

[Back to results](#) | [Previous](#) 7 of 47 [Next](#)[Download](#) [Print](#) [Save to PDF](#) [Add to List](#) [Create bibliography](#)

Proceedings of the International Conference on Industrial Engineering and Operations Management • Pages 2097 - 2106 • 2021 • 2nd South American Conference on Industrial Engineering and Operations Management, IEOM 2021 • Sao Paulo • 5 April 2021 through 8 April 2021 • Code 267339

Document type

Conference Paper

Source type

Conference Proceedings

ISSN

21698767

ISBN

978-179236125-8

Publisher

IEOM Society

Original language

English

[View less](#)

The evaluation of reverse logistic as indicator of the green material management performance in a construction project: A literature review

Wardani, Sherly A.^a ; Handayani, Naniek Utami^a ; Wibowo, Mochamad Agung^b [Save all to author list](#)^a Industrial Engineering Departement, Diponegoro University, Semarang, Indonesia^b Civil Engineering Departement, Diponegoro University, Semarang, Indonesia1 75th percentile
Citation in Scopus1.14
FWCI 18
Views count [View all metrics](#) [Full text options](#) [Export](#) **Abstract**

Author keywords

Sustainable Development Goals 2023

SciVal Topics

Metrics

Funding details

Abstract

Green supply chain management (GSCM) is an approach to minimize negative impacts on the environment during the construction process. Green material management (GMM) is a phase of the project life cycle that has a significant effect on GSCM performance. GMM dimensions consist of green procurement, green transportation, green warehousing, and reverse logistics (RL). The application of RL in the construction is difficult because of the lack of awareness. The difficulties of RL application

Cited by 1 document

Barriers for Implementing Reverse Logistics in the Construction Sectors

Wardani, S.A. , Handayani, N.U. , Wibowo, M.A.
(2022) *Journal of Industrial Engineering and Management*[View details of this citation](#)

Inform me when this document is cited in Scopus:

[Set citation alert](#) **Related documents**

Barriers for Implementing Reverse Logistics in the Construction Sectors

Wardani, S.A. , Handayani, N.U. , Wibowo, M.A.
(2022) *Journal of Industrial Engineering and Management*

Reverse Logistics Performance Indicators for the Construction Sector: A Building Project Case

Wibowo, M.A. , Handayani, N.U. , Mustikasari, A.
(2022) *Sustainability (Switzerland)*

A S.W.O.T. Analysis of Green Procurement Implementation in Construction Projects

Bidin, Z.A. , Bohari, A.A.M. , Rais, S.L.A.
(2019) *IOP Conference Series: Earth and Environmental Science*[View all related documents based on references](#)

Find more related documents in Scopus based on:

[Authors](#) [Keywords](#)



ISSN: 2169-8767 (U.S. Library of Congress) ISBN: 978-1-7923-6125-8

ID 007 Order Picking Operation and Warehouse Layout Optimization in a Textile Industry by using Genetic Algorithm

Maxsuel Vieira Orti and Raimundo C. G. Teive, Laboratory of Applied Intelligence, University of Vale do Itajaí (UNIVALI), Itajaí, SC, [Brazil](#)

ID 008 Production disturbances handling: where are we and where are we heading to?

Adriana Ito, Torbjörn Ylipää, and Anders Skoogh, Department of Industrial and Materials Science, Chalmers University of Technology, Gothenburg, [Sweden](#)

Per Gullander, RISE Research Institute of Sweden, Gothenburg, Sweden

ID 009 Simulation Improves Service and Resource Allocation at an Automotive Garage

Wenqi Deng, Yang Yang, Di Zhao, and Edward J Williams, Business Analytics, College of Business, University of Michigan – Dearborn, MI, [USA](#)

ID 023 A Study about the Level of Lean Use in Plasturgie Industry

Giulia Ottoni, Larissa Dutra, Bruna de Jesus, and José Ferraz, Industrial Engineering Department, Facens University, Sorocaba, Brazil

Flavio Silva, Industrial Engineering Department, ESEG, São Paulo, Brazil

Luís Anjo, Bárbara Silva and Inês Onofre, Department of Economics, Management, Industrial Engineering and Tourism, University of Aveiro, Aveiro, Portugal

Carina Pimentel, Department of Economics, Management, Industrial Engineering and Tourism, Governance, Competitiveness and Public Policy Research Unit, University of Aveiro, Aveiro, Portugal and UNIDEMI, Department of Mechanical and Industrial Engineering, Faculty of Science and Technology, Universidade NOVA de Lisboa, Caparica, Portugal

Marlene Amorim and João Matias, Department of Economics, Management, Industrial Engineering and Tourism, Governance, Competitiveness and Public Policy Research Unit, University of Aveiro, Aveiro, Portugal

Maria João Rosa, Department of Economics, Management, Industrial Engineering and Tourism, University of Aveiro, Aveiro, Portugal and Center for Research in Higher Education Policies, Matosinhos, Portugal

ID 027 Sustainability Best Practices for Oil and Gas Sector in Mexico

María del Rocío Soto-Flores, Raúl Rodríguez-Ávila, Christian Muñoz-Sánchez, and Ingrid Yadibel Cuevas-Zuñiga, Business School, National Polytechnic Institute of Mexico, Mexico City, **Mexico**

ID 031 The Application of Decision Tree Regression to Optimize Business Processes

Mike Sishi and Arnesh Telukdarie, Post Graduate School of Engineering Management, University of Johannesburg, South Africa

ID 032 Digital Technologies and Artificial Intelligence for Optimized Key Performance Indicators

Mike Sishi and Arnesh Telukdarie, Department of Engineering Management, University of Johannesburg, 524 Auckland Park, 2006, South Africa

ID 035 Planning Support Tool for Torobayo Beer Production using Systems Dynamics

Vicente Ramírez, Oscar Jara, Institute of Industrial Engineering and Systems, Universidad Austral de Chile, Valdivia, Chile

ID 036 Measuring the Performance of Sustainable Supply Chain Management in the Food Industry

Edgar Guillermo Rodríguez Guevara, Department of Administration and Organizations, Faculty of Administration Sciences Universidad del Valle, Cll. 4B 36-00, Cali, Colombia

ID 040 Microfinancing for Informal Enterprises: Perspectives in Colombia

Omar Alonso Patiño C., School of Administration, Finance and Economics, Universidad Ean, Bogotá, Colombia

Carlos Salcedo-Pérez, School of Administration, Finance and Economics, Universidad Ean, Bogotá, Colombia

ID 041 Green Technologies and their Effects on Agribusiness Performance in Mexico

Ingrid Yadibel Cuevas-Zuñiga, María del Rocío Soto-Flores, and Christian Muñoz-Sánchez, Business School, National Polytechnic Institute of Mexico, Mexico City, Mexico

ID 042 The High Schools in Colombia and the Creation of a Convenient Environment for Organizational Change

Omar Alonso Patiño C., Sandra Jennina Sánchez, and Mauricio Díez S., School of Administration, Finance and Economics, Ean University, Bogota – Colombia

Laura Marcela Patiño-Gutiérrez, Faculty of Administrative Sciences, Fundación Universitaria Cafam, Bogotá – Colombia

ID 043 Importance of Economic and Financial Education for Regional and Rural Development

Omar Alonso Patiño C., Faculty of Management, Finance, and Economics, Universidad EAN, Bogotá, Colombia

José Augusto Ramírez Díaz, Business School, Fundación Universitaria Agraria de Colombia, Bogotá, Colombia

Laura Marcela Patiño Gutiérrez, Faculty of Administrative Sciences, Fundación Universitaria Cafam, Bogotá – Colombia

ID 045 The Escalation of Commitment. An Empirical Case in Colombia

Martha Lucía Pachón Palacios and Omar Alonso Patiño C., Management, Finance, and Economics Faculty, EAN University, Bogotá, Colombia

ID 048 Impact of Artificial Intelligence in South African Construction Project Management Industry

Siphosenkosi Makaula, Megashnee Munsamy, and Arnesh Telukdarie, Post Graduate School of Engineering Management, University of Johannesburg, Johannesburg, South Africa

ID 067 Generation of Voltage by means of Microbial Fuel Cells using the bacterias Antinomiceto, Bacillus sp and Escherichia coli

Rojas Flores, Segundo Grupo de Investigación en Ciencias Aplicadas y Nuevas Tecnologías, Universidad Privada del Norte, Trujillo 13007, Perú

Rodríguez Yupanqui- Magda, De La Cruz Noriega- Magaly, Agüero Quiñones-Rickelmi, Enríquez León-Martin, Contreras Cáceda-Cynthia

School of Environmental Engineering, Universidad Cesar Vallejo S.A.C., Víctor Larco Herrera, Trujillo, Perú

ID 068 CEFET/RJ's contributions to society: monitoring sustainable practices with Brazilian Sustainable Logistics Management Plan

Bruno Zeitone, Department of Civil Engineering, Centro Federal de Educação Tecnológica Celso Suckow da Fonseca (CEFET/RJ), Rio de Janeiro, Brazil

Aline Trigo, Strategy Division for Institutional Environmental Sustainability, Centro Federal de Educação Tecnológica Celso Suckow da Fonseca (CEFET/RJ), Rio de Janeiro, Brazil

José Aires Trigo, Department of Business Management, Universidade Estácio de Sá (UNESA), Rio de Janeiro, Brazil

Ursula Maruyama, Department of Business Management , Centro Federal de Educação Tecnológica Celso Suckow da Fonseca (CEFET/RJ), Rio de Janeiro, Brazil

ID 069 Engineering project driver: fostering innovation and core values in technology education

Gabriel Vitor S. Gouvêa, Mechanic Technical/Professional Education Department student, CEFET/RJ, Rio de Janeiro, Brazil

Priscila Paiva, Postgraduate Program in Intellectual Property and Innovation, PPGPII/INPI, Rio de Janeiro, Brazil

Francisco J. C. Rapchan, Technology Extension Directory, IFES, Espírito Santos, Brazil

Paloma María Teresa Martínez-Sánchez, Engineering Faculty- Industrial Engineering Program, El Bosque University, Bogota, Colombia

Ursula Maruyama, Business Administration Department, CEFET/RJ, Rio de Janeiro, Brazil

ID 070 BOEING 737' MAX: An analysis of the variables involved in aircraft failure

William Soares de Lima, Federal Institute of Science and Technology of São Paulo – Campus Boituva

Marcelo Figueiredo Polido, Federal Institute of Science and Technology of São Paulo – Campus Boituva, Brazil

ID 071 Industry 4.0: Technologies and Applications

William Soares de Lima, Federal Institute of Science and Technology of São Paulo – Campus Boituva

Marcelo Figueiredo Polido, Federal Institute of Science and Technology of São Paulo – Campus Boituva, Brazil

ID 103 Supply Chain Differentiation: A Quantitative Fuzzy Application to Segment Demand Driven Supply Chains

Lucas Alves S. Santos and Kleber Francisco Espôsto, Department of Production Engineering, São Carlos School of Engineering, University of São Paulo, São Carlos, Brazil

ID	104	Cylinder Management Flexibilization for Rotogravure Process- Transition for Industry 4.0	Liane
Mahlmann Kipper	Universidade de Santa Cruz do Sul – UNISC	Santa Cruz do Sul	Rio Grande do
Sul	Brazil		

ID 105 Cylinder Management Flexibilization for Rotogravure Process- Transition for Industry 4.0

Leonardo Moraes Aguiar Lima dos Santos, Matheus Becker da Costa, Ronaldo Bastos dos Santos; Ricardo Silva de Souza; Sandra Elisia Lemos Iepson and Liane Mahlmann Kipper, Postgraduate Program in Industrial Systems and Processes, University of Santa Cruz do Sul, Santa Cruz do Sul, Rio Grande do Sul, Brazil

ID 106 Scientific Mapping of Project Management and Educational Perspectives for Industry 4.0

Dantom Guilherme Helfer, Sandra Elisia Lemões Iepson and Liane Mahlmann Kipper, Graduate Department in Industrial Systems and Processes

University of Santa Cruz do Sul, Santa Cruz do Sul, Rio Grande do Sul, Brazil

ID113 Education in the Anthropocene: Disinformation and power relations on environmental education

Ursula Maruyama Business Administration Department CEFET/RJ Rio de Janeiro, Brazil

Liz-Rejane Issberner Postgraduate Program in Information Science PPGCI, IBICT/UFRJ Rio de Janeiro, Brazil

Wladimir Henriques Motta Production Engineering Department/DIPPG CEFET/RJ Rio de Janeiro, Brazil

Marcelo Sampaio Dias Maciel Business Administration Department CEFET/RJ Rio de Janeiro, Brazil

ID 114 Financial Analysis of a Small Scale Mining Organization

M. Manyuchi, Department of Mining Engineering and Surveying, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

Mudamburi, Department of Technopreneurship, School of Business Sciences and Management, Harare Institute of Technology, Zimbabwe

N. Sukdeo Department of Operations and Quality Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

ID 120 Analyzing Factors Responsible for Energy Use in the Construction Industry

Oludolapo Akanni Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban, South Africa

ID 121 Process Capability in LGPD Context: Characterization and Potential Future Directions

Gianfranco Muncinelli, Edson Pinheiro de Lima, Fernando Deschamps, Sergio Eduardo Gouvea da Costa, Juliana Lara Souza, Alexandre dos Santos Pereira and José Marcelo Almeida Prado Cestari, Industrial and Systems Engineering Graduate Program, Pontifical Catholic University of Parana (UFPR), Curitiba, Brazil

ID 125 Applying Data Mining Techniques and Analytic Hierarchy Process to the Food Industry: Estimating Customer Lifetime Value

Fátima Carneiro, Kaizen Institute Western Europe, Faculty of Engineering of the University of Porto, R. Manuel Alves Moreira 207, Vila Nova de Gaia, Portugal, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal

Vera Miguéis, Faculty of Engineering of the University of Porto, INESC TEC, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal

ID 136 Systematic Mapping Analysis on Sustainable Supply Chain Management

Claudemir L. Tramarico, Sao Paulo State University (UNESP), Engineering School, Campus Guaratinguetá, Guaratinguetá, SP, 12516-410, Brazil

ID 137 3D Printing Technology: an overview of the textile industry

Walakis Vieira Bataglini, Ana Julia Dal Forno, Fernanda Steffens and Antônio Augusto Ulson de Souza, Textile Engineering Department, Master Program in Textile Engineering, Santa Catarina Federal University – UFSC Blumenau, Rua João Pessoa, 2514 – Velha – Blumenau/SC, Brazil

Liane Mählmann Kipper, Industrial and Process Systems Master Program, Santa Cruz do Sul University – UNISC, Av. Independência, 2293 – Universitário, Santa Cruz do Sul – RS, Brazil

ID 140 Analysis of the sustainability management model in the productivity of small and medium enterprises. Case study in the city of Bogotá D.C.

Oscar A. Vásquez-Bernal, School of Basic Science, Technology and Engineering, Universidad Nacional Abierta y a Distancia UNAD, Bogotá D.C, Colombia

William E. Mosquera-Laverde, Faculty Administrative and Economic Sciences, Universidad Cooperativa de Colombia, Bogotá D.C, Colombia

ID 141 Port Community System Design for Emerging Economies: Case Study Barranquilla, Colombia

Adriana Moros-Daza and Rene Amaya-Mier and Guisselle Garcia-Llinas, Industrial Engineering Department, Universidad del Norte, Barranquilla, Colombia

Prof. Stefan Voß, Hamburg University, Information System Institute, Hamburg, Germany

ID 142 Blood Shortage Management with a Reactive Lateral Transshipment Approach in a Local Blood Supply Chain

Parmis Emadi and Zbigniew J. Pasek, Industrial Engineering Program, University of Windsor, 401 Sunset Ave, Windsor, ON

ID 149 A review on the metallic components direct production by additive manufacturing

Givanildo Alves dos Santos, Maurício Silva Nascimento and Rogério Teram, Mechanical Department, Federal Institute of São Paulo, São Paulo, Brazil

Vinícius Torres dos Santos and Márcio Rodrigues da Silva, Salvador Arena Foundation Educational Center, Termomecanica São Paulo S.A., São Bernardo do Campo, Brazil

Antonio Augusto Couto, Materials Engineering Department, Mackenzie Presbyterian University, UPM, São Paulo, Brazil

ID 157 Organizational change management in industrial SMEs in the optimization of decision making

William E. Mosquera-Laverde, Faculty Administrative and Economic Sciences, Universidad Cooperativa de Colombia, Bogotá D.C, Colombia

Felix A. Cortes-Aldana, Faculty of Engineering, Universidad Nacional de Colombia, Bogotá D.C, Colombia

Oscar A. Vásquez-Bernal, School of Basic Science, Technology and Engineering, Universidad Nacional Abierta y a Distancia UNAD, Bogotá D.C, Colombia

ID 160 Process Innovation: A Study of Micro and Small Industries In Sao Paulo

Adriano Gomes de Freitas, Luis Alberto Martinez Riascos, Alexandre Acácio de Andrade and Júlio Francisco Blumetti Facó, Centro de Engenharia, Modelagem e Ciências Sociais Aplicadas, Universidade Federal do ABC (UFABC), Santo Andre, Brazil

Bruno Gallotta, Derby Business School, University of Derby, Derby, UK

ID 161 Computational Suitability for Industry 4.0 Implementation in Companies of the Metropolitan Region of Sorocaba-SP

Luis Tadeu Marson, Jonathan M. Santos, Luiz Egidio C. Cunha, Robert D. Ximenes and Marcelo F. Polido, Graduate Program in Information Technology Management, Federal Institute of Education, Science and Technology of São Paulo, Campus Boituva – SP – BRAZIL

ID 162 Analysis Impact Of The Associativity On The Competitiveness Of Fishing Commercial Companies

William E. Mosquera-Laverde, Faculty Administrative and Economic Sciences, Universidad Cooperativa de Colombia, Bogotá D.C, Colombia

Gerardo Avendaño-Prieto, Faculty Administrative and Economic Sciences, Universidad EAN, Bogotá D.C, Colombia

Mario S. Rodriguez-Barrero, Faculty Administrative and Economic Sciences, Universidad Cooperativa de Colombia, Ibagué, Colombia

ID 163 Performance Optimization of a New Solid Feeder

Adriano Gomes de Freitas, Yuri Oliveira Lima, Ricardo Borges dos Santos and Luis Alberto Martinez Riascos, Center for Engineering, Modelling and Social Applied Sciences, Federal University of ABC, Santo André, Brazil

Vitor Furlan de Oliveira, Post-Graduation Program in Mechanical Engineering, University of São Paulo, São Paulo, Brazil

ID 169 Operations Strategy, Environmental Management and Sustainability – There is a New Competitive Priority of the Operations

José Roberto Soares Ribeiro, Administration Department, Metodist University of Piracicaba, Piracicaba-SP-Brazil

Alceu Gomes Alves Filho, Production Engineering Department, Federal University of São Carlos, São Carlos-SP-Brazil

ID 183 Application of Marketing Strategies in the Mining Sector for Continuous Growth

M. Manyuchi, Department of Mining Engineering, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

Mbohwa, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

Muzenda, Department of Chemical Engineering Technology, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa and Department of Chemical, Materials and Metallurgical Engineering, Faculty of Engineering and Technology, Botswana International University of Science and Technology, P. Bag 16, Palapye, Botswana

ID 189 Techno-Economic Assessment for The Production of 400 tpd of Sulphuric Acid Using Waste Sulphur Gases from Coal Combustion and Pyrolysis Gases

G.T. Bare, Department of Chemical and Process Systems Engineering, School of Engineering and Technology, Harare Institute of Technology, Zimbabwe

M. Manyuchi, Department of Mining Engineering and Surveying, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

Chikosi, Department of Chemical and Process Systems Engineering, School of Engineering and Technology, Harare Institute of Technology, Zimbabwe

N. Sukdeo Department of Operations and Quality Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

ID 215 Importance of the Control Function in Effective Operational Planning and Rational Decision Making in Mining Organisations

M. Manyuchi, Department of Mining Engineering and Surveying, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

N. Sukdeo Department of Operations and Quality Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

ID 217 Application of the Situational Leadership Model to Achieve Effective Performance in Mining Organizations Teams

