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**ID 139 Deviation degree between ideal and real of domain transition probability in resource circulation considering production synchronization ratio**

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**ID 140 Design and Analysis of Ducted Wind Turbine for Rooftop Installation**

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**ID 141 How the difference in product characteristics affects the relationship with customers? In the case of the electronics parts industry increasing its focus on the automotive market**

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Aulia F. Hadining, Sukanta and Wachid Hidayat, Industrial Engineering Department, State University of Singaperbangsa Karawang, Karawang, Indonesia

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Ik-Whan Kwon, Ph.D., Professor Emeritus, Saint Louis University, U.S.A.

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Arnab Adhikari, Operations Management Department, Indian Institute of Management Ranchi, Ranchi, India

**ID 147 Throughput Rate Calculation by Cycle Time Modeling for Multi Aisles ASRS Using Timed Petri Nets**

Yassine Boudghene Stambouli, MELT laboratory, University of Tlemcen, Algeria

Samir Hamacl, Quartz Laboratory (EA 7393), ECAM-EPMI, Cergy-Pontoise, France

**ID 148 A Knowledge Management Approach to Compare and Develop the ASEAN University Credit Transfer System in Thailand**

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**ID 149 Collaborative Supply Chain in Auto Service in India**

Debabrata Bhattacharjee, Country Head, Indian Oil Corporation Limited, Yangon Branch, Myanmar

**ID 150 A Workplace Assessment for Visually Impaired and Blind Massage Therapists of a Massage Therapy Franchise in Metro Manila, Philippines**

Noriko Hayashi, Januel Ticsay, Krischael Santos and Janne Paula Villafior, Department of Industrial Engineering, Technological Institute of the Philippines, Manila, Philippines

**ID 151 City Carbon Footprint Adaptation on Green Supply Chain and Logistics of Food Production and Consumption**

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**ID 152 Decontamination of mercury, cadmium and lead**

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Pamela Espinosa Alonso, Blanca Nelly Fabela Guardado, Laura Citlali Flores Martínez, Katia Margarita Martínez López and Ana Laura Ochoa Tovar, María Cristina Rendón Lara and Jesús Salvador Sánchez Miñón, Tecnológico de Monterrey, Mexico

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Ira Setyaningsih, Universitas Gadjah Mada, UIN Sunan Kalijaga Yogyakarta, Yogyakarta, Indonesia

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Ch V Sai Praveen and Mayank Anand, Department of Mechanical Engineering, Indian Institute of Technology, Kharagpur, West Bengal, India

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Priyankshu Mukhopadhyaya, Shreeya Shahu and Dr. Pravin P. Tambe, Department of Industrial Engineering, Shri Ramdeobaba College of Engineering and Management, Nagpur, Maharashtra 440013, India

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**ID 158 Mercury, Cadmium and Lead Removal by Processed Orange Peel**

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Md. Kutub Uddin, Department of Mechanical Engineering, Khulna University of Engineering & Technology, Khulna-9203, Bangladesh

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Roman Kapuscinski and Liang Ding, University of Michigan, Stephen M. Ross School of Business

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Gerardo Espinosa Garza and Jacobo Tijerina Aguilera, Universidad de Monterrey, San Pedro Garza García, Nuevo León, México

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Houssam Benbrahim, Hanaâ Hachimi and Aouatif Amine, Systems Engineering Laboratory, BOSS-Team, National School of Applied Sciences, Ibn Tofail University, Kenitra, Morocco

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Mr. Nachiket Sachin Deole and Mrs. Manasi Vyankatesh Ghamande, Department of Engineering Sciences and Humanities, Savitribai Phule University, Pune, India

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Atchara Dokkulab, Ramathibodi Hospital, Bangkok, Thailand

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Michael Angelo Promentilla, Chemical Engineering Department, De La Salle University Manila

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#### **ID 291 Solving Multi-Objective Assignment Problem with Decision Maker's Preferences by Using Genetic Algorithm**

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Rene D. Estember, Ilyne Geraldine A. Isip, and Ma. Camille C. Misal, School of Industrial Engineering and Engineering Management, Mapua University, Manila, Philippines

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Aineias Karkasinas and Athanasios Rentizelas, Department of Design, Manufacturing and Engineering Management, Strathclyde University, Glasgow, Scotland

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Erwin Rauch, Thomas Stecher, Marco Unterhofer, Patrick Dallasega and Dominik T. Matt, Industrial Automation and Engineering (IEA), Faculty of Science and Technology, Free University of Bolzano, Piazza Università 5, 39100 Bolzano, Italy

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Youssef El Mokaddem and Fouad Jawab, Laboratory of International Management, Decision Making and Logistics (MIDLOG), USMBA, High School of Technology (EST) – Fez, Morocco

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Frichi Youness, Jawab Fouad and Boutahari Said, Laboratory of Manufacturing, Energy and Sustainable Development, Sidi Mohamed Ben Abdellah University, Fez, Morocco

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Abdullah Al-Amri and T.C. Wong, Department of Design, Manufacture and Engineering Management, University of Strathclyde, Glasgow, 75 Montrose St, Glasgow G1 1XJ, UK

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Boback Parsaei, Senior Consultant, Integrated Technology Systems, Inc., Houston, Texas

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Riza A.N. Rukmana, Senior Member, Industrial Engineering, Telkom University, Bandung, Indonesia

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Dian Yulianto, Salaya, Nakhon Pathom, Thailand

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Nicolas Giraldo Peralta, Mechanical, Electromechanical, and Biomedical Department, Universidad Antonio Nariño, Bogota, D.C., Colombia

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Madylaine G. Delfin and Danna May G. Mendez, School of Industrial Engineering and Engineering Management, Mapua University, Intramuros, Manila

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Madonna F. Andrada and Muriem R. Biscocho, School of Industrial Engineering and Engineering Management, Mapua University, Intramuros, Manila City

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Christabel Annora Paramita Parung, S.T., M.Sc., Faculty of Creative Industry, University of Surabaya, Surabaya, Indonesia

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Albertus Retnanto, Ph.D. and Mohamed Idris, Petroleum Engineering, Texas A&M University at Qatar, Doha, Qatar

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**ID 335 A Multi-Item Inventory Control Model Using Multi-Objective Particle Swarm Optimization (MOPSO)**

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Prince Agarwal, K Subash Nirmal, K Nageswara Reddy, Akhilesh Kumar, Department of Industrial and Systems Engineering, Indian Institute of Technology, Kharagpur, West Bengal, India-721302

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Jenilyn Shigella G. Yandug and Phoebe Lie T. Dionisio, School of Industrial Engineering and Engineering Management, Mapua University, Intramuros, Manila

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Mary Christy O. Mendoza and Erica Racquel G. Cruz, School of Industrial Engineering and Engineering Management, Mapua University, Intramuros, Manila

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Pratik Mukesh, Master of Design, Design Discipline, PDPM Indian Institute of Information Technology, design and Manufacturing, Jabalpur, M.P., India

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Khaled Alyami and Eui H. Park, Department of Industrial & Systems Engineering, North Carolina A&T State University, Greensboro, NC, U.S.A.

