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Pilsen, Czech Republic, July 23–26, 2019

Venue: Park Hotel Congress Center Pilsen

www.ieomsociety.org/pilsen2019/

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Conference Theme: *Industrial Engineering and Operations Management for Industry 4.0*

Conference Registration Link

Please send your tours and industrial visit registration form to pangraci@rice.zcu.cz

July 23, 2019 – Tuesday

Pilsen city tour, 6.30pm – 7.30pm

Dinner at Pilsner Urquell brewery from 7.30pm (price for the dinner is 15 Euro)

Industrial trips:

July 24, 2019 – Wednesday

Excursion to Siemens Electronics Factory in Amberg / Germany – The “Digital Factory” – 2pm – 8pm
(The cost of the trip is 15 Euro)

July 26, 2019 – Friday

Excursion to the University of West Bohemia and Pilsner Urquell Brewery (production and logistics) – 9am – 3pm

Excursion to BMW group plant in Regensburg / Germany – 8.30am – 3pm

The cost of the trip is 15 Euro

For family members: (if you are interested, please let us know) – the price will be calculated later based on interest

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July 23, 2019 – Tuesday – Trip to spa cities – Mariánské Lázně and Karlovy Vary (all day)

July 24, 2019 – Wednesday – Trip to capital city – Prague (all day)

July 25, 2019 – Thursday – Trip around Pilsen (all day)

Registration Form for Tours and Industrial Visits: <http://www.ieomsociety.org/tour-registration-pilsen.pdf>

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You can pay onsite for tours and plant visit. However, you must submit your tour registration form as soon as possible, **but no later than June 30, 2019.**

If you have any questions about tours and plant visits, please contact:

Dr. Jiří Tupa – Conference Co-Chair and Chairman of the Organizing Committee

Vice Dean for Strategy and Development

Faculty of Electrical Engineering

University of West Bohemia, Pilsen, Czech Republic

E-mail: tupa@ket.zcu.cz, tel: +420 3776345 008

IEOM Society International, a 501(c)(3) non-profit organization, is a premier international platform and forum for academics, researchers, scientists and practitioners to exchange ideas and provide insights into the latest developments and advancements in the fields of Industrial Engineering and Operations Management. IEOM has successfully organized international conferences in Dhaka (2010), Kuala Lumpur (2011), Istanbul (2012), Bali (2014), Dubai (2015), Orlando (2015), Detroit (2016), Kuala Lumpur (2016), Rabat (2017), Bristol, UK (2017), Bogota (2017), Bandung (2018) and Paris (2018). There are more than 100 IEOM Student Chapters around the globe. After having successfully 2nd European Conference in Paris, the IEOM Society is organizing the 3rd European Conference in Pilsen, Czech Republic during July 23–26, 2018. The event will be held at Park Hotel Pilsen, Czech Republic.

Authors can submit full paper(s) or abstract(s) only. Authors must use the conference template to prepare papers or abstracts. All full papers will be subjected to double peer review. Accepted papers will be published in the Proceedings and **indexed in SCOPUS**. Attending the conference and presentation of the paper is required.

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The 3rd IEOM European International Conference aims at providing a platform for academics, researchers, scientists and practitioners to exchange ideas and bridge the gap between the Industrial Engineering and Operations Management theory and its application in solving the most current problems and challenges faced by 21st century organizations. Hence, the conference is also expected to foster networking, collaboration and a joint effort among the conference participants to advance the theory and practice as well as to identify major trends in Industrial Engineering and Operations Management.

Dr. Jiri Tupa

Chairman of the Organizing Committee

Topics covering industrial issues/applications and theoretical research, but are not limited to:

- Business management
- Big Data and Analytics
- Decision Sciences
- E-Business and E-Commerce

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- Lean Six Sigma Competition
- Supply Chain and Logistics Competition

Important Dates

- Paper Submission Deadline – **March 31, 2019 (Extended)**
- Notification of Acceptance – April 15, 2019
- Camera-ready Paper Submission – April 30, 2019
- Early Bird Registration – May 15, 2019
- Conference – July 23–26, 2019



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 - Dr. Ahad Ali, Lawrence Tech University, Michigan, USA
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Bernardo Villarreal, Universidad de Monterrey, San Pedro Garza García, México.

Mónica Balderas, Universidad de Monterrey, San Pedro Garza García, México.

Andrea Araiza, Universidad de Monterrey, San Pedro Garza García, México.

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Mercy Manyuchi, University of Johannesburg, Johannesburg, South Africa.

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Botswana, University of Johannesburg, Johannesburg, South Africa.

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Teresa Verduzco, Universidad De Monterrey, San Pedro Garza Garcia, Mexico.

Bernardo Villarreal, Universidad De Monterrey, San Pedro Garza Garcia, Mexico.

ID 8 A Sustainable Supply Chain of a Coal Power Plant

Asmaa El Bouri Camel, Faculty of Sciences & Techniques of Marrakesh Safi, Morocco.

Khalid Benhida, Department of Instrumental Techniques and Quality Control, EST of Safi, Cadi Ayyad University, Safi, Morocco

Said El Fezazi, Department of Instrumental Techniques and Quality Control, EST of Safi, Cadi Ayyad University, Safi, Morocco

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Hakan Butuner, IMECO Industrial Management & Engineering Co., Istanbul turkey, Turkey.

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Mercy Manyuchi, University of Johannesburg, Johannesburg, South Africa.

Mbohwa, University of Johannesburg, Johannesburg, South Africa.

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Eric Amankwa, University of Johannesburg, Oakland park, Gaunteng, South Africa.

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Jana Kleinova, University of West Bohemia, Pilsen, Czech Republic

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Yahaya Yusuf, Lancashire School of Business University of Central Lancashire Preston, United Kingdom

David Hanley, Lancashire School of Business University of Central Lancashire Preston, United Kingdom

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Milton Krivokuca and Associates Wilmington, North Carolina, United States.

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Muhammad Babar Ramzan, Department of Garment Manufacturing, National Textile University, Faisalabad, Pakistan

Ateeq ur Rehman, Department of Garment Manufacturing, National Textile University, Faisalabad, Pakistan

Muhammad Salman Naeem, Department of Garment Manufacturing, National Textile University, Faisalabad, Pakistan

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Dr. Goutam Nandi, Department of Mechanical Engineering Jadavpur University, India

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Dr. Goutam Nandi, Department of Mechanical Engineering Jadavpur University, India

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Dr. B K R Naik, National Institute of Industrial Engineering, Mumbai, India

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Mohammad Shamsuzzaman, University of Sharjah, United Arab Emirates

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Ahmed Maged, Benha Faculty of Engineering, Benha University, Benha, Egypt

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Zakaria Tobi, Ecole Nationale des Sciences Appliquées (ENSA) Université Abdelmalek Essaâdi Tetouan, Morocco

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Rana Musa, University of Sharjah, United Arab Emirates

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Martin Kába, University of West Bohemia Univerzitní, Pilsen, Czech Republic

Ilona Kačerová, University of West Bohemia Univerzitní, Pilsen, Czech Republic

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Moloko Masopoga, University of Johannesburg, South Africa

A Wessels, University of Johannesburg, South Africa

JHC Pretorius, University of Johannesburg, South Africa

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Vilas J Kharat, National Institute of Industrial Engineering, Mumbai, India

Tejashree Bendale, Electronics Department, UMIT, Mumbai India

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Prasenjit Dutta, NIT Agartala, Jirania, Tripura, India.

Subhash Chandra Panja, Jadavpur University, Kolkata, India.

Pawan Kumar Research Student Department of Production Engineering, NIT Agartala, Jirania, Tripura, India.

