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ID 180 A Framework of Wireless Maintenance System Monitoring Based Cloud Technology

Fransiskus Tatas Dwi Atmaji, Telkom University, Indonesia
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ID 182 Management of Toxic and Hazardous Chemicals from Electronic Devices Using Supply Chain Concept

Shahrin Iqbal, Department of Electrical and Electronic Engineering, Shahjalal University of Science and Technology, Sylhet, Bangladesh
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ID 183 A Model for Optimizing Remanufacturing Quality Strategy by Considering Quality Loss Function

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Nani Kurniati and Udisubakti Ciptomulyono, Department Industrial Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

ID 184 The Role of Organization's Continuous Commitment in Mediating Relationship between Strategic Evaluation and Organizational Performance in Libya's Industrial Sector'

Abdul Talib Bon and Ahmed Alghazali Mohammed Alghannai' Faculty of Technology Management and Business' Universiti Tun Hussein Onn Malaysia, Parit Raja, Johor Malaysia

ID 186 Stakeholders Analysis of Performance Improvement Project on Integrated Development Public Space Child Friendly (RPTRA) In Jakarta Timur

E. R. Gloria Febriani, Civil Engineering

ID 187 Standard Operational Procedure to an Effective Reserve Goods Procurement Based on Risk: the Government Building's Project

Sindi Ajeng Hadiyanti and Yusuf Latief, Department of Civil Engineering, University of Indonesia, Depok, Indonesia

ID 188 Development of Risk-Based Standardized WBS (Work Breakdown Structure) for Safety Planning of Cable Stayed Bridge Project

Gilang Satrio and Prof. Dr. Ir. Yusuf Latief, MT., Department of Civil Engineering , University of Indonesia, Depok, Jawa Barat, Indonesia

ID 189 Integration Process Models of Quality, Safety, Health and Environment Management Systems to Achieve Sustainability Construction

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ID 190 Development of Standard Operational Procedure (SOP) of Risk-Based Fire Emergency Response on Government Building

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ID 192 Impact of climate on water stress in the vegetative development of the cultivated table vine of Vitis vinifera ssp sativa in Algeria

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ID 205 Additive and Digital Manufacturing: Implications for Organizational Strategy and Structure

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ID 206 Exploring the Synergistic Nature of Combinations of Various Functional Flexibility of Manufacturing Organizations

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ID 207 Analysis of the Operations Management Strategy of a Telecommunication Company in Malaysia

Habibah Norehan Haron, Universiti Teknologi Malaysia

ID 208 Characterization And Modeling of Rheological Behavior of a System of Mud a Reverse Emulsion

Mellak Abderrahmane, Boumerdes University, Algeria

Kaddour El Heit, Université Mouloud MAMMERI, Algeria

Khaled Benyounes, University M'Hamed Bougara of Boumerdes, Algeria

ID 209 Studies of the Loss of Circulation during Drilling Oil Wells

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EL HEIT University Mouloud Mammeri, Tizi Ouzou, Algeria

ID 210 Simulation Model of Risk Based Contingency Costs Estimated In Industrial Building Projects with Design Build Contract

Filbert Reginald, Civil Engineering, Project Management

ID 214 Engineering Accreditation: Assessing and Documenting Students Competencies in their Respected Disciplines

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ID 215 Business Strategy with Exploratory & Exploitative Innovation: The Analytics Role from SMAC Technology

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ID 217 A Framework Towards Successful Business Incubator for Indonesian Public Universities: A Pilot Review

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ID 218 Reduce Turnaround Time through Waste Elimination

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ID 219 Agent-Based Conceptual Model of Coordination Collaborative Production Planning In Divergent Two-Tier Supply Chain

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ID 221 A Mathematical Model for Outbound Truck Scheduling with Multiple Trips in Multi-Door Cross Docking System

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ID 231 Analytical Hierarchy Process (AHP) Application of Selecting Corn Waste Production