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Sambil Charles Mukwakungu, Matimba Davis Mabasa and Xihlovo Baloyi, Department of Quality and Operations Management, University of Johannesburg, Johannesburg, South Africa

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Vilas Kharat, NITIE, Mumbai, Maharashtra, India

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Shibbir Ahmad, SUST Gazipur, Bangladesh

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Thidathip Haanchumpol, Prapaisri Sudasna-na-Ayudhya and Chansiri Singhtaun, Department of Industrial Engineering, Faculty of Engineering, Kasetsart University, Bangkok, Thailand

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Jayne Lois G. San Juan and Charlle L. Sy, Industrial Engineering Department, De La Salle University, Manila, Philippines

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Taisy Mak and Duangpun kritchanchai, Department of Industrial Engineering, Mahidol University, Salaya, Nakhon Pathom, 73170, Thailand

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Ivan Pudjihardjo, Ig. Jaka Mulyana and Luh Juni Asrini, Industrial Engineering Department, Widya Mandala Surabaya Catholic University, Jl. Kalijudan 37 Surabaya, Indonesia

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Denny Satria Ika and Hui-Ming Wee, Chung-Yuan Christian University, Taoyuan, Chung-Li, Taiwan

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Ompal Singh and Arunima Verma, IET Lucknow, Uttar Pradesh, India

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Ghaliyah Al-Mutairi, Mariam Al-Ajran, Hawraa Al-Bather, Fatma Mhaisen, Rawan Al-Humaidi, and Walid Smew, Industrial

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### **ID 392 Streamlining the Flow of Production System through Elimination the Waste of the Overburden (Muri) for Manual Handling Process**

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#### **ID 396 Application of Statistical Process Control on Sunbless Industrial Corporation**

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#### **ID 398 Engineering Education through Students Engagement in Virtual Learning Space**

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#### **ID 399 Linking knowledge sourcing, transformation and exploitation activities for innovation: Evidence from UK manufacturing firms**

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#### **ID 400 Improving the Fabrication and Welding Workshop at Kuwait Oil Company for Better Worker Performance by Using Digital Human Modeling and Simulation**

Fatemah AlKhozam, Hebah AlEnezi, Muneerah AlMetlaqem, Rahaf AlAjmi, Shareefah Haji, Kareem Abbady, and Suat Kasap, Industrial Engineering Department, College of Engineering and Technology, American University of the Middle East - AUM, Egaila, Kuwait

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#### **ID 402 Food Waste in Supply Chains: A Literature Review**

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**ID 405 Blood Supply Chain Challenges: Evidence from Indonesia**

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**ID 406 Few Refinements to Capacitated Plant Location Problem**

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**ID 407 Renewable Energy Management: Technical and Economic Evaluation of an Optimized Photovoltaic System**

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**ID 408 Design Optimization of Equipment Controls Setup and Workstation Tables for the Remote Production Taping of a Media Broadcasting Company**

Arriane A. Palisoc, Gerald O. Semifrania, Ma. Teodora E. Gutierrez, Yoshiki B. Kurata and Maricar M. Navarro, Department of Industrial Engineering, Technological Institute of the Philippines Quezon City, Philippines

**ID 409 Few Refinements to Simple Plant Location Problem**

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**ID 410 Development Of Internal Quality Assurance System Iso 9001: 2008 Based On Iwa 2: 2007 Using Web-Based Document Management Control (DMC) Applications**

Hermien Tridayanti, Bayu Airlangga Putra, Sengguruh Nilowardono, Economic and Business Faculty, Narotama University, Surabaya, East Java, Indonesia

**ID 411 Optimization of Biogas Production from sewage sludge**

Mohamed Belaid, Anthony Njuguna Matheri, Itumeleng Constance Lelosa, Edison Muzenda and Ishmael Ramatsa, Department of Chemical Engineering Technology, Faculty of Engineering and the Built Environment, University of Johannesburg, Doornfontein, Johannesburg, South Africa

**ID 412 Biochemical Methane Potential Analysis using Cow dung, Chicken manure and Pig manure under Mesophilic Conditions**

Mohamed Belaid, Anthony Njuguna Matheri, Nomkhosi Princess Mdluli and Edison Muzenda, Department of Chemical Engineering Technology, Faculty of Engineering and the Built Environment, University of Johannesburg, Doornfontein, Johannesburg, South Africa

**ID 413 Increasing Productivity in Garments Manufacturing through Time Standardization and Work Measurement**

Valerie Peralta, Jerran Del Mundo, Juan Miguel Dinglasan, Patrick James Palma, Bert, Regin Santiago, and Cohesir Sims, Department of Industrial Engineering, Technological Institute of the Philippines, Quezon City, Philippines

**ID 414 Statistical Analysis in Measuring Employee Performance at Department Store**

Ahmad Syarif Hidayaulloh, Agus Sukoco, Elok Damayanti, Arasy Alimudin, M. Ikhsan Setiawan and Sriwiwoho Mudjanarko, Faculty Economy and Business, Narotama University, Surabaya, Indonesia

Dani Hermanto, Faculty of engineering and technology, University of Derby, UK

Abdul Talib Bin Bon, Fakulti Pengurusan Teknologi dan Perniagaan, Universiti Tun Hussein Onn Malaysia (UTHM), Johor, Malaysia

**ID 415 Analysis of the Efficiency of Company's Strategy by Dismissing Employees and Replacing Them with the Home Industry**

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Dani Hermanto, Faculty of engineering and technology, University of Derby, UK

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**ID 416 Do E-Satisfaction And E-Trust Affect Online Repurchase Intention?**

Ade Woroko, Santirianingrum Soebandhi, Avi Sunani, Hermin Tridayanti, Sengguruh Nilowardhono and Ronny Wardhana, Faculty Economy and Business, Narotama University, Surabaya, Indonesia  
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Dani Hermanto and Abdul Talib Bin Bon, Fakulti Pengurusan Teknologi dan Perniagaan, Universiti Tun Hussein Onn Malaysia (UTHM), Johor, Malaysia

**ID 417 The effects of chromosome length on hyper-heuristics for solving the maritime inventory routing problems**

Nurhadi Siswanto, Department of Industrial Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, 60111, Indonesia

**ID 418 Seal Slurry Analysis Based On Asbuton Addition and Cement Filler Variation**

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**ID 419 Utilitarian and Hedonic Motivations: Its Influences on Search and Purchase Intention in Instagram**

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**ID 420 Indonesia Airport, Passanger and Aircraft impact on Regional Budget (APBD)**

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**ID 421 Plastic Waste of Low Density Polyethylene (Ldpe) Types in Asphalt Mixture**

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**ID 422 Phenomenological Study of ERP-Based PDT Implementation in Enhancing Firm Performance**

Avi Sunani and Rony Wardhana, Narotama University, Surabaya, East Java, Indonesia

**ID 423 The Behavior and Entrepreneurial Intentions of the Millennia Generation of Indonesia, Studies in Surabaya City Students**

Agus Sukoco, M. Ikhsan Setiawan, Sriwiwoho Mudjanarko, Arasy Alimudin and Iswachyu Dhaniarti, Faculty Economy and Business, Narotama University Surabaya Indonesia  
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Dani Harmanto, Faculty of engineering and technology, University of Derby, UK  
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**ID 424 Airport, Passenger and Aircraft supporting to Regional Growth**

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Kaveesha Ariyaratna and Suren Peter, Department of Industrial Management, University of Kelaniya, Sri Lanka

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Charlene Cariaga, Alyza Marie D. Tolentino, August Adrian A. Castor, Khenn S. Arista, John Nathanoj A. Basilio and Yoshiki B. Kurata, Department of Industrial Engineering, Technological Institute of the Philippines, Quezon City, Philippines

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Pfumelani Malulekea, Clinton Aigbavboab and Wellington Thwalac, Department of construction management and Quantity surveying, University of Johannesburg, Johannesburg, South Africa

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M. T. Dimantha Jayasanka and L. H. T. De. S. Wickramasuriya, Department of Decision Sciences, University of Sri Jayawardenepura, Gangodawila, Nugegoda, Sri Lanka

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Adriana Ferreira Esteves, Department of Economics, Management, Industrial Engineering and Tourism, University of Aveiro, Aveiro, Portugal

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Valerie B. Peralta, Jerran Del R. Mundo, Patrick James M. Palma, Bert Regin S. Santiago, Cohesir V. Sims, Francis I. Sulit and Yoshiki B. Kurata, Industrial Engineering Department, Technological Institute of the Philippines – Quezon City, Quezon City, Philippines