Debashis Sarkar, Principal Asansol Engineering College, Asansol, India

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Salah Haridy, University of Sharjah, Sharjah, United Arab Emirates.

Imad Alsyouf, University of Sharjah, Sharjah, United Arab Emirates.

Mohammad Shamsuzzaman, University of Sharjah, Sharjah, United Arab Emirates

Ahmed Maged, Benha Faculty of Engineering, Benha University, Benha, Egypt

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Piya Ghosh, Indian Institute of Technology, Kanpur, India

RRK Sharma, Indian Institute of Technology, Kanpur, India

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Kibala Adiam, University of Johannesburg Johannesburg, South Africa

Hannelie Nel, University of Johannesburg Johannesburg, South Africa

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Yahaya Yusuf, University of Central Lancashire Preston, UK

Tanimu Dandutse, University of Central Lancashire Preston, UK

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Muhammad Ahmad Tauqeer, Department of Mechanical and Structural Engineering and Material Science, University of Stavanger, Norway

Knut Erik Bang, Department of Mechanical and Structural Engineering and Material Science, University of Stavanger, Norway

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Tariq Samad, Technological Leadership Institute, University of Minnesota, U.S.A.

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M.J Rasethe, Postgraduate School of Engineering Management, University of Johannesburg, South Africa

A Wessels, Postgraduate School of Engineering Management, University of Johannesburg, South Africa

JHC Pretorius, Postgraduate School of Engineering Management, University of Johannesburg, South Africa

ID 120 A Review Paper on Algorithms Used For Simple Assembly Line Balancing Problems in the Automotive Industry

Salah Eddine Ayoub El Ahmadi, National School Of Applied Sciences, Ibn Tofail University, Kenitra, Morocco

Laila El Abbadi, National School Of Applied Sciences, Ibn Tofail University, Kenitra, Morocco

Moulay Taib Belghiti, National School Of Applied Sciences, Ibn Tofail University, Kenitra, Morocco

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Mohamed Hicham Salah Eddine, Research team AMIPS, Mohammed V University of Rabat, Morocco
Tarik Saikouk, International logistics and supply chain department, International University of Rabat
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ID 122 Understanding supply chain resilience: a dynamic approach using theory of constraints current reality tree

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ID 123 The Impact of Payment delays on The Financial resilience of a Multi-echelon Supply Chain: a System Dynamics simulation Approach

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ID 124 Production of Tailored Reinforcement of Rattan Fiber Composite

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ID 125 Testing the Effect of Knowledge Management Capabilities on Service Quality

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ID 126 Optimal Inventory Control Policies for Avoiding Food Waste

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ID 127 Assessment of Wind Farm Allocation Criteria

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ID 129 Preparation of Collaborative Robot Implementation in the Czech Republic

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ID 130 ABC Analysis And Diminution Of Inventory Level Through Forecasting Technique In A Medium Scale Manufacturing Industry

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ID 131 A Scalable Approach for Vehicle Routing Problem with Reinforcement Learning

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ID 132 Enhancement Of Overall Equipment Effectiveness Through Implementation Of Total Productive Maintenance

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ID 133 Challenges facing projects due to a lack of resources

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ID 135 Historical Overview of Maintenance Management Strategies: Development from Breakdown Maintenance to Predictive Maintenance in Accordance with Four Industrial Revolutions

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ID 136 Steady State, Transient and Harmonic Behavior Analysis of Home Appliances

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ID 137 Business Process Modelling and Change of Organizational Structure

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ID 138 Technology Management and Adoption for Different E-tailer Formats: A Conceptual Framework

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ID 139 Development of Vendor Management Inventory (VMI) Model for Single Vendor Single Retailor Using Imperialist Competitive Algorithm

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ID 140 The Triple-Helix sub-revolution and the hype of Industry 4.0

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ID 141 Remaining Life Prediction for Corroded Gas Pipeline Management in the Era of Industry 4.0

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ID 150 Critical Success Factors for Lean implementation "Projection on SMEs"

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ID 151 Towards an Efficient Residential Electricity Consumption: An Assessment of the Effectiveness of Residential Electricity Efficiency-Incentive Subsidies Reform in Saudi Arabia

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ID 152 The driver of hub port development in Africa

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ID 153 Sustainable Procurement in the Public Sector Case study of Morocco

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ID 154 Impact of quality and lean manufacturing in automotive parts suppliers' competitiveness

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ID 155 Balancing The Workmanship Of a Production Line In The Manufacturing Industry Of a Personal Care Product

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ID 156 Exchange Rate Risk Hedging for a Global Supply Chain of Nonstorable Commodity in Presence of a Spot Market

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ID 157 A case of creative mixed method research to develop a total quality service (TQS) framework

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ID 164 Multi-item, Multi-location Transshipment Model for Cross Filling

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ID 165 Investigation of Project Delay in Construction Projects in the South African Rail Industry

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ID 166 Applying Customer Relationship Management Principles in a Sales-Oriented Engineering Organisation

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ID 173 Substantial Utilization of MST_ to Reduce Taxi-Delay in the Metropolitan City of Johannesburg

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ID 174 Categorization of Supply Chain Sustainability Risks in SMEs: A Preliminary evidence from a Developing Country

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ID 175 Factors Affecting Efficiency Of Police Stations In Metropolitan Police Division 3

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ID 177 Model-Based Engineering of a Process Wash Plant using SysML: Case study of beneficiation processes in a phosphate industry

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ID 179 Global Executive Doctoral Program

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ID 180 A Framework to Prolong Interval of Turnaround Maintenance (TAM) of Processing Plants: Pressure Drums Case Study

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ID 181 Analysis Of Changes In Productivity In The Colombian Banking Sector

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ID 188 Augmented Reality for Technical Instructions – Challenges and Opportunities

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ID 189 Advantages and Requirements for a Successful Introduction of an Industrial Tele Maintenance System

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ID 190 Breaking paradigms of lean and six sigma improvement models, new perspective of implementation.

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ID 193 The Impacts of Second Order Construct of Personal Resources on Employees' Job Performance and the Mediating Role of Affective Commitment: SEM Analysis Approach

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ID 194 The Relationship between Price Satisfaction, Non-financial and Financial Performance

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ID 195 Developing a Discrete Event Simulation Methodology to support a Six Sigma Methodology

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ID 199 Analysis of Factors Undermining the Reliability of Permanent Way Infrastructure in the South African Railway Industry

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ID 200 Logistics Performance and National Culture

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ID 201 Wind Energy: A Case Study On Wind Power As An Alternative Source Of Renewable Energy

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ID 202 The storage and management of Natural Resources: A case study on water and energy usage and management in hotels in Gauteng

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ID 203 Lean and Green Manufacturing Practices: A multiple case study about synergy

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ID 204 A Fuzzy-Network Analysis Approach for Modeling and Analyzing the Critical Success Factors for the ERP Implementation Projects

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ID 205 Proactive orientation towards the market and the degree of novelty of innovation in the exporting intensity of the business sector in Colombia

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ID 206 The Cost-Effectiveness Of Solar Energy In South Africa

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ID 207 Customer Churn Prediction Using Artificial Neural Network: An Analytical CRM Application

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ID 208 A method to construct driving cycles based on micro-trips and cluster analysis

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ID 209 Decrease in Loading Times for Trucks at a Steel Company

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ID 210 Activity-Based Costing (ABC) for Manufacturing Costs Reduction and Continuous Improvement: A Case Study

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ID 211 Making the Profitability Paradox of Bad Banks: A System Dynamics Approach

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ID 212 Improvement Plant Layout of Production Line in Textile Company: A Case Study

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ID 213 Implementation of a metaheuristic in a simulation model for programming in a port system