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ID 232 Impact of capacity loss factors in front-of-line IC packaging on production performance: a case study

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ID 233 Prediction of Relative Permeability from Experimental Resistivity Index and Capillary Pressure Data

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ID 234 The Influences of Salary Level, Employee Satisfaction, and Organizational Commitment on Turnover Intention

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ID 235 Incorporating repeat purchasing in Innovation Diffusion Model Using Stochastic Differential

Kuldeep Chaudhary, Kalyani Kumar and Sunita Mehta, Department of Applied Mathematics, Amity Institute of Applied Sciences, Amity University, Noida, India

ID 242 STRATEGIES FOR CORE ESTABLISHMENT IN IRANIAN BANKING INDUSTRIES

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ID 251 The Effects of Steam Commingled Injection in Heavy Oil Production from FNE and Bamboo Sudanese Fields (Steam Adsorption and Distribution Challenges)

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ID 252 An Interplay between Employee Psychological Capital, Organizational Fit, and Work Well-Being on Organizational Commitment: An Empirical Study on E-Commerce Industry in Indonesia

Rizal Nangoy and Mohammad Hamsal, Doctor of Research in Management, Binus University, Jakarta, Indonesia

ID 253 Creating Innovative Work Behavior: The Roles of Self Efficacy, Leader Competency, and Friendly Workplace

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ID 262 Milk agro- alimentary chain sustainable development strategy in the conditions of the Ecuadorian Amazon region

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Magdalena Beatriz Cárdenas Uribe, Manuel Lázaro Pérez Quintana, Luis Bravo Sánchez and Nelly Manjarrez Fuentes, Career Agro industrial Engineering, Amazon State University, Puyo, Ecuador

ID 263 STRATEGIC BUSINESS TRANSFORMATION THROUGH LEAN SIX SIGMA

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ID 264 Development of Standardized WBS (Work Breakdown Structure) Based on Risk for Cost Control of Steel Bridge Construction Project

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ID 274 Working with Millennial Generation: How to Manage Team Engagement to Achieve Excellent Service (Case Study: Tanah Abang Main Branch, Private Bank ABC)

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ID 275 Lean Assessment in a Cross-Docking Distribution Center

Ammar Mohamed Aamer, Faculty of Engineering and Technology, Sampoerna University, Jakarta, Indonesia

ID 285 Contribution to the integrated evaluation of business management

Hidelvys Cantero Cora, Elisa Leyva Cardeñosa and Daideé Caridad Ibarra Miranda, Universidad de Holguín, Cuba

ID 292 Comparing the Business Process in Creative Industry at Bandung

Iston Dwija Utama and Chyintia Ika Ratnapuri, Creativepreneur Department, Bina Nusantara Bandung, School of Creative and Technology, Bandung, West Java, Indonesia

ID 293 Other Income from Building a Franchise System: Insight from the Franchisor

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ID 294 On the Locations of Electric Vehicle Charging Facilities using a Geographic Information System

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Yoichi Shimakawa, Department of Computer Science & Technology, Salesian Polytechnic, Tokyo, Japan

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ID 295 The effect of Third Parties Fund, Non-Performing Loan, Capital Adequacy Ratio, Loan to Deposit Ratio, Return On Assets, Net Interest Margin and Operating Expenses Operating Income on Lending (Study in Regional Development Banks in Indonesia)

Sugeng Riadi, Program Doktor Manajemen, Pascasarjana Universitas Mercubuana, Universitas Mercubuana, Jakarta, Indonesia

ID 301 Conceptual Development of Land Value Capture (LVC) Model in Indonesia Infrastructure Project to Increase Project Benefits

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ID 302 Scaling up Model for Developing Second-Generation (2G) Bioethanol by using Palm Empty Fruit Bunches Feedstock

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ID 304 On Quantitative Analysis of the Positive and Negative Feelings in the Menu Selection Behavior of the Consumers

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ID 305 Applicability of ARIMA models for investigating the effects of Technology spillover on Car Manufacturing Companies' performance