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Mohammad Asim, Department of Electrical Engineering, Integral University, Lucknow, India

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Ganeshan Subramanian & Aimen Sudhir, Production Engineering Department, Veermata Jijabai Technological Institute, Matunga, Mumbai 400019, India

Mandar Tendolkar, Mechanical Engineering Department, Veermata Jijabai Technological Institute, Matunga, Mumbai 400019, India

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P. M. D. Rasanjani, W. W. N. Sachini, G. A. S. Sandamali and W. M. S. K. Weerabahu, Department of Industrial Management, Faculty of Science, University of Kelaniya, Sri Lanka

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Sanchita Das, Amit Gahlawat and Sarvartha Kanchan

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**ID 448 Investigating curriculum transformation pathways in technological planning schools: Learning from conventional planning programmes and beyond**

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**ID 449 Exploring the efficacy of blended learning and innovative assessments in town planning students at the University of Johannesburg**

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Emaculate Ingwani, University of Venda, Department of Urban and Regional Planning

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Ali Massaeli, Corrosion Management System Project Manager, Technical Inspection and Control Department, National Iranian Gas Company, Tehran, Iran

Reza Mesgarian, Head of Process Engineering, Coordination and Production Monitoring Department, National Iranian Gas Company, Tehran, Iran

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Hoor Alhafeiti, Aiman Ziout, Athari Alsaadiya & Asma Alhebsi, Department of Mechanical Engineering, United Arab Emirates University, Alain, UAE

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Department of Mechanical Engineering, University of Nigeria Nsukka, Nigeria

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Tamanna Islam and Salim Hossain, Department of Industrial and Production Engineering, Khulna University of Engineering & Technology, Dhaka, Bangladesh

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Zakaria Yahia and Anup Pradhan, Department of Quality and Operations Management, University of Johannesburg, Johannesburg, South Africa

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Tarek Fatyani, R&D Department, SMAGROUP LLC, Chiba, Japan

Zakaria Yahia, Department of Quality and Operations Management, University of Johannesburg, Johannesburg, South Africa

**ID 457 A Study of Workforce Assignment Problem in Lean Factory on Machine Tool Industry**

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Kung University, Tainan, Taiwan

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Carlos A. Machado Orges, Leandro L. Lorente Leyva and Juan C. Mugmal Iles, Facultad de Ingeniería en Ciencias Aplicadas, Universidad Técnica del Norte, Ibarra, Ecuador

Juan P. Tafur Guisao, Escuela de Ciencias Químicas e Ingeniería, Universidad Yachay Tech, Urcuquí, Ecuador

Ivet Challenger Pérez, Facultad de Ingeniería Informática y Matemática, Universidad de Holguín, Cuba

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JrJung Lyu, Chia-Wen Chen, and Hong Yu Chen, Department of Industrial and Information Management, National Cheng Kung University, Tainan, Taiwan (R.O.C.)

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Md. Mamunur Rashid and Sharif Ahmed, Department of Industrial & Production Engineering, Department of Yarn Engineering, Bangladesh University of Textiles, Dhaka-1208, Bangladesh

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Carol S. Gattis, Ph.D., Associate Dean Emeritus, Honors College, Adjunct Associate Professor, Industrial Engineering, University of Arkansas, Fayetteville, AR 72701, USA

Karl D. Schubert, Ph.D., FIET, Research Professor, College of Engineering, Director of Research for Innovation and Data Science Initiatives for the College of Engineering and the Sam M. Walton College of Business, University of Arkansas, Fayetteville, AR 72701

Michele Cleary, Evaluation and Reporting Consultant, Cleary Scientific Intelligence, LLC, Minneapolis, MN 55410

#### **ID 466 Development of Post-Consumer Polymer Suppliers**

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Md. Haider Ali Biswas, Uzzwal Kumar Mallick, Mst. Shanta Khatun, Mathematics Discipline, Khulna University, Khulna-9208, Bangladesh

Kazi Masum Parves, Joint Director, Bangladesh Bank, Khulna, Bangladesh

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Nor Hazana Abdullah, Eta Wahab, Alina Shamsuddin and Nor Aziati Abdul Hamid, Faculty of Technology Management, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor 86400 MALAYSIA

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Lina Gozali, Lilyana Jap, Meisya Anggriani Halim, Industrial Engineering Department, Faculty of Engineering, Universitas Tarumanagara, Jakarta, 11140, Indonesia

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Benmounah Amar, Department of Transport and Equipment of Hydrocarbons, University Mhamed Bougara Boumerdas 35000. Algeria

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Fawaz M. Abdullah, Abdulrahman M. Al-Ahmari, and Saied Darwish, Industrial Engineering Department, King Saud University, Riyadh, 11421, KSA

Madiha Rafaqat, Department of Industrial and Manufacturing Engineering, University of Engineering and Technology, Lahore, Pakistan

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**ID 478 Performance Evaluation of Integrated Moisture Sensor with ZigBee Mesh Network for Automated Irrigation System**

Che Zalina Zulkifli, Nursyahida Mohd Noor and Nur Hazlina Abu Hassan, Computing Department, Sultan Idris Education University, Perak, Malaysia

**ID 479 Factors Influencing Knowledge Transfer activities in Enterprise Resource Planning Success for Food Manufacturing**

Nur Izzah Muallah, A.H. Nor Aziati, T. Rosmaini, A. Nor Hazana and S.W. Chan, Faculty of Technology Management & Business, University of Tun Hussein Onn Malaysia, 86400, Parit Raja, Johor, Malaysia

**ID 480 Incorporating Dynamic Potential market in Innovation Diffusion Model Using Stochastic Differential Equation**

Kuldeep Chaudhary and Pradeep Kumar, Department of Applied Mathematics, Amity Institute of Applied Sciences, Amity University, Noida, 201301, India

Sunita Mehta, Department of Mathematics, Kalindi College, University of Delhi, India

**ID 487 Innovative Undergraduate Degree Programs in Data Science and Business Analytics**

Shahram Taj, Florida Polytechnic University, Lakeland, Florida, United States

**ID 488 The Design Of Hybrid Flowshop Scheduling System With Nawaz Enscore Ham (Neh) And Campbell Dudek Smith (Cds) Algorithm To Minimize Makespan In Pt. Plasindo Elok**

Liesly Liesly, Lina Gozali, and Lilyana, Department of Industrial Engineering, Tarumanagara University, Jakarta, Indonesia

**ID 489 State of Model Risk: A Comprehensive Review of Model Validation and Model Risk Management Approaches in the Age of Machine**

Murphy Choy, Edinburgh Business School, Heriot Watt University

Ma Nang Laik, School of Business, Singapore University of Social Science, Singapore

**ID 490 Stochastic Analysis of a Three Unit Series Parallel System**

Venkata S S Yadavalli, Department of Industrial & Systems Engineering, University of Pretoria, Pretoria, South Africa

**ID 491 Sustainable Construction through the Application of Lean Principles**

Mary Yrene B. Paguio, ChE, OD, MS Industrial Engineering & Management Student, PUP, Philippines

**ID 492 Sustainable Model Impact of Reclamation in Coastal North Jakarta (Case Study: A Fishing Village in Kamal Muara, Penjaringan)**

Lilyana, Naufal Sanca L, Lina Gozali, Teuku Yuri M Zagloel and Tri Edhi Budhi Soesilo, Tarumanagara University, Jakarta, Indonesia

**ID 493 Value-at-Risk and Modified Value-at-Risk under Asset Liability by Using Time Series Approach**

Sukono, Betty Subartini and Herlina Napitupulu, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

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Adam Sukma Putra, Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Gajah Mada, Indonesia

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**ID 494 Reinsurance Loss Model at Individual Risk for Short Term in Life Insurance**