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ID 214 The effect of monitor type on the front head posture (FHP)

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ID 216 A double layer decision modeling for evaluating the conceptual arena of air pollution and linked measures

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ID 217 An Approach of Designing Robust Plant Layout Using Genetic Algorithm

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ID 220 Analysis and Optimization of Wire Electric Discharge Cutting Parameters for Micro-hardness of Ni55.8Ti Shape Memory Alloys

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ID 221 Taguchi integrated Grey Relation based Multi-Performance Optimization for Productivity and Surface Quality in Dry Machining of SS304

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ID 222 Investigation on Wire Electric Discharge Cutting of Ni55.8Ti Shape Memory Alloy for Recast Layer Thickness

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ID 223 A Case Study on Effectiveness of 4S Implementation in a Machine Shop

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ID 224 Implementation of Shitsuke for Sustaining with 5S Culture in a Mechanical Workshop

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ID 225 Industrial IoT integrated with Simulation – A Digital Twin approach to support real-time decision making

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ID 226 Biogas Power Generation Plant with Power of Hydrogen (PH) and Gas Flow Regulation

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ID 227 Nonintrusive Appliance Load Monitoring (NALP) Power Data Aggregation System

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ID 228 Integrating Production Assessment with PPAP – A QFD Approach

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ID 229 Plagiarism in Colombian Universities – Regulatory Aspects

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ID 230 Adoption of product-service system and the potential as a sustainable solution: A literature view in the fashion industry

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ID 231 A new climate indicator to be used in prediction of cooling energy in hot and humid regions

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ID 232 Measuring Sustainability Performance of SMEs in A Developing Country – A study of Southern Vietnam

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ID 233 Design & Fabrication of Smart Louvered Roof

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ID 235 Digitalization in Industry 4.0, Knowledge Management

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ID 236 A Two-Step Stochastic Optimization and Simulation Approach for Scheduling Operating Rooms in an Ophthalmology Surgery Department

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ID 238 Selection of a biomass product using a hybrid approach of BW–PROMETHEE

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ID 239 Augmented Reality in Industrial Applications: Technologies and Challenges

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ID 241 Challenges in managing oil and gas supply chain – An exploratory study

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ID 242 Optimal policy for a vendor–buyer inventory system with price–dependent demand, production cost discount and reliability consideration: A geometric programming approach

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ID 243 Antecedents and Consequences in Green Manufacturing: A Review Literature

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ID 244 Optimal Design of Additive Manufacturing Supply Chains

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ID 245 The Effect of Implementing International Public Sector Accounting Standards on the Financial Reporting and Internal Control Systems in United Nations Agencies

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ID 246 Design of Glass Reinforced Concrete Wall for Improved Utilisation of Natural Light and Aesthetics without Compromising the Strength

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ID 247 A Portable Workstation: Implementing Techniques of Product Design Process

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ID 251 Two-stage Meta-Heuristic Algorithm for Parallel Machine Scheduling with Additional Resource Input in Shipyard Manufacturing

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ID 252 Performance assessment of buck converter using single and cascade control loops

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ID 253 locating battery swapping stations for smart e-bus system

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ID 254 Life Cycle Assessment Of Needle Roller Bearing

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ID 255 Life Cycle Assessment of Corrugated Box

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ID 256 A Systematic Literature Review of Blockchain Technology in Agriculture

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ID 257 Knowledge Management to Minimize the Marketing Challenges using Strategic Management as a Tool

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ID 258 Probabilistic Control of Projects Based on Earned Value Management

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ID 260 Optimization of customers' trust in the insurance industry by data envelopment analysis: An actual case study

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ID 261 Electric-Vehicle Traveling Salesman Problem with Battery Swapping

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ID 263 Assessing Assimilation Gap in Higher Technical Educational Institutions: A Conceptual Framework

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ID 264 Investigating the Motivators, Barriers and Enablers Associated with the Implementation of Sustainable Supply Chain in Saudi Manufacturing Industry

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ID 265 Investigating The Impact Of Green Supply Chain Managemnet On Organisational Performance. A Case Of Selected Johannesburgbased Corporates

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ID 268 Factors of the innovation ecosystem by example of Latvian technological startup

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ID 269 Analysis Of Organizational Management And Supply Chains In Ecotourism Companies Of Lejanías, Uribe And Mesetas–Meta–Colombia

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ID 270 Ecotouristic foresight in the Colombian post–conflict for the sustainability of the tourist service with emphasis on ecological marketing. Buenaventura Case

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ID 271 Prevalence Study of Lean Management in Academic Education

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ID 272 Use of web application in the reactivation of freight intermodal transport in Colombia

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ID 274 Real-Time Fuzzy Rotation-Insensitive System for Motion Image Recognition

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ID 276 Critical Competencies in Project- Based Organizations: An Interpretive Structural Modelling approach

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ID 278 Application of Six Sigma in Improving the Quality of Recyclable Polymer in Collection Centers

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ID 279 Mobile Robotic Platform for Simultaneous Localization and Mapping (SLAM) Experiments Based on Range Sensors

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ID 280 A Simulation Approach for Spare Parts Supply Chain Management

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ID 281 Ethics in the Development and Engineering of Software Jeanette Del Pilar

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ID 283 Professional Drivers' Motivations for Eco-driving Behavior

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ID 284 Important Conditions for integrating a Logistics Cluster

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ID 285 The Impact of Consumer Return Strategies on Omnichannel Retailing

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ID 300 Fruiting Patterns of Cacao as Affected by Shading Regimes

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ID 301 Evaluation of Saturated Hydraulic Conductivity at Adaptable Depths in a Sandy Loam Using the Beerkan Method

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ID 302 On Applying Big Data to Transform the Inspection Lines

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ID 303 A Study of Workforce Assignment Problem in Lean Factory on Machine Tool Industry

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ID 304 Process View on E–Health with Risk Analysis

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ID 305 Optimization of operating parameters of an ingot mold during continuous casting – case of a content high carbon slab

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ID 306 Promoting Supplier’s Environmental Innovation via Emission Taxation

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ID 308 Harmonics in Power Systems and Mitigating Techniques

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ID 315 Evaluation of Outfit Rental Fee Payment Processing System of LMFH Company

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ID 316 The Comparison of Characteristics Profile of the Traditional Fishing Boats in Lamongan, Probolinggo, and Pasuruan, Indonesia

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ID 317 Towards Using Advanced Analytics for Port Performance Management

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ID 318 Guidelines to Create a Student CAD Portfolio

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ID 319 Prediction of the Friction Coefficient of 13Cr5Ni2Mo Steel Using Experiments Plans–Study of Wear Behavior

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ID 327 Ranking of the Factors for Resilient Humanitarian Supply Chain: A TOPSIS Approach

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ID 328 Optimizing Production Overtime Period and Backorder Quantity in Joint Production and Maintenance Scheduling

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ID 329 Analysis Of Accidental Deaths During Songkran Festival Using Data Mining

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ID 330 The Impact of Carbon Accounting on Corporate Financial Performance: Evidence from the Energy Sector in Jordan

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ID 333 Understanding Capacity Planning Through a Dynamic Performance Management Approach for Public Sector

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ID 334 A Method to Measure Logistic Interoperability using Structural Equation Modelling

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ID 335 A Review of Adomian Decomposition Method

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ID 336 Review Methods to Solve Fractional Black-Scholes

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ID 337 Review Strategies of Optimal Crop Insurance Selection Based on Climate Change

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ID 338 A Review Climate Index Insurance in the Field of Agriculture Using the Copula Model

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ID 339 On the Impact of Cargo Capacity and Cost on Shipment Consolidation

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ID 340 Analysis Of Credit Scoring Using Particle Swarm Optimization Algorithm In Logistic Regression Model