M. Manyuchi, Department of Mining Engineering and Surveying, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

N. Sukdeo Department of Operations and Quality Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

ID 221 Cyclic Steam Stimulation Designing for Two Horizontal Wells in Sudanese Oil Field – Case Study FNE Oil Field

Mahmoud Zohair, Husham A. Ali Elbaloula, and Tagwa A. Musa, College of Petroleum Engineering & Technology, Sudan University of Science and Technology, Khartoum, Sudan

ID 231 Information security and quality management systems integration: implementation in an institution specialized in exams organization

Ana Paula Alves Fiore, Ana Lúcia Figueiredo Facin, and Jorge Muniz Jr., São Paulo State University (UNESP), Engineering School, Campus Guaratinguetá, Guaratinguetá, SP, 12516-410, Brazil

ID 237 Identification of the main topics about Cleaner Production: a guide to directing sustainable industrial practices in the next decade

Vitor H. M. Santos, Thalita L. R. Campos, Maximilian Espuny, and Otávio J. Oliveira, São Paulo State University (UNESP), Engineering School, Campus Guaratinguetá, Guaratinguetá, SP, 12516-410, Brazil

ID241 Ergonomic Work Analysis in a Long Term Residency Institution for the Elderly in the South of Brazil

Isadora Bechert de Modesti, Master's Degree Student of the Postgraduate Program in Architecture and Urbanism, Federal University of Santa Catarina (UFSC), Florianópolis, Santa Catarina, Brazil

Andrea de Aguiar Kasper, Post-Doctoral Student of the Postgraduate Program in Architecture and Urbanism, Federal University of Santa Catarina (UFSC), Florianópolis, Santa Catarina, Brazil

Gizelli Flôr de Jesus, Master's Degree Student of the Postgraduate Program in Architecture and Urbanism, Federal University of Santa Catarina (UFSC), Florianópolis, Santa Catarina, Brazil

Lizandra Garcia Lupi Vergara, Associate Professor of the Postgraduate Program in Production Engineering, Federal University of Santa Catarina (UFSC), Florianópolis, Santa Catarina, Brazil

ID 256 Study on Determinant Factors of Economic Feasibility in Generating Wind Power in Northeast Brazil

Antônio Henriques de Araujo Junior, Department of Production Engineering, Rio de Janeiro State University, Rio de Janeiro, Brazil

Jose Glenio Medeiros de Barros, Department of Production Engineering, Rio de Janeiro State University, Rio de Janeiro, Brazil

Nilo Antonio de Souza Sampaio, Department of Mathematics, Physics and Computing, Rio de Janeiro State University, Rio de Janeiro, Brazil

Bernardo Bastos, Department of Production Engineering, Rio de Janeiro State University, Rio de Janeiro, Brazil

Luiz de Freitas Ayres, Department of Production and Systems, University of Minho, Braga, Portugal

Maria da Gloria Diniz de Almeida; Department of Production Engineering, Rio de Janeiro State University Rio de Janeiro, Brazil

ID261 Contributions to the development of suppliers in competitive environments: a case study in Brazilian companies

Luiz de Freitas Ayres, Department of Production and Systems – DPS, University of Minho – Campus de Gualtar – Braga,

Maria Sameiro Faria Brandão Soares Carvalho, Department of Production and Systems – DPS – Centro Algoritmi, University of Minho – Campus de Gualtar – Braga

Paulo Alexandre da Costa Araujo Sampaio, Department of Production and Systems – DPS – Centro Algoritmi, University of Minho – Campus de Gualtar – Braga

Antônio Henriques de Araujo Junior, Department of Production Engineering, Rio de Janeiro State University, Rio de Janeiro, Brazil

ID 264 Perspectives of circular value networks in Ecuador

Ana Julia Acevedo Urquiaga, Industrial Engineering Program, University Foundation San Mateo, Bogotá, Colombia

Neyfe Sablón Cossío, Postgraduate Institute, Production and Services Group (ProServ), Technical University of Manabí, Portoviejo, Ecuador

Marina Bouzon, Federal University of Santa Catarina, Florianópolis, Brazil

José Antonio Acevedo Suárez, Logistic and Production Management Laboratory (LOGESPRO), Havana Technological University “José Antonio Echevarría” (CUJAE), Havana, Cuba

Carlos Manuel Taboada Rodriguez, Logistics Performance Laboratory, Department of Production and System Engineering, University Federal of Santa Catarina, Florianópolis, Brazil

ID 270 Women in Postgraduate Programs of Engineering and Natural Sciences: A Case Study in Brazil

Isotilia Costa Melo, Department of Production Engineering, São Carlos Engineering School (EESC)/University of São Paulo (USP), Avenida Trabalhador Sancarlense, 400 – 13566-590 – São Carlos (SP) – Brazil

Érica Gonçalves Rezende, Department of Production Engineering, São Carlos Engineering School (EESC)/University of São Paulo (USP), Avenida Trabalhador Sancarlense, 400 – 13566-590 – São Carlos (SP) – Brazil

Daisy Aparecida do Nascimento Rebelatto, Department of Production Engineering, São Carlos Engineering School (EESC)/University of São Paulo (USP), Avenida Trabalhador Sancarlense, 400 – 13566-590 – São Carlos (SP) – Brazil

ID 271 Digital Capabilities to Support Digital Product-Service Systems

Daisy Valle Enrique, Department of Electromechanical Engineering, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

Lucas Santos Dalenogare, Grenoble-INP Génie Industriel, Institut Polytechnique de Grenoble, Grenoble, France

Laura Visintainer Lerman, Department of Industrial Engineering, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

Alejandro Germán Frank, Department of Industrial Engineering, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

ID 272 Requirements of Industry 4.0 from Heavy Automotive Manufacturing

Jânio Vaz Bragança, Department of Industrial Engineering, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

Lucas Santos Dalenogare, Grenoble-INP Génie Industriel, Institut Polytechnique de Grenoble, Grenoble, France

Maria Auxiliadora Cannarozzo Tinoco, Department of Industrial Engineering, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

Laura Visintainer Lerman, Department of Industrial Engineering, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

Alejandro Germán Frank, Department of Industrial Engineering, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

ID 298 Exploring the Evolution Structure of Process Modelling for Industry 4.0: a Science Mapping for Proposing Research Paths

Michele Kremer Sott 1, Leonardo Bertolin Furstenau 1, Yan Pablo Reckziegel Rodrigues 2 and Liane Mahlmann Kipper 3

1 Master student of Graduate Program in Industrial Systems and Processes, University of Santa Cruz do Sul (UNISC), Santa Cruz do Sul – BRAZIL

2 Undergraduate student of Computer Science, University of Santa Cruz do Sul (UNISC), Santa Cruz do Sul – BRAZIL

3 Professor of Graduate Program in Industrial Systems and Processes, University of Santa Cruz do Sul (UNISC), Santa Cruz do Sul – BRAZIL

Guilherme Luz Tortorella, Professor, Dept. of Production and Systems Engineering, Federal University of Santa Catarina, Santa Catarina – BRAZIL

José Ricardo López-Robles, Management Engineering PhD, University of the Basque Country, Bilbao – SPAIN

Manuel J. Cobo, Professor at the Dept. of Computer Science and Engineering, University of Cadiz, Cadiz – SPAIN

ID 299 Initial overview of industry 4.0 in textile companies from Santa Catarina

Leila Araújo Falani, Catia Rosana Lange de Aguiar and Ana Julia Dal Forno, Department of Textile Engineering, Federal University of Santa Catarina, Blumenau, Santa Catarina, Brazil

ID 301 Effects of Voltage Sags on Industrial Processes: case study

Danilo Rodrigues Almeida, Electrical Engineering Graduate Program, São Paulo State University – UNESP, Institute of Science and Technology, Campus of Sorocaba, Brazil

Juan Carlos Cebrian, Electrical Engineering Graduate Program, São Paulo State University – UNESP, Institute of Science and Technology, Campus of Sorocaba, Brazil

ID 302 Business Survival Strategies for Small Scale Miners to Remain Afloat in Turbulent Times

M. Manyuchi, Department of Quality and Operations Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

N. Sukdeo Department of Operations and Quality Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

ID 317 Selection of Appropriate Maintenance Strategy for Oil and Gas Equipment Using Analytical Hierarchy Process (AHP)

Abdelnaser Elwerfalli, College of Mechanical Engineering Technology, Benghazi – Libya

ID 326 Patents and Technology Innovation in the Latin-American Audiovisual Industry

Debora Regina Taño and Ana Lúcia Vitale Torkomian, Industrial Engineering Department, Federal University of São Carlos, São Paulo, Brasil

ID 356 School Readiness in the New Normal Era of Online Teaching and Learning at Junior High School

Agung Suharyanto Public Administration Study Program, Faculty of Social and Political Sciences, Universitas Medan Area, Indonesia

Rezky Fernanda Department of Pancasila and Citizenship Education, Faculty of Teacher Training and Education, Universitas Muhammadiyah Sumatera Utara, North Sumatra, Indonesia

Jamaludin & Hodriani Department of Pancasila and Citizenship Education, Faculty of Social Sciences, Universitas Negeri Medan, North Sumatra, Indonesia

Wiflihani Music Education Study Program, Faculty of Language and Art, Universitas Negeri Medan, North Sumatra, Indonesia

Ahmad Muhajir Universitas Islam Sumatera Utara, North Sumatra, Indonesia

Yurial Arief Lubis Government Science Study Program, Faculty of Social and Political Sciences, Universitas Medan Area, North Sumatra, Indonesia

ID 357 Triple Helix Relations and Patent Deposition in Innovation Projects at a Large Brazilian University

André Bassetto Okamura, Industrial Engineer, University of Brasília, Brasília, Brasil

Sanderson César Macêdo Barbalho, Industrial Engineering Department, University of Brasília, Brasília, Brasil

ID 358 Statistical analysis of female education in income: study case for Brazilian states

Érica Gonçalves Rezende Department of Production Engineering São Carlos Engineering School (EESC)/University of São Paulo (USP) Avenida Trabalhador Sancarlense, 400 – 13566-590 – São Carlos (SP) – Brazil

Caio Falconi

Isotilia Costa Melo Department of Production Engineering São Carlos Engineering School (EESC)/University of São Paulo (USP) Avenida Trabalhador Sancarlense, 400 – 13566-590 – São Carlos (SP) – Brazil

Daisy Aparecida do Nascimento Rebelatto Department of Production Engineering São Carlos Engineering School (EESC)/University of São Paulo (USP) Avenida Trabalhador Sancarlense, 400 – 13566-590 – São Carlos (SP) – Brazil

ID 367 Proposal for the Optimization of the Manufacturing Process of Integral Kitchens of the Casa Madeira Company Across to Lean Six Sigma Methodology

Laura Cristina Carvajal Benítez, Ingeniera Industrial, Fundación Universitaria de Popayán, Popayán – Cauca – Colombia

Luis Fernando Pedraza Ruiz, Ingeniero Industrial and Magister en Diseño y Dirección de Proyectos Tecnológicos, Fundación Universitaria de Popayán, Popayán – Cauca – Colombia

Alexandra Bustamante Pizo, Ingeniera Industrial, Fundación Universitaria de Popayán, Popayán – Cauca – Colombia

Daniel Sandoval Aristizabal, Ingeniero Industrial, Fundación Universitaria de Popayán, Popayán – Cauca – Colombia

ID 371 Critical Success Factors in Management of University-Industry Cooperation Projects: A Case Study in Aerospace and Defense Industry

Marcel Senaubar Alves and Eduardo Bizeli Tiburtino, PhD student in Technology and Innovation Management, Department of Production, Engineering – Federal University of São Carlos, São Carlos – SP, Brazil

Ana Lúcia Vitale Torkomian, PhD Professor in the Department of Production Engineering, Federal University of São Carlos, São Carlos – SP, Brazil

ID 372 The Effects of Stakeholders Management on Risks: An IT Projects Analysis

Letícia Barbosa Gomes Figueiredo Filho, Diego de Castro Fettermann and Marina Bouzon, Production and Systems Engineering Department, Universidade Federal de Santa Catarina (UFSC), Florianópolis, SC, Brazil

ID 373 The use of simulation in analysis of femoral prostheses fatigue

Rodrigo Cesar dos Santos, Wilson Carlos da Silva Junior, Givanildo Alves dos Santos and Edson Bispo Ferreira Department of Mechanical Sao Paulo Federal Institute Sao Paulo, Brazil

Vinicius Torres dos Santos and Márcio Rodrigues da Silva Salvador Arena Foundation Educational Center Termomecanica São Paulo S.A. São Bernardo do Campo, Brazil

Antonio Augusto Couto Materials Engineering Department Mackenzie Presbyterian University, UPM São Paulo, Brazil

ID 374 Efficiency in technology licensing of science and technology institutions for companies: a systematic review

Carlos Pusinhol, Debora Taño, and Ana Lúcia Vitale Torkomian, Production Engineering Department, Federal University of São Carlos, São Carlos – São Paulo – Brazil

ID 375 The influence of parameters and strategies on parts manufactured by FDM process

Damião de Oliveira Fiuza, Department of Mechanics, São Paulo Faculty of Technology, São Paulo, SP, Brazil

Jesiel Ribeiro da Rocha, Department of Mechanical Engineering, Insper, São Paulo, SP, Brazil

Givanildo Alves dos Santos, Department of Mechanical Engineering, Federal Institute of São Paulo, São Paulo, SP, Brazil

Vinicius Torres dos Santos and Márcio Rodrigues da Silva Salvador Arena Foundation Educational Center Termomecanica São Paulo S.A. São Bernardo do Campo, Brazil

Antonio Augusto Couto Materials Engineering Department Mackenzie Presbyterian University, UPM São Paulo, Brazil

Alex Camilli Bottene Teaching and Research Institute, Insper São Paulo, Brazil

ID 377 Triple Helix, Innovation and Technology Transfer from the Initiative of the Interested Company: Case Study of The Drug VONAU-FLASH and Its Partnership Between USP and Biolab Sanus Farmacêutica LTDA

Afonso de Carvalho Costa Lopes, Eduardo Magalhães, Neiane Andreato and Vanessa Araújo Pessoa, Centro de Desenvolvimento Tecnológico de Brasília – CDT, Universidade de Brasília (UNB) – Brasília, DF – Brasil

Sanderson César Macedo Barbalho, Production Engineering Department, Faculty of Technology, University of Brasília, Brasília, DF, Brasil

ID 383 Researching Electromobility in Brazil: Elements for Building a National Policy

Sérgio Roberto Knorr Velho, Mechatronics Systems Postgraduation Program, Technology College (FT) – University of Brasília, Brasília, DF, Brazil

Sanderson César Macêdo Barbalho, Mechatronics Systems Postgraduation Program, Technology College (FT) – University of Brasília, DF, Brazil

Cláudio Albuquerque Frate, Mechanical Engineering Department, Technology College (FT) – University of Brasília, Brasília, DF 70910-900, Brazil

ID 385 The Life Cycle Cost Calculation as an enabler of Product Sustainability

Antonio Henrique Duarte, Production Engineering Department, Faculty of Technology, University of Brasília, Brasília, DF, Brasil

Sanderson César Macêdo Barbalho, Production Engineering Department, Faculty of Technology, University of Brasília, Brasília, DF, Brasil

Luciano Sales, Production Engineering Department, Faculty of Technology, University of Brasília, Brasília, DF, Brasil

Rodrigo Augusto dos Santos, Computer science and engineering department, The University of Texas at Arlington, Arlington, USA

ID 388 Analysis of Cost and Benefit on Safety Critical Systems

Jussara Pimenta Matos, Department of Electrotechnical, Instituto Federal de São Paulo, São Paulo, SP

ID 406 Production Improvement in SME's Enterprises through Lean: A Case Study

Maximiliano Arroyo Ulloa, Faculty of Engineering, Santo Toribio de Mogrovejo Catholic University, Chiclayo, Peru

Lucía Sánchez Celis, Zur Distribution Food Company, Lima, Peru

Maira Arroyo Lujan Management Department Decorlux-SAC Enterprises Lima, Peru

Javier Beltran Reyes Business Intelligence Department Comercio-Group Lima, Peru

ID 409 Supplier Selection using Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS) Method: A Case Study

Nida An Khofiyah Master Program of Industrial Engineering Department, Faculty of Engineering Universitas Sebelas Maret, Jl. Ir. Sutami, 36 A, Surakarta, Indonesia

Sulvi Fitriani, Syifa Luthfiana Asnan Industrial Engineering Department, Faculty of Engineering Universitas Sebelas Maret, Jl. Ir. Sutami, 36 A, Surakarta, Indonesia

Wahyudi Sutopo University Centre of Excellence for Electrical Energy Storage Technology Research Group Industrial Engineering and Techno-Economic, Industrial Engineering Department, Faculty of Engineering Universitas Sebelas Maret, Surakarta, Jl. Ir. Sutami, 36 A, Surakarta, Indonesia

ID 420 Dynamic Capability of Marketing: A Qualitative Study of Indonesian Hotel Industry

Yokie Radnan Kristiyono and Evo Sampetua Hariandja, Department of Management Faculty of Economics and Business Universitas Pelita Harapan, Tangerang-15811, Indonesia

ID 428 Identification and analysis of efficiency drivers: Evidences from Brazilian Airports

Prof. Paulo Sodré Hollaender, MSc, School of Applied Sciences (FCA), State University of Campinas, Limeira, BRA

Prof. Antonio Carlos Pacagnella Junior, PMP, PhD., School of Applied Sciences (FCA), State University of Campinas, Limeira, BRA

ID 429 Traditional Ceremony “NDILO WARI UDAN” as a Transcendental Communication Attraction for the Karo Tribe in North Sumatera

Indira Fatra Deni Peranginangin, Universitas Islam Negeri Sumatera Utara Medan

Abrar Adhani, Universitas Muhammadiyah Sumatera Utara

H Herwansyah Putra, Universitas Islam Negeri Sumatera Utara

Ahmad Rudy Sihalohe, Poldas Sumut

Mukmin Saipul, Universitas Islam Negeri Sumatera Utara

Mucklis, Universitas Sumatera Utara

ID 474 Game Theory Supporting a Decision-Making Process to Reduce Losses in Hydro Generating Plants Overhaul Delays

Alécio Julio da Silva, Department of Mechatronics and Mechanical System Engineering, USP – University of São Paulo, São Paulo, SP, Brazil

Marjorie Maria Bellinello, Department of Mechanical and Maintenance Engineering, UTFPR – Federal University of Technology of Paraná, Guarapuava, PR 85053-525, Brazil

Gilberto Francisco Martha de Souza, Department of Mechatronics and Mechanical System Engineering, USP – University of São Paulo, São Paulo, SP 05508-900, Brazil

Adherbal Caminada Netto, Department of Mechatronics and Mechanical System Engineering, USP – University of São Paulo, São Paulo, SP 05508-900, Brazil

Carlos Alberto Murad, Department of Mechatronics and Mechanical System Engineering, USP – University of São Paulo, São Paulo, SP, Brazil

Silvio I. Nabeta, Department of Energy and Electrical Automation, University of São Paulo, Av. Prof. Luciano Gualberto, 380 trav. 3, São Paulo, São Paulo, ZIP 05508-900, Brazil

ID 475 Design of an Automated Paper Cutting Machine

Sara AlDrais, Fatmah AlZhraa Ibrahim, Nourah AlFouderi, Ali Mamedov

College of Engineering and Technology, American University of the Middle East, Kuwait

ID 488 Critical issues for an analytical framework in the relationship between academic spin-offs and their incubators

Ana Carolina Nerva Blumm, Centro de Desenvolvimento Tecnológico de Brasília – CDT, Universidade de Brasília (UNB) – Brasília, DF – Brasil

Sanderson César Macêdo Barbalho, Industrial Engineering Department, Technology College (FT) – University of Brasília, Brasília, DF 70910-900, Brazil

ID 490 Improving Cycle Time of Returnable Packaging Logistics Management in a Philippine Automotive Manufacturing Plant

Bryan Jay O. Capistrano, Industrial Engineering and Management Department, Polytechnic University of the Philippines

Rhodora N. Buluran, PUP Graduate School, M.H. del Pilar Campus, Sta. Mesa, Manila 1016, Philippines

ID 491 Teaching Work Measurement through Origami in Developing Countries

Boris Christian Herbas Torrico , Professor of Industrial Engineering, Exact Sciences and Engineering Research Center (CICEI), Bolivian Catholic University, Cochabamba, Bolivia