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**ID 495 A New 3-D Chaotic System with Three Nonlinearities, its Adaptive Synchronization and Circuit Simulation**

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**ID 496 A New 4-D Hyperchaotic System with a Two-Scroll Attractor, its Adaptive Control and Circuit Simulation**

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**ID 497 Numerical Simulation of Finite Difference Time Domain (FDTD) for Solving the Boundary Value Problem (BVP) in Earth Layer**

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**ID 498 The Application of Floyd-Warshall Algorithm in Solving Shortest Path Problem for Fire Evacuation System at High Rise Building (Case Study at eL Royale Hotel Bandung)**

Sukono F, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran Bandung Jawa Barat, Indonesia

**ID 499 Regional Lagging Analysis in Indonesia Using Binary Logistic Regression**

Titi Purwandari and Yuyun Hidayat, Department of Statistics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

Sukono and Herlina Napitupulu, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

**ID 500 Profile of West Java Province Based on School Participation Rate Using Biplot's Principal Component Analysis**

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Sukono and Herlina Napitupulu, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

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**ID 501 Identification of Countries that Have Similarities with Indonesia in the Context of Rice Crisis Using Multidimensional Scaling**

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Sukono and Herlina Napitupulu, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

**ID 502 Grouping of Regencies and Cities in West Java Using the Biplot's Principal Component Analysis**

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Sukono and Herlina Napitupulu, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas

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#### **ID 503 Listing all potential maximal cliques of a graph**

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#### **ID 504 Eigenvalues and the max-cut problem**

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#### **ID 507 New Ordering Approach Specific Airline Industry**

Redemtor V. Cariño, Master of Science in Industrial Engineering Management, Polytechnic University of the Philippines

#### **ID 508 The Identification of Material Management Risk Factors Affecting to The Time Performance in Fly Over Project Construction**

Hafnidar A. Rani and Tamalkhani Syammaun, Civil Engineering Department, Faculty of Engineering, Universitas Muhammadiyah Aceh, Banda Aceh, Aceh, Indonesia

#### **ID 509 Problems of demand and effects in portfolio based selection of utility functions**

Riaman, Sukono and Eman Lesmana, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Malaysia

#### **ID 513 Successful Implementation of Separate Layer Steam Injection to Enhance Oil Production from Comingle Layers-FNE-28 Case Study**

Husham A. Ali Elbaloula Petro-Energy E&P, Dr. Tagwa A. Musa –Sudan University of Science & Technology, Luo Shengyong – GWDC

#### **ID 514 Comparing Products and (Medical) Services on Few Organizational Variables: A Theoretical Framework**

Dr. Sheela R Sharma, Rama Medical College, Mandhana, Kanpur, India

Prof. RRK Sharma and Ajay Jha, Dept of IME, IIT Kanpur, Kanpur, India

#### **ID 515 Management Control Systems (MCS) in Hospitals**

Dr. Sheela R Sharma, Rama Medical College, Mandhana, Kanpur, India

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#### **ID 516 ERP For Service Sector And Medical Service**

Dr. Sheela R Sharma, Rama Medical College, Mandhana, Kanpur, India

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#### **ID 517 Multi Agent System For Hospitals**

Dr. Sheela R Sharma, Rama Medical College, Mandhana, Kanpur, India

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#### **ID 518 Literature review of Dynamic Vehicle Routing Problem and future perspectives**

Kaadiri Yahia and Omar Drissi Kaitouni, Engineering, Management and Systems' optimization Laboratory, Mohammadia School of Engineers, Avenue Ibn Sina B.P 765, Agdal -Rabat

#### **ID 521 Data Screening Technique for Developing a Crude Oil Price Forecasting Models for Petroleum Industry**

Abdul Talib Bon and Nuhu Isah, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Parit Raja, Batu Pahat, Malaysia



**ID 522 ASEAN 2025 and KM Approach to Improve Business Lawyer Competency: A Case Study of Chiang Mai University**

Chayamarnie Bhiriyanit, Worawit Janchai, Pitipong Yodmongkol and Anurak Panyanuwat, College of Arts, Media, and Technology, Chiang Mai University, Muang, Chiang Mai, 50200, Thailand

**ID 523 Strategy for Developing MSMEs Performance Using Balanced Scorecard Model Measurement Based on Information Technology**

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**ID 524 Optimal Investment Timing and Liquidity**

Michi Nishihara, Graduate School of Economics, Osaka University, Osaka, Japan

**ID 525 Controlling Schedule of Fiber to the Home (FTTH) Project Using Critical Path and Crashing Method**

Catur Fajri Augyhana, Ika Arum Puspita and Wawan Tripiawan, Industrial Engineering, Industrial and System Engineering Faculty, Telkom University, Bandung, 40257, ID

**ID 526 A Principal Criteria Searching Approach Based Leanness Assessment Method Considering Industrial Diversity**

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**ID 527 Organizational Readiness to Change in Research Institute Case Studies**

Mia Rahma Romadona, Research Center for Development of Science and Technology, Indonesian Institute of Sciences, Jakarta, Indonesia

**ID 530 A New Metaheuristics for Solving Traveling Salesman Problem: Partial Comparison Optimization**

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Industrial Engineering Department, Universitas Stikubank, Semarang, Indonesia  
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**ID 531 A Strategic Model to Improve the Last Mile Delivery Performance in E-commerce Parcel Delivery**

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**ID 533 Application of ECRS Technique to Reduce Waste in Case of Detergent Packaging Process**

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**ID 534 Role of IOT and Big Data Science in Reusable Packaging Logistics Optimization**

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**ID 535 The Completeness of p-Summable Sequences as 2-Normed Spaces**

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**ID 536 Application of Spatial Weighting Matrix of GSTAR by Using CLARANS Clustering on Farmer Exchange Rates in 32 Provinces in Indonesia**

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#### **ID 537 Application of Graph Hamilton on Determining the Shortest Route of Trans Metro Bandung**

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#### **ID 538 The LASSO (Least Absolute Shrinkage and Selection Operator) Method to Predict Indonesian Foreign Exchange Deposit Data**

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#### **ID 539 Analysis Students Abilities in Completing Mathematical Problems Dimension Three in Junior High School**

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#### **ID 541 100% Reduction Of Ogp Inspection Waiting Time At Xyz Electronics Corporation Using Monte Carlo Simulation, Heijunka Device And Military 105e Sampling Standard**

Mary Rose O. Arnejo, Department of Industrial Engineering, Cebu Institute of Technology - University, Cebu City, Philippines

#### **ID 542 A Critical Review on the Drivers and Barriers for Enabling Smart Cities**

N.S. Jayasena, H. Mallawaarachchi and K.G.A.S. Waidyasekara, Department of Building Economics, University of Moratuwa, Sri Lanka

#### **ID 543 Strategies to Adopt Zero Waste Concept in the Construction Industry**

K.L.A.K.T. Liyanage, K.G.A.S. Waidyasekara and H. Mallawarachchi, Department of Building Economics, University of Moratuwa, Sri Lanka

#### **ID 544 Performance Evaluation of Sustainable Innovation Practices in Food Supply Chain Using Best-Worst Method**

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Venkata Seshachala Sarma Yadavalli, University of Pretoria, South Africa

#### **ID 545 An Interpretive Structural Model for Analyzing the Impact of Sustainability Driven Supply Chain Strategies**

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Jyoti Darbari, Department of Mathematics, Lady Shri Ram College, University of Delhi, India

Vernika Agarwal, Amity International Business School, Amity University, Noida, Uttar Pradesh, India

#### **ID 546 Waste Plastic Material As An Additional Material For Hollow Foundation Test Concrete**

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#### **ID 547 Development of Food Safety Plan for Food Parks in the Philippines**

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#### **ID 548 An Ergonomic Design of Birthing Chair for Public Maternity Hospitals in the Philippines**