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ID 341 Generalized Transportation Relay Network Design

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ID 342 Improvement Production Capacity of Recycled Plastic Wood through Six Sigma DMAIC

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ID 343 Development of Industry 4.0 Virtual Lab for Manufacturing Engineering Education

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ID 344 The stability test of traditional fishing boats in East Java, Indonesia based on the International Maritime Organization Standard

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ID 345 The Inventory Control Analysis of Head Truck Spare Parts with Continuous Review Policy in Container Terminal Company

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ID 358 Requirements for Education 4.0 and study programs within Industry 4.0

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ID 359 Determination of changes between Lean management and Lean 4.0

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ID 360 An Assessment On The Implementation Of Sustainable Supply Chain Management (Green Public Procurement) A case study in the city of Johannesburg Municipality

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ID 361 An Investigation of Supply Chain Operational Improvements for Small and Medium Enterprises (SMEs): A UK Manufacturing Case Study

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ID 362 Gold Value Addition and Beneficiation for Women in the Mining Sector

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ID 363 Mathematical Modelling of Multi-Product Ordering in Three-Echelon Supply Chain Networks

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ID 364 Reviewing the use of Multi-Criteria Group Decision Making Methods for Transportation Problems: Case of Transport Mode Selection Problem

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ID 377 Sustainable Manufacturing Practices, Sustainable Performance and the Moderating Effect of Innovation

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ID 378 Applicable Models of Customer Analytics for a Retail Company in Mexico

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ID 380 TKFR2: A Multi-function Robot

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ID 381 The Effect of The AIDC On JIDOKA's Performance via VSM to Reduce the total Manufacturing Lead Time

Ahmed M. Abed, Industrial Engineering Department, AIET, Alexandria

Dr.Tamer S. Gaafar, Computer and systems dept., Zagazig University

ID 382 Preliminary Study on Neural Correspondence of Human Trust

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Younho Seong, Associate Professor, North Carolina A and T state university

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ID 383 Student Satisfaction and I-E-M Method Proposal for Improved Learning Experience of Generation Y and Generation Z Engineering Students

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ID 385 Developing Rasterization Using Unstable Modalities

Heejoo Choi, SEOUL SEOUL, South Korea

Sangsoo Park, SEOUL SEOUL, South Korea

ID 386 Title: The Move It Forward Theory (MIFT) offers a better method to manage major machine failure in a serial flow line.

William Edward, Ph.D. , ISE Department, Oakland University,

Sankar Sengupta, Ph.D., Professor, ISE Department, Oakland University

Michael Latcha, Ph.D., Associate Professor, Mechanical Engineering, Department, Oakland University

ID 387 The Effects of the Fourth Industrial Revolution on the Career Progression of Engineers in the South African Packaging Industry

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Bheki Makhanya, Post-Graduate School of Engineering Management,, University of Johannesburg, South Africa

ID 388 Usefulness of System Dynamics Models in Systems Engineering: the Systems-Thinking Educational Perspective

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Marek Zanker, Faculty of Informatics and Management, University of Hradec Kralove, Hradec Kralove, Czech Republic

ID 389 Dynamic perspectives in Colombian Swine Supply Chain

Johanna Trujillo Díaz, Escuela Colombiana de Ingeniería

Milton M. Herrera, Universidad Militar Nueva Granada

Hugo Rene Sarmiento, Escuela Colombiana de Ingeniería Julio Garavito

ID 390 Identifying Barriers of Lean Six Sigma Implementation in RMG Sector: A Case Study

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Farzana Islam, Bangladesh University of Engineering & Technology

Md Sadman Sakib , Bangladesh University of Engineering & Technology

Sampa Halder , Bangladesh University of Engineering & Technology

ID 391 Hybrid System Operating LED Streetlight

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ID 392 Energy Performance of Insulation Material

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ID 393 New Approaches to Fast the Iterative Closest Point (ICP) Algorithm: Application to the Inspection of Freeform Surfaces

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ID 394 Effects of Collaborative Learning Blended Knowledge Management E-learning Approach on Students' Motivation in Higher Education

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Kannika Daungcharone, College of Arts, Media and Technology, Chiang Mai University, Chiang Mai, 50200, THA

ID 395 A Review of Adomian Decomposition Method and Applied to Deferential Equations

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ID 396 Literature Review on Employment of Unmanned Aerial Vehicles for Disaster Management

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ID 400 Real time car engine condition monitoring by using instantaneous angular speed analysis (IAS)

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ID 401 Production Employees Knowledge in Digitized Production Environment

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ID 402 Mistakes in Managing Local Community; Exploring the Case of Repsol in Canary Islands

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ID 403 Assessing Due Date Fulfillment for Lumber Manufacturing Production Orders

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ID 404 To understand the applications of cloud computing adoption in various sectors

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ID 406 Prediction of the fracture of a non-alloy steel calm to aluminum by simulation in direct tensile test

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ID 407 Needle Stick Injury: Occupational Hazards from Medical Waste among Healthcare Workers

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ID 408 Rebuilding Organization's Legitimacy in the Eyes of Local Community; Case Study of Oil and Gas Megaprojects

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ID 416 A Clustering Algorithm for Location Routing Problem with Outsourced Delivery

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ID 419 Development of a Campus Carbon Footprint Intervention Framework

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ID 421 Compressed Air Driven Car

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ID 423 Teaching Assistantship Assignment Optimization using Hungarian Algorithm – A Case Study

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ID 424 Life Cycle Assessment of Residential Buildings Considering Photovoltaic Systems

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ID 425 Statistical and Kinetic Modeling for Investigating Acetyl Salicylic Acid Stability

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ID 426 Multi-criteria Supplier Selection for Implementing Lean Six Sigma Using Fuzzy AHP

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ID 427 Optimizing a Solid Waste Management Model using Particle Swarm Optimization

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ID 428 Business Process Modeling for Tracing Halal Food using BPMN

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ID 429 Solving the Dynamic Facility Layout Problem using Dynamic Programming

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ID 430 Sustainability of Sago Agro-industry Using Rapid Appraisal (Case study : Sago Industri X in South Sorong, Papua)

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ID 431 Study of Inhibitory Efficacy of Natural Extract of Opuntia Ficus Indica as Green Inhibitor for Corrosion of Mild Steel in Drilling Water

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ID 432 The alkali concentration effect on quality of semi refined carrageenan production : a meta-analysis

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ID 433 A Hierarchical Facility Location-Allocation Model for the Maternal Healthcare in India

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ID 434 Inverted Hockey Stick Effect In The European Industry: Inventory Reduction In The Last Fiscal Quarter

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ID 435 Sustainable UK Food Manufacturer Supplier Selection: A Conceptual Framework for the Responsive Supply Chain in the Era of Industry 4.0

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ID 437 Operational Excellence and Feasibility Analysis of raw material

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ID 438 Horizontal Collaboration to Reduce Traffic Congestion: Opportunities for Industries of Bangladesh by improving Smart Conveyance

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ID 439 The Ecological Footprint of Polyethylene Teraphthalate. A Case Study

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ID 450 Governance Arrangements for Agile Projects

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ID 451 Assessing the use of Project Management Information Systems and Its Impact on Project Outcome

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ID 452 Technical and Environmental Assessment of Lignite-fired Electricity Generation in Greece

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ID 453 Change Management as the bridge from Operational to Organizational Excellence

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ID 454 Culture & Personality: Directional influence on Consumer Switching

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ID 455 Efficiency analysis of public primary schools: the case of a medium-sized Brazilian city

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ID 456 Greenhouse Gas (GHG) Emissions from Land Transports in Malaysia: Modelling and Policy Analysis