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ID 306 Green Manufacturing Adoption on SME: A review of theories

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ID 307 Consumer Switching Behavior in E-Services: Organizational and Technological antecedents through relational paradigm

Anjali Sharma and R.R.K. Sharma, Dept. of Industrial & Management Eng., Indian Institute of Technology-Kanpur, U.P., India

ID 308 Strategy for Capability Development of Knitting Small Medium Enterprises Using SWOT Analysis

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ID 310 Productivity Improvement with Short-Term Quantitative Forecasting Method Case Study on ABC Store – Tokopedia and Bukalapak

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ID 311 Integrated Scheduling and Transportation System Incorporating Energy Consumption: Models Development In the Case of Perishable Goods

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ID 313 Overall Equipment Effectiveness (OEE) at the Laboratory of Structure Testing

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ID 314 The Effect of Service Quality on Student's Satisfaction At Technical Education And Vocational Training

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ID 315 Criteria Affecting the Selection of Logistics Service Provider for Retail Small and Medium Enterprise in Thailand

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ID 316 The Implementation of Material Flow Cost Accounting Analysis to Determine the Optimal Sample Size and Lot Size in Serial Multi-stage Processes

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ID 320 Implications of Human Resource Management against Organizational Culture, Work Motivation, Job Satisfaction and Employee Performance at State Own Enterprise Hospitals in Indonesia (Empirical Study on the 5 Biggest Pertamina Hospitals in Indonesia)

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ID 321 Modeling for Sustainable Supply Chain Management Level and its Impact on Company's Performance

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ID 322 The dynamic of rice production in Kalimantan Selatan: A policies study

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ID 325 Improvement optimization for DMAIC methodology: A Case study

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ID 326 PERT-Type System Application on Food Industry to Reduce CIP Cycle Time

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ID 327 Performance management using Influence Diagrams: The case of improving procurement

Mohammad Hassan Abolbashari, Omar Khadeer Hussain and Elizabeth Chang, School of Business, University of New South Wales, Canberra, BC , Australia

ID 328 Aircraft Taxiing Strategy

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ID 329 Incubation framework for a new startup: A case study in Thailand

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ID 330 Selection of Product Design Prominent Factors Using Analytic Hierarchy Process for Developing Countries

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ID 331 Management of the Ground Engaging Tools through Using Classification and Forecast

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ID 332 Educational Program Planning Using Project Management Techniques

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ID 333 Distribution Network Design for an Oil Blending Company

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ID 334 A Critical Evaluation of Climate-Related Risks Associated with Oil and Gas Industry in Libya

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ID 335 Portable Inflated Solar Power Cold Storage House Technology as a supporting facility to increase the production and marketing of fishery fishermen

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ID 336 Gender Leadership And Inequality Study on Higher Education in Indonesia

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ID 337 Model of Mix-Used Central Feasibility Investment Model Support for Increasing Local Government Revenue

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ID 338 Safety Culture Assessment in the Air Traffic Control Sector

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ID 340 Integration Model of Maritime and Tourism in the Regional Areas to Enhancing Economy in the East Indonesia

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ID 341 Calibration system for costs reduction: Case study in the maquiladora industry.

Karina C. Arredondo-Soto, Maria del Socorro Cruz-Castillo, Teresa Carrillo-Gutierrez, Marcela Solis-Quinteros and Luis A. Avila-

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ID 342 Framework of improving the quality and lower the cost build for the real estate industry in Indonesia

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ID 343 Increasing the productivity of health facilities in urban areas in México

Adrián Aguado, Sandra Garza, Jenny Díaz-Ramírez and Johana González, Department of Industrial Engineering, Universidad de Monterrey, San Pedro Garza García, N.L, MX

ID 344 A Model for Tuna-Fishery Policy Analysis: Combining System Dynamics and Game Theory Approach

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ID 345 Inbound Logistics in Sub-Saharan Africa: A Case Study on Current Practices and Challenges