Rianina D. Borres and Angeli K. Javier, School of Industrial Engineering and Engineering Management, Mapua University, Intramuros, Manila

#### **ID 549 Ergonomic Design of NLEX Toll Booth in the Philippines**

Jenilyn Shigella G. Yandug and Marvin L. Cruz, School of Industrial Engineering and Engineering Management, Mapua University, Muralla St., Intramuros, Manila

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#### **ID 551 Predictive Model Affecting the Fatigue Condition of Drivers in the Philippines**

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#### **ID 552 Development of Supply Chain Model for Small Scale FarmerProducers of the Carrageenan Industry in the Philippines**

Mary Christy O. Mendoza and Raphael Joesh P. Layug, School of Industrial Engineering and Engineering Management, Mapua University, Intramuros, Manila

#### **ID 553 Effects of Internal and External Sources of Distraction to the Driving Performance of Filipino Drivers**

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#### **ID 554 In-Depth Analysis of Workplace Accidents in Food Processing Company in the Philippines**

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#### **ID 556 Analysis Using of Lean Manufacturing to Minimize Waste**

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#### **ID 557 Cost Reduction in Case of Forklift's Tire Replacement using VA/VE Technique**

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#### **ID 558 Factors Affecting the Performance of Cold Chain for Export of Thailand's Longan**

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#### **ID 559 A Data Analytics Model of Bankability versus Economic Factors: East Java Region Case**

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**ID 560 Performance Improvement of Shrimp Feed Raw Materials in Green Supply Chain**

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**ID 561 Integration of Contract and Spot Market Carrier under Demand Uncertainty**

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**ID 562 Carbon Pricing as a Policy Instrument to Reduce Energy Based Emissions in Apparel Sector**

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**ID 563 Issues in Implementing Business Process Reengineering (BPR) Projects**

M.F.F. Fasma & Sachie Gunatilake, Department of Building Economics, University of Moratuwa, Sri Lanka

**ID 565 An Assessment for the Use of Green Building Information Modelling for Sustainable and Green Buildings – Sri Lankan Perspective**

H.W.T. P. Rathnasiri and H.S. Jayasena, Department of Building Economics, University of Moratuwa, Sri Lanka

**ID 566 Service Quality Improvement in Courier Service: Need for Lean Principles**

N. Botsane, P.A. Ozor and Charles Mbohwa, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg, Johannesburg, South Africa

**ID 567 E-Toll Information Technology In Gto And Hybrid In Toll Gate Menanggal – Surabaya**

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**ID 568 A reverse logistics network optimization model for residual OTR tires from the mining industry: A Colombian case study**

Jorge Oyola and René Amaya-Mier, Department of Industrial Engineering, Universidad del Norte, Barranquilla, Atlántico 081007, Colombia

**ID 569 The Improvement of Technology Utilization in The Framework of the Competitiveness and Sustainability of Indonesia Palm Oil Industry**

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**ID 570 Integration of 360-degree Feedback Methods and AHP for Employee Performance Measurement**

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**ID 571 Conflict Avoidance in Construction Stage through Proper Practice in Pre Contract Stage**

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**ID 572 Mathematical Modeling to Predict the Mechanical Properties of Hot Rolled Steel Sheets**

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**ID 573 Combining SWOT and PESTLE Model to Assess Kaskus Business Model**

Widhiyaningrum, Abel Kristanto Widodo, Moh. Rizal Tahqiqi, A.A.S. Manik and Mahachandra J.M., Departement of Industrial Engineering, Faculty of Engineering, Diponegoro University

**ID 574 Development Sophistication Degree of New Components of Technometrics Using Concept Mapping**

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Alva Edy Tontowi and Hari Agung Yuniarto, Department of Mechanical and Industrial Engineering, Universitas Gadjah Mada, Yogyakarta, Indonesia

**ID 575 The Impact of Green Supply Chain Management Practices on Operational Performance and Customer Satisfaction**

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**ID 576 Ability to Optimizing Shipping Line Operation using Information Technology- A Case Study in Sri Lanka**

A.P Preethika Darshani, C.W. Chaturani Silva, Department of Decision Sciences, University of Sri Jayewardenepura, Nugegoda, Sri Lanka

**ID 577 An Equity-based Positioning of Domestic Waste Collection Sites for an Equal Waste-induced Disaster Risk**

Eko Setiawan, Much Djunaidi, Hafidh Munawir, Alfa Novian Hendranansa Putra, Praditsya Paramitha, Eliza Arrofi Maharani and Bella Brylian, Industrial Engineering Department, Universitas Muhammadiyah Surakarta, Sukoharjo, Central Java, Indonesia

**ID 578 Internet of Things, Big Data and Simulation as a Competitive Advantage in the New Age of Industry 4.0**

Rafaela Soares dos Santos and Sandro Alberto Vianna Lordelo, Anhanguera University Center, Rio de Janeiro, Brazil

**ID 579 Using Petri Net method for assessing safety barriers performance Case study: Oil and Gas Industry**

Mouloud Bourareche and Rachid Nait-Said, Institute of Health and Occupational Safety, Laboratory of Research in Industrial Prevention (LRIP), University of Batna, Algeria

**ID 580 Multi-Product Multi-Vehicle Inventory Routing Problem with Mixed Integer Linear Programming**

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**ID 581 Design and Development of Advanced Air Purifier Facial Mask**

Md. Mamunur Rashid and Sadman Sakib Tushan, Department of Industrial & Production Engineering, Bangladesh University of Textiles, Dhaka-1208, Bangladesh

**ID 582 Digital Human Modeling in Ergonomic Risk Assessment of Working Postures using RULA**

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**ID 588 A Knowledge Management Approach to Compare and Develop the ASEAN University Credit Transfer System in Thailand**

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Wimalin Laosiritaworn and Wichai Chattinnawat, Department of Industrial Engineering, Chiang Mai University, Chiang Mai, 50200, Thailand

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Abdelaziz Berradou, Tarik Saikouk and Mohamed Hicham Salah Eddine, University of Rabat, Rabat, Morocco

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Emy Ezura Bt. A. Jalil, Technology and Supply Chain Excellence Institute

Chong Wing Ying, Chang See Min and Loo Mei Chen, School of Technology Management and Logistics, College of Business, Universiti Utara Malaysia, Sintok, Kedah, Malaysia

**ID 592 The Determination of Patient Appointment Scheduling and Patients' Examination Room Assignment Policies: A Case Study**

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Wen-Tso Huang, Business School, Department of Financial Management, Minnan Normal University, Xiangcheng District, Zhangzhou City, 363000, China

#### **ID 593 Implementation of Karakuri Kaizen to Improve Productivity and Ergonomics in Wire Rope Industry**

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#### **ID 594 DEA-cross efficiency approach for peer assessment of retail stores' efficiency**

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#### **ID 596 The Impact of Waste Management in the Hospitality Industry Johannesburg North, South Africa**

Dr E I Edoun, Professor C Mbohwa and Mrs Thobile Yvonne Bhila, Faculty of Engineering and the Built Environment, Department of Quality and Operations Management, University of Johannesburg, Auckland Park, South Africa

#### **ID 597 Application of Data Mining for Exploring Hidden Patterns in Tuberculosis Patients**

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#### **ID 598 Factors Investigation for the Development of Medical Device towards Sustainable Product**

Taisy Mak and Duangpun kritchanchai, Department of Industrial Engineering, Mahidol University, Salaya, Nakhon Pathom, 73170, Thailand

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Muhammad Nauman Sheikh, Department of Electrical Engineering, University College of Engineering and Technology (UCET), The Islamia University of Bahawalpur, Pakistan

#### **ID 600 Analysis of new product development strategies between the green supply chain and non-green supply chain partners (case study: Doosheh Dairy Company)**