ID 493 Risk Map Elaboration in Safety Technological Educational: Teaching Prevention Tool

Maria Isabel Monteiro Trigo, Work Safety college student, CEFET/RJ, Rio de Janeiro, Brazil

Aline Guimarães Monteiro Trigo, Professor and head of the Sustainability Division, CEFET/RJ, Rio de Janeiro, Brazil

Danielle Samira Ferreira Abdalla , Engineer and head of the Occupational Health and Safety Section, CEFET/RJ, Rio de Janeiro, Brazil

Carina da Conceição Rodrigues Acioli Ferreira, Occupational Safety Technician, CEFET/RJ, Rio de Janeiro, Brazil

Úrsula Maruyama, Business Administration professor, CEFET/RJ, Brazilian Ministry of Education, Setec/MEC, Brasília-DF, Brazil

José Aires Trigo, Post graduation in Business Administration and Development, UNESA University,

Rio de Janeiro, Brazil

ID 496 Analytic Study for Subsea Oil Production Optimization Using Lean Concepts

Hamdy Ahmed Abdel Rahiem, Prof. Yehia M. Youssef and Dr. Mohamed H. Mourad Industrial and Engineering Management Department, Faculty of Engineering and Technology, College of Engineering and Technology, Arab Academy for science Technology and Maritime Transport, Alexandria, Egypt

ID 497 Innovation ecosystem at RFEPCT and student leadership at Cefet/RJ

Nayne da Silva Moura, Business Administration Department, CEFET/RJ, Rio de Janeiro, Brazil

Priscila Daniel de Paiva Gama e Silva, DIGES – Strategic Management Directory, CEFET/RJ, Rio de Janeiro, Brazil

Francisco Casarim Rapchan, Computer Science Department, IFES, Espírito Santo, Brazil⁴

Nelson Mendes Cordeiro Mechanical Engineering Department CEFET/RJ Rio de Janeiro, Brazil

Wellington Ávila Information Technology professor IBMR/Vassouras University Rio de Janeiro, Brazil

Luciano Carino Business Administration Department CEFET/RJ Rio de Janeiro, Brazil

Úrsula Maruyama, Business Administration professor, CEFET/RJ, Brazilian Ministry of Education, Setec/MEC, Brasília-DF, Brazil

ID 498 ‘Being a Woman’ and ‘Being a Scientist’: Contributions to Women Participation in Science

Cintia Guimarães Ferreira, Post graduation in Technological Education, CEFET/RJ, Rio de Janeiro, Brazil

Viviane Lima da Conceição, Tourism Management Department, CEFET/RJ, Rio de Janeiro, Brazil

Andrea Silveira Business Administration CEFET/RJ Rio de Janeiro, Brazil

Aline Trigo Strategy Division for Institutional Environmental Sustainability Centro Federal de Educação Tecnológica Celso Suckow da Fonseca (CEFET/RJ) Rio de Janeiro, Brazil

Lara Brunelle Almeida Freitas Regional Development and Agribusiness Program UNIOESTE Paraná, Brazil

Ana Carolina Oliveira de Santana, Business Administration, CEFET/RJ, Rio de Janeiro, Brazil

Úrsula Maruyama, Business Administration professor, CEFET/RJ, Brazilian Ministry of Education, Setec/MEC, Brasília-DF, Brazil

ID 499 ANSPI: an Analytic Network Process Software Tool

Michele Kremer Sott¹, Maikel Luis Kolling¹, Aline Ramos da Silva¹, Pablo Venzke Tessmann¹, Gislene Cássia S. Schwambach¹, Tulio Cicero Haas Correa Lima¹, João Victor Kothe¹, Luciano André Alff¹, Leonardo B. Furstenau¹ and Liane Mahlmann Kipper¹ ¹Graduate Program in Industrial Systems and Processes University of Santa Cruz do Sul Santa Cruz do Sul – Brazil

ID 500 Overview of Nano-Biotechnology Potential in Wastewater and Effluent Treatment

Sunday A. Afolalu, Osise Okwilagwe, Biodun B. Matthew and Moses E. Emetere, Department of Mechanical Engineering, Department of Physics, Covenant University, Ota, Nigeria

Omolola O. Yusuf, Department of Microbiology, Obafemi Awolowo University, Ile-Ife, Nigeria

Olusegun D. Samuel, Department of Mechanical Engineering, Federal University of Petroleum Resources, Effurun, Delta –State. Nigeria

ID 501 Application of Nanomaterials and Nanotechnology in Addressing Covid-19 Challenges – Review

Sunday A. Afolalu, Ayodeji A, Noiki, Abiodun A. Abioye and Moses E. Emetere; Osise Okwilagwe, Department of Mechanical Engineering, Department of Physics, Covenant University, Ota, Nigeria

Olabisi Omolola, Department of Microbiology, Obafemi Awolowo University, Ile-Ife, Nigeria

Olusegun D. Samuel, Department of Mechanical Engineering, Federal University of Petroleum Resources, Effurun, Delta –State. Nigeria

ID 502 Developing of Multi-Criteria Decision Making Model in Assessment of Outcomes Based Best Value in UAE Public Construction Sector

Ihsan Al Hosani, PhD in Engineering Management Program, University of Sharjah, Sharjah, UAE

Udechukwu Ojiako, and Fikri Dweiri, Industrial Engineering and Engineering Management Department, University of Sharjah, Sharjah, UAE

ID 505 An Exploratory Research on Startup Firms Operating in Turkey

Eren Özceylan, Industrial Engineering Department, Gaziantep University, Gaziantep, Turkey

İbrahim Halil Korkmaz, İslahiye Vocational School, Gaziantep University, Gaziantep, Turkey

Ayca Özceylan, Oğuzeli Vocational School, Gaziantep University, Gaziantep, Turkey

ID 506 The Use of Circular Economy Indicators to Improve Sustainability in the Recycling Aluminium Context

Paulo Vitor dos Santos Gonçalves, Universidade Federal de Santa Catarina, Graduation Program in Production Engineering

Rafaela Francisca Moreira Barbosa, Universidade Federal de Santa Catarina, Graduation Program in Production Engineering

Vitor Allan Prats Raspini, Universidade Federal de Santa Catarina, Department of Production Engineering and Systems

Simone Sehnem, UNOESC and UNISUL, Graduation Program in Administration

Lucila M. S. Campos, Universidade Federal de Santa Catarina, Department of Production Engineering and Systems

ID 507 The determinants of a culture of quality for Bolivian firms

Boris Christian Herbas Torrico, Professor of Industrial Engineering, Exact Sciences and Engineering Research Center (CICEI), Bolivian Catholic University, Cochabamba, Bolivia

Jarin Canaza Fernandez, Research Assistant of Industrial Engineering, Exact Sciences and Engineering Research Center (CICEI), Bolivian Catholic University, Cochabamba, Bolivia

ID 508 Product development and Business Creation opportunity during the Pandemic: A Case study of Le Misure – Indonesia Italian Fusion Food

Alvin, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

Mulyani, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia 11480

Rudy Aryanto, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 509 The Value Innovation Capabilities to Create Powerful Business Strategy: A Case Study on The High Business Performance of An Investment Business in Covid 19 Pandemic

Jibril Muhammad Irvan, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

Mulyani, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 510 Frozen Food Packaging And Innovation Product Design Addressing Customers Pains Point In Covid 19 Quarantine: A Case Study of Homemade Frozen Food

Muhammad Farhan Arvianto, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

Nada Piedita, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

Mulyani, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 512 Utilization of Technology and Perceived Complexity

Doni Purnama Alamsyah, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

Lia Mazia, STMIK Nusa Mandiri, Jakarta, Indonesia

Lukmanul Hakim, Universitas Bina Sarana Informatika, Jakarta, Indonesia

Bambang Sukajie, Chairil M. Noor, Ani Solihat, Universitas ARS, Bandung, Indonesia

ID 513 Digital Branding and Online Marketing Communication Strategy Optimization: A Case Study of a Small Hits Beverage Business

Marsha Deborah, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

Agathacia Melinda, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

Andreas Chang, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

Mulyani, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 515 Best practices for COVID-19 Test Process in a Hospital Emergency Department

Jéssica de Assis Dornelles, Jassen Rodrigues da Silva, Patrick Ferreira da Silva, Vicente Colombo Júnior and Laura Visintainer Lerman, Industrial Engineering Department, Federal University of Rio Grande do Sul, Porto Alegre, Brasil

ID 516 The Implementation of Mixture Design and Design Thinking for the Development of a Bolivian Native Plants Based Liquor

Boris Christian Herbas Torrico and René Cabero Villazón, Exact Sciences and Engineering Research Center (CICEI), Bolivian Catholic University, Cochabamba, Bolivia

ID 520 The Mediating Impact of Sustainability on the Relationship between Flexible Manufacturing Systems and Operational Performance

Mohamad Ali Mezher and Raed El-Khalil, Information Technology and Operations Management, Lebanese American University, Beirut, Lebanon

ID 522 Process Reliability Improvement of Slitting Machines in an Industrial Setting

Dolor Roy Enarevba, Modestus O. Okwu, Lagouge K. Tartibu, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

Chukwuebuka M. U-Dominic, Department of Industrial and Production Engineering, Nnamdi Azikiwe University, Awka, Nigeria.

Ifeyinwa J. Orji, Research Center for Smarter Supply Chain, Dongwu Business School, Soochow University, No. 50 Donghuan Road, Suzhou, Jiangsu 215006, People's Republic of China

ID 523 Six Sigma as a Strategy for Process Improvement in Industry 4.0

Modestus O. Okwu, Dolor Roy Enarevba, Lagouge K. Tartibu, Oluwayomi J. Oyejide, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa
Chukwuebuka M. U-Dominic, Department of Industrial and Production Engineering, Nnamdi Azikiwe University, Awka, Nigeria

ID 524 Systematic Literature Review of Six Sigma Philosophy in Manufacturing Operations

Chukwuebuka M. U-Dominic, Department of Industrial and Production Engineering, Nnamdi Azikiwe University, Awka, Nigeria.

Modestus Okwu, L.K. Tartibu and Dolor Roy Enarevba, Department of Mechanical Engineering, University of Johannesburg, South Africa.

ID 525 Improving the quality and operations of a cable manufacturing company by implementing Six Sigma-DMAIC Technique

Chukwuebuka M. U-Dominic, Department of Industrial and Production Engineering, Nnamdi Azikiwe University, Awka, Nigeria.

Modestus O. Okwu and Lagouge K. Tartibu, Dolor Roy Enarevba, Department of Mechanical Engineering and Industrial Engineering, University of Johannesburg, South Africa

Ifeyinwa J. Orji, Research Center for Smarter Supply Chain, Dongwu Business School, Soochow University, No. 50 Donghuan Road, Suzhou, Jiangsu 215006, People's Republic of China

ID 526 Textile Waste Management Practices in the Garment Industry: A Circular Economy Perspective

Pedro Seolin dos Santos, Universidade Federal de Santa Catarina, Graduate Program in Production Engineering, Florianopolis – SC, Brazil

Lucila M. S. Campos, Universidade Federal de Santa Catarina, Graduate Program in Production Engineering, Florianopolis – SC, Brazil

Diego A. Vazquez-Brust, University of Portsmouth, Portsmouth Business School, Portsmouth, UK

ID 537 Development of Dimensions and Indicators for Quality Measurement of Mobile Banking Services

Billy Arma Pratama, Manik Mahachandra, and Heru Prastawa, Department of Industrial Engineering, Diponegoro University, Semarang, Central Java, Indonesia

ID 538 Towards the Realization of Engineering Postgraduate Students' Engagement and Employability: A PBL Involvement in ERP

Amjad Khalili , Department of Mechanical Engineering , Palestine Technical University Kadoorie (PTUK), Former Visiting Fellow to QUT, Tulkarm, West Bank, B.O box 7, Palestine

ID 539 LECTURER PERFORMANCE DETERMINATION MODEL BASED ON ADAPTIVE NEURO FUZZY INFERENCE SYSTEM (Case Study: Universitas Muhammadiyah Jakarta)
Decision Sciences Umi Marfuah Muhammadiyah University of Jakarta Kota Jakarta
Pusat Indonesia

ID 540 Confirmatory Factor Analysis of Comprehensive Traffic State Assessment (CTSA): A Case Study Approach towards an Integrated LGU Transportation Planning and TrafficManagement Model

Redrax Stephen A. Santos and Marvin I. Noroña, School of Industrial Engineering and Engineering Management, Mapua University, Manila, Philippines

ID 541 Do embasamento teórico à parte prática em aulas remotas: experiências de professores no Ensino Médio Técnico

José Geraldo Basante, Aluno do Programa de Pós-Graduação em Engenharia de Produção, Unip Universidade Paulista

Márcia Terra, Orientadora do Programa de Pós-Graduação em , Engenharia de Produção, Unip Universidade Paulista

ID 542 Literature Review and Bibliometry: a Groundwork on Servitization

Gustavo Canaver Pedrinho and Paulo A. Cauchick-Miguel, Graduate Program of Production Engineering, Universidade Federal de Santa Catarina, Florianópolis, SC 88040-900, Brazil

ID 547 Analysis of synergies between Circular Economy and Integrated Management Systems: a bridge to unite sustainable solutions and business efficiency

Maximilian Espuny, Vitor H. M. Santos, Thalita L. R. Campos, Vinícius de M. Oliveira, Antonio E. Kurita, Otávio J. Oliveira, São Paulo State University (UNESP), Engineering School, Campus Guaratinguetá, Guaratinguetá, SP, 12516-410, Brazil

ID 548 IIoT Architecture Using LoRa Technologie, LoRaWAN and OPC UA Protocols

Angelo Guimarães Silva, Federal University of Minas Gerais, 6627 Ave. Antônio Carlos, Belo Horizonte, MG 31270-901, Brazil

Hugo César Coelho Michel, Electronic Engineering Department, Federal University of Minas Gerais, Antônio Carlos, Belo Horizonte, MG, Brazil

ID 549 A Mathematical Model for Patient Scheduling in Radiotherapy Treatment

Satchapot Sriprakayporn, Graduate Program/ Master Degree's Program in Logistics Engineering and Supply Chain Management, Faculty of Engineering, Chiang Mai University, Chiang Mai, 50200, Thailand

Wapee Manopiniwes, Center of Healthcare Engineering System, Department of Industrial Engineering, Faculty of Engineering, Chiang Mai University, Chiang Mai, 50200, Thailand

ID 550 A Case Study of Inventory Management System for an International Lifestyle Product Retailer in Bolivia

Boris Christian Herbas Torrico and Sebastian Alem Oyola, Exact Sciences and Engineering Research Center (CICEI), Bolivian Catholic University, Cochabamba, Bolivia

ID 551 Perceived Value Mediation Model to Improve Customer Expectation and Loyalty

Tjia Fie Tjoe, Ronny Samsul Bahri, Doni Purnama Alamsyah, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

Khidhir Akbar Ghofar, Universitas ARS, Bandung, Indonesia

Heni Rohaeni, Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia

ID 552 Development of Seasonal Product in Star-Up Business

Natalie Putri, Rudy Aryanto, Chyntia Ika Ratnapuri, Doni Purnama Alamsyah, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 553 Market Growth Strategy through Consumers' Satisfaction, Product Quality and Brand Image: Evidence from Jakarta Indonesia

Sidik Budiono, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

John Tampil Purba, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

Gidion P. Adirinekso, Department of Management Faculty Economics and Business, Universitas Kristen Krida Wacana, Jakarta, 11470 Indonesia

Wilson Rajagukguk, Department of Management Faculty of Economics and Business, Universitas Kristen Indonesia, Jakarta

ID 555 Strategic Business Analysis by Using Determinants of Buying Decision on Products: Lessons from an International Company in Indonesia

Sidik Budiono, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

John Tampil Purba, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

Gidion P. Adirinekso, Department of Management Faculty Economics and Business, Universitas Kristen Krida Wacana, Jakarta, 11470 Indonesia

ID 556 Measurement of Brand Image, Price, Promotion, Ease of Use and Satisfaction to Customer Loyalty of on line Transportation in Urban Area

Dimitrius Hikaru & John Tampil Purba, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

Sidik Budiono, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

Wilson Rajaguguk, Department of Management Faculty of Economics and Business, Universitas Kristen Indonesia, Jakarta, Indonesia

Gidion P. Adirinekso, Department of Management Faculty of Economics and Business, Universitas Kristen Krida Wacana, Jakarta, Indonesia

ID 557 Global Brand Commitment in International Market: The Factors Affecting Global Brand Commitment

Justin Evanson and Sidik Budiono, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

John Tampil Purba, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

ID 558 How Brand Image Mediated Sales Promotion and Price to Impact Shopee Consumer's Decision? The Case of Urban Worker in Jakarta

Gidion P. Adirinekso, Department of Management Faculty Economics and Business, Universitas Kristen Krida Wacana, Jakarta 11470, Indonesia

John Tampil Purba, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang 15811, Indonesia

Sidik Budiono, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang 15811, Indonesia

Wilson Rajaguguk, Department of Management Faculty of Economics and Business, Universitas Kristen Indonesia, Jakarta 13630, Indonesia

ID 559 Innovation Product Development and Satisfaction on Business

Sonya Angela, Idi Jahidi, Santika Syaravina, Doni Purnama Alamsyah, Entrepreneurship Department, BINUS Business School Undergraduate Program, Bina Nusantara University, Jakarta, Indonesia

ID 560 The Role Of Economic And Development Factors On Average National Exam Score At Primary, Junior Secondary, And Senior Secondary Level In Indonesia

Wilson Rajaguguk, Faculty of Economics and Business, Universitas Kristen Indonesia, Jl. Mayjen Sutojo No.2, Cawang, Jakarta 13630, Indonesia

John Tampil Purba and Sidik Budiono, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

Gidion P. Adirinekso, Department of Management Faculty of Economics and Business, Universitas Kristen Krida Wacana, Jakarta, Indonesia

ID 562 How Product Quality, Brand Image and Price Perception Impact on Purchase Decision of Running Shoes?

William Steven and John Tampil Purba, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

Sidik Budiono, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

Gidion P. Adirinekso, Department of Management Faculty of Economics and Business, Universitas Kristen Krida Wacana, Jakarta, Indonesia

ID 563 Determining the Most Habitable Planet Using Multi-Criteria Decision Making Techniques

Gizem Gunaydin, Gamze Duvar and Eren Ozceylan, Industrial Engineering Department, Gaziantep University, Gaziantep 27100, Turkey

ID 564 Total Specific Allocation Grant for Population Development and Population Growth in Indonesia

Omas Bulan Samosir, Faculty of Economics and Business, Universitas Indonesia Depok Indonesia

ID 566 Assessing Disruptive Crises of Supply Chain in Firms Amidst Covid-19: An application of Multi Category-SVM using k-means Clustering

MD Ariful Islam, Shubho Roy, Nishat Farzana Supriti and Naimur Rahman Chowdhury, Department of Mechanical & Production Engineering, Ahsanullah University of Science & Technology, Dhaka, Bangladesh

ID 567 Evaluation of Brand Communication and Service Performance toward Brand Loyalty through Brand Trust as the Mediation Variables of Bank's Customers

Fullyana Surjana and John Tampil Purba, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

Sidik Budiono, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang-15811, Indonesia

ID 568 Assessing Performance and Improving Productivity through Identification of Sewing Defects: A Multi Criteria Based Case Study in an Apparel Firm in Bangladesh

Sharmine Akther Liza, Dept. of Mechanical and Production Engineering, Ahsanullah University of Science and Technology, Dhaka, Bangladesh

Naimur Rahman Chowdhury, Dept. of Mechanical and Production Engineering, Ahsanullah University of Science and Technology, Dhaka, Bangladesh

MD Rakib Rayhan, Dept. of Industrial and Production Engineering, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

ID 578 Worker Switching Intention from Pay Later Apps to Card: An HCM Approach of Traveloka Customers in Jakarta

Gidion P. Adirinekso, Department of Management Faculty Economics and Business, Universitas Kristen Krida Wacana, Jakarta 11470, Indonesia

John Tampil Purba, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang 15811, Indonesia

Sidik Budiono, Department of Management Faculty of Economics and Business, Universitas Pelita Harapan, Tangerang 15811, Indonesia

ID 579 The effect of shift work on police officers' stress, sleep quality, and cognitive performance in Sharjah Police Workforce.