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ID 458 Use of Clean Technologies in Agribusiness in Mexico: A literature Review

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ID 459 Transport Operations Optimisation through Lean Implementation – A Case Study

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ID 461 Minding the gap between Smart Factory Systems and sustainability performance

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ID 462 Stylistic Design Engineering (SDE) applied to a new E-Segment sport sedan

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ID 463 A new SUV conceived by Stylistic Design Engineering (SDE)

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ID 464 Stock Return Prediction Based on Some Forms of Capital Asset Pricing Model (CAPM)

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ID 465 Stock Assessment Using a Dividend Discount Model with Growth Rate Following a Time Series Pattern

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ID 466 Problems of Demand and Effects in Portfolio Based Selection of Utility Functions

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ID 467 Unit Link Single Life Premium Calculation for Unit Link Lifetime Insurance Using the Ratchet Compound Method

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ID 468 Graph Algorithm Vertex Coloring

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ID 469 Solving Traveling Salesman Problems Using Branch and Bound Methods

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ID 470 Comparison of Double Exponential Smoothing Holt and Fuzzy Time Series Methods in Forecasting Stock Prices (Case Study: PT Bank Central Asia Tbk)

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ID 472 Modelling And Mapping University Business Process

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ID 473 Automatic Sawing seeds Machine

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ID 485 Developing a risk covering based model for locating rescue and relief centers in hazardous materials transportation (An empirical study: Guilan province of Iran)

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ID 486 Enhance The Thermal Properties Of Poly-Propylene Polymer

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ID 488 Assessing Critical Failure Factors for Implementing Lean Six Sigma Framework in Indian Manufacturing Organizations

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ID 489 Prioritizing Service Quality Factors for Polytechnic Institutions as Per Student's Perception in the State of Madhya Pradesh, India

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ID 490 Towards a patient rule induction based classifier

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ID 499 Enhance the Thermal Properties of Poly-propylene

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ID 500 A Continuous Review Inventory Model With Backorders And Equivalencies

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ID 501 The Impact of Learning Orientation on Innovation Performance: Mediating Role of Operations Strategy and Moderating Role of Environmental Uncertainty

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ID 508 Design, Fabrication and Testing of a 3D Printer

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ID 509 Multi-criteria Decision Approach to Measure Complexity Level in Supply Chain

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ID 510 Material and Energy Wastes Reduction in Steel Production through the Application of Lean Manufacturing Tools

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ID 511 Ranking of Technologies for Energy Recovery from Municipal Solid Waste in Bangladesh Using the Analytic Hierarchical Process (AHP): A Case Study

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ID: 513 Scheduling of M jobs on N machines by a novel sequencing approach

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ID 515 Supply Chain 4.0: A Shift in Paradigm

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ID 516 Handling Mercury (Hg) Waste through Utilization of Lapindo Activated Mud HCl to Realize Environmentally Friendly Gold Mining Industries

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ID 517 Optimization of Granite Cutting in Abrasive Water Jet Machining using Taguchi Technique

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ID 519 Mobile Application Development: A comprehensive and systematic literature review

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ID 527 Process View on E-Health with Risk Analysis

Michal Švehla, Faculty of Electrical Engineering, University of West Bohemia, Plzeň.

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ID 528 Employee Productivity Improvement & Skill Enhancement in Pharmaceutical Industry

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ID 529 An Assessment of Presence of Palm Kernel Shell Ashes and Sawdust Ashes on Strength Properties of Lateritic Soil

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ID 530 A Real Study-Based Modeling of Stochastic Behavior of Traffic Crash Counts Using Penalized Poisson-GzLM

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ID 531 Tools and Leadership Qualities for Change Implementation

Lukas Vaclavik, University of Derby, College of Engineering and Technology

ID 532 Introducing a Measurement Framework to Assess Lean Readiness Level within Emergency Departments in Kuwait

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ID 533 Performance and Evaluation of Perforated Bamboo as Reinforcement for Concrete

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ID 534 Monitoring of Simple Linear Quality Profiles Using dEWMA Statistic under Uncertainty of Process Deviations

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ID 542 Managing student technology innovations of rural engineering campuses

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ID 545 Case Study: Lean and Green Technique of Manufacturing Industries

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ID 550 Ergonomic Evaluation of Vehicle License Plates used in Saudi Arabia

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ID 558 Strategic Sourcing in Manufacturing Sector: A Case of an Indian Company

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ID 559 Towards Sustainable Industrial Development – A Systems Thinking-Based Approach Luis Angel

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ID 561 Measuring the effect of entrepreneurial competence and social media marketing on small medium enterprises' competitive advantage: a structural equation modeling approach

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ID 562 Multiple Regression Analysis Of Spiritual Stimulants Increased Awareness As A Company Employee In Improving Morale

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ID 563 Design, Fabrication and Testing of a 3D Printer

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ID 565 Model of Treatment Media and Hand-Eye Coordination, Experimental Studies on Altras Softball Team

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ID 566 Model of Students' Understanding on Thermodynamic Concepts in Learning with Virtual Labs

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ID 567 Model of Triple Jump Achievement: The Effect Method Learning and Motor Skills Youth 18 – 20 Age

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ID 568 The role of academics' organizational commitments on their extra role behavior in academic contexts

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ID 569 Model of Physical Condition of Leg Muscle Explosive Power, Nutrition Status and Confidence Towards Skill Smash Sepaktakraw

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ID 570 Empowerment Community in Buru Regency

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ID 571 Utilization of Qualitative Methods in Research Universities

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ID 572 Interactive Multimedia Product Based on Green Chemistry in the Acid–Base Concept of Chemistry Learning Process

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ID 573 Analysis Characteristics Organoleptic of Sorghum Pie for Quality Entrepreneurial Products with The Influence of Varieties and Concentration of Flour

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ID 574 Analysis of Design Product Entrepreneursip Syrup Based Purple Sweet Potato (Ipomoea batatas)

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ID 575 How do Knowledge Management Practices Influence the Deployment of Lean Management: A Case Study

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ID 576 Linking Organizational Learning, Organizational Culture, and Market Orientation on Innovation Culture: A Case Study in Indonesian MSME's

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ID 577 Using the Design Thinking into Product Development Process: A Case Study in Bio-pharmaceutical Firm

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ID 584 Model of reward system toward the performance of public sector organizations

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ID 585 Factors Affecting Poverty in Lamongan

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ID 586 Implementation of Cybercrime Settlement with Indonesia Law 19/ 2016 about Information and Electronic Transactions

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ID 587 The Development of E-Assessment with Learning Management System

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ID 588 Technology CLL to Foster Student's Speaking

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ID 589 Service Quality of Patient's Perceived Value in Private Hospital Surabaya, Indonesia

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ID 590 Islamic social reporting disclosure and firm value: Empirical Study of Firms Listed in Jakarta Islamic Index

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ID 591 Model of Skill Sprint 100 Meters, Experiment Study The Method of Exercise and Reaction Time on Male Students of Physical Education

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ID 593 Model on Butterfly Swimming for Athletes in the Age 11–13 Years Group

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ID 594 Analysis of Factors Considered in Policy Making Placement Officer in Structural Position (Studies in the University of Mataram)

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ID 595 Model of Competence and Organizational Citizenship Behaviour (OCB) on Performance of Hotel Employees in Batam City with Organizational Commitment as Intervening Variables

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ID 597 Model Knowledge Fiscal Potential Impact on Economic Growth and Public Welfare of East Java, Indonesia

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Abstract

The life that modern all-round nowadays, making demands and necessities of life that high makes everyone work with each other in an attempt to meet all the necessities of life. These conditions force any individual to attempt in various ways to meet the needs of his life. So sometimes forgotten what exactly is the purpose of actual work for them. Such a condition makes the behavior of individuals working in companies being encouraged to seek purely material and forget manners and a sense of family within the company. The company works should be a comfortable and pleasant event turned into a mutually oppress one employee with the other employees, if this situation continues then it becomes unhealthy for the company to growing forward. Here it takes a spiritual value for employees in the works so that they are aware of and understand the true meaning of working together with other people and friends in an attempt to advance a healthy company. Through spiritual company, employees will feel that their place of work as a House of worship and large family homes each other mutually in hand to achieve the goal and well-being together without sacrificing each other a sense of family.