Hadi Gholizadeh and Nikbaksh Javadian, Department of Industrial Engineering Mazandaran University of Science and Technology, Babol, Iran

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M. M. Manyuchi and A. Garg, Department of Management Sciences, School of Management Sciences, Tshwane University of Technology, South Africa

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Dr E I Edoun, Professor C Mbohwa and Mrs Thobile Yvonne Bhila, Faculty of Engineering and the Built Environment, Department of Quality and Operations Management, University of Johannesburg, Auckland Park, South Africa

#### **ID 603 Engineering Education and Self Dependence: A Nigerian Experience**

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Paul A. Ozor, Department of Quality and Operations Management, University of Johannesburg, South Africa

Department of Mechanical Engineering-Industrial Engineering and Management, University of Nigeria Nsukka, Nigeria

#### **ID 604 Detection & Diagnosis Of Malignancy By Laser Induced Fluorescence Spectra (LIF)**

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Mr. Nachiket Sachin Deole and Mrs. Manasi Vyankatesh Ghamande, Department of Engineering Sciences and Humanities, Savitribai Phule University, Pune, India

#### **ID 605 Assessing the Effects of Sustainability Practices on Product Life Cycle- Clustering Approach**

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**ID 606 Supply Chain Management of Facility Operations and Maintenance Function in Apparel Sector**

F.N. Abdeen, Y.G. Sandanayake and T. Ramachandra, Department of Building Economics, University of Moratuwa, Sri Lanka

**ID 607 Maintenance Scheduling and Optimization of Wind Parks: Models and Methods**

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**ID 608 A Conceptual Framework to Optimise the Impact of Embodied Energy and Operational Energy in Buildings during the Design Stage**

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**ID 618 Relief Demand Modeling Using Bayesian Approach to Coordinate Humanitarian Logistics Planning**

Mohammad Anwar Rahman, Central Connecticut State University, New Britain, Connecticut, USA

**ID 619 The Effectiveness of Total Quality Management and Operations Performance at a Bakery Firm in The City of Tshwane, Pretoria South Africa**

Syria Sibongile Chauke, El Edoun and Charles Mbohwa, Quality and Operations Management, University of Johannesburg, RSA

**ID 620 The Essence of Communication and Its Operationalisation On Managerial Effectiveness**

Nkube Eva Masetlwa, El Edoun and Mbohwa, Department of Quality and Operations Management, University of Johannesburg, South Africa

**ID 621 The Essence of Total Quality Management Philosophies in Business**

Sibongile Chauke, El Edoun and Mbohwa, Quality and Operations Management, University of Johannesburg, South Africa

**ID 622 Analyzing the Impact of Location Factors on Building Construction Cost in Sri Lanka**

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**ID 623 Development of The P I N T A R Concept for Designing Core Competencies Using The Malcolm Baldrige Performance Excellence Approach The Description Analysis At Third Party Logistics Company**

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**ID 624 Classification of Bearing Fault Location and Severity Using Cascade ANNs with Statistical and Spectral Features**

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**ID 628 Forecasting at completion: Introduction of new method and comparing it with the method of Earned Schedule**

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**ID 629 Feature Selection and Machine Learning Classification for Live P2P Traffic**

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Bushra M. Ali, University of Technology Malaysia, Johor, Malaysia

**ID 630 Identification of Opinion Leadership: A Literature Review**

L.M.B.N. Kolugala and H.S. Jayasena, Department of Building Economics, University of Moratuwa, Sri Lanka

**ID 631 An Equity-based Positioning of Solid Waste Collection Sites for an Equitable Waste-induced Disaster Risk**

Eko Setiawan, Much Djunaidi, Hafidh Munawir, Alfa Novian Hendranansa Putra, Praditsya Paramitha, Eliza Arrofi Maharani and Bella Brylian, Industrial Engineering Department, Universitas Muhammadiyah Surakarta, Sukoharjo, Central Java, Indonesia

**ID 632 The Analysis of Pros and Norms of Outsourcing Logistics Operational Activities in the Construction Industry in South Africa**

Katlego Frans Letsoko and Xhanti Dyonase, Department of Operations Management and Quality Assurance at the University of Johannesburg, South Africa

**ID 633 Human Error Assessment in the Accident Causations Experienced among Vehicle Drivers in the Philippines**

Gann Sebastian B. Quiban, Bryan D. Caventa, Patricia Paula H. Corpuz, Francesco Nicolai L. Datu, Rica Jonell A. Millet and Yoshiki B. Kurata, Department of Industrial Engineering, Technological Institute of the Philippines, Quezon City, Philippines

**ID 634 Occupational Health and Issue in The Low Back Pain Among Filipino – Aged People Through Ordinal Logistic Regression**

Angelo M. Alindogan, Felix John F. Amin, Nicole P. Clave, Queenie Colleen Guadalupe, Lynnette P. Salas, Ritz Jerard A. Tan, Arriane A. Palisoc and Yoshiki B. Kurata, Department of Industrial Engineering, Technological Institute of the Philippines, Quezon City, Philippines

**ID 635 Conceptual Facebook Model to Mitigate the Problem of Obesity among Sudanese Females**

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**ID 636 What are the factors affecting the successful implementation of Industrial engineering projects or the application of Industrial engineering tools and techniques in mining in a South African context?**

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**ID 637 Design an optimal doctor scheduling system**

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**ID 638 Competency Mapping for Managers in Governmental Organizations by Shannon entropy**

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**ID 639 SMEs Managing Organisational Knowledge In The 4IR Era: A Case Study Of Developing Countries**

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**ID 640 Design Intervention in Maheshwar Handloom, MP, India**

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**ID 641 Fleet management through Vehicle Routing Problem and Multi Depot Vehicle Scheduling Problem: A Literature Review**

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**ID 642 Analysis of Student's abilities in Completing Mathematical Problems Dimension Three in Junior High School**

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**ID 643 Performance Assessment of Hardboard Material's Supplier in PT. Nutech Pundi Artha using Analytic Network Process (ANP) Methods**

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**ID 644 Production System Disturbances of Heavy Equipment Component Industry (Case Study at PT ABC)**

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**ID 645 Property Rights on Existing Reconstruction and Development Program Houses (RDP)- Literature review**

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**ID 650 Big Data Issues and Processing Techniques: A Comprehensive Survey**

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**ID 651 Theoretical examination of sustainability on low cost affordable housing and corporate governance**

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**ID 652 Pilot Study: Organizational Creativity in Indonesia's Creative Industries**

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**ID 653 Semiconductor's Automotive Burn-in Testing Improvement by Using Six Sigma**

Norzima Zulkifli and Haresh Kumar Shanmugam, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, Universiti Putra Malaysia

**ID 654 Optimization Model to Enhance the Petroleum Distribution Network in Sri Lanka**

W.W.N. Sachini, W.M.S.K. Weerabahu and R. Wickramarchchi, Department of Industrial Management, University of Kelaniya, Sri Lanka

**ID 655 Newsvendor Models and Biases under Ambiguity**

Peeyush Mehta, Indian Institute of Management Calcutta, Operations Management Group, Kolkata, India – 700104

R K Amit, Indian Institute of Technology Madras, Dept. of Management Studies, Chennai

**ID 656 Perceptions and Career Choices Linked to the UAE Youths Entrepreneurial Intention**

Fauzia Jabeen, Abu Dhabi, University Abu Dhabi, United Arab Emirates

**ID 657 Expansion Tale of Al Fanar Restaurant**

Fauzia Jabeen, Abu Dhabi University, Abu Dhabi, United Arab Emirates

**ID 658 Model-Based Engineering of a Process Wash Plant using SysML: Case study of beneficiation processes in a phosphate industry**

Mariem, Ait Bakader Usmba Khouribga, Morocco

**ID 659 Analysis of Inventory Control Planning for P-200 Chip (Semi Dull) Using Material Requirement Planning (MRP) Method at Pt. Indonesia Toray Synthetic**