Bushra Almheiri and Hamad Rashid , Department of Industrial Engineering and Engineering Management, University of Sharjah, Sharjah, UAE

ID 580 Recognizing Critical Drivers to Mitigate Supply Chain Disruptions in Pharmaceutical Industry during COVID-19

Naimur Rahman Chowdhury, Sharmine Akther Liza, Syed Tanvir, Abu Saimon Raj and Pritom Mohajon, Department of Mechanical & Production Engineering, Ahsanullah University of Science & Technology, Dhaka, Bangladesh

ID 581 Innovation in the Auto Industry- A Review of Organizational Structure in Relation to Innovation

Nicholas Evans and Muhammad S Ahmed , Engineering Management, School of Engineering, Eastern Michigan University, Ypsilanti, MI. 48197

ID 582 Internet of Things and Artificial Intelligence applied to predictive maintenance in Industry 4.0: A systematic literature review

Vitor Mendes Caldana and Francisco Diego Garrido da Silva, Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, Sorocaba, São Paulo, Brasil

Rafael Araujo de Oliveira and Juliana Freitag Borin, UNICAMP, Campinas, São Paulo, Brasil

ID 584 Adoption and intention of the usage of shared mobility through Technology Acceptance Models: Systemic analysis of literature through PROKNOW-C

Gilson Ditzel Santos, Federal Technological University of Paraná, Pato Branco, Brazil

Natália Misturini, Federal Technological University of Paraná, Pato Branco, Brazil

Fernando José Avancini Schenatto Federal Technological University of Paraná Pato Branco, Brazil

ID 585 Wikipedia Edition in 8 Languages. 2001 a 2019

Wilson Alexander Pinzón Rueda, Facultad Tecnológica, Universidad Distrital "Francisco José de Caldas", Bogotá, Colombia

Carlos Andrés Arango Londoño, Departamento de Ingeniería Industrial, Universidad de LaSalle, Bogotá, Colombia

Jose Martin Díaz, Facultad de Ciencias Empresariales, Corporacion Universitaria Minuto de Dios, Bogotá, Colombia

ID 586 Global Retail Trade Index. 2004- 2019

Wilson Alexander Pinzón Rueda, Facultad Tecnológica, Universidad Distrital "Francisco José de Caldas", Bogotá, Colombia

Carlos Andrés Arango Londoño, Departamento de Ingeniería Industrial, Universidad de La Salle, Bogotá, Colombia

Diego Karachas Rodriguez, Facultad de Ciencias Empresariales, Corporacion Universitaria Minuto de Dios, Bogotá, Colombia

ID 587 NASDAQ, COLCAP Colombia Exchange Rate. 2011-2014

Wilson Alexander Pinzón Rueda, Universidad Distrital "Francisco José de Caldas", Bogotá, Colombia

ID 588 SATC Creative Entrepreneurship Program: An Experience Report

Gustavo dos Santos de Lucca, Coordenador de Engenharia da Computação e do Cocreation Lab Satc, Centro Universitário Satc, Criciúma, Brasil

Jovani Castelan, Coordenador Geral Centro Universitário Satc, Centro Universitário Satc, Criciúma, Brasil

Vânia Medeiros Ribeiro, Coordenadora Biblioteca Centro Universitário Satc, Centro Universitário Satc, Criciúma, Brasil

ID 589 Portfolio Management of Social Projects: A case study in IFSP

Anne Karolyne de Almeida Lima and Vitor Mendes Caldana, Instituto Federal de Educação, Ciência e Tecnologia de São Paulo, Sorocaba, São Paulo, Brasil

ID 590 A System Dynamics Model for Warehouse Performance Measurement with Highly Seasonal Demand and with Long and Short Life Products

Diego Ramirez-Malule, Juan Sebastián Jaén-Posada, and Juan G. Villegas, Grupo de Investigación ALIADO, Universidad de Antioquia UdeA, Calle 70 No. 52-21, Medellín, Colombia

ID 598 Towards a Conceptual Framework for Design and Functionality of Websites and Smart Device Apps for Startups in Lebanon: Impact on Customer Journey

Manal Yunis, Lebanese American University, Ras Beirut, Lebanon

Abdul-Nasser Kassar, Tala Jamil Nassar, Adnan Kassar School of Business Lebanese American University Beirut, Lebanon

ID 599 Towards a Conceptual Framework on the Importance of Privacy and Security Concerns in Audit Data Analytics

Manal Yunis, Raed El-Khalil and Miray Ghanem Lebanese American University, Ras Beirut, Lebanon

ID 600 A Risk-Based Management Approach in Minimizing Occupational Accidents in Manufacturing Locator Companies in Philippine Special Economic Zones

Simon Vincent W. Bondoc and Marvin I. Noroña, School of Industrial Engineering and Engineering Management, Mapúa University, Manila, Philippines

ID 601 A Workplace Design Improvement for Visual Inspection in a Philippine-based Aircraft Furniture Company: A Cognitive Ergonomic Approach

Terrylyn M. Narvaez and Marvin I. Noroña, School of Industrial Engineering and Engineering Management, Mapúa University, Manila, Philippines

ID 602 Analysis of Factors Affecting Road Traffic Accidents in the City of Makati Philippines

Rodiel L. Rodriguez, Jan Tricia B. Villamaria, and Marvin I. Noroña, School of Industrial Engineering and Engineering Management, Mapúa University, Manila, Philippines

ID 603 Developing a Susceptibility Index for Elderly Care Management in the Philippines: A Systems Perspective

Joanne Christine C. Brodit and Marvin I. Noroña, School of Industrial Engineering and Engineering Management, Mapúa University, Manila, Philippines

ID 604 Total Productive Maintenance in the Philippine Rice Production Sector

Charmine Sheena R. Saflor and Marvin I. Noroña, School of Industrial Engineering and Engineering Management, Mapúa University, Manila, Philippines

ID 608 Knowledge Based Orchestration: Response to the Dynamic Environmental Covid-19 Pandemic

Hadi Purnomo, Universitas Gadjah Mada (UGM), Indonesia, and Universitas Kristen Immanuel (UKRIM), Indonesia

Wakhid Slamet Ciptono, Universitas Gadjah Mada (UGM), Indonesia

Hargo Utomo, Universitas Gadjah Mada (UGM), Indonesia

Kusdhianto Setiawan, Universitas Gadjah Mada (UGM), Indonesia

ID 612 Designing a Low-Cost Thermal Energy Storage System for Small-Scale Tobacco Farmers in Zimbabwe

Nelson Shati, Ignatio Madanhire and Tawanda Mushiri, Department of Mechanical Engineering , University of Zimbabwe, Mount Pleasant, Harare, Zimbabwe

Emmanuel Mashonjowa, Department of Physics , University of Zimbabwe, P. O. Box MP167, Mount Pleasant, Harare, Zimbabwe

ID 613 Empirical Modelling of the Water Supply Crisis in the Mpumalanga Province of South Africa

Motsi Ephrey Matlakala and Daramy Vandi Von Kallon, Mechanical Engineering Department, University of Johannesburg, South Africa

ID 614 Systems Dynamics Modelling of the Water Supply Problem in the Limpopo Province of South Africa

Motsi Ephrey Matlakala and Daramy Vandi Von Kallon, Mechanical Engineering Department, University of Johannesburg, South Africa

ID 615 Open Source E-Learning Model Base on Cloud Computing Technology

Inayatulloh, Information System Department, School of Information System, Bina Nusantara University, Jakarta, Indonesia

Enggal Sriwardiningsih Management Department, Business School-Undergraduate Bina Nusantara University, Jakarta, Indonesia

Hendra Alianto Information System Department School of Information System Bina Nusantara University, Jakarta, Indonesia

ID 621 The Digital Economy Growth in Indonesia through E-Commerce

Michael Putra Hartanto, Stephanie, and Doni Purnama Alamsyah Entrepreneurship Department, BINUS Business School Undergraduate Program Bina Nusantara University Jakarta, Indonesia

ID 622 Job Satisfaction and Organizational Performance: Empirical Evidence from Pakistan's Banking sector

Muhammad Imran, Fadillah Ismail and Khawar Hussain, Faculty of Technology and Business Management, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, 86400, Malaysia

Faheem Zeb, Business School Qingdao University, Shandong Province, China

ID 623 E-Logistic SMEs Model: Information Technology to Support SMEs Logistic

Inayatulloh, Information System Department, School of Information System, Bina Nusantara University, Jakarta, Indonesia

ID 630 Ergonomics Redesign of Mountain Backpack for Female Hikers in Indonesia

Manik Mahachandra, Heru Prastawa, Zainal Fanani Rosyada, and Tahmida Fatmala Zulva Diponegoro University Tembalang, Semarang, Central Java, Indonesia

ID 631 Analysis of Implementation Level and Barriers in Implementing Quality Management System ISO 9001 in Electricity Sector Company: A Case of PT. ABC

W A Hendarto and R D Kusumastuti, Department of Management, Faculty of Economics and Business, University Indonesia, Jakarta, Indonesia

ID 632 Analysis of Handgrip Strength and Anthropometric Measurements of Manufacturing Workers in the Philippines

K A Mariñas, School of Graduate Studies, Mapúa University, Manila, 1002 Metro Manila, Philippines

R A Robielos, School of Industrial Engineering and Engineering Management, Mapúa University, Manila, 1002 Metro Manila, Philippines

Yung-Tsan Jou, Industrial and Systems Engineering Department, Chung Yuan Christian University, Zhongli District, Taoyuan City, Taiwan

ID 633 Analysis of Factors that Affecting Safety Risk Perception in Oil Refinery Industry

I R Pratama, R S Dewi, and A Sudiarno, Department of Industrial and System Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 634 Analysis Factors that Influence Mall Customer Loyalty in Semarang

N B Puspitasari, D I Rinawati, Z F Rosyada and A T Jonenetha, Department of Industrial Engineering, Diponegoro University, Semarang, Indonesia

ID 635 Concise Consumer Needs for Women Muslim Fashion by Integrating Online Product Reviews and Designer Voice

Y D Nurcahyanie, Industrial Engineering Department, PGRI Adi Buana University, Surabaya, Indonesia

M L Singgih and D S Dewi, Industrial and System Engineering Department, Sepuluh Nopember Institute of Technology, Surabaya, Indonesia

ID 636 Categorizing Suppliers in an Indonesian Shipping Company Using Kraljic's Portfolio Model

Muningrum and R D Kusumastuti, Department of Management Faculty of Economics and Business, Universitas Indonesia, Jakarta, Indonesia

ID 637 Case Study: Knowledge Management System (KMS) using the Maynard Operation Sequence Technique (MOST) Approach to Improve Manufacturing Efficiency at CV. XYZ Leathercraft

G K Sidanta and N Susanto and M Mahachandra, Departement of Management and Industrial Engineering, Faculty of Industrial Engineering, Diponegoro University, Indonesia

ID 638 Development of a Multi Echelon Economic Dispatch Model for Combined Optimization Between The Production and Distribution Side of The Electricity

Wahyuda, Industrial Engineering, Mulawarman University, Samarinda, Indonesia

ID 639 Designing Facility Layout Using Business Intelligence Approach: A Case Study in an Amusement Arcade

T Octavia, S Halim and C Alianto, Industrial Engineering Department, Petra Christian University, Surabaya, Indonesia

ID 640 Data Analytics for Transforming Towards Smart Supplier Relationship Management (A Case Study in Manufacturing Company)

D Anggrahini, N Kurniati, A P Sukma, Sepuluh Nopember Institute of Technology, Surabaya, Indonesia

ID 641 Driving Factors of the Intention to Purchase Travel Products Through Online Travel Agent (OTA)

N B Puspitasari, R Purwaningsih, N Fadlia, and Z F Rosyada, Department of Industrial Engineering, Faculty of Engineering, Diponegoro University, Semarang, Indonesia

ID 642 Evaluation of Chair Dimensions, Anthropometric Measurements and Subjective Comfort Among Filipino High School Students: A Structural Equation Modelling Approach

A Kumar, A J P Canlas, K T A M Ong, M A S Siochi and A K S Ong, Young Innovators Research Center, Mapúa University, Metro Manila, Philippines

Y T Prasetyo, School of Industrial Engineering and Engineering Management, Mapúa University, Metro Manila, Philippines

ID 643 Environmental Impact Reduction in Broiler Chicken Farm Using Life Cycle Assessment in the Implementation of Circular Economy

P A Wicaksono and D Kaswara, Industrial Engineering Department, Faculty of Engineering, Diponegoro University, Semarang, Indonesia

ID 644 Enterprise Risk Management Disclosure and Firm Value: The Role of Risk Monitoring Committee

N W Rustiarini and N N A Suryandari, Accounting Department, Mahasaraswati Denpasar University, Denpasar, Indonesia

ID 645 Eliminating Shadow Warehouse and Improving Inventory Performance in A Nickel Mine Company

R Mulyati, I N Pujawan and I Vanany, Department of Industrial and Systems Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 646 Economic Order Quantity Model Considering Product Damage and Permissible Delay in Payment

R Y H Silitonga and C Iskandar, Institut Teknologi Harapan Bangsa

ID 647 Economic Evaluation of Burner Unit Removal Project at Nickel Processing Company

H Irawan and E Widodo, Department of Industrial and System Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 648 Examining Inventory Management for Spare-Part Warehouse

D Ermawanto and N Kurniati, Department of Industrial and System Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 649 Food Security Model in Corn Commodity Concerning on Welfare of Corn Farmers and Chicken Farmers in East Java

N M C Utami, I Vanany, D I Maftuhah, L M Jaelani and G Hajar, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 650 Impact of Brand Image, Halal Status, and Government Certification on Purchasing Decisions for Food and Beverages

A Bakhtiar, N R Ningsih, and N M Sari, Department of Industrial Engineering, Diponegoro University, Semarang 50275, Indonesia

ID 651 Impact of Infrastructure Development on Economic Growth (Case Study of Lumajang Regency): A System Dynamics Approach

M B A Reski and B Wirjodirdjo, Department of Industrial Engineering, Sepuluh Nopember Institute of Technology, Surabaya, Indonesia

ID 652 Inventory Control for Electrical and Instrumentation Spare Parts in Cement Industries

Imran and I Vanany, Departement of Industrial and System Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 653 Joint Decision between Maintenance Strategy of Heavy Equipment and Production Planning

Y Munda and E Widodo, Department of Industrial and Systems Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 654 Joint Economic Lot Sizing at Two Levels of Supply Chain in Food and Beverage Industry

M Anshori, N H Isnaini and G Adriansyah, Industrial Engineering, Universitas Maarif Hasyim, Latif, Ngelom Megare Taman Sidoarjo

ID 655 Maintenance Cost Optimization on Heavy Equipment Tires by Goal Programming Method at Nickel Mine Operation

Dwinda S Wibowo and Budi Santosa Department of Industrial and Systems Engineering Institut Teknologi Sepuluh Nopember Surabaya, Indonesia

ID 656 Neglected Pregnant Women in Surabaya: A System Analysis to Provide Necessary Support

M Anityasari, Department of Industrial and System Engineering, Sepuluh November Institute of Technology, Surabaya, Indonesia

ID 657 P300 and Vigilance Level of University Student under Hot and Humid Condition

W Budiawan, Department of Industrial Engineering, Diponegoro University, Indonesia

K Tsuzuki, Department of Architecture and Civil Engineering, Toyohashi University of Technology, Indonesia

ID 658 Retail Pricing Strategy for Supply Chains: Literature Review and Research Opportunity

N I Arvitrida, N A Savitri and R J Pramudita, Department of Industrial and Systems Engineering, Sepuluh Nopember Institute of Technology, Surabaya, 60111, Indonesia

ID 659 Risk Analysis in Mini Container Loading and Unloading Activities at Dock Company

A B T P Dharana, S G Partiwi and P Suwignjo, Department of Industrial Engineering, Sepuluh Nopember Institute of Technology, Surabaya, Indonesia

ID 660 Risks Analysis for Production and Distribution System in Local Water Supply Utility

N Khalid, Department of Technology Management, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

I Vanany, Department of Industrial and System Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 661 Spare Part Inventory Management with a Cross-functional Perspective

B P Putra, N I Arvitrida, and I N Pujawan, Department of Industrial and System Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 662 Strategic Role of Procurement Function on Private Hospital

H Suliantoro, A S Utomo, N U Handayani, N B Puspitasari, and D Pujotomo, Department of Industrial Engineering, Faculty of Engineering, Diponegoro University, Semarang, Indonesia

ID 663 Study of the Effect of Service Quality toward Customer Loyalty with Customer Satisfaction in Financial Service Industry at PT Bank Rakyat Indonesia (Persero) Tbk at Cepu Branch as an Intervening Variable

M E Br Sipayung, A Bakhtiar, and N U Handayani, Magister Program of Engineering and Industrial Management, Diponegoro University,

Soedharto, Semarang, Indonesia

ID 664 Study on Process Innovation at Indonesia State-Owned Enterprises

P Suwignjo, I K Gunarta, N A Wessiani, Industrial and Systems Engineering Department, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

B M Sukoco, Department of Management, Universitas Airlangga, Surabaya, Indonesia

A E Prasetyo, Engineering Management Department, Universitas Internasional Semen Indonesia, Gresik, Indonesia

L Yuwana, Physics Department, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 665 Supply Chain Performance Measurement with Supply Chain Operation References Approach (a Case Study in a Batik Company)

N Susanto, R Purwaningsih, R Rumita and E Septia, Industrial Engineering Department, Faculty of Engineering, Diponegoro University, Indonesia

ID 666 System Dynamic Model for Restaurant's Food Waste in Surabaya

S A Oktaviasari, I Vanany, and D I Maftuhah, Department of Industrial Engineering, Institut Teknologi Sepuluh Nopember, Surabaya Indonesia

ID 667 The Analysis of Factors Affecting The Buying Interest in Poultry Frozen Food Processed Product

R Purwaningsih, N Susanto, N Purba, and A A A Putri, Department of Industrial Engineering, Diponegoro University, Semarang, Indonesia

ID 668 The Effect of Financial Ratios and Macroeconomics on Stock Return in Infrastructure Sector

G Mayliana, E Chumaidiyah and R Zulbetti, Industrial Engineering, Telkom University, JL. Telekomunikasi 1 Bandung, Indonesia

ID 669 The Effect of Soygurt Fortification with Black Rice Bran Extract Anthocyanin in Hyperlipidemia: Preliminary Step of Food Product Development

E P Nurlaili, Faculty of Agricultural Technology, University of 17 Agustus 1945, Semarang, Indonesia

ID 670 Understanding the Effects of Satisfaction and Trust on E-Repeat Purchase Intention: An Ergonomic Approach

D S Dewi, A Sudiarno, R S Dewi, and J Aritonang, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 671 The Influence of Day Time, Traffic Density and Rush Hour on Mobile Phone Use Among Indonesia Motorcyclist

Amelia, G B Pratama, and A Widyanti, Department of Industrial Engineering, Bandung Institute of Technology, Bandung, Indonesia

ID 672 Workload analysis for laboratory and sample house employees in mining industry using Full-Time Equivalent

Yunita Rachmuddin^{1, 2}, Dyah Santhi Dewi¹ and Ratna Sari Dewi¹

¹

Department of Industrial and Systems Engineering,
Institut Teknologi Sepuluh Nopember,

Surabaya, Indonesia

2

PT Vale Indonesia Tbk, Indonesia

ID 673 Service Quality Assessment of E-Wallet

M M Ulkhaq, A Cahyo, A Rustanti, L Gobel, M Dasminar, and E V Wijaya, Department of Industrial Engineering, Diponegoro University, Semarang, Indonesia

ID 674 Designing Education Development Model: The Educational Supply Chain

B Susanto, E Chumaidiyah and H Amani, Industrial Engineering, Telkom University, JL. Telekomunikasi 1 Bandung, Indonesia, PPPTK BMTI, Ministry of Education of the Republic of Indonesia, Bandung, Indonesia

ID 675 Evaluation of Business Model on E-Commerce PT. XYZ Using Business Model Canvas Approach

V B Pratiwi and E Chumaidiyah, Faculty of Industrial Engineering, Telkom University, Bandung, Indonesia

ID 676 Lot-Sizing Single Item Model with Stochastic Demand, Multiple Suppliers, Backlogging and Quantity Discounts