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ID 346 Sustainable Warehousing: A Case Study on Practices, Outcomes and Barriers in the Asia Pacific

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ID 347 Implementation and Configurations Open Source ERP in e-Commerce Module using ASAP (A Case Study on SME)

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ID 363 Sensitivity Analysis of the Gas Compressibility Factor

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ID 364 Risk Analysis Related to Costing and Scheduling of Construction Projects

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ID 365 An Optimal Integrated Maintenance Policy for a Pro-rata Warranty Model

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ID 366 Risk Assessment at Heritage Sites: A Case Study of Tripoli Old City, Libya

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ID 367 Calculation of EUR form Oil and Water Production Data

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ID 370 Integrated Management Framework for Carbon capture and storage (CCS)

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ID 398 Risk Assessment of EPS in Building and Construction Projects: A New Technology in the Libyan Market

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ID 399 FinTech as Innovative Technology in Banking Services Process

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ID 400 Statistical Basketball Player Analysis

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ID 401 Some obstacles that affect the TQM implementation in Bangladeshi RMG Sector: An empirical study

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ID 402 Modeling and Simulation of Queuing Systems Using Stochastic Petri net and Arena Software: A Case Study

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ID 403 Environmental Sustainability and Waste Management Practice in Nigeria: Reconnoitering Local Training and Beneficiations

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ID 404 Exploring, Monitoring of Ecological Conservation Practice for Awareness and Sustainability in Aba, Nigeria

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ID 405 Cogitating Sustainability on Ethical Code Enactment: Comparing Social Work Administrators' Habitus and Gender Parity Outcomes

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ID 406 Inventory-Transportation Model Considering Carbon Cap

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ID 407 Evaluating the impact of Quality Assurance and Control on the Performance of South African Food Manufacturing Industry

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ID 408 Assessing the performance of the South African automobile manufacturing companies by means of quality management practices

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ID 409 Causes of food crisis in the Southern African Development Community

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ID 410 The Analysis of Manufacturing System Utilization by Using Queuing and Taylor Theories

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ID 411 Analysis of Accident in Construction Projects

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ID 412 Sustainable Performance Measurement Using Sustainable Value Stream Mapping: A Case Study on One of Palm Oil Companies in Indonesia

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ID 413 The Cars' Brand Country of Origins Impact to Brand Personality Based on Consumer's Involvement Level: Experimental Investigation Evidence for Country of Manufacturing Effect

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ID 414 Growth Analysis of Indonesia Crude Palm Oil Industry on Manufacturing Industry and Macroeconomic Period 1997 - 2015

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ID 415 Influence of Critical Plasma Spray Parameter on Characteristics of Nanostructured Yttria Stabilized Zirconia Coatings

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ID 416 Measuring the effectiveness of Total Productive Maintenance in the South African food manufacturing industry

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ID 418 Optimization using Decisions Analysis and Linear Programming at PT GMS

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ID 419 Integrating Affective Requirements in Car Design Methodologies

Rosemary R. Seva, Ronald S. Mariano and Alma Maria Jennifer A. Gutierrez, Industrial Engineering Department, De La Salle University - Manila, Philippines

ID 420 The Prediction of Needs of Humanitarian Aids Logistics for Merapi Eruption Victims in Sleman Yogyakarta

Naniek Utami Handayani, Dyah Ika Rinawati, Diana Puspita Sari and Projo Mukti Rifa'i, Department of Industrial Engineering, Faculty of Engineering, Diponegoro University, Semarang, Indonesia

ID 421 Case study on strategic development of genuine leather bags using canvas business model

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Irene Teresa Rebecca Hutabarat, BINUS Entrepreneurship Center, Bina Nusantara University, Jakarta, Indonesia

ID 422 Simulation Analysis of Segmented CONWIP: Application to Reentrant Flow Lines

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ID 423 Dynamics of a Small Scaled Men-Owned Business