Keywords

spiritual awareness, employee, company morale

1. Introduction

If we are observant observe, lately there is an interesting trend in employee behaviour and many companies. Employees working in companies or factories are always trying so that at any moment his earnings can always rise, his savings always growing and very worrying if at any time a shortage of property. Business is also not to be outdone, their running mates, vying to make a profit, income from year to year are expected always to increase. To achieve that goal they are willingly to any roads, no problem harming others, damage the nature. Even to the extent that appears adigum that times now to achieve the unlawful sustenance only difficult let alone looking for halal sustenance. There is another saying that if in working or doing business do not use religion because surely will be hard road. Thus the first phenomenon. Then if we look again there are phenomena that accompanied the first phenomenon i.e. the growing proliferation of study groups, spirituality in the Office Office of both private as well as Government-owned, even in Jakarta also spiritual groups grow rapidly. The employers also do not want to lose, they are also looking for something more than profit. They feel that caring for the environment, helping human beings who lack is an act of giving more meaning in life. Money as a single bottom line in pursuit of enjoyment of life was not able to meet the needs of today's modern community life. And why does this phenomenon can happen thus? Actually the idea of modernization requires the existence of a strict distinction between religion with worldly problems like economy, politics, and science as well as others, which eventually gave birth to understand secular desires sparate between the Affairs of the religion with life issues.

When religion was abandoned and the basis of human thinking based on understand the philosophy of materialism, positivism, empiricism, and science and technology is evolving very rapidly.

2. Literature Review

In his article Hamdi (2013), explained that in fact a company is an organization which is composed of a group of people headed by a person to achieve a particular goal. The most easily understood so that a company will have a karateristik high spirituality is making all employees have a high level of spirituality, then automatically each company's activity will be tinged ethics either. But if this is a hard step then the leader of the company shall be poinir in implementing the transcendental values into the company through regular activities as well as programmes of activity of the company so that it resulted in a good ethics against employees, surrounding communities and the environment. When perusahaan runs a good business ethics then the benefits will be very large for the company to grow and develop. Study conducted by Prof. Curtis Verschoor, published in Management Accounting finds the fact that the company has a clear commitment towards ethical principles in the conduct of business has a better financial performance than companies that does not make the business ethics. In a study conducted by McKinsey and Co. in Australia showed that companies that implement programs which use spirituality has high levels of productivity and low turnover. Even research conducted by Prof. Ian i. Mitroff found that Spirituality would be the ultimate competitive advantage. Some of the key values of spirituality in business is integrity, accountability, quality, cooperation, excellent service, respect, fairness. Integrity is the unity between Word and perbuata, between words and behavior. Accountability is the ability to account for any actions, products, or reports. Quality is our commitment to producing quality goods as agreed upon. Cooperation is the ability to work together harmoniously to achieve a particular goal. Excellent service is the ability to provide a quality service continuously. Respect is respect for all parties without distinguishing. Justice is to treat every person in accordance with its rights. The company was able to improve its performance is a company that really values the key to applying spirituality is consistently above.

2.1 The Importance Of The Spiritual Element For The Company

In his, Riawan (2010), describes a growing number of companies that lent its activities on aspects of spirituality (spiritual being the company). In contrast to companies that ignore the spiritual factor in its, companies that base their activities on spiritual values proved able to survive and thrive in good. In General, identified six of the benefits obtained with the company attributing the business aspect of spirituality. First, the company will be far from a variety of fraud (fraud) that may occur due to ' justifies all means. Because, from this colaps company started. Second, increasing the productivity and performance of the company. Third, the harmonious work harmonious atmosphere or presence of a synergy between the employees and the leadership of the company. Fourth, the rising positive image (image) of the company. Fifth, the company became grow and develop on an ongoing basis (the sustainable company). Sixth, lowering the transfer (turnover) employees.

It's been like the businessman, let alone a Muslim businessman, applying the spiritual management culture, namely the universality of values put in the the purpose of business achievement. In this concept, the definition of management change than just getting things done through the people be getting God's will done by the people. The increase of prosperity lived through the heyday of the Organization — as defined in surah Hud paragraph 61 above — is seen as a sacred duty. Spirit worship to God became a very solid business Foundation. Because, every activity benefit always relates closely to the creator (Creator). That is why a work order awakened be more sacred than just getting the sheer financial gain. This was the power turbines driving the spirit of struggling her followers (man). Because, every step of the fight made a lasting life history notes.

To be sure, Foundation peribadahan in the struggle in the business need to go on the creation and the breakup of prosperity in a fair manner (creation) to all parties involved. That is, the crew (employees), customer (customer), capital providers (owners of capital), and community (community). Consciously, the company is positioned as an organism that is standing on the grass roots and bears the Mission of spirituality. Its presence is not merely to get advantages for individuals solely. More than that, its existence aims to lift overall human marwah. His approach is not just purely pragmatic. Far from it, the paradigm is formed to build civilization.

2.2 The Purpose Of The Application Of Spiritual Company

In general the application of spiritual company within a company, aims to change gradually every individual who contributed in the workplace in order to become more aware, more understanding of why they are present in the company, to arouse the sense of important contribution to the company during this time, so that each individual will eventually realize that working at the company are not just limited to making a living solely yet there is a more noble purpose they emban continuously in long term (Carrol 2008).

The purpose of an intrinsically spiritual values in a work is.

- (a). The achievement of a wealth that is a wealth which is something that we can jointly access so that we can improve the quality of life together either with friends or working with family.

- (b). Animate, sharpening and repair the richness of taste, talent, wealth of character, wealth luck, to achieve the goal of a more glorious and far-reaching, as long as someone is able to and can achieve that goal, a goal that has been obtained is not for personal but leaning more for happiness together.
- (c). Wealth is derived from the old English (welth) which means "be good". This means that each individual who works in the company should be willing to change his thinking patterns and behavior toward the better, since it works also include fixing the quality of family life.
- (d). The wealth that keeps us alive, the wealth that enriches the aspects of our lives more deeply, the intelligence that we use to find their value, meaning, purpose and deepest motivation. Moral intelligence we are able to distinguish right and wrong, so we use to make goodness, beauty and affection to our lives. These values must apply in internal company.
- (e). Incorrect behavior and ego eventually chaining themselves employees and ultimately human life just as economic beings namely Moneymaker that eventually make stress. Stress causes the loss of the meaning of life (arising in the blanks). The reduced time of relaxing, family time together, assemble, inner fulfillment, job satisfaction (Fisher 2004).
- (f). The complex issues of life and the pressures experienced by any workers or employees in work always bothered by how the meet the needs of her life all the time. If this doesn't get a good way out then appeared a variety of mental illness: depression, stress, fatigue, alcoholism, substance abuse, suicide, and disruption of the physical form of high blood pressure, heart, cancer, parkinson's, stroke, lame and other diseases.