A Sriyono, S Martini and M D Abufatih, Faculty of Industrial Engineering, Telkom University, Bandung, Indonesia

ID 677 Physiological and Biochemical Measures of Mental Workload of Air Traffic Controllers: A Systematic Literature Review

Wiediartini, U Ciptomulyono, and R S Dewi, Industrial and Systems Engineering Department, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 678 Asymmetric Relationship in Supply Chain: A Conceptual Framework and Research Opportunities

S S Alrosjid, I N Pujawan and N I Arvitrida, Department of Industrial and System Engineering, Sepuluh Nopember Institute of Technology, Kampus ITS Sukolilo, Surabaya 60111, Indonesia

ID 680 The Contribution of Intellectual Capital on Indonesian Banks' Risk Management

A W S Gama, Department of Management, Mahasaraswati Denpasar University, Indonesia

N L P Wiagustini, I B P Sedana, and I B A Purbawangsa, Department of Management, Udayana University, Indonesia

ID 681 Systematic Literature Review of the application of Lean methodologies in the retail sector

Luis Bedoya Jimenez, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Peru

Carlos Chirinos Cuadros, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Peru

María Teresa Noriega Aranibar, Facultad de Ingeniería y Arquitectura, Universidad de Lima, Lima, Peru

ID 682 Aircraft Redelivery Project Risk Assessment: A Case Study in Maintenance, Repair and Overhaul (MRO) Company

A A Pratiwi, N A Wessiani, H Dzakiyah and U Nurhalizah, Department of Industrial Engineering, Faculty of Industrial Technology and System Engineering, Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia

ID 683 Implementation of Block chain Technology to Maintain Halalness in the Sale of Fresh Beef

Inayatullah, Information System Department, School of Information System, Bina Nusantara University, Jakarta, Indonesia

ID 684 Development of a Three-Phase Inventory Management Model for Perishable Products (Chili) by Considering Quality Deterioration

M K Boer and A Rusdiansyah, Department of Industrial Engineering, Sepuluh Nopember Institute of Technology, Surabaya, Indonesia

ID 685 The Evaluation of Reverse Logistic as Indicator of the Green Material Management Performance in a Construction Project: A Literature Review

S A Wardani and N U Handayani, Industrial Engineering Departement, Diponegoro University, Semarang, Indonesia

M A Wibowo, Civil Engineering Departement, Diponegoro University, Semarang, Indonesia

ID 686 Coming Together is A Beginning: A Review of Business Incubator and Digital Startup Company

A Setiawan and Arviansyah, Faculty of Economics and Business, Universitas Indonesia, Jakarta, Indonesia

ID 687 Conceptual Model of Relationship between Trust, Perceived Risk, Price Dispersion, E-WOM, Perceived Value, and Online Transaction Intention

C A Pradhana, H Suliantoro, and A Susanty, Industrial Engineering Department, Diponegoro University, Semarang, Indonesia

ID 688 Decision-Making Behavior of Traditional Retail in Distribution System: A Conceptual Framework

Ary Arvianto, Bertha Maya Sopha, and Anna Maria Sri Asih Industrial Engineering, Gadjah Mada University Yogyakarta, Indonesia

Muhammad Ali Imron Faculty of Forestry, Gadjah Mada University Yogyakarta, Indonesia

ID 689 A Review of Respiratory-Based Measurement Methods for Assessing The Cognitive Workload

S A Salma, Telkom University, Indonesia

A Widyanti, Bandung Institute of Technology, Indonesia

ID 690 Understanding "IS Effectiveness and Efficiency": Based on Management Levels in the Organization

A Widiyanto and A P Subriadi, Department of Information System, Sepuluh Nopember Institute of Technology, Surabaya 60111, Indonesia

ID 691 Analysis of Supply Chain Performance Based on the Supply Chain Management Maturity Level in Manufacturing Industry

N Trisnawati and I N Pujawan, Department of Industrial and System Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 692 The Effect of Relational Benefits, Service Quality, and Product Quality on Customer Satisfaction and Loyalty

A D Sastra and I Baihaqi, Department of Industrial and System Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 695 Production and Distribution Model in Cement Industry to Minimize Supply Chain Costs

M R Nooranda and I Vanany, Department of Industrial Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 696 Economic Analysis of Heavy Equipment Supply for Fulfilling Raw Materials

L A Sugiyono and B Syairudin, Department of Industrial and Systems Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 697 Analysis of Stressors Factors on Occupational Stress and Performance Blue Collar Employees in Pharmaceutical Manufacturing

D A Sekti Master's Degree Study Program of Industrial Engineering, Faculty of Engineering Diponegoro University Semarang, Indonesia

M Mahachandra and N U Handayani Department of Industrial Engineering, Faculty of Engineering Diponegoro University Semarang, Indonesia

ID 698 SCOR and ANP Methods for Measuring Supplier Performance with Sustainability Principle of Green Supply Chain Management in Furniture Company PT. XYZ

P W Hapsari, H Santoso, and D Nurkertamanda, Industrial Engineering Department, Diponegoro University, Semarang, Indonesia

ID 699 The Case of Acoustic Cleaning of Industrial Boilers at Sasol Synfuels Power Station in Secunda

P.M. Shandu, D.V.V. Kallon

Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

ID 700 Driver Sleep Detection and Alarming System

Marianne B. Calayag, Diana Marie S. Cortez, Jasmine I. Gaspar, Junell R. Mananquil, John Leslie B. Manuzon, Department of Industrial Engineering, Bulacan State University, City of Malolos, Bulacan

ID 705 Applying Macroscopic Simulation Models To Evaluate River Crossing Alternatives

Oscar Jara, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

Carlos Hernández, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

ID 706 Real Estate Pricing Models Using Machine Learning Schemes

Ingrid Rosales, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

Carlos Hernández, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

ID 707 Applying Supply Chain Simulation Models for Planning Vaccination Campaigns

Carlos Hernández, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

ID 708 Development of Rapid Macroscopic Traffic Simulation Models

María García, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

Carlos Hernández, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

ID 709 A Comparative Study of Hospital Catering Production System between Thailand and Denmark

Narat Hasachoo and Pornwasin Sirisawat, Business Excellence and Logistics Research Centre, School of Management, Mae Fah Luang University, Thailand

Torben Jessen, President Emeritus, Silkeborg Business College, Silkeborg, Denmark

**ID 710 The Exploration and Investigation of Logistics Processes and Barriers for Medical Supplies
Department: A case of Thai Public Hospital**

Pornwasin Sirisawat and Narat Hasachoo, Business Excellence and Logistics Research Centre, Logistics and Supply Chain Management Program, School of Management, Mae Fah Luang University, Thailand

ID 711 Proposal of a Salary Structure for Positions at Productos Caribe S.A.S.

Luis Sampayo Castellanos, Elianeth Villarreal Sabalza and Carlos Gualdron García, Industrial Engineering Program, Faculty of Engineering, Universidad Tecnológica de Bolívar, Cartagena de Indias, Colombia

ID 712 Design of a strategic planning for the company MetalProffice S.A.S in Cartagena-Colombia

MSc.Carlos Gualdron, Adrian de Meza and Camila Fuentes, Industrial Engineering Program, Faculty of Engineering, Universidad Tecnológica de Bolívar, Cartagena de Indias, Colombia

ID 714 Applying Microscopic Simulation Models to Improve Existing Road Transport Infrastructure

Isaac Gutiérrez, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

Carlos Hernández, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

ID 715 Implementing Macroscopic Simulation Models to Evaluate Complementary Waterbus Routes

Josefina Ávila, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

Carlos Hernández, Instituto de Ingeniería Industrial y Sistemas, Universidad Austral de Chile, Valdivia, Chile

ID 716 Development of a Global Sustainability Index for G8+5 Countries by Using TOPSIS

Hisham Alidrisi, Department of Industrial Engineering, King Abdulaziz University, Jeddah, Saudi Arabia

ID 717 Machine Learning for Predictive Maintenance Reliability and Maintenance

Dwi Kusumaningrum Institut Teknologi Sepuluh Nopember Surabaya Indonesia

ID 719 Enabling Predictive Maintenance Using Machine Learning in Industrial Machines With Sensor Data

Adelina Zian Andriani, Department of Industrial and Systems Engineering, Sepuluh Nopember Institute of Technology, Surabaya, 60111, Indonesia

Nani Kurniati and Budi Santosa, Department of Industrial and Systems Engineering, Sepuluh Nopember Institute of Technology, Surabaya 60111 Indonesia

ID 720 Framework to manage academic administrative processes, validating it from the students' perspective – Case study: Faculty of Engineering of a Public University

Santiago Domingo, Moquillaza Henríquez and Javier Elmer Cabrera Díaz, Academic Department of Computer Science-Universidad Nacional Mayor de San Marcos, Av. German Amezaga s/n Lima 1, Lima, Perú

Oscar Abraham Morales Da Costa, Academic Department of Industrial Production and Management-Universidad Nacional Mayor de San Marcos, Av. German Amezaga s/n Lima 1, Lima, Perú

Augusto Ernesto Bernuy Alva, Postgraduate Unit of the Faculty of Systems Engineering and Informatics-Universidad Nacional Mayor de San

Marcos, Av. German Amezaga s/n Lima 1, Lima, Perú

ID 721 Expansion of Brick-and-Mortar Retailers to Online Retailing: A Strategic Application of the Technology Acceptance Model in the Philippines

Ma. Francine Isabel G. Caraan, Louis Michael F. Surabia, and Marvin I. Noroña, School of Industrial Engineering and Engineering Management, Mapua University, Manila, Philippines

ID 722 Entrepreneurial Intention in Surgical Instrumentation Students: Study in Colombian Universities

Norka Elena Marquez-Blanco, Department of Health Sciences, Universidad Libre, Barranquilla, Colombia

Lorena Herrera-Fuentes, Department of Extension and Social Projection, Corporación Universitaria Latinoamericana, Barranquilla, Colombia

Odette Chams-Anturi, Department of Economic Science, Universidad de la Costa, Barranquilla, Colombia

Milton Soto-Ferrari, Department of Marketing and Operations, Indiana State University, Terre Haute IN 47807, USA

ID 723 Asset Management Policy for Equipment Replacement

Ana Carolina Gandini Panegossi and Ethel Cristina Chiari da Silva, Professional Master's Program in Industrial Engineering, University of Araraquara (UNIARA), Araraquara, SP, Brazil

ID 724 The Impact of Covid-19 on International Supply Chains Looking Through the SCOR Model

Luiz Carlos Roque Junior, Ricardo Moreira da Silva, Gabriel Francisco Gauer, Germano Glufke Reis, Guilherme Francisco Frederico, Setor de Ciências Sociais Aplicadas, Universidade Federal do Paraná, Curitiba, Paraná, Brazil

ID 725 Mortality Incidence for SARS-CoV-2 Non-Survivor Infected in Colombia: A Potential Vaccination Priority Guide Based on Comorbidities

Milton Soto-Ferrari, Department of Marketing and Operations, Indiana State University, Terre Haute IN 47807, USA

Odette Chams-Anturi, Department of Economic Science, Universidad de la Costa, Barranquilla, Colombia

Juan P. Escorcia-Caballero, Department of Entrepreneurship and Management, Universidad del Norte, Barranquilla, Colombia

Daniel Romero-Rodriguez, Department of Industrial Engineering, Universidad del Norte, Barranquilla, Colombia

Julio Daza-Escorcia, Department of Industrial Engineering, Fundación Universidad de América, Bogotá, Colombia

Blas Ferrari-Padilla, Department of Clinical Medicine, Universidad Cooperativa de Colombia, Santa Marta, Colombia

ID 728 Genetic Algorithm Based on Clark & Wright's Savings Algorithm for Reducing the Transportation Cost in a Pooled Logistic System

Mehdi Mrad, Khaled Bamatraf, Mohammed Alkahtani, and Lotfi Hidri, Industrial Engineering Department, King Saud University, Riyadh, KSA

ID 729 Optimizing University Campus Shuttle Bus Congestion Focusing on System Effectiveness and Reliability: A Combined Modeling Based-Routing Approach

Adeeb A. Kutty, Nasser Al-Jurf, Ayman F. Naser, Murat Kucukvar, Hiba Ayad, Muna Al-Obadi, Galal M. Abdella, Mechanical and Industrial Engineering Department, College of Engineering, Qatar University, Doha, Qatar

Muhammet Enis Bulak Industrial Engineering Faculty of Engineering and Natural Sciences, Uskudar University Istanbul, Turkey

Jalal M. Elkharaz Authority of Natural Science Research, Tripoli, Libya

ID 737 A Supply Chain Environmental Sustainability Model for Micro-Enterprises in the Philippine Food Industry

Rey Arth C. Andaya, Raphael Bernard L. Bonifacio, and Marvin I. Noroña, School of Industrial Engineering and Engineering Management, Mapúa University, Manila, Philippines

ID 738 Design and Simulation of a Lamella Clarifier

Phumelele Maqina and D.V.V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

ID 739 Review of Clarifier Technologies

Phumelele Maqina, D.V.V. Kallon and B. N. Mushwana, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

ID 740 An Underground Model Atmospheric Water Generator Designed for South African Rural Communities

I. G. Siyaya, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

D.V.V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

S.K. Thisani, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

ID 741 Design of a Hybrid Natural Gas Power Plant Boiler for South African International Airports

I. Phungula, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

D.V.V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

P.M. Shandu, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

ID 742 Design of a Novel Gas Turbine Generator for South African International Airports

M.A. Mazibuko, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

D.V.V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

P.M. Shandu, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

ID 743 Concept Development for the Design of a Biogas Filling Machine

A.M.C. Khumalo, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

D.V.V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

O.J. Kaelo, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, Johannesburg, South Africa

ID 744 Appreciative Inquiry to Promote Innovation Culture in Industrial Engineering Students

Maximiliano Arroyo Ulloa, Industrial Engineering Department, Santo Toribio of Mogrovejo Catholic University, Chiclayo, Peru

Maira Arroyo Lujan, Management Department, Decorlux-SAC Enterprises, Lima, Peru

Javier Beltran Reyes, Business Intelligence Department, Comercio-Group, Lima, Peru

ID 745 Methodological Strategy for the Development of Research Skills in Engineering Students: A Proposal and its Results

Jesús Zúñiga-Cueva and Elizabeth Vidal-Duarte, Department of Systems Engineer and Informatics, Universidad Nacional de San Agustín, Arequipa-Perú

Arasay Padrón Alvarez, Reference Center for Advanced Education (CREA), Technological University of Havana (CUJAE), Cuba

ID 746 Enhanced Service Level Management Process as a Result of Best Practices Integration

Muhammad Anas AlGhamian, Network Engineering Department, Universitat Politècnica de Catalunya – BarcelonaTech, Castelldefels, Barcelona, Spain

Jesús Alcober Segura, Network Engineering Department, Universitat Politècnica de Catalunya – BarcelonaTech, Castelldefels, Barcelona, Spain

David Rincón Rivera, Network Engineering Department, Universitat Politècnica de Catalunya – BarcelonaTech, Castelldefels, Barcelona, Spain

ID 752 The Dynamic Marketing Capability for Service Excellence and Satisfaction of the Brand: Investigation from Customer's Perspective of Hotel Industry

Evo Sampetua Hariandja, Faculty of Economics and Business, University of Pelita Harapan, Tangerang, Banten 15811, Indonesia

Stephanie Ophelia Masman Faculty of Economics and Business, University of Pelita Harapan Tangerang, Banten 15811, Indonesia

Tanggor Sihombing, Faculty of Economics and Business, University of Pelita Harapan, Tangerang, Banten 15811, Indonesia

Liza Handoko, Faculty of Economics and Business, University of Pelita Harapan, Tangerang, Banten 15811, Indonesia

ID 755 E-Learning Hybrid Model

Inayatulloh, Information System Department, School of Information System, Bina Nusantara University, Jakarta, Indonesia

Indra Kusumadi Hartono, Information System Department, School of Information System, Bina Nusantara University, Jakarta, Indonesia

ID 756 Public Policy and Indonesian Diplomacy for the Acceleration of International Goods Terminal Development

Elyta, Faculty of Social and Political Sciences, Universitas Tanjungpura, Pontianak, Indonesia

Martoyo, Faculty of Social and Political Sciences, Universitas Tanjungpura, Pontianak, Indonesia

ID 759 An Ergonomic Design of Motorized Tricycle in the Philippines

Ma. Janice J. Gumasing and Jonas Liao, School of Industrial Engineering and Engineering Management, Mapua University, Intramuros, Manila, Philippines

ID 760 Assessment of Ergonomic Risk Factors Affecting the Musculoskeletal Discomfort of Daycare Centers Occupants in the Philippines

Ma. Janice J. Gumasing, Kayla Katriz Mae C. Antonio and Joanna Lou C. Mata, School of Industrial Engineering and Engineering Management, Mapua University, Intramuros, Manila, Philippines

ID 761 Predictive Model on the Severity of Injuries and Musculoskeletal Disorders Affecting the Restaurant Kitchen Workers in the Philippines

Ma. Janice J. Gumasing, Kim D. Lustañas, School of Industrial Engineering and Engineering Management, Mapua University, Philippines

ID 762 Decision Support System for Cash Direct Assistance for Victims of the Covid-19 Outbreak Based On Cloud Computing

Inayatulloh, Information System Department, School of Information System, Bina Nusantara University, Jakarta, Indonesia

ID 763 Mobile Commerce model for Medium and Small-Scale Agriculture in Indonesia

Inayatulloh, Information System Department, School of Information System, Bina Nusantara University, Jakarta, Indonesia

ID 764 Community Learning Model for Elementary Schools in the COVID 19 Pandemic

Inayatulloh, Information System Department, School of Information System, Bina Nusantara University, Jakarta, Indonesia

Ade Fadli Fachrul, Character Building Development Center, Bina Nusantara University, Jakarta, Indonesia

ID 765 A Mathematical Model for the Optimization of Timetable Scheduling Problem of an Educational Institution

Melis Akkilog and Eren Ozceylan, Industrial Engineering Department, Gaziantep University, Gaziantep, Turkey

ID 767 Modelling of Coal Terminal Location Determination for Steam Power Plants in Java Island

Nisrina Nabella Putri, Department of Industrial and Systems Engineering, Institut Teknologi Sepuluh Nopember, Surabaya 60111, Indonesia

ID 769 Identifying Critical Success Factors in Implementing Air Conditioning Servitization to Encourage Business Model Innovation

Yonatan Suganda and Djoko Sihono Gabriel, Department of Industrial Engineering, University of Indonesia, Jakarta, Indonesia

ID 770 Development of Integrated Security Control Service Model Using Artificial Intelligence

Jung Sein, PAUL MATH SCHOOL, 12-11, Dowontongmi-gil, Cheongcheon-myeon, Goesan-gun, Chungcheongbuk-do, Republic of Korea, (Supervised by teacher Shin Dong Ho)

ID 772 Deep Learning Data Visualization Using Architectural Data

Ji Mok Lee, PAUL MATH SCHOOL, 12-11, Dowontongmi-gil, Cheongcheon-myeon, Goesan-gun, Chungcheongbuk-do, Republic of Korea, (Supervised by teacher Shin Dong Ho)

ID 773 The Influence of Digital Learning Engagement on Indonesian University Students' Online Satisfaction During The COVID-19 Pandemic

Enggal Sriwardiningsih, Nopriadi Saputra, Management Department, Business School-Undergraduate, Bina Nusantara University, Jakarta, Indonesia

Inayatulloh, Information Systems Department School of Information Systems, Bina Nusantara University, Jakarta, Indonesia

Nurianna Thoha, International Business Program, Management Department, BINUS Business School International Undergraduate Program, Bina Nusantara University, Jakarta Indonesia

ID 776 Vetconnect: E-Commerce Portal for Veterinary Health care Providers and Service Subscriber

Daniele De Guzman; Samuel Mirasol; King Perez; Grace Lorraine Intal, School of Information Technology, Mapua University Makati, Philippines

ID 777 Traceability Architecture Technology for Short Commercial Exchange

John Jairo Aguilera Camacho, Research Group EGE, Early Career Researcher at Grizzly, Fundación Universitaria Compensar, Bogotá D.C., Colombia

Angela Maritza Mora Gómez, Research Group EGE, Early Career Researcher at Grizzly, Fundación Universitaria Compensar, Bogotá D.C., Colombia