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ID 424 Knowledge Management Enabler and Operational Performance in Indonesia Automotive Component Industry

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ID 425 Improvement of Safety Maturity Model Affected by Policy and Institution to Build Safety Culture in Construction Sector

Johan Santoso and Yusuf Latief, Department of Civil Engineering, Universitas Indonesia, Depok, West Java, Indonesia

ID 428 Automatic Bicycle Gearshift: A Disruptive Innovation and Design Thinking Perspective

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Khristian Edi Nugroho Soebandrija, Faculty Member of Industrial Engineering Department and Binus ASO, School of Engineering, Bina Nusantara University, Jakarta, Indonesia

ID 429 Project Risk Management: The Role of Stakeholder Analysis

Rufaidah Yousef AlMaian, Industrial and Management Systems Engineering Department, Kuwait University, Kuwait

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ID 430 Development of Management System Audit Integration on Quality Management System, OH&S Management System, and Environmental Management System in Construction Project Management

A Sofuan Dwi Saputra and Yusuf Latief, Department of Civil Engineering, Universitas Indonesia, Depok, West Java, Indonesia

ID 431 Industrial Systems Engineering on Physical and Digital Banking: A Service Innovation and Ambidexterity Perspective

Khristian Edi Nugroho Soebandrija, Faculty Member of Industrial Engineering Department, Faculty of Engineering, Bina Nusantara University, Jakarta, Indonesia

ID 432 Improvement Process in Drilling with Multi Spindle Boring, a Case of Student Industrial Internship Program

Gamawan Ananto and M. Shafry Firasyidnan, Bandung State Polytechnic for Manufacturing (POLMAN), Jl.Kanayakan 21, Bandung, Indonesia

ID 433 Trilogy of Service Innovation's Antecedents: Doctoral Dissertation Paper on Banking's Financial and Non-Financial Performance

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Nurul Munazzah Sadikin, Faculty of Built Environment, Linton University College, Mantin, Negeri Sembilan, Malaysia

ID 437 Community Based On Microfinance Service with Social Entrepreneur Concept Case Study: Parish of Robertus Cililitan

Hendro Budiyanto and Sri Witjaksono W, Program Doctoral Management SDM, Fakultas Pascasarjana, Universitas Mercu Buana, Jakarta, Indonesia

ID 438 Understanding supply chain resilience: a business dynamics approach using theory of constraints thinking process.

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Tarik Saikouk, Université Internationale de Rabat, Morocco
Abdelaziz Berrado, EMI, Morocco

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Hifzan Ilyana binti Mohd Amin, Faculty of Engineering, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia

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Houda TAHRI and Omar DRISSI KAITOUNI, IMOSYS, Engineering, management and optimization of systems, Mohammadia School of Engineers, Avenue Ibn sina B.P. 765 Agdal Rabat, Morocco

ID 443 LIFE CYCLE VALUE STREAM MAPPING (LC-VSM): The Application in Two Botle Drinking Water Companies

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ID 444 Creating a KPI Tree for Monitoring and Controlling Key Business Objectives of First Mile Logistics Services

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ID 445 The relationship between Information Technology and Halal Logistics

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ID 446 Designing Training and Development Program for Competence Global Supply Chain Managers: A Depth Structured Interview

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ID 447 Indicators to Measure a Smart Education: An Indonesian Perspective

Indrawati, Wahyu Widodo and Husni Amani, Telkom University, Telekomunikasi Terusan Buah, Batu Bandung, Indonesia

ID 448 Using MCDM approaches to rank different locations for harnessing wind energy to produce hydrogen

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ID 449 Location optimization of hybrid solar- wind plants by using FTOPSIS method

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ID 450 Establishing wind farm for desalting sea water to produce hydrogen

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Abbas Mahmoudabadi, Mehrastan University, Gilan, Iran

ID 454 Risk assessment study within manufacturing/remanufacturing system through maintenance actions