2.3 Spiritual-Based Leadership And Management

According to Afiff (2013), there are still many people who do not yet understand very well about what is meant by spirituality. According to the Merriam Webster dictionary "spirituality has a notion of something very religious, or anything relating to the spirit and sacred things". Of course through search and experience life, a person has the freedom to interpret this spiritual understanding. The spiritual sense is also often associated with religion, especially with regard to the question: is that religion is the goal of spirituality, or conversely that religion is a means and/or infrastructure to achieve the goal of spiritual. Spirituality is also very real are related to the concept of the soul, and so determining a principle that the essence of life is not a mere material. Then the spirituality without soul does not make sense. The concept of soul is used to distinguish between man and animals. Of course in the world of animals we would not be talking about human values, contemplation, compassion and conscience, or represented in one word is called the soul.

2.4 Spiritual Relationship Company And Morale

Facing the increasingly rigorous competition era, the world of industrial undertakings are required to seoptimal may improve the quality of human resources. Success, failure, progress or setbacks of a business will be very related to private individuals are involved with such activities. Human resources brings an important role in the success of a business. A lot of compenen that supports the creation of a company's success, one of which was the motivation of working of employees the company it self. Employees with high work motivation will have passion, desire, desires, and energy in him to carry out his duties seoptimal possible. Crosby (2001), States that assess and understand a person (employee), it is not enough to look at the action or the vagaries of the Act. But the motivation to become a power mover behaviour it should also be noted, as it turned out to be more decisive as the driving power behavior. Cupach (2004), argued to cause the views and attitudes that respect the work as something sublime, the necessary impetus or motivation. Becker (2003) provide an understanding that human existence can be obtained through an accomplishment of a work and the work. Employee motivation is high will bring a positive impact to the company and improve the competitiveness of the employee to better perform.

2.5 The Spiritual Concept Of The Company

How to actually change a critical order initially worked based on the material being worked is based on the spiritual exercises, here presented the image below.

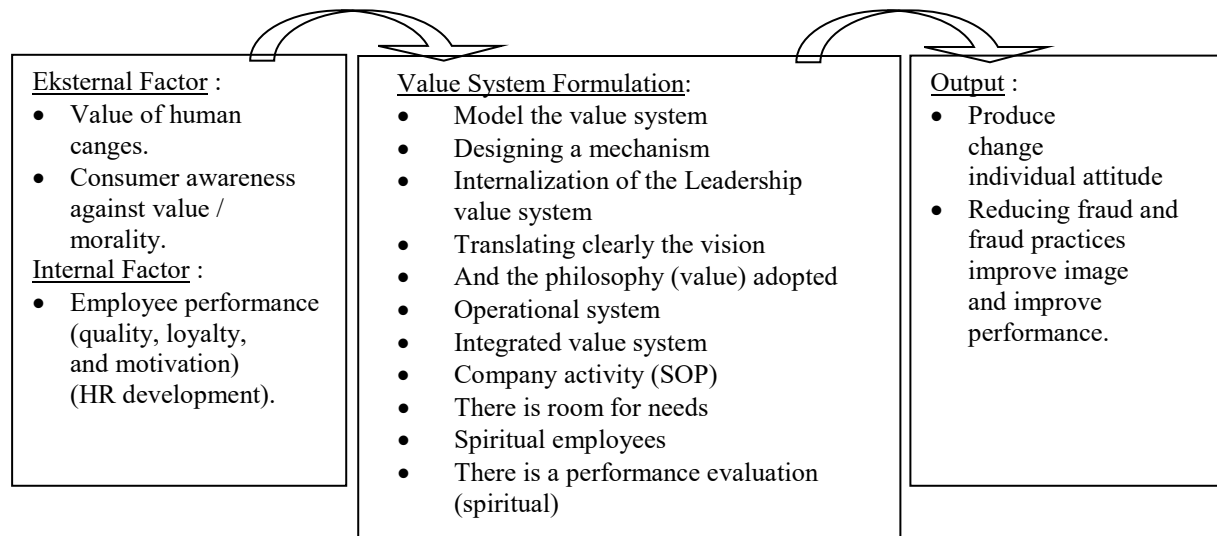


Figure 1. The process of applying spiritual values in the company that lead to changes in the behaviour of workers.

Source: Zhuang. 2007. Material Capital. Beijing: Peking University Press

3. Research Methods

3.1 Location Research And Sample

The object of the research is one of the STATE-OWNED ENTERPRISES that are located in the city of Surabaya, Surabaya in the East. The overall number of employees working in these STATE-OWNED ENTERPRISES totaled 52 people including security personnel. The company was chosen because it has opted several times employees in the spiritual training is ESQ. So it felt more appropriate STATE-OWNED ENTERPRISES chosen for testing the concept of spiritual application of company. Because the overall number of employees only 52 people, then all employees made a sample research.

3.2 Model Of Data Collection

The process of collecting data in this research was conducted using the following approach.

- The approach of filling the questionnaire and accompanying interviews to every employee, the aim to unearth the perceptions regarding the optimal experience, ability and their success as part of a spiritual application of the company where they work.
- In addition to the primary data above, researchers also use secondary data as a complement in the test and look for completeness of information in the decision-making process while when spiritual company in this STATE-OWNED company's test.

3.3 Process Measurement Data

To further simplify the process of measuring the perceptions, opinions, reactions, experiences and values behaviour then the process of collecting research data using a unit of measurement that is the model approach is considered the most representative, i.e. using assessment approach the score, (Pramesti, 2017). Score is used.

**Table 1. Approach to the model of measurement data.
Source: Santoso, 2015.**

Spiritual Company	Skor	Morale	Skor
1. Great fit	4	1. Very fulfilling	4
2. Appropriate	3	2. Meet	3
3. Less appropriate	2	3. Less fulfilling	2
4. Not suitable/fail	1	4. Does not meet/fail	1

3.4 Model Of Data Analysis

Multiple linear regression analysis (Santoso 2015) is used to measure or no relationship between the style of leadership, communication, and discipline work against the performance of employees. Multiple linear regression formula in this study is.

$$Y = a + \beta_1.x_1 + \beta_2.x_2 + \beta_3.x_3 + \beta_4.x_4 + e$$

Where:

Y = Morale
X1 = Emotional Quotient (EQ)
X2 = Creative Quotient (CQ)
X3 = Adversity Quotient (AQ)
X4 = Spiritual Quotient (SQ)
(a) = Konstanta
b1, b2, b3, b4 = Koefisien regresi (e) = Standard error

The results of the analysis are calculated based on the regression equation can be determined the relationship between the independent variable and the dependent variable. When the results of the analysis are equally increase or equally down or direct, then the relationship between the dependent variable independent variable is positive. Vice versa, if the increase in independent variable causes a decrease in the dependent variables then the relationship between the dependent variable independent variable is negative.

4. Result And Discussion

4.1 Result

Based on the results of the analysis that has been done through multiple linear regression analysis, then to describe the results of the analysis, the following are displayed in the outline of the multiple linear regression analysis output, using objective analysis the regression equation is to find the actual estimation of the variables are independent of the dependent variable. With the estimation can be estimated whether the independent variables have a relationship and influence on the variable dependent. This pattern includes the general pattern in the regression of origin all data are empirical or normality has been tested in such a manner, so that it can be used for estimation. The type of this analysis tend to be the type of induction meaning if one estimation in an object are the same as the estimation of the object more then can be said to be the empirical.

Tabel 1. The Results of The Analysis to Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,768 ^a	,589	,554	,351

a. Predictors: (Constant), Spiritual Quotient , Adversity Quotient , Creative Quotient , Emotional Quotient

b. Dependent Variable: Morale

In table 1 above seen that the contribution of independent variables (Emotional Quotient (EQ), Creative Quotient (CQ), Adversity Quotient (AQ), Spiritual Quotient (SQ)) of the dependent variable (morale) magnitude of 55.4%. Means other than factor sipiritual company, there are still other factors influence to improve employee morale, only those factors did not appear in the regression model has been formed.