Lina Nataly Alvarado Riaño, Research Group EGE, Early Career Researcher Grizzly, Fundación Universitaria Compensar, Bogotá D.C., Colombia

ID 778 SHOP BUDDY: Enhanced Automated Chatbot for Any E-commerce Website with Data Analytics Functionalities

Sean Justine Español, Romulo Fronda Jr., Mikka Rosella Villarica, and Grace Lorraine Intal, School of Information Technology, Mapua University, Makati City, Philippines

ID 779 Analysis of Agropolitan Area Planning Based on Natural Disaster Mitigation in West Muna Regency, Southeast Sulawesi, Indonesia

Kalfin, Doctor Program of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

Sukono, and Sudradjat Supian, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Padjadjaran, Indonesia

Mustafa Mamat, Faculty of Informatics and Computing, Universiti Sultan Zainal Abidin, Kuala Terengganu, Malaysia

Fitri Muljana, Department of Geography, Faculty of Earth Sciences and Technology, Halu Oleo University, Indonesia

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

ID 780 Proposal of a Production Management Model for small tanneries applying Good Manufacturing Practices

Jorge Rendulich, Postgraduate Unit of the Faculty of Production and Services Engineering, Universidad Nacional de San Agustin de Arequipa, Arequipa, Peru

Roberto Enrique López Guerra, Industrial Engineer, Universidad Nacional de San Agustin de Arequipa, Arequipa, Peru

Elizabeth Rojas Durand, Professional training in Accounting

ID 781 Collaborative Health Resources Management Model

Janus Amaru Leonhardt Gutierrez, Department of Transport Engineering and Logistics, Pontificia Universidad Católica de Chile, Santiago, Chile

Macarena Paz Navarro Tabilo, Department of Industrial and Systems Engineering, Pontificia Universidad Católica de Chile, Santiago, Chile

Mathias Alberto Klapp Belmar, Department of Industrial and Systems Engineering, Department of Transport Engineering and Logistics, Pontificia Universidad Católica de Chile, Santiago, Chile

ID 790 An Integrated Sustainable Quality Management Framework for Quality-Related Research

Adeeb A. Kutty, Galal M. Abdella, Murat Kucukvar, Mechanical and Industrial Engineering Department, College of Engineering, Qatar University, Doha, Qatar

ID 793 A reverse logistics network for recycling in Chile: a case in Concepción

Sergio Aliaga, Lorena Pradenas and Carlos Contreras-Bolton, Departamento de Ingeniería Industrial, Universidad de Concepción, Concepción 4070409, Chile

ID 798 Supervisor Controller-Based Elementary Siphons and Colored Petri Net for Deadlock Control and Machine Failures in Automated Manufacturing Systems

Husam Kaid¹, Abdulrahman Al-Ahmari¹, Emad Abouel Nasr^{1,2}, Adel Al-Shayea¹, Ali K. Kamrani³, and Haitham A. Mahmoud^{1,2}

¹Industrial Engineering Department, College of Engineering, King Saud University, Riyadh 11421, Saudi Arabia

²Mechanical Engineering Department, Faculty of Engineering, Helwan University, Cairo 11732, Egypt

³Industrial Engineering Department, College of Engineering, University of Houston, Houston, TX 77204 4008, USA

ID 800 Structural Equation Modeling of Brand Love, Brand Trust, Brand Respect, Brand Loyalty and Brand Equity in Indonesia E-Commerce

Evo Sampetua Hariandja, Faculty of Economics and Business, University of Pelita Harapan, Tangerang, Banten 15811, Indonesia

Tirza Theresia Suryanto, Faculty of Economics and Business, University of Pelita Harapan, Tangerang, Banten 15811, Indonesia

ID 802 Structural Model for Product Design Aesthetics, Product Development Process, Attitudes to Brands, Product Evaluation, and Product Preference

Evo Sampetua Hariandja, Faculty of Economics and Business, University of Pelita Harapan, Tangerang, Banten 15811, Indonesia

Jessica Laura, Faculty of Economics and Business, University of Pelita Harapan, Tangerang, Banten 15811, Indonesia

ID 803 Towards Understanding the Impact of Industry 4.0 Technologies on Operational Performance: An Empirical Investigation in the US Automotive Industry

Joelle Nader, School of Engineering, Office of the Graduate Studies and Research, Lebanese American University, Byblos 48328, Lebanon

Mohamad Ali Mezher and Raed El-Khalil, Information Technology and Operations Management, Lebanese American University, Chouran Beirut, Lebanon

ID 804 Flexibility and Operational Performance: Examining the Mediating Role of Lean and Sustainability Practices

Joelle Nader, School of Engineering, Office of the Graduate Studies and Research, Lebanese American University, P.O. Box 36, Byblos 48328, Lebanon

Raed El-Khalil, Information Technology and Operations Management, Lebanese American University, P.O. Box 13-5053, Chouran Beirut: 1102 2801, Lebanon

ID 805 The Role of Lean in Enhancing Operational Performance Through Sustainability and Supply Chain Practices: A Case Study on the Automotive Industry

Raed El-Khalil, Information Technology and Operations Management, Lebanese American University, P.O. Box 13-5053, Chouran Beirut: 1102 2801, Lebanon

Joelle Nader, School of Engineering, Office of the Graduate Studies and Research, Lebanese American University, P.O. Box 36, Byblos 48328, Lebanon

ID 806 Strategic Manufacturing Planning Performance in the Food Industry: The Mediating Influence of Sustainability

Joelle Nader, School of Engineering, Office of the Graduate Studies and Research, Lebanese American University, P.O. Box 36, Byblos 48328, Lebanon

Raed El-Khalil, Information Technology and Operations Management, Lebanese American University, P.O. Box 13-5053, Chouran Beirut: 1102 2801, Lebanon

ID 809 Towards the Development of Internet Tracker Mobile Application Based on User's Preferences

Aquino, Jan Erica D.C., Batto, Karlo Gabbriel, De Jesus IV, Bonifacio, Geldof Resuello; Grace Lorraine Intal, School of Information and Technology, Mapua University

ID 810 The Influence of Service Quality and Consumer Trust on Consumer Loyalty of Carousel Apps

Alma Amanda Putri, Aditya Wardhana and Mahir Pradana, Department of Business Administration, Telkom University, Bandung, 40257, Indonesia

ID 811 The Influence of E-Trust on E-Customer Loyalty of Online Food Delivery Customers in Indonesia (Study Conducted During COVID-19 Pandemic)

Martifa Firli Devi and Mahir Pradana, Department of Business Administration, Telkom University, Bandung, 40257, Indonesia

Diki Wahyu Nugraha, Prodi/Jurusan D4 Teknik Informatika Politeknik Pos Indonesia, Jln. Sari Asih No. 54, 40151 Bandung, Indonesia

ID 812 The Influence of Promotion and Price on E-Commerce Impulse Purchase in Bandung, Indonesia

Raisa Hanifah and Mahir Pradana Department of Business Administration Telkom University Bandung, 40257, Indonesia

Diki Wahyu Nugraha Prodi/Jurusan D4 Teknik Informatika Politeknik Pos Indonesia Jln. Sari Asih No. 54, 40151 Bandung, Indonesia

ID 813 Performance Analysis of a Tri-adjustable Automated Heavy-Duty Handling System Designed on Industry 4.0 Principles

S.Z. Mafokwane and D.V.V. Kallon, Department of Mechanical and Industrial Engineering Technology, University of Johannesburg, South Africa

ID 814 An Assessment of Failure Modes and Criticality Analysis in a Pharmaceutical Industry by RPN Method

Nourin Mohsin and Rafat Mahmud Hridoy, Department of Industrial Engineering and Management (IEM), Khulna University of Engineering & Technology Bangladesh

ID 816 Review of Pension Systems in Institutions of Higher Learning: Key Lessons for Zambia

Romeo Yohane, Bupe G Mwanza and Tawonaziso Chowa, Graduate School of Business, University of Zambia, G.E.R Campus, Lusaka, Zambia

ID 822 The Effect of Quality of Work life and Job Stress Toward Organizational Culture

Genna Ayu Maghfira, Mahendra Fakhri, Syarifuddin S, Ida Nurnida, and Benny Kurnia, School of Communication and Business Telkom University, Indonesia

ID 832 The Quality of Logistic and Expedition Business Services In the Era COVID 19 (Study on Shipping and Logistics Company in Indonesia)

Budi Rustandi Kartawinata, Business Administration, Jalan Terusan Buah Batu, Bandung 40257, Indonesia

Aldi Akbar, Politeknik Piksi Ganesha Bandung, Jalan Jend. Gatot Subroto No. 301, Bandung 40274, Indonesia

Tri Indra Wijaksana, Telkom University, Jalan Terusan Buah Batu, Bandung 40257, Indonesia

Sri Nanda Nurlela, Telkom University, Jalan Terusan Buah Batu, Bandung 40257, Indonesia

ID 833 The Influence Of Lifestyle And Financial Behavior On Personal Financial Management For The Millennia Generation (Study on College Students in Bandung City, Indonesia)

Budi Rustandi Kartawinata, Business Administration, Telkom University, Jalan Terusan Buah Batu, Bandung 40257, Indonesia

Candra Wijayangka, Business Administration, Telkom University, Jalan Terusan Buah Batu, Bandung 40257, Indonesia

Aldi Akbar, Politeknik Piksi Ganesha Bandung, Jalan Jend. Gatot Subroto No. 301, Bandung 40274, Indonesia

1. Susanto Hendiarto, Universitas Widyatama, Jl. Cikutra no 204 A Bandung 40124, Indonesia

ID 834 Supply Chain Design and Performance Enhancement by Industry 4.0

MB Kiran, Department of Mechanical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India

ID 835 Significance of Intruder Detection Techniques in the Context of Industry 4.0

M.B.Kiran, Associate Professor, Department of Mechanical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat-382007- INDIA

ID 836 Industry 4.0 Significance and its Applications

MB Kiran, Department of Mechanical Engineering, School of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat, India

ID 837 Analysis of Factors Affecting Work Motivation of Teachers at State Private Vocational School 08 Kab. Sleman

Siti Zahra, Anita Silvianita, Mahir Pradana, and Fitriani Nur Utami, Department of Business Administration, Telkom University, Bandung, Indonesia

ID 838 The Role of the Government and Health Educators on Community Behavior and Its Impact on Oral and Dental Health in the Work Area of the Community Health Center in Central Mamuju District

I Md Dana, Hasmin Tamsah, Purnomo Purnomo, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Fitriani, Universitas Puangrimaggalatung, Wajo, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 839 The Influence of Experience, Education, And Training, and Work Environment on The Performance of Village Midwives in Bulukumba Regency

Hermawali Yusuf and Hasmin Tamsah, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Eddyman W. Ferial, Universitas Hasanuddin, Makassar, Indonesia

Hasliana Haslan, Institut Sains dan Kesehatan Bone, Makassar, Indonesia

Misnawati, Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

ID 840 The Influence of Soft Competency and Hard Competency on Internal Auditor Performance Through Work Motivation at PT. KB Finansia Multi Finance

Gunawan, Ansar, Tajuddin Malik Program Pascasarjana STIE Amkop Makassar, Indonesia

Jeffriansyah DSA STIE Muhammadiyah Mamuju, Indonesia

Yusriadi Yusriadi Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Sjaïd S Fais Assagaf Universitas Iqra Buru, Maluku, Indonesia

Laili Alfita Fakultas Psikologi, Universitas Medan Area, North Sumatera, Indonesia

ID 841 Analysis of Public Service Motivation and Professionalism on Employee Performance Through Discipline of State Civil Apparatus in Jeneponto Regency

Saripuddin, Ansar, Muhammad Tamrin Program Pascasarjana STIE Amkop Makassar, Indonesia

Indah Restika BN, STIKes Nani Hasanuddin, Makassar, Indonesia

Broto Suwiryo Universitas Kartini, Surabaya, Indonesia

Yulismayanti Universitas Iqra Buru, Maluku, Indonesia

Andi Sadapotto English Department of UMS Rappang

ID 842 The Influence of Community Health Centre (Puskesmas) Planning and Mini-Workshop on Employee Performance through Motivation

Iriani and Abdul Latief R, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Ekafadly Jusuf, Universitas Hasanuddin, Makassar, Indonesia

Arni AR, Universitas Puangrimaggalatung, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 843 Performance Improvement with Compensation and Training through the Work Capabilities of Health Workers at the General Hospital of the Makassar City Hajj Area

Deni Anggreani Sutomo and Abdul Latief, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Ekafadly Jusuf, Universitas Hasanuddin, Makassar, Indonesia

Fatmawati, Universitas Puangrimaggalatung, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 844 Increased Professionalism through Work Discipline and Employee Competence and Its Impact on Employee Performance at the Directorate of Special Criminal Research (Ditreskrimsus)

Hasmin Tamsah, Ibnu Hasyim, and Umi Farida, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Rika Damayanti and Misnawati, Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

Dwi Lindarto Hadinugroho Departemen Arsitektur, Fakultas Teknik, Universitas Sumatera Utara

Erfina Public Administration Department of UMS Rappang

ID 845 The Influences of Teacher Professional Competencies and Infrastructure on Teacher Performance Through Teaching Devices of Technical Implementation

Masrullah, Buyung Romadhoni, Hasbi, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Misnawati Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Ayu Febryani Department of Anthropological Education, Faculty of Social Sciences Universitas Negeri Medan, Indonesia

Abdul Jabbar Public Administration Department of UMS Rappang

ID 847 The Influence of Leadership and Work Motivation on Work Effectiveness through Discipline

Kasmiaty, Baharuddin, and Muhammad Nur Fattah, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Nasaruddin H, STISIP 17-8-1945 Makassar, Indonesia

Misnawati, Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

ID 848 Effect of Competence and Compensation on Job Satisfaction through Employee Performance of the Health Service Office of West Sulawesi Province

Syamsyucri and Hasmin Tamsah, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Eddyman W. Ferial, Universitas Hasanuddin, Makassar, Indonesia

Ryryn Suryaman Prana Putra, Institut Ilmu Kesehatan Pelamonia Kesdam XIV/ Hasanuddin, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Yuni Syahputri Fakulty of Psikologi, Universitas Medan Area, North Sumatera, Indonesia

Andi Sadapotto English Department of UMS Rappang

ID 849 The Influence of Infrastructure and Supervision Facilities on Employee Performance and Public Service Quality (Case Study of Bantaeng District)

Nur Nengsih, Syahrudin, Mansur Azis Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Elyani Universitas Tjut Nyak Dhien, Medan, Indonesia

T Enita Rosmika Management Study Program, Faculty of Bussines and Management Universitas Amir Hamzah, North Sumatera, Indonesia.

Muhamad Abdul Jumali Universitas PGRI Adi Buana Surabaya

Yusriadi Yusriadi Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 850 The Influence of Work Experience and Motivation on Nurse Performance through Caring Behavior in the Inpatient Room of the Labuang Baji Regional General Hospital Makassar

Wildaningsih, Syahrudin and Abubakar Betan, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Devy Febrianti, Universitas Muhammadiyah Sidenreng Rappang

Misnawati, Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

ID 851 Analysis of Regional Financial Management Systems and Intellectual Capital through Work Capabilities on the Quality of Regional Financial Management in Mamuju Regency

Santim Raharja Kusuma, Umi Farida and Hasmin Tamsah, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Andi Tenry Sose, STIM Lasharan, Makassar, Indonesia

Yusriadi Yusriadi Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Endang Setyawati STIKOM Yos Sudarso Purwokerto

Fitra Wahyudi Muhammadiyah University of Maros

ID 854 The Influence of Knowledge, Compensation for Documentation Upbringing Treatment through Motivation Nurse in Mamuju Regional General Hospital

Sultan, Hasmin Tamsah and Hasan Nongkeng, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Jumra, Gustika Sandra, Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

Yusriadi Yusriadi Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Loth Botahala Universitas Tribuana Kalabahi

M Chairul Basrun Umanailo Universitas Iqra Buru

ID 855 The Effect of Drug Prices, Facilities on Customer Satisfaction through Service Quality

Dian Harisman, Abdul Latief and Darti Darti, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Watty Rimalia, Universitas Pancasakti, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 856 The Effect of Compensation and Work Environment On Employee Performance With Team Work As A Mediation Variable At The Makassar Main Port Authority Office

Fauzan Amrullah, Ansar and Abdul Latief R, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

A Arifuddin, Universitas Bosowa, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru

Faradila Hasan Faculty of Sharia, IAIN Manado, Indonesia

ID 857 The Effect of Education Level and Health Facilities on Maternal Participation through Health Services at Binuang Public Health Center, Polewali Mandar District

Nurhayati, Purnomo Purnomo, Muhammad Yahya, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Reski Dewi Pratiwi, Institut Ilmu Kesehatan Pelamonia Kesdam XIV/ Hasanuddin, Makassar, Indonesia

Misnawati Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

Lina Fitriani STIKES Biges Polewali

Sitti Nur Intang STIKES Salewangang Maros

ID 858 Analysis of the Behavior of Clean and Healthy Living Communities

Samrah AT and Mansur Azis, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Ekafadly Jusuf, Universitas Hasanuddin, Makassar, Indonesia

Zarina Akbar, Universitas Negeri Jakarta, Jakarta, Indonesia

Agung Suharyanto Public Administration Study Program, Faculty of Social and Political Sciences Medan Area University, North Sumatra, Indonesia

Saidna Zulfikar Bin Tahir, Universitas Iqra Buru, Maluku, Indonesia

Jamilah Nasution Biology Study Program, Faculty of Science and Technology Medan Area University, North Sumatra, Indonesia

ID 859 The Influence of Education and Training and Work Facilities on Employee Performance through Work Ability at the Human Resources Development Agency of South Sulawesi Province

Andi Ismawati Mastulen, Hasmin Tamsah, Gunawan Bata Ilyas, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Zarina Akbar, Universitas Negeri Jakarta, Jakarta, Indonesia

Saidna Zulfikar Bin Tahir, Universitas Iqra Buru, Maluku, Indonesia

Isra Djabbar Universitas Sembilanbelas November Kolaka

ID 860 The Effect of Workload on Performance through Time Management and Work Stress of Educators

Ashar, Syahrudin and Nasruddin, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Zarina Akbar, Universitas Negeri Jakarta, Jakarta, Indonesia

Saidna Zulfikar Bin Tahir, Universitas Iqra Buru, Maluku, Indonesia

Dina Chamidah Department of Biology Education Faculty of Language and Science Universitas Wijaya Kusuma Surabaya

Retnawati Siregar Accounting Study Program, Faculty of Bussines and Economic Universitas Medan Area, North Sumatera, Indonesia

ID 861 The Influence of Work Environment and Teacher Certification Benefit towards Students Achievement through Teachers Pedagogical Ability

Hasmin Tamsah, Abdul Haris and Musdalipa Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Zarina Akbar, Universitas Negeri Jakarta, Jakarta, Indonesia

Misnawati Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

Aulia Nursyifa Universitas pamulang, Indonesia

Ardianto Institut Agama Islam Negeri Manado, Indonesia

ID 862 The Influence of Education Level and Behavior on Clean and Healthy Lifestyle through Quality in the Work Area of the Madello Community Health Center, Barru Regency

Risnawati, Baharuddin and Muhammad Nur Fattah, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

L.M Zainul, Universitas Balikpapan, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru

Nurman Achmad Universitas Sumatera Utara

ID 863 The Effect of Education and Community Income on Clean and Healthy Behavior through Motivation in Tandukalua District, Mamasa Regency

Fitria, Hasmin Tamsah, Muhammad Yahya, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Arief Hidayat Tumanggor, Universitas Amir Hamzah, Medan, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru

M Dahlan Bahang English Department of STKIP YPUP Makassar

ID 864 Effect of Competencies and Incentives on Performance through Job Satisfaction

Irna Anggriana Bahari, Akmal Umar and Darti Darti, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Zakir Muhammad, Sekolah Tinggi Ilmu Ekonomi Panca Bakti, Palu, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 865 Analysis of Soft Competence with Intellectual Capital and Talent Management and its Impact on Service Quality at Mega Bank Regional Makassar

Salmahwati Saleh, Gunawan Bata Ilyas, Umar Syarifuddin, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Elpisah, STKIP Pembangunan Indonesia, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Haudi STAB Dharma Widya, Tangerang Indonesia

Syafruddin STIKES Salewangang Maros

ID 866 Analysis of Service Quality Improvement with Education and Training and Professionalism and Teamwork as Mediation Variables

Baso Achmat, Baharuddin, Misbahuddin, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Saiful Irfan, Politeknik Pelayaran Surabaya, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Dina Chamidah Department of Biology Education Faculty of Language and Science Universitas Wijaya Kusuma Surabaya

Herlina Universitas Sembilanbelas November Kolaka

ID 868 Improving the Welfare of the Poor with Quality Assistants and Quality of the Family Hope Program (PKH) in Community Empowerment in Makassar City

Saharuddin, Ansar, Syahrudin, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Yenni Kurnia Gusti, STIE Widya Wiwaha, Yogyakarta, Indonesia

Misnawati, Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

ID 869 Analysis of the Influence of Leadership Style and Work Environment on Apparatus Performance in Improving Service Quality

Muhammad Rusli, Baharuddin, Muhammad Yahya, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Dhaniel Hutagalung, STIE Insan Pembangunan, Tangerang, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Lilinesia Management Study Program, STIE Bina Karya Tebing Tinggi, North Sumatera, Indonesia.