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ID 455 Quality Assessment of Nylon Filament Yarn Product Using DMAIC Method and Failure Mode and Effect Analysis (FMEA) Method

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ID 456 Innovation Network Analysis to Support Innovation Capabilities of Kakao, Sengon and Porang (KaSePo) Cluster in Madiun Regency

Yudha Adi Kusuma and Bambang Syairudin, Industrial Engineering Department, Sepuluh Nopember Institute of Technology

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Elisa Kusrini, Magister of Industrial Engineering and Industrial Engineering Department, Indonesian Islamic University

ID 458 Quality Management Strategy for Indonesian Aircraft MRO Companies Based on Kano Model, QFD Matrix, and AHP

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ID 459 Core Competence Strategy Development of Batik Products in Pekalongan City

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ID 461 Two - Way Radio Line Productivity Improvement Using Lean Six Sigma

Norzima Zulkifli and Mohd Zahreen Firdaus Mustapha, Department of Mechanical and Manufacturing Engineering, University of Putra Malaysia

ID 462 The Influence of Nonlinear Loads on Optimal Operation Control of Electrical Distribution System

Agus Ulinuha, Department of Electrical Engineering, Universitas Muhammadiyah Surakarta, Surakarta, Central Java, Indonesia

ID 463 Manufacturing Capability, Sustainability Strategy, and Manufacturing Performance of Indonesia Automotive Manufacturer

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ID 464 Simultaneous consideration of assemblability and disassemblability for fastening method selection

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ID 465 Performance Improvement of Corporate Travel Agent Using Business Intellegence

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ID 467 The Integration of Kano's Model and Quality Function Deployment: A Case Study for Design of An Alternative Energy Utilization

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ID 469 An Empirical Testing on Quality Label Equity Model

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ID 470 Revolutionize Supply Chain Collaborations through Cloud Implementation

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ID 471 Investigating the benefits and challenges of the implementation of ISO 9001 and ISO 14001 in the aerospace industry

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ID 473 Designing Nonconforming Services (NCS) Control System for ISO 9001 Implementation

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ID 474 Designing Customer Satisfaction Measurement System for a SME Laundry Services Company

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ID 475 Ultradiscrete exponential Newell-Whitham model: A cellular-automaton model for traffic flow

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ID 476 Design of Customer-driven Facility Management System for Universities

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ID 477 Unemployment Rate And Economic Growth Modelling With Generalized Spatial Three Stage Least Square (GS3SLS) in East Java

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ID 478 Implementation and Management of ERP Systems: A Literature Review

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ID 479 Supplier selection through Attractive criteria: a Fuzzy Kano based integrated MCDM approach

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ID 480 The airport connectivity of medium airports in Thailand

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ID 481 Model Scheduling with Dynamic Trip for Public Transportation

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ID 482 Prediction of project completion time using robust time series regression

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ID 483 Evaluation of Combustion Performance of Waste Tyre Pyrolysis Oil on Variable Compression Ratio, Single Cylinder Diesel Engine

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ID 484 Discrete Wavelet Packet Based Spectrum Sensing in Cognitive Radio using an Improved Adaptive Threshold

Dibal Peter Yusuf, Elizabeth Onwuka, and Caroline, Alenoghena, Telecommunications Engineering Department, Federal University of Technology Minna
James Agajo, Computer Engineering Department, Federal University of Technology Minna

ID 486 Application of Reliability Engineering Method in Sugar Refinery Industry

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ID 487 Value Chain Analysis for Determining Innovation Priority in Batik Small Medium Industry

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ID 490 Toward a Conceptual Framework of Piper retrofractum Supply Chain Performance

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ID 491 Analysis Implementation Effectiveness of ISO / IEC 17025 on Testing Laboratory

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ID 493 A green design chain collaboration model for TFT-LCD industry

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ID 497 Spatial Information and Geoadditive Model for Small Area Statistics

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ID 498 Design Mitigation of Blood Supply Chain Using Supply Chain Risk Management Approach