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Saiful Munajat, Program Studi Teknik, Industri Fakultas Teknik, Universitas Mercu Buana, Jakarta Barat, Indonesia

**ID 660 Gorelax: A User-Ergonomically Designed Backpack for Stress Prone Millennials in the Philippines**

Ryan Christopher Malicdem, Technological Institute of the Philippines, Quezon City, Philippines

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Yoshiki Kurata, Technological Institute of the Philippines, Quezon City, Philippines

**ID 661 Role of Tourism IT Adoption and Tourism Risk Management Orientation On Collaborative Assets: Implications for Sustainable Tourism Supply Chain Performance**

Santanu Mandal, Amrita School of Business, Amrita Vishwa Vidyapeetham, Coimbatore, India

**ID 662 Influence of IOS Appropriation in Tourism Agility and Tourism Resilience Development: An Empirical Study**

Santanu Mandal, Amrita School of Business, Amrita Vishwa Vidyapeetham, Coimbatore, India

**ID 663 Advancement of Life Cycle Assessment Towards Eco-design In Ceramic Floor Tile Industry In Sri Lanka**

Kamalakkannan Sivappirakasam, University of Peradeniya, Faculty of Engineering Peradeniya, Sri Lanka

**ID 664 Academic – Industry Partnership to Develop Tomorrow’s Engineering Innovators**

Carol Gattis, University of Arkansas, Fayetteville, United States

**ID 665 Big Data Tasks Execution Time Analysis Using Machine Learning Techniques**

Aisha Shabbir, University Technology Malaysia, skudai, Malaysia

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Raja Zahilah Raja Mohd. Radzi, skudai, Malaysia

Muhammad Siraj, Department of Information Engineering & Computer Science, University of Trento, Trento, Italy

**ID 666 Analysing the Pros and Norms of Outsourcing Logistics Operational Activities in Construction in South Africa**

Katlego Letsoko and Xhanti Dyonase, University of Johannesburg, Johannesburg, South Africa

**ID 667 Vertical Wind Turbines as Power Plants at the Railroad Tracks**

Andreas Arga Pembangunan Nasional Veteran Jakarta University Bogor Indonesia 667

**ID 668 Formulating a Strategic Management of Social E-Commerce through a Combination of SWOT and PESTLE Analysis : Case Study**

Abel Kristanto Widodo, Universitas Diponegoro, Semarang, Indonesia

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**ID 669 Application of Spatial Weighting Matrix of GSTAR by Using CLARANS Clustering on Farmer Exchange Rates in 32 Provinces in Indonesia**

Annisa Azizah, Universitas Padjadjaran, Sumedang, Indonesia

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Abdul Talib, Bon Universiti Tun Hussein Onn Malaysia, Batu Pahat, Malaysia

**ID 670 The LASSO (Least Absolute Shrinkage and Selection Operator) Method to Predict Indonesian Foreign Exchange Deposit Data**

Trisha Magdalena, Adelheid Januaviani, Nurul Gusriani, Khafsah Joebaedi, Sukono F and Subiyanto Subiyanto, Universitas Padjadjaran, Indonesia

Abdul Talib Bon, Department of Production and Operations, University Tun Hussein Onn Malaysia, Batu Pahat, Malaysia

**ID 671 Evaluation of Redesign Layout Using Discrete Event Simulation (DES) Oral**

Zakka Ugih Rizqi, Islamic University of Indonesia, Yogyakarta, Indonesia

Rachmat Aulia, Islamic University of Indonesia, Sleman Indonesia 671

**ID 672 Lean Manufacturing and Ergonomics in the metallurgical industry: an integrated approach for performance improvement**

Ana Luísa Ramos, University of Aveiro (DEGEIT/GOVCOPP), Aveiro, Portugal

Marlene Brito, DEGEIT University of Aveiro, Aveiro, Portugal

Paula Carneiro, University of Minho (ALGORITMI Centre of Engineering), Braga, Portugal

Maria Antónia Gonçalves, Polytechnic of Porto – Research Center of Mechanical Engineering (CIDEM), Porto, Portugal

**ID 673 AMBHigh: A User Ergonomic Mobile Learning Application Intended for Business Management Secondary Students in the Philippines**

Bert Regin, Santiago Technological Institute of the Philippines, Quezon City, Philippines

**ID 674 Heuristics for Course Planning in Degree Programs**

Kingsley Gnanendran University of Scranton Scranton United States

Manohar Madan University of Wisconsin-Whitewater Whitewater United States

**ID 675 Supply Chain Strategy for Ayamas Food Cooperation Sdn. Bhd.**

Mohd Effendi Amran and Habibah Norehan Binti Haron, Razak Faculty of Technology and Informatics, Universiti Teknologi Malaysia, Kuala Lumpur, Malaysia

**ID 677 Management of Waste Water in Meat Processing Sector: Case Study of Ekurhuleni Abattoir in Johannesburg**

Victor Msimango, Paul Amaechi Ozor and Charles Mbohwa, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

Paul Amaechi Ozor, Department of Mechanical Engineering, Faculty of Engineering, University of Nigeria Nsukka, Nigeria

**ID 678 Red Bin Analysis – The Art of Problem Solving in Manufacturing Industry**

Sumit Shandilya and Jaskiran Arora, School of Management, BML Munjal University, Gurgaon, Haryana, India

Kalluri Vinayak, School of Engineering & Technology, BML Munjal University, Gurgaon, Haryana, India

**ID 679 Minimizing Mean Weighted Expected Tardiness by Integrating Preventive Maintenance and Production Scheduling Using Genetic Algorithm**

Sumiharni Batubara, Iveline Anne Marie, and Cattelya F.H, Industrial Engineering Department, Faculty of Industrial Technology, Trisakti University, Jakarta Barat, INDONESIA

**ID 680 A Quantitative Approach for Similarity Comparison of the Terminologies in Standard Documents**

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**ID 685 Personalized Product Recommendations on E-Commerce Websites with the use of Social Media**

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**ID 686 Data Mining in Healthcare Records: A Review Based on the Kind of Knowledge**

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**ID 688 The Influence of Organizational Culture on Students' Satisfaction in Saudi Arabia**

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**ID 721 The Effect of Classroom Questioning on Oral English Output of Junior High School Students**

Lu Juan, School of Education, Universiti Teknologi Malaysia; School of Foreign Studies, Shaanxi University of Technology, China

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**ID 722 A Multi-Objective Generalized Intuitionistic Fuzzy Linear Fractional Inventory Model with Possibility and Necessity Constraints**

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Tapan Kumar Roy, Professor, Department Mathematics, Indian Institute of Engineering Science and Technology, Shibpur, West Bengal, India

**ID 723 SMOSA Optimization Approach to a Multi Objective Model for a Machine Tool Selection and Operation Allocation Problem in FMS**

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**ID 724 Modeling Analysis in Furniture Company by Using System Dynamics**

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**ID 748 Quality Improvement in Refrigerator Division for 1-Door Refrigerator with Implementation of Six Sigma and Data Mining Method**

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Azizah Khairina Sarasetyo, Quality Control Laboratory, Industrial Engineering Department, Trisakti University

**ID 753 Occupational Health and Safety Issues among Workers in Stone Industries in North Karnataka**

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**ID 754 Optimization of Parameters for Sustainable Manufacturing Process – Special Focus on Machining Process**

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Ramanathan Arunachalam, Sultan Qaboos University  
Bakhit Al-Mahri, Sultan Qaboos University  
Abdullah Al-Ghielani, Sultan Qaboos University  
Alwaleed Al-Jahwari, Sultan Qaboos University