T. Nurhaida Business Administration Study Program, Politeknik Mandiri Bina Prestasi North Sumatera, Indonesia

ID 871 The Effect of Regional Original Income and Capital Expenditure Management against Economic Growth of Mamuju Tengah Regency through Performance Effectiveness Regional Finance

Andi Syahrul Asfar, Muh. Akob, Gunawan Bata Ilyas, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Muh. Abduh. Anwar, Universitas Muhammadiyah Sidenreng Rappang, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru

Suprayitno Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Palangka Raya

ID 872 The Influence of Motivation and Competence on Employee Performance through Organizational Commitment at Regional General Hospitals in Majene Regency

Rahmitasari, Ansar, Ekafadly Jusuf, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Ery Wardanengsih, Universitas Puangrimaggalatung, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Zulfikar Lating STIKes Maluku Husada

Krisnawati Setyaningrum Nugraheni Sekolah Tinggi Ilmu Ekonomi Pariwisata Indonesia

ID 873 The Influence of Competence and Motivation on The Discovery of Tb Patients Through the Quality of Officer Services in The Health Office Polman

Ahmad and Akmal Umar Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Nirmawati Darwis, Universitas Puangrimaggalatung

Ekafadly Jusuf Universitas Hasanuddin, Makassar, Indonesia

Masrah Hasan Universitas Puangrimaggalatung

M Chairul Basrun Umanailo Universitas Iqra Buru

Andiwi Meifilina Universitas Islam Balitar, Indonesia.

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 875 The Influence of Leadership and Work Environment on Employee Performance Through work motivation at the Regional Disaster Management Agency of West Sulawesi Province

Jufri, Gunawan Bata Ilyas, Hendra Gunawan Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Darmawati Manda Universitas Bosowa Makassar, Indonesia

Misnawati Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru

ID 876 The Influence of Supervision of Heads of Rooms and Knowledge of Implementing Nurses on Patient Safety through the Quality of Nursing Services at the Regional Hospital

Kasmiaty, Baharuddin, and Muhammad Nur Fattah, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Dewi Mulfiyanti Akademi Keperawatan Lapatau Bone, Indonesia

Ermawati Akademi Kebidanan Lapatau Bone, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru

Irwan Hadi Stikes Yarsi Mataram

ID 877 The Influence of Individual Characteristics and Work Experience on Family Planning Services (KB)through the Competence of Midwives at Public Health Centers (Puskesmas)

Nurhilal, Nasruddin Nawawi and Eddyman W. Ferial, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Hasnawati, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Saidna Zulfikar Bin Tahir, Universitas Iqra Buru, Maluku, Indonesia

Arindiah Puspo Windari STIKes Maluku Husada

Aisyah Vitarani STIKES Salewangang Maros

ID 879 Overcoming Poverty by Increasing Local Own Revenue and General Allocation Funds Through Economic Growth in Central Mamuju Regency

Usman, Gunawan Bata Ilyas, Mansur Azis Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Marlia Rianti Universitas Muhammadiyah Bone, Indonesia

Muliaty Politeknik Negeri Media Kreatif, Makassar, Indonesia

Wiwi Rumaolat, Mohammad Dahlan Sely STIKes Maluku Husada

ID 880 The Influence of Competence, Nurse Motivation on Patient Satisfaction through the Professional Nursing Care Model (MAKP) Team in the Inpatient Room of the West Sulawesi Provincial Hospital

Hendriani Darno, Baharuddin and Purnomo Purnomo, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Abdul Rahman, Sekolah Tinggi Ilmu Ekonomi Wira Bhakti, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru

Jantje Eduard Lekatompessy Universitas Pattimura

ID 881 The Effect of Education Level and Health Service Management on Stunting Risk through Nutritional Status

Wahyuni, Muhammad Yahya and Trimaya Cahya Mulat, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Andi Makkulawu Panyiwu Kessi, STIE Tri Dharma Nusantara, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Wiwi Rumaolat STIKes Maluku Husada

Musdalifah Syamsul STIKES Salewangang Maros

ID 882 The Influence of Teaching Experience and Education Level of Teacher Performance Through Work Loads at Formal Education Unit (SPF) of Senior High School (SMAN)

Asnawati, Mislia, Hasmin Tamsah Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Geminastiti Sakkir Universitas Negeri Makassar, Makassar, Indonesia

Misnawati Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

Firman Saleh Cultural Sciences Faculty, Hasanuddin University, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru

ID 883 The Influence of Leadership and Incentives on Nurse Performance through Motivation in the Inpatient Room of the Makassar General Hospital Labuang Baji

Andri, Baharuddin and Darti Darti, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Abdul Haris, Sekolah Tinggi Ilmu Ekonomi Wira Bhakti, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 884 The Effect of Education and Work on Public Participation in National Health Insurance through Income Levels

Erdayanti and Akmal Umar, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Ekafadly Jusuf, Universitas Hasanuddin, Makassar, Indonesia

Emmi Azis, Universitas Muhammadiyah Bone, Indonesia

Misnawati, Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

ID 885 Analysis of Motivation and Work Programs on the Performance of State Civil Servants through Teamwork

Andi Tenrisanna, Hasmin Tamsah, Umi Farida, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Muhammad Arsad Rahawarin, Universitas Pattimura, Maluku, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 887 Analysis of Employee Performance through Document and Budget Availabilities and Its Impact on Work Capabilities at the Social Office of West Sulawesi Province

Rahmat, Baharuddin, Hasan Nongkeng Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Arifin Tapi Oyihoe Universitas Pattimura, Maluku, Indonesia

Yusriadi Yusriadi Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Nurman Achmad Universitas Sumatera Utara

Sjaid S Fais Assagaf Universitas Iqra Buru

ID 888 Analysis of Factors Affecting Financial Performance at the Office of the Central Mamuju District Financial Agency

Abdul Rasyid, Mattalatta Mattalatta, Baharuddin, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Mega Erdawati, Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 889 The Influence of Education Level, Teaching Experience, and Training on Teacher Pedagogical Competence in the Technical Implementation Unit of State Vocational High Schools

Syamsumarlin, Hendra Gunawan dan Mislia, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Nurlaelah Mahmud, Universitas Muhammadiyah Sidenreng Rappang, Indonesia

Misnawati, Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

ID 890 Increasing Work Motivation with State Defense Education and Compensation through Employee Discipline at the XI / Hasanuddin Military Regional Parent Regiment Educational Institution

Suryanti, Mattalatta, Syahrudin, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Satriya Nugraha, Universitas PGRI Palangka Raya, Indonesia

Heri Kurnia Universitas Cokroaminoto Yogyakarta

Yusriadi Yusriadi Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru

ID 893 The Effect of Classroom Management and Learning Media on Students' Learning Achievement through Teacher Performance

Nasrullah, Abdul Latief R, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Mustari, Universitas Negeri Makassar, Indonesia

Muhammad Ybnu, Universitas Tomakaka, Mamuju, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 894 Analysis of the influence of competency and extension methods on increasing agricultural yields through the application of integrated Technology

Islamia, Mattalatta Mattalatta, Muhammad Natsir, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Samson Laurens, Universitas Kristen Indonesia, Maluku, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 895 The Role of Work Environment and Leadership on Employee Performance through Employee Work Discipline

Debby, Umi Farida, Hasan Nongkeng, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Muhammad Ybnu, Universitas Tomakaka, Mamuju, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 896 Increasing the Professionalism of Military Teachers with Training and Experience through Competence

Eni Kusiani, Ansar, Syahrudin, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Muh. Bakri, STIH Pengayoman, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Muhammad Syukrano Baubau Islamic Religious School (STAI)

Sianturi Novdin Manoktong Civil Engineering, Technology Management and Environmental Science

ID 897 The Influence of Leadership Style on Knowledge Transfer and Organizational Culture for Employee Performance Improvement

Nellyanti, Gunawan, Masur Aziz, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Ratnawaty, PhD Program STIE AMKOP, Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 899 The Effect of Service Quality and Health Facilities on Inpatient Satisfaction through the Attitudes of Nurses at the Regional General Hospital (RSUD) Bantaeng Regency

Siti Hardianti Har, Rasyidin Abdullah, Baharuddin, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Megawati Akademi Keperawatan Lapatau Bone, Indonesia

Gustika Sandra Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

M Chairul Basrun Umanailo, Sja'id S Fais Assagaf Universitas Iqra Buru

ID 900 Training and Rewards for Performance Improvement through Personnel Motivation

Muhammad Ikbal, Gunawan, Milka Pasulu, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Marniati Syam, Sekolah Tinggi Ilmu Ekonomi YAPI Bone, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Effendi M Universitas Terbuka

Muspiha Universitas Iqra Buru

ID 901 The Impact on the Utilization of Courseware in the New Normal among PSU Students

Carla Carmela P. Perez, University of the Cordilleras, Baguio City, Benguet, 2600, Philippines and Pangasinan State University, Lingayen, Pangasinan, 2401, Philippines

Cristeta G. Tolentino, University of the Cordilleras, Baguio City, Benguet, 2600, Philippines, Pangasinan State University

Lingayen, Pangasinan, 2401, Philippines

ID 904 Analysis of Household Economic Conditions and Community Habits on The Incidence of Anemia in Pregnant Women through Household Nutrition Management in The Working Area of The Salugatta Health Center, Central Mamuju Regency

Nikmawati, Ansar, Rasjidin Abdullah Program Pascasarjana STIE Amkop Makassar, Indonesia

Jamiludin Usman Institut Agama Islam Negeri Madura

Ode Yahyu Herliany Yusuf Baubau Islamic Religious School (STAI)

Ida Bagus Made Wisnu Parta Universitas Dwijendra

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 907 The Influence of Hard Competency and Employee Productivity on Company Performance through Social Capital at PT. Celebes Indonesia Marble

A.Buyung Arma, Hasmin Tamsah, and Muliaty Ansar, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Saidna Zulfikar Bin Tahir, Universitas Iqra Buru, Maluku, Indonesia

ID 908 The Influence of Work Ethics and Work Experience on Employee Performance through Job Satisfaction at the Regional Secretariat of Central Mamuju Regency

Heranto, Hasmin Tamsah, and Abdul Razak Munir, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Ika Swasti Putri STIE Adi Unggul Bhirawa Surakarta

M Chairul Basrun Umanailo Universitas Iqra Buru

Jantje Eduard Lekatompessy Universitas Pattimura

Yusriadi Yusriadi, and Andi Asrijal, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

ID 910 The Influence of the Level of Public Awareness and Public Understanding of the Rules on the Achievement of PAD Targets through the PBB Collection Process

Achmad Anthony Haeba, Akmal Umar, and Mansur Asis, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Saidna Zulfikar Bin Tahir, Universitas Iqra Buru, Maluku, Indonesia

ID 911 The Effect of Competence and Management Quality on the Effectiveness of Using Medical Equipment through Electromedical Performance at Makassar City Hospital

Mardhiah, Sukri Palutturi, and Baharuddin, Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Yusriadi Yusriadi, Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung, Makassar, Indonesia

Sjaid S Fais Assagaf Universitas Iqra Buru

Muhammad Agussalim Isnaini Shobah Baubau Islamic School of Religion (STAI)

ID 912 The Effect of Additional Employee Income (TPP) and Professionalism on Performance Through Job Satisfaction of Civil Servants (PNS) in the Soppeng District Environment Office

Arham, Tenri Fitriyah, Nur Naninsih Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar, Indonesia

Marlia Rianti Universitas Muhammadiyah Bone, Indonesia

Gustika Sandra Sekolah Tinggi Ilmu Hukum Pengayoman, Makassar, Indonesia

Masna Hatuwe, Sjaid S Fais Assagaf Universitas Iqra Buru

ID 914 The Effect of Work Productivity Toward Employee Performance

Maudi Hijriatin, M. Yahya Arwiyah, Mahendra Fakhri, and Bachruddin Saleh Luturlean, School of Communication and Business Telkom University, Indonesia

ID 918 Analysis of the Effects of the Prolonged Standing and Sitting Posture on Physiological Indicators, and the Potential Impact on Health: A Systematic Review and Meta-Analysis

Mateo Maldonado and Nicolás Orbe Department of Industrial Engineering Universidad San Francisco de Quito Cumbayá, UIO 170901, ECU
eorbe@estud.usfq.edu.ec María Gabriela García, PhD Thesis tutor Department of Industrial Engineering Universidad San Francisco de Quito Cumbayá, UIO 170901, ECU

ID 919 An Analysis of Critical Thinking Skills of Grade VIII Mts Manbaul Ulum Gembong Materials Build a Flat Side Room from Student's Self-Confidence

Yogi Faisal Fahmi, Postgraduate Program of Mathematics Education, Universitas Sebelas Maret, Indonesia
Budiyo Budiyo, and Farida Nurhasanah, Faculty of Teacher Training and Education, Universitas Sebelas Maret, Indonesia

ID 924 Lean After Sales Service: Implementation of DMAIC Methodology in After Sales Processes of an Automotive Workshop

Andrea Michel Chávez Guachamín¹ and Pablo Sebastián Burneo Arteaga², Universidad San Francisco de Quito, USFQ, Colegio de Ciencias e Ingeniería, Departamento de, Ingeniería Industrial and Instituto de Innovación en Productividad y Logística CATENA-USFQ, Diego de Robles s/n y Vía Interoceánica, Quito, Ecuador 170901

ID 951 Development and Validation of the Social-Cultural Competency Assessment Software for State Civil Apparatus

Tri Esti Budiningsih, Fatma Kusuma Mahanani, Pradipta Christy Pratiwi, Woro Apriliana Sari and Luthfi Fathan Dahriyanto
Department of Psychology, Faculty of Education Universitas Negeri Semarang, Indonesia

ID 952 School for Parents: Family Education Development throughout the First 1000 days of Life for Accelerating Stunting Reduction in Brebes Regency

Lita Latiana, Rina Windiarti, Reni Pawestuti, Amirul Mukminin and Akaat Hasjiandito Departemen of Early Childhood and Teacher Education Faculty of Education, Universitas Negeri Semarang, Indonesia

ID 953 Validation of Reflective Model Curriculum Evaluation Instruments

Istyarini Istyarini, Niam Wahzudik, Wardi Wardi, Nurussa'adah Nurussa'adah and Christian Christian Department of Curriculum and Educational Technology Faculty of Education, Universitas Negeri Semarang, Indonesia

ID 954 Implementation of Cooperative Learning Model in Homeschooling as Equality Education

Imam Shofwan, Irlan Widiana Santosa, Joko Sutarto Fakhruddin Fakhruddin, and Fathona Soraya Nonformal Education Departemen, Faculty of Education Universitas Negeri Semarang, Indonesia

ID 956 Implementing Character Building and Nationalism at Inclusive Early Childhood Education Institutions

Diana, Neneng Tasu'ah, Rina Windiarti and Akaat Hasjiandito Department of Early Childhood Teacher Education Universitas Negeri Semarang Indonesia

ID 957 The Big Book Media Drawing for Third Class Elementary School

Deni Setiawan, Siti Nur Sa'adah, Nursiwi Nugraheni, A. Busyairi Elementary School Teacher Education Department Faculty of Education, Universitas Negeri Semarang, Indonesia

ID 961 Tutors' Job Performance: The Role of Work Motivation and Organizational Climate

Hendra Dedi Kriswanto, Imam Shofwan, Muarifuiddin, Yudi Siswanto Non-Formal Education, Faculty of Education Universitas Negeri Semarang, Indonesia

ID 962 Are You Gritty People? A Study of Passion and Perseverance in University Students

Sukma Adi Galuh Amawidyati, Fatma Kusuma Mahanani, Isnaeni Mas'udah Vertika Aprilolita and Silviana Irawati Department of Psychology, Faculty of Education, Universitas Negeri Semarang, Indonesia

ID 963 The Capability and Electability of Local Government in improving Administration Development

Ivana STISIPOL Candradimuka, Palembang, Indonesia

Chairun Nasirin College of Health Sciences (STIKES), Mataram, Indonesia

Rudy Kurniawan University of Sriwijaya, Palembang, Indonesia

Andries Lionardo University of Sriwijaya, Palembang, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru, Indonesia

ID 964 Swimming Exercise Model Policy Using Straps as Aid for Beginners

Meirizal Usra, Andries Lionardo and Rudy Kurniawan University of Sriwijaya, Palembang, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru, Indonesia

Chairun Nasirin College of Health Sciences (STIKES), Mataram, Indonesia

ID 965 Social Capital In The Indonesian General Election 2019

Rudy Kurniawan, Andries Lionardo Faculty of Social and Political Studies, University of Sriwijaya, Palembang,

Ivana STISIPOL Candradimuka, Palembang, Indonesia

Chairun Nasirin College of Health Sciences (STIKES), Mataram, Indonesia,

M Chairul Basrun Umanailo Universitas Iqra Buru

ID 966 PUBLIC SERVICE MOTIVATION ON THE STATE CIVIL APPARATUS: “Local Government Policies Strategy in Administration Reform”

Andries Lionardo University of Sriwijaya, Palembang, Indonesia

Rudy Kurniawan University of Sriwijaya, Palembang, Indonesia

Kiki Cahaya Setiawan UIN Raden Fatah, Palembang, Indonesia

Chairun Nasirin College of Health Sciences (STIKES), Mataram, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru, Indonesia

ID 967 Challenges of Public Administration Reform in the Industrial Age 4.0

Derriansya Putra Jaya University of Sriwijaya, Palembang, Indonesia

Rudy Kurniawan University of Sriwijaya, Palembang, Indonesia

Chairun Nasirin College of Health Sciences (STIKES), Mataram, Indonesia

Andries Lionardo University of Sriwijaya, Palembang, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru, Indonesia

ID 968 Innovation in the Utilization of Digital-Based Social Media in Readiness to Organize Concurrent Regional Head Elections in the Covid 19 Pandemic Era

Andries Lionardo University of Sriwijaya, Palembang, Indonesia

Rudy Kurniawan University of Sriwijaya, Palembang, Indonesia

Chairun Nasirin College of Health Sciences (STIKES), Mataram, Indonesia

Derriansya Putra Jaya University of Sriwijaya, Palembang, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru, Indonesia

ID 969 Big Data Analytics in Handling Mechanisms of Transforming Healthcare Performance: An Approach Technological Management in Addressing Nurse Workloads in Emergency Department

Chairun Nasirin Department of Health Administration College of Health Sciences (STIKES), Mataram, Indonesia

Andries Lionardo, Rudy Kurniawan Faculty of Social and Political Studies University of Sriwijaya, Palembang, Indonesia

Ivana STISIPOL Candradimuka, Palembang, Indonesia

M Chairul Basrun Umanailo Universitas Iqra Buru, Indonesia

ID 970 Usage Satisfaction of Clarin Hayes Health Youtube Channel Toward Healthy Lifestyle

Rehia Karenina Isabella Barus, Nadra Idayani Vita, Nina Siti Salmaniah Siregar, Ester Elisabeth Sinaga and Syafruddin Ritonga Communication Science Study Program, Faculty of Social and Political Sciences, Universitas Medan Area, North Sumatera, Indonesia

Waridah Pulungan Government Science Study Program, Faculty of Social and Political Sciences, Universitas Medan Area, North Sumatera, Indonesia