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ID 499 Analysis of Key Factors for Airport Service Quality: A Case Study of Three Regional Airports in Thailand

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ID 500 A Predictive Model of Motorcycle Accident Involvement Using Structural Equation Modeling Considering Driver Personality and Riding Behavior in Metro Manila

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ID 501 Bayes Spatio-temporal Models for East Java Poverty Analysis with R-INLA

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ID 502 Managing Project Scope Creep: An Exploratory Study

Mian Ajmal and Mehmood Khan, Abu Dhabi University, United Arab Emirates
Mohsin Malik, The University of Melbourne, Australia

ID 503 Relationship between Risk Factors and Risk Information Sharing at SME's In Bandung

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ID 504 Supplier Relationship Management Based On Process Capability Index for Multiple Characteristics

Erik Bagus Prasetyo and Nani Kurniati, Industrial Engineering Departement, Institut TeknologiSepuluh Nopember, Jl. Arif Rahman Hakim Sukolilo, Surabaya, Indonesia

ID 505 Optimization of Supply Chain Network Design for Multiple-Channel Distribution

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ID 506 The Influence of Culture, Job Satisfaction and Motivation on the Performance Lecturer / Employees

Linda Theresia, A H Lahuddin and Gadih Ranti, Industrial Engineering Department, Institut Teknologi Indonesia
Ramon Bangun, Faculty of Administrative Science, Universitas Indonesia

ID 507 Digital Terrestrial TV in Philippines: What is in for the media consumer?

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ID 508 Integration of Maintenance and Quality Control Policy Based On Variable Sampling Plan Using Process Capability Index

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ID 509 Business Strategy with Uncertainty and Performance

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ID 510 Confucianism Culture Study in Improving the Performance of Employees

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ID 511 The Impact of Integrated Management System Implementation on Operational Performance in Industry

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ID 512 Model development of Multi depot SDVRPTW using Tabu Search algorithm

Ali Alhureibi, Amelia Santoso and Dina Natalia Prayogo, Industrial Engineering, Engineering Faculty, Universitas Surabaya, Surabaya, Indonesia

ID 513 Conceptual Model for Online Marketing Strategy to Success in the Survival Phase of Small Firms

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ID 514 A Simulation Approach for Determining Delivery Time in a Waste Materials Based Make-To-Order Manufacturing Company

Nur Indrianti, Bachtiar Rakagandhi and Tri Wibawa, Department of Industrial Engineering, Universitas Pembangunan Nasional "Veteran" Yogyakarta, Yogyakarta, Indonesia

ID 515 A Framework for Evaluating the Performance of Supply Chain Risk in E-commerce

Abraham Stefanus and Markus Hartono, Industrial Engineering, Engineering Faculty, Universitas Surabaya, Surabaya, Indonesia

ID 517 A FEA-based feasibility study on the replacement of student wooden desks and chairs with a plastic arm chair.

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ID518 Finite element analysis on Nitric Acid Compressor Expansion (NACE) turbine

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ID519 Design for manufacture and assembly of a paper cup making machine in a developing nation

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ID 522 A cloud based architecture for Automatic Feature Recognition in Distributed manufacturing environment

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ID 524 The Performances of Process Capability Indices in the Six-Sigma Competitiveness Levels

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ID 531 Implementation of Horizontal Strategy for Conglomerate firms: The Role of Five-Factor Model

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ID 532 Equal Distribution of Shortages in Supply Chain Problem of Food Corporation of India

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ID 534 The Application of Lean Six-Sigma for Improvement in Bead Manufacturing Process throughout Cooperative and Work Integrated Education Program (CWIE)

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ID 535 The Application of Design of Experiment for Improvement on Filtration Process of Thickness Chicken Soup Manufacturing throughout Cooperative and Work Integrated Education Program (CWIE)

Manufacturing throughout Cooperative and Work Integrated Education Program (CWIE)

