>
<td>CHOWDHRY</td>
<td></td>
</tr>
<tr>
<td>Physical Layer Design of Optical Networks with Practical</td>
<td>1342</td>
</tr>
<tr>
<td>Considerations</td>
<td></td>
</tr>
<tr>
<td>Kin Fan POON, Anis OUALI, Beum LEE</td>
<td></td>
</tr>
<tr>
<td>Developing Target Marketing Models for Personal Loans</td>
<td>1347</td>
</tr>
<tr>
<td>Jen-Ying SHIH, Wun-Hwa CHEN, Yu-Jung CHANG</td>
<td></td>
</tr>
<tr>
<td>Developments and Trends in Shopfloor-related ICT Systems</td>
<td>1352</td>
</tr>
<tr>
<td>Olaf SAUER</td>
<td></td>
</tr>
<tr>
<td><strong>Poster Session</strong></td>
<td></td>
</tr>
<tr>
<td>A Study on RFID-based Kanban System in Inventory Management</td>
<td>1357</td>
</tr>
<tr>
<td>Alireza GHELICHI, Ahmed ABDELGAWAD</td>
<td></td>
</tr>
<tr>
<td>The Economic Analysis Model of Operations Strategy</td>
<td>1362</td>
</tr>
<tr>
<td>Chun-Ying SHEN</td>
<td></td>
</tr>
<tr>
<td>Solving an Economic and Environmental Dispatch Problem Using</td>
<td>1367</td>
</tr>
<tr>
<td>Evolutionary Algorithm</td>
<td></td>
</tr>
<tr>
<td>Forhad ZAMAN, Ruhul SARKER, Tapabrata RAY</td>
<td></td>
</tr>
<tr>
<td>Message Sequencing of Rational and Emotional Appeals: A Study on</td>
<td>1372</td>
</tr>
<tr>
<td>Consumer Brand and Product Attitudes</td>
<td></td>
</tr>
<tr>
<td>Weng Marc LIM, Pei-Lee TEH, Pervaiz Khalid AHMED</td>
<td></td>
</tr>
<tr>
<td>A Conceptual Neural Model for Business Selection in Multi Business</td>
<td>1377</td>
</tr>
<tr>
<td>Unit Firms</td>
<td></td>
</tr>
<tr>
<td>Saeed KHODAMORADI, Jalal ABDELLAHI</td>
<td></td>
</tr>
<tr>
<td>Optimal Inventory Policies for Remanufacturing Inventory Systems</td>
<td>1382</td>
</tr>
<tr>
<td>with Multiple Returns</td>
<td></td>
</tr>
<tr>
<td>Xue-Ming YUAN, Z. L, TAN, Amrik Singh BHULLAR</td>
<td></td>
</tr>
<tr>
<td>A New Conceptual Design Approach for Context-aware Product Service</td>
<td>1389</td>
</tr>
<tr>
<td>System</td>
<td></td>
</tr>
<tr>
<td>Dongping CHEN, Xueling CHU, Yuliang SU, Dexin CHU</td>
<td></td>
</tr>
<tr>
<td>Evaluation of Equipment Renewal Based on Combination Weighting Method</td>
<td>1394</td>
</tr>
<tr>
<td>Lei CHEN, Chunjing WANG, Xuedong LIANG, Zhaoxia GUO, Da WANG</td>
<td></td>
</tr>
<tr>
<td>Applied Cognitive Psychology in Software Debugging Process to</td>
<td>1399</td>
</tr>
<tr>
<td>Predict Software Reliability Growth</td>
<td></td>
</tr>
<tr>
<td>Kuei-Chen CHIU</td>
<td></td>
</tr>
</tbody>
</table>
Assessing Survivability for Damaged Aircraft in the Combat Environment
   Yang PEI, Tao CHENG, Min XIE  

An Efficient Genetic Algorithm for Flexible Job-Shop Scheduling Problem
   Ali MOKHTARI MOGHADAM, Kuan Yew WONG, Hamed PIROOZFARD  

A Integrated Inventory Model with Imperfect Production and Inspection Under Trade Credit Financing
   Chia-Hsien SU, Liang-Yuh OUYANG  

Least Cost Design of Green Buildings by Genetic Algorithms
   Kang-Ting TSAI, Min-Lun LYU, Min-Der LIN  

Performance Analysis of Autonomous Vehicle Storage and Retrieval Systems Depending on Storage Management Policies
   Sascha KACZMAREK, Jonas GOLDENSTEIN, Michael TEN HOMPEL  

Integrating Fuzzy Logic to Systems Dynamics for Decision Support
   Ifeyinwa ORJI, Sun WEI  

Effect of Inspirational and Motivational Leadership on Creativity and Innovation in SMEs
   Wilson MALADZHI, Bingwen YAN  

In Search of Measuring Organizational Culture: ICT Peculiarities
   Maria KÜTT, Mait RUNGI  

Investigating Factors Behind Choosing a Cryptocurrency
   Aamna AL SHEHHi, Mayada OUDAH, Zeyar AUNG  

Model of Human Reliability for Manual Workers in Assembly Lines
   Yolanda BÄEZ, Manuel RODRIGUEZ, Jorge LIMON, Diego TLAPA  

Influence of Online Store Belief and Product Category on Impulse Buying: An Empirical Investigation on Consumer Perceptions
   Qiong ZHOU, Xi CHEN, Yi-Wen CHEN  

Exploring Effects of Ecosystem Clockspeed on Product Performance
   Saku MÄKINEN, Ozgur DEDEHAYIR, Roland ORTT  

Impact of Lean Development System Implementation on the Product Development Process
   Uwe DOMBROWSKI, Kai SCHMIDTCHEN, Philipp KRENKEL  

Internet-of-things Disrupting Business Ecosystems: A Case in Home Automation
   Saku MÄKINEN  

Postural Load Balancing in Daily Personnel Planning in an Assembly Line for Trailer Production by Working Posture Analysis
   Christopher BRANDL, Alexander MERTENS, Jennifer BÜTZLER, Christopher M. SCHLICK  

An Enterprise System Virtual Factories Platform for Collaborative Business Environment
   Yuqiuge HAO, Ahm SHAMSUZZOHA, Petri HELO  

Factors Affecting Product Quality and Reliability: A Comparison of Developed and Developing Countries
   Pei-Lee TEH, Dotun ADEBANJO, Pervaiz Khalid AHMED  

Towards Recursive Plan-Do-Check-Act Cycles for Continuous Improvement
   Michael Timo SCHMIDT, Fatos ELEZI, Iris TOMMELEIN, Udo LINDEMANN  

A Study on Developing the Indicators of Energy Conservation and Carbon Reduction for the Business
   Liang-kong LIN, Walter DEN, Ying-Chyi CHOU, Hsin-Yi YEN, Ching-Hua LU
Author Index