Agung Suharyanto Public Administration Study Program, Faculty of Social and Political Sciences, Universitas Medan Area, Indonesia

ID 971 The Teaching of EFL Vocabulary through Anticipatory Learning Strategy in Islamic Higher Education Context in Indonesia

Abdul Gafur Marzuki, Santiana, Ana Kuliahana, Alek, Nurul Fadhilah, Besse Darmawati, Saidna Zulfiqar Bin-Tahir English Education Department, Palu State Institute for Islamic Studies (IAIN Palu), Diponegoro Street 94221, Palu city, Central Sulawesi, Indonesia

ID 973 The Impact of Additional Employee Income (TPP) and Professionalism on Performance through Job Satisfaction of Civil Servants in the Environmental Service

Arham Student of Magister Program of Economic Science, STIE AMKOP, Makassar, Indonesia

A. Tenri Fitriyah Universitas Bosowa, Makassar, Indonesia

Nur Nainsih STIE AMKOP, Makassar, Indonesia

Andi Sutra Rimba Institut Pemerintahan dalam Negeri, Makassar, Indonesia

Yusriadi Yusriadi Sekolah Tinggi Ilmu Administrasi Puangrimaggalatung

Erni Qomariyah Department of Business Administration, Halu Oleo University

Andries Lionardo University of Sriwijaya, Palembang, Indonesia

ID 975 Motivation and Incentives on Management Effectiveness through Performance Evaluation System at the Soppeng District Police Station

Andi Ahmad Rahmansyah San Student of Management Magister Program Sekolah Tinggi Ilmu Ekonomi Amkop, Makassar

Muhammad Yahya, Muhammad Nur Fattah Management Program Sekolah Tinggi Ilmu Ekonomi Amkop, Makassar

Amin Toha Student of Doctoral Program Universitas Muslim Indonesia, Makassar

Misnawati Law Studies Department Sekolah Tinggi Ilmu Hukum Pengayoman

Esther Kembauw, Maryam Sangadji Pattimura University

ID 976 Empowerment Policy Analysis on Performance through Institutional Coordination and Quality Assistance at the Community Empowerment Office

Suci Dharma, Hasmin Tamsah and Sitti Mujahida Baharuddin Student of Management Magister Program- Postgraduate Program Sekolah Tinggi Ilmu Ekonomi Amkop Makassar, Indonesia

Endy Gunanto Marsasi Management Department Universitas Islam Indonesia, Yogyakarta, Indonesia

Saidna Zulfiqar Bin-Tahir English Education Department Universitas Iqra Buru, Maluku, Indonesia

Herry Fernandes Butar Butar Politeknik Ilmu Pemasarakatan

Ambo Upe Department of Sociology, Halu Oleo University

Order Picking Operation and Warehouse Layout Optimization in a Textile Industry by Using Genetic Algorithm

Maxsuel Vieira Orti and Raimundo C. G. Teive

Laboratory of Applied Intelligence
University of Vale do Itajaí (UNIVALI)
Itajaí, SC, Brazil

maxsuel@edu.univali.br, rteive@univali.br

Abstract

The optimization of Warehouse Layout and Order Picking are essential to warehouse management in companies trying to follow the trend of one-day shipping. This paper studies a Textile Industry with this objective, proposing a change in warehouse layout and applying a Genetic Algorithm (GA) with the objective of optimizing the order picking operation. The proposed GA uses sales data and data mining to minimize the distance between the company's bestselling items. The results have demonstrated the feasibility of this approach, supplying two optimal warehouse layout configurations with minimal distances between the most sold items.

Keywords

Genetic Algorithm, Order Picking, Textile Industry, Warehouse Layout Optimization

1. Introduction

Warehouse operations are a critical part of logistics and its optimization can lead to lower costs and better productivity. Warehouse operations have a strong influence on both investment and direct operational costs (Chen et al. 2015, Pan et al. 2018). Same-day shipping is one of the objectives for business that are trying to follow a trend set by companies like Amazon (Giannikas et al. 2017). Considering the fast development of logistics, the use of conventional storage method is insufficient to meet the demands of production and transportation (Liu et al. 2014). The optimization of both inventory and storage allocation is an important issue for warehouse management (Gibson et al. 2016). Thus, it is known that to meet customers demands and apply a same-day shipping policy, the optimization of warehouse operations is paramount in a company. One of the warehouse operations that can be optimized is the Order Picking (OP)

Order Picking is a critical warehouse operation. This activity handles the retrieving of items from their storage location to satisfy customers orders (Henn, 2012). This operation is repeated for each order and may be influenced by sectoral requirements, customer requests, order structures, transportation routes and warehouse layout (Yener, 2019). OP usually involves at least four actions: pre-action, searching, picking, transport and other (Chen, 2014). OP is one of the most labor-intensive operations in a warehouse (Koster, 2007) and it is estimated that OP can be up to 70% of the costs of a warehouse (Chen, 2014). Thus, the optimization of OP can reduce the operational costs and decrease the average time of shipping. One of the approaches to optimize OP is the utilization of a Genetic Algorithm (GA).

Metaheuristics, mostly Genetic Algorithm (GA), has been used to solve optimization problems related to order picking and warehouse management. Ardjmand et al. (2019) applied a GA to optimize order picking in a put wall-based picking system. Pan et al. (2018) uses GA and a simulation model to improve layout planning in a warehouse. Beroule et al. (2017) implemented a GA to improve routing and items allocation in a warehouse of a hospital pharmacy. Chen et al. (2014) developed a hybrid solution using GA and Ant Colonization Optimization to solve an integrated order batching, sequencing, and routing problem. As far as we know, there are no publications of GA applied to OP considering the limitations of a textile industry.

The proposed study differs from the related works in three aspects: case scenario, problem modelling and solution method. On Ardjmand et al. (2019) and Beroule et al. (2017), the major challenger is related to the order batching

Sustainability Best Practices for Oil and Gas Sector in Mexico

**María del Rocío Soto-Flores, Raúl Rodríguez-Ávila,
Christian Muñoz-Sánchez, Ingrid Yadibel Cuevas-Zuñiga**
Business School (ESCA-STO)
National Polytechnic Institute of Mexico (IPN)
Mexico City, Mexico

msotof@ipn.mx, raul.rodrigueza@pemex.com, cmunozs@ipn.mx, icuevasz@ipn.mx

Abstract

The objective of the research is to identify the best sustainability practices most used in companies in the oil and gas sector to reduce the environmental damages of their activities, in order to take them into account in Mexico. The research is documentary, in which the leading companies in the oil and gas sector were considered as subjects of study based on their environmental performance and the development of substantive activities. The results presented are the best sustainability practices and the environmental impacts derived from the central activities of the oil and gas sector, as well as the mechanisms for implementing best sustainable practices in the case of Mexico. There is evidence that companies in the sector invest in sustainability practices to improve their environmental performance, while continuing to obtain economic benefits, in the direction of low carbon economies, however, it is necessary to give greater impetus to renewable energy sources that have taken relevance in recent decades.

Keywords

Sustainability Best Practices, Environmental impacts, Oil and Gas Sector.

1. Introduction

The oil and gas sector is considered vital and strategic for the development and economic growth of many countries, including Mexico. This sector plays a central role as a supplier of hydrocarbons around the world, which are considered the largest sources of primary energy in global consumption with a participation of 57% (BP, 2017), they also represent economic potential and military strategic value (Puyana, 2015). The value chain of the sector consists of the Upstream, Downstream and Midstream phases, being its main activities: exploration, production, industrial transformation and hydrocarbon logistics.

Activities throughout the value chain of this sector have caused serious impacts on the physical and biological means of its areas of influence (Roa, 2011), leaving serious environmental liabilities and deteriorating the quality of the environmental services they provide, of which there is evidence throughout the world and in the history of this industry (Oilwatch, 2006). Globally, it is estimated that in the next 20 years, hydrocarbons will continue to contribute a significant share in global energy consumption (EIA, 2016), therefore, the sector would be carrying out activities around this projection, but facing fundamental challenges, on the one hand, the supply of these resources and, on the other, how to achieve it through ethical behavior in the economic, social and environmental dimensions (Saavedra & Jiménez, 2014). The incidence of companies in this sector in Mexico has taken on greater relevance today, mainly due to the implementation of the Energy Reform of 2013, which now allows private participation in the activities of the sector, which were previously exclusive to the Mexican state (SENER, 2013). In this research, the sustainability management carried out by leading companies in the sector is analyzed and compared, which have been considered based on their relevance and participation at the international level in terms of sustainability and, some of which develop activities in important natural areas protected from the planet, in addition to being dabbled in alternative energy sources, all in search of those sustainability practices with which they have managed to reduce the impacts on the means of areas of influence, as well as the mechanisms they use for their implementation. This paper is organized as follows; in the following section of the literature review is developed. Second, methodology is introduced. Third, sustainability management and best sustainability practices in the oil and gas sector are discussed. Fourth, mechanisms for implementation of sustainability best practices for the case of Mexico are presented. Finally, the theoretical and applied contribution of this research is provided.

2. Literature Review

The Evaluation of Reverse Logistic as Indicator of the Green Material Management Performance in a Construction Project: A Literature Review

Sherly A Wardani and Naniek Utami Handayani

Industrial Engineering Departement
Diponegoro University
Semarang, Indonesia

sherlyayuardani@students.undip.ac.id, naniekh@ft.undip.ac.id

Mochamad Agung Wibowo

Civil Engineering Departement
Diponegoro University
Semarang, Indonesia

agung.wibowo@ft.undip.ac.id

Abstract

Green supply chain management (GSCM) is an approach to minimize negative impacts on the environment during the construction process. Green material management (GMM) is a phase of the project life cycle that has a significant effect on GSCM performance. GMM dimensions consist of green procurement, green transportation, green warehousing, and reverse logistics (RL). The application of RL in the construction is difficult because of the lack of awareness. The difficulties of RL application because RL not integrated along the supply chain. In construction, RL viewed as an independent system. The ease of RL implementation requires performance evaluation as a start to determine the initial steps in efforts to improve performance. Previous performance evaluations on GMM did not include RL as a dimension in measuring performance, so the purpose of this study is to develop and added an RL indicator for GMM performance evaluation. The weakness of the previous research is a measurement not to use a quantitative approach. The purpose of this research is to develop indicators and added an RL indicator for GMM performance evaluation. The result of this study is a framework of GMM concepts in the construction that consists of four dimensions, ten elements, and 38 indicators.

Keywords

Reverse Logistics, Green Material Management, Construction Project.

1. Introduction

The construction industry is an essential sector in infrastructure development for Shakantu et al. (2008) supporting the growth of a country (Luangcharoenrat et al. 2019). During the process of infrastructure development, the construction consumes a lot of non-renewable material Wong et al. (2016) which will be emerging a significant impact on the environment (Shakantu et al. 2008; Wong et al. 2016). The construction industry produces solid waste (rubbish, mud, air pollution, CO₂ emissions), and non-solid waste (delay, rework, high cost, etc.) (Wibowo et al. 2018; Wibowo et al. 2017). The construction of the utilization of 35% of energy will release 40% of CO₂ gas into the atmosphere, it shows the role of the building in environmental degradation, and it requires more environmentally friendly practices management throughout its business processes (Luangcharoenrat et al. 2019).

GSCM in the construction sector has a goal to achieve good quality, cost, time, and environmental performance. Therefore, GSCM implementation must be integrated with PLC. The concept of integration is the result of research conducted by Wibowo et al. (2018). The GSCM concept with the PLC approach includes green initiation, green design, green material management, green construction, and green operations & maintenance (Wibowo et al. 2018; Farida et al. 2019; Wibowo et al. 2018). Each phase during the project life cycle will produce different waste, so it will need such amelioration through the supply chain to reduce the waste and improve the performance of a construction project (Wibowo et al. 2018; Nur et al. 2018).

Production Disturbances Handling: Where Are We and Where Are We Heading?

Adriana Ito, Torbjörn Ylipää, Anders Skoogh

Department of Industrial and Materials Science
Chalmers University of Technology
Gothenburg, Sweden

adriana.ito@chalmers.se , torbjorn.ylipaa@chalmers.se , anders.skoogh@chalmers.se

Per Gullander

RISE Research Institute of Sweden
Gothenburg, Sweden
per.gullander@ri.se

Abstract

Half of manufacturing companies' production capacity is estimated to be compromised due to disturbances. With the upcoming Industry 4.0, this problem is expected to be minimized through technological solutions. The aim of this article is to propose alternatives to handle production disturbances by means of technological support, to minimize their occurrence and impacts. To this purpose, we conducted a literature review and a series of interviews with five companies. We distinguish six stages for handling production disturbances: detection, diagnosis, mitigation/correction, root cause analysis, prevention, and prediction. Our results indicate that all these stages are expected to benefit from Industry 4.0 technologies significantly. Furthermore, our results point out that practitioners perceive the stages of prevention and prediction with the highest potential for improvement. However, focus on the diagnosis and root cause analysis stages is also necessary since those stages are coupled to the prevention and prediction. The contributions of this article are twofold. Firstly, it provides a holistic view of the stages and technologies to handle production disturbances in Industry 4.0, from which practitioners can extract directions for implementation. Secondly, the paper provides focus for further research in the field of disturbance management with the identification of the current challenges.

Keywords

Production disturbances, Industry 4.0

1. Introduction

With the advent of Industry 4.0, production systems are envisioned with nearly zero disturbances (Eleftheriadis & Myklebust, 2016; May & Kiritsis, 2019). Different technologies support the Industry 4.0 era to become a reality. Among the leading technologies are smart sensors, smart devices, big data, data analytics, internet of things (IoT), cloud computing, additive manufacturing, augmented and virtual reality (Posada et al., 2015; The Boston Consulting Group (BCG), 2015). These technologies will provide the means for developing self-adaptable, self-optimized, and self-maintained production systems (Lee et al., 2015).

However, there is a long way to go until we reach a disturbance-free system. The overall equipment effectiveness (OEE) of manufacturing companies is only around 50% (Ylipää et al., 2017). In other words, about half of the manufacturing capacity is not utilized, primarily because of disturbances. Therefore, the reduction of production disturbances causes a significant impact on financial performance. Furthermore, it also affects the environmental and social aspects of sustainability. It is possible to achieve more efficient resource utilization in a production system with fewer disturbances, as well as safer working conditions.

But what is a production disturbance? There are different definitions in the literature, ranging from "unexpected and unplanned events" to "all events that affect quality, operational performance, security or working conditions" (Stricker & Lanza, 2014; Bokrantz et al., 2016; Kaya & Bergsjö, 2018). In this paper, we consider that a production disturbance is "an undesired and unplanned event that causes the production system not to perform as planned".

Simulation Improves Service and Resource Allocation at an Automotive Garage

Wenqi Deng, Yang Yang, Di Zhao, and Edward J Williams

Business Analytics, College of Business, University of Michigan – Dearborn

Dearborn, MI, 48126, USA

wenqid@umich.edu, umethan@umich.edu, dizhao@umich.edu, williams@umich.edu

Abstract

Discrete-event process simulation historically began its now long and distinguished “career” in support of manufacturing operations, ranging from assembly lines to make-to-order operations. From that auspicious beginning, it has expanded its usage to many other fields, such as warehousing, public transport (e.g., airports, bus terminals, railroads...), health care delivery (e.g., hospitals, clinics, urgent care centers, dental practices...), government functions (e.g., welfare administration, timing of traffic lights, courthouses...), and the service industry. Service industry applications of simulation have included restaurants, retail stores, hotels, and drive-through oil change centers. In this paper, we describe the important and productive role of simulation in improving the service performance metrics and resource allocation within an automotive service center.

Keywords

Discrete-event process simulation, Automotive repair, Service industry, Resource utilization, Queueing system performance metrics

1. Introduction

The first commercial uses, and still among the most numerous uses, of discrete-event process simulation have been in the manufacturing sector of the economy. There, simulation first and dramatically showed its abilities to identify bottlenecks, evaluate proposals for eliminating them, improve and level usage of scarce and/or expensive resources, and improve performance metrics such as total output, queue lengths, and time waiting in queues. As a result of and spurred by these successes, simulation usage rapidly expanded into the warehousing sector, health care (particularly hospitals), government work, transportation networks, and service industries, as documented by Greasley (2005). Cepera and Konrad (2019) applied simulation to governance of complex transportation systems and traffic jams in Germany. Many examples of simulation analyses applied to service industries have been documented in the literature. For example, Villarreal-Navarro et al. (2017) applied simulation analysis to reduce shoppers’ exasperation at empty shelves at a network of Mexican convenience stores. Call centers are a frequent service-industry application of simulation, as recognized by Mathew and Nambier (2013). Williams et al. (2005) applied simulation to improve operations and traffic flow at a drive-through oil-change center.

The remainder of this paper is organized as follows: The next section presents an overview of the services provided by and the operations of the repair garage. Next, we describe the data required by the model and describe the collection of those data. Next, we present the process of building, verifying, and validating the simulation model. Subsequently, we describe the results provided by the model and our analysis of them, leading to recommendations provided to the garage managers and owners. We conclude with a summary of the project and indications of likely future work.

2. Overview of Repair Garage Services and Operations

Servicing consumers’ vehicles is a huge market worldwide, with three types of participants: Dealers who also sell vehicles, independent repair shops, and a miscellaneous category including, for example, filling stations and specialty shops, as described by Horowitz and Shilling (1989). The automotive service center studied in this simulation work is of the second category; it was opened in 2017, and is located near the economic development district of Beijing, the capital of China. This garage enjoys, has earned, and very much wishes to maintain, an excellent reputation for repair services performed with integrity and quality (in sharp contrast to worldwide stereotypes of automotive repair shops). The center operates five days a week (Monday through Friday), opening each day at 8am. After 4pm, no new arrivals are accepted for service that day, but the mechanics and other service personnel stay on duty until almost all (exception noted below) vehicles arriving that day have received service. Therefore, a customer (e.g., an employee in a nearby office building) can and routinely does drive his or her vehicle (drivable but in need of repairs and/or routine maintenance) to the garage, leave it there, and

Keynote Speakers – 2nd South American Industrial Engineering and Operations Management Conference, Sao Paulo, Brazil, April 5-8, 2021



Professor Paulo Roberto Freitas de Carvalho
Director - FACENS
Sorocaba Engineering School
Sorocaba, Sao Paulo, Brazil



Daniel Scuzzarello
Vice President and Country
Manager, Siemens Digital Industry
Software South America
São Paulo, Brazil



Prof. Dr. Fernando José Barbin Laurindo
Full Professor, Production
Engineering Dept. Polytechnic
School, University of São Paulo



Ricardo Mourad
Regional Operation Director -
South America
Valeo
Sao Paulo, SP, Brazil



João Luis Frare, MBA
Industrial Engineering Executive
Manager
Continental Automotive do Brasil,
São Paulo, Brazil



Prof. Eduardo Antonio Modena,
Rector/Dean
Federal Institute of Education,
Science and Technology
Sao Paulo, Brazil



Cláudio Araujo Rocha
Head of Powertrain Manufacturing
LATAM / Powertrain Manufacturing
Director (retired), FCA Fiat Chrysler
Automobiles, Latam, Brazil



Edinaldo Fancio
Manufacturing, Engineering &
Quality Manager
Eaton Corporation
Valinhos, São Paulo, Brazil



Dr. Antonio Henrique de Araujo Junior
Professor, Production Engineering
Dept., State University of Rio de
Janeiro, RJ, Brazil



Dr. Antonio Carlos Gomes Junior
Coordenador de Engenharia
Mecânica e Centro 4.0 Centro
Universitário FACENS
Sorocaba, São Paulo, Brazil



Dr.-Ing. Enzo Morosini Frazzon
Associate Professor, Industrial and
Systems Engineering Department
Federal University of Santa
Catarina (UFSC), SC, Brazil



Marco Santos, MBB, MBA
Master Black Belt
ZF do Brasil
Sorocaba, São Paulo, Brazil



Mr. Fábio Soares Freccia
Head of Corporate Logistics
Planning
Volkswagen do Brasil
São Bernardo do Campo
São Paulo, Brazil



Dr. Jose Luis Guerrero-Cusuman
Assoc. Professor of Operations
and Information Management
McDonough School of Business
Georgetown University
Washington, D.C., USA