Table 2. The Results of The Analysis For Anova F-Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	8,283	4	2,071	16,854	,000 ^a
Residual	5,775	47	,123		
Total	14,058	51			

a. Predictors: (Constant), Spiritual Quotient , Adversity Quotient , Creative Quotient , Emotional Quotient

b. Dependent Variable: Morale

Table 2 above explains, through the coefficient F test (16.854) with the level of 0.000 kesalahan means the whole independent variables influence the dependent variables against simultaneously. Or at least there is one independent variable which has influence on the dependent variable.

Table 3 results of analysis for measuring the Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,220	,537		,409	,684
	Emotional Quotient	,274	,126	,297	2,166	,035
	Creative Quotient	,074	,104	,078	,713	,479
	Adversity Quotient	,525	,113	,490	4,639	,000
	Spiritual Quotient	,089	,134	,087	,664	,510

a. Dependent Variable: Morale

In table 3 above, it can be explained that to see if any independent variable has an impact on the dependent variable separately or one-one then viewable column Sig (error rate). On column Sig. looks a value error rate of each independent variable are below five percent (meaning a significant/real) or above five percent (not significant/not real). Of the four independent variables, it turned out that only two significant variables i.e. adversity quotient and emotional quotient. While the two other variables not significant i.e. creative quotient and spiritual quotient. The focus of the next discussion is located on two independent variables was not significant. While the two independent variables already significant do not need further discussion.

With the above results, the main focus of attention is how the next program can be implemented to improve the three insignificant variables to be feasible to be applied internally within the institution, of course this is not a light job for the top management in the company. Why should it be because the internal and external environment is easy to change and this is very influential on the mentality and soul of employees. if this change is not anticipated, all forms of change will be able to influence the climate of the work atmosphere in a negative direction. Efforts to improve Creative Quotient and Spiritual Quotient must be carried out continuously, because every employee has a desire and hope that is constantly changing, so that this condition will be a concern in every internal activity of the company to always change in a better direction.

With improvements in these two things Creative Quotient and Spiritual Quotient, it is expected that employees will be able to change themselves emotionally in adjusting all changes in the company in the long run.

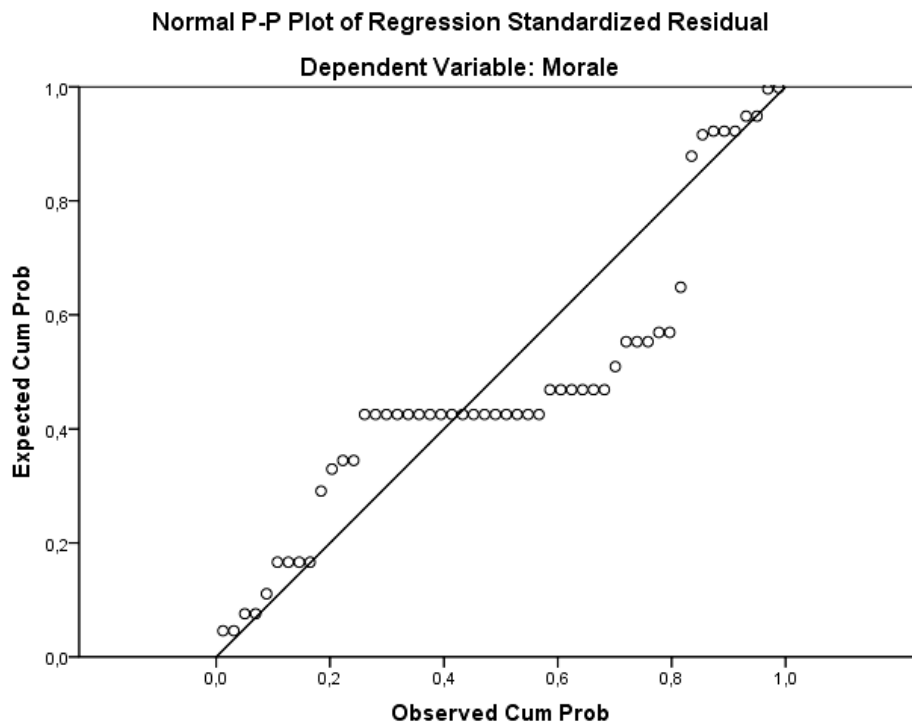


Figure 1. Linieritas Relationships Between The Dependent And Independent (Variable)

4.2. Discussion

Now it seems clear that a second independent variable *tervukti* was not significant should be attempted in order to have the changes of the characteristics to be significantly to the dependent variable. It means how can I make the variable quotient and creative spiritual quotient of variables can change effect on employee morale. Then there are ways to improve your creative quotient that is.

- (a). Willing to compromise, because what is not always able to obtain exactly what is wanted. Better received than not at all, in making a decision there must be some who accept and reject, it depends on the personality and values of ourselves. In embuat a decision or action, what is the most appropriate for you isn't necessarily the best for others. Familiarize yourself with the compromises put forward to peer will likely bring a success for everything. Due to the success of a person can be transmitted to others, albeit not sedrastis (as soon as) expected.
- (b). Change the approach, by changing the approach we will be able to find out the error before. Sometimes the results obtained successful repair or *instropeksi* from wrong before. The more precise understanding an error, the more precise the repairs undertaken, these conditions will add value to your thoughts and actions. And take the chance of a success on the next action in the long term.
- (c). Use the opposite point of view, need to do a comparison or something being opposed to the actions of others, but these actions must be complementary to other people's actions, which can be sustainable synergy. Increase your spiritual quotient, that is by following the steps in the following.
 - (a). Get to know ourselves well, who are we, what we work for, serving who we are, people who have not come to know itself will experience a crisis of meaning of life as well as a spiritual crisis. Therefore, know who's self is absolutely necessary to be able to improve the spiritual intelligence.
 - (b). Fix everything that's wrong. Sometimes forget if doing something and the result is good but there is an error on such action therefore willing to accept suggestions and input so that those small mistakes can be changed so that the work is becoming more perfect and can accepted by all.
 - (c). Trying to appear calm with a friendly attitude. This is the most difficult conditions and tend to be heavy. But to make ourselves peace, needs to initiate an action to accept the results of the work of others with the full flavor of friendship. This will *meninbulkan* synergy and making ourselves acceptable to more people.

5. Conclusion

After discussing the results of the analysis, there are several important conclusions need to get attention from the management of the company, i.e..

Emotional quotient, creative quotient, adversity quotient, and spiritual quotient is a unity that can not be separated in to build a kesadarn myself so that every employee can begin to fix all the action ends at the repair passion in working.

Four variables on top of each other, intertwined in the lives of employees, especially in the building of community self when someone has the same goals with others in carrying out its work in a company. So the emotional quotient, creative quotient, adversity quotient, and spiritual quotient can be applied gradually in accordance with the changes of time i.e. do the application through the hierarchical approach.

After understanding all forms of the above conclusions, there is a suggestions and recommendations should be made within the company i.e..

Improvement and application of the emotional quotient, creative quotient, adversity quotient, and spiritual quotient can not be applied simultaneously, therefore its application must follow by the change of motivation, i.e. changes to welfare improvements, the award, reward, more employee rights are met and provide confidence to employees as individuals who have the ability to work.

Need to apply a rule that employees have different services and contributions to the company, therefore it is necessary to appreciate the efforts and contributions of services given to every employee to the company through a particular container capable employees with full sense accepted his consciousness. It is certainly better than nothing at all to do something. Because in the long run will all have benefits which result cannot be measured in material, because this is part of an investment company for the cultivation of the sense of having participated in the long run, until they entered a period of full duty later.

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