**ID 756 Stochastic Modeling of Rail Under-head Failure Risks**

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Ekambaram Palaneeswaran, Faculty of Science, Engineering and Technology, Swinburne University of Technology, Hawthorn, Australia

**ID 757 Ergonomically Design E-Book to Improve Comprehension and Retention**

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**ID 758 Develop Tourism Demand Forecasting Model using Artificial Neural Network**

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**ID 759 A Machine Learning based Intelligent Agent for Human Resource Planning in IC Design Service Industry**

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#### **ID 760 Models and Metaheuristics for the Pollution Traveling Salesman Problem**

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#### **ID 761 Entrepreneurial Competencies and Business Performance of Pontian Small Medium Enterprises**

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#### **ID 762 Understanding the Antecedents of Social Media Fatigue**

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#### **ID 763 Current Health Disease among Solid Waste Management Workers: A Case Study in Malaysia**

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#### **ID 764 Design and Development of a Decision Support System with Visual Analytics to Improve MRT Maintenance Operations**

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#### **ID 765 Pilot Study: Organizational Creativity in Indonesia's Creative Industries**

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**ID 766 Reasoning Types in Industrial Engineering/Operations Management Processes**

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**ID 767 Information Security for Hospital Information System Using COBIT 5 Framework**

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**ID 769 A Conceptual Framework on the Role of Road Safety Management Intervention in Overcoming Road Accident**

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**ID 770 Review of the Implementation Status & Associated Challenges for Industry 4.0 Transformation in Asian MSMEs**

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**ID 771 Measuring Utrecht Work Engagement Scale: Factor Analysis Approach in Telecommunication Sector**

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**ID 772 Increasing Productivity and Efficiency for Third Party Logistics Service**

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**ID 774: Problem Based Learning for Techno-economic Analysis for Logistics System Course: Case in a State-owned Warehouse**

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**ID 775 Preparation of Polyacrylamide Grafted onto Magnetic Cellulose as Flocculant in Wastewater Pre-treatment Application**

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**ID 776 Environmental Factor and Road Accident: A Review Paper**

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**ID 777 Learning 4.0: Connecting the Dots, Reaching the Unbleached by ICT Adoption in Education**

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**ID 778 Surfactant and Polymer-Nanoparticle Interaction with Heavy Crude Oil**

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**ID 779 The Capacitated Multiple-Allocation Hub Location Problem Model for Railway Logistics Transportation**

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**ID 780 The Project Based Learning Combined with Problem Solving Based Learning in Industrial Engineering Programs**

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**ID 781 Effect of Emotional Intelligence on Employee Work-Engagement and Career Satisfaction Using Thriving As a Mediator and Power Distance as a Moderator**

Abroo Murtaza, Foundation University Rawalpindi Campus, Pakistan

**ID 782 Enhancing Firm Performance through Human Resource Management (HRM) Practices and HR Roles**

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**ID 783 Impact of Exploitative Leadership on Employee Outcomes and Moderating Role of Narcissism**

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Asma Gul, Riphah International University Islamabad

Abroo Murtaza, Riphah International University Islamabad

**ID 784 Development of Framework for the Core Soft Skills and Competencies Required by Project Managers in Oil and Gas Industry**

Esra Abusharkh, Sultan Qaboos University

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**ID 785 Individual Characteristics Influencing Employee Innovative Behavior with Reward as Moderator in Universiti Teknologi Malaysia**

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**ID 786 Design of an Automated Millet Milling Machine**

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**ID 787 Expanding Central Craft Company**

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**ID 788 Thermodynamic Modeling of Vapor Absorption Refrigeration Cycle-An Overview**

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**ID 789 Study of Wood Dust and Chemical Hazard at Wood Based Furniture**

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**ID 790 Study of Ergonomics and Noise Hazard at Wood Based Furniture Industry**

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**ID 791 Categorization of Shopping Centres in Malaysia: A Criteria-Based Delphi Study**

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**ID 792 The Role of Railway Industry in Indonesia's Economic Growth**

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**ID 795 Development of an Automated Railway Level Crossing Gate Control System using PLC**

Rumana Tasnim, World University of Bangladesh, Bangladesh

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Kamruzzaman Sarkar, World University of Bangladesh, Bangladesh

Ismail Mahmud, World University of Bangladesh, Bangladesh

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**ID 800 Estimating people stature based on Hand Length and Width: a case of Omani people**

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**ID 801 Application of Multi-Criteria Decision Making (MCDM) Tools in Governance Evaluation of Accessible and Inclusive Urban Developments (AIUD)**

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Hasim Altan, Department of Architectural Engineering, University of Sharjah, Sharjah, UAE

**ID 802 Contemporary Modular Study Table for Small Minimalist Residence in Malaysia**

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Abdullah Al Rashid Ab Hamid, University Tun Hussein Onn Malaysia (Uthm), Malaysia  
Abdul Talib Bon, Null, Universiti Tun Hussein Onn Malaysia, Malaysia

**ID 803 Calculation of Safety Stock and Bottleneck Minimization with Theory of Constraints Method Approach on Sand Coated Metal Roof Production in XYZ Ltd.**

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**ID 807 Handling Heavy Metal Waste through Utilization of Lapindo Activated Mud HCl to Realize Environmentally Friendly Industries**

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**ID 812 Supply China Finance with Applications of Block Chain**

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**ID 813 Factors Affecting Efficiency of Police Stations in Metropolitan Police Division 3**

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**ID 823 Technical Feasibility Battery Lithium to Support Unmanned Aerial Vehicle (UAV): A Technical Review**

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**ID 825 Internal vs External Green Supply Chain Management at Petrochemical Industry Economic Performance in Indonesia**

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**ID 826 Environment Sustainability in Petrochemical Industry in Indonesia**

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**ID 827 Green Marketing Mix Role Toward Sustainability Performance of Petrochemical Industry in Indonesia**

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**ID 828 User-Entity Behavior Analytics (UEBA) – A Systematic Review of Literatures**

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**ID 831 Healthcare Social Factors of Companies in India**

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### **ID 838 A Study on Awareness of Block Chain Technology among Human Resources Executives in India**

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### **ID 841 Analysis of Course Content Development using Pedagogic Framework – A Case Study**

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### **ID 842 Sorghum-Based Alternative Food Industry: Entrepreneurship High Education**

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#### **ID 843 Design and Development of Game Based Evaluation and Learning (GABEL) for Applied Thermodynamics course for Active Learning**

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#### **ID 845 Women's Leadership Policy Strategy: Improving Quality of Education (TQM) In Higher Education**

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#### **ID 846 DMAIC Approach to Improve on Safety Performance Using Safety Management System in Kuwait International Airport**

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#### **ID 855 Control Returnability Inventory Using System Dynamic Modeling and Fuzzy Logic**

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# **Development Of Internal Quality Assurance System Iso 9001: 2008 Based On Iwa 2: 2007 Using Web-Based Document Management Control (Dmc) Applications**

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## **Abstract**

The existence of ISO 9001: 2008 standards for the reality of business processes in universities, aims to increase the quality of the Internal Quality Assurance System, so that Stake Holders get satisfaction with the services provided. Application Approach Document Management Control on business realities of processes in Higher Education can optimize performance in academic and non-academic units at Narotama University. The Document Management Control application is expected to later be used by various parties, namely academic and non-academic units in improving their performance, in compliance with ISO 9001: 2008 Based on IWA 2: 2007 Standards.

The purpose of using Document Management Control, in general is to get timely reports, ease of operation, maintenance and the possibility of being upgradeable and expandable (easily adapted to the development and needs of the College). The use of computer technology that implements proper design, implementation and operation, both in terms of hardware, software and brainware, will easily be able to adjust the standards of world needs for Higher Education, both nationally and internationally.

## **Keywords**

ISO 9001:2008 Based on IWA 2:2007, Document Management Control Application, and Internal Quality Assurance System of Higher Education

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