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ID 536 Model of Integration of Lean Tools and Knowledge Management to improve the production process in a Metal-mechanic company

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ID 537 An Energy Audit to Minimize Waste Energy in Weaving AJL 2 Departement PT. Daya Manunggal Textile

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ID 538 **Extended Statistical JAVA Gaming Simulation**

Timothy Liu, Mason Chen, and Joseph Jang, Lynbrook High School, Milpitas Christian School, and Monta Vista High School, San Jose, CA, USA

ID 539 **Increasing Value Added in an automotive assembly line. A case study.**

Michelle Eugenia Sánchez Barrientos, Valeria Argumedo Hinojosa, Fabiola Mercedes Arango García, Teresa Verduzco-Garza and Jesús Vázquez, Fernando González-Aleu, Department of Engineering, Universidad de Monterrey, Nuevo León, México

ID 540 **The Integrated Method of Warehouse Layout and Labor Scheduling to Reduce Overtime**

Fransisca Dini Ariyanti, Aurellia Victoria, Lidya Guestine and Noviana, Industrial Engineering, Faculty of Engineering, Bina Nusantara University, KH. Syahdan, Jakarta, Indonesia

ID 541 **Fuzzy House of Risk (FHOR) to Manage Supply Chain Risk**

Widya Nurcahayanty Tanjung, Selma Intan Praditya Sari Himawan and Syarif Hidayat Industrial Engineering, Faculty of Science and Technology, Al Azhar Indonesia University, Jakarta, Indonesia

ID 542 **Comparison Method of Spatial Autoregressive Probit Estimation**

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ID 544 **Geographically Weighted Zero-Inflated Poisson Regression (GWZIPR) for Excess Zero Problems and Heterogeneity of Spatial Data: Application for Number of Diphtheria Disease Cases in West Java Province in 2014**

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ID 545 **Computerized Maintenance Management System for the Philippine's Railway Transit**

Beatrice Michaela L. Felipe, Maria Patricia B. Javier and Rene D. Estember, School of Industrial Engineering and Engineering Management, Mapua University, Manila, Philippines

ID 546 **Development of Ergonomics Intervention in Manual Material Handling to Prevent Work Related Musculoskeletal Disorder**

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ID 547 **A Review on the Reliability, Availability and Maintainability (RAM) Approaches In Conceptual Process Design**

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ID 548 **Fault Feature Extraction And Diagnosis of Gear Transmission System Using EMD and Machine Learning Approach**

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ID 551 **Feasibility of using a hybrid Photovoltaic-Wind Power Plant to Produce Hydrogen for Hendijan in the Southwest of Iran**

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 Amir-Mohammad Golmohammadi, Industrial Engineering Department, Yazd University,
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ID 552 An optimization model of renewable electricity price and construction of new wind power plants for Kermanshah, Iran

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ID 553 Implementing Fuzzy Rank Function Model for a New Supply Chain Risk Management

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ID 554 Identifying the effective factors for implementing solar water heaters (SWH) for Yazd, Iran

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ID 555 Cost Estimation Model of Structural Steel for Super Structure of Wellhead Platform in Oil and Gas Industry

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ID 556 System Dynamics Approach to Supply Chain Performance Measurement in Small and Medium Enterprise

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ID 719 Budget Airline Operations Optimization using Linear Programming

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ID 728 Optimization of Distribution Channel Vehicle Routing Problem with Time Windows using Differential Evolution Algorithm: A Case Study in Newspaper Industry

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A Framework for Evaluating the Performance of Supply Chain Risk in E-commerce

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Abstract

The perceived risk is found to be a barrier for e-commerce application. It has been widely demonstrated in previous studies that the e-commerce is closely related with risk assessment. Taking into account of the scope of supply chain management, the activities of e-commerce system mostly deal with information flow, rather than either product or service flows. With regard to the rapid growth of e-commerce, there is imbalance between preparation and mitigation activities. More specifically, there is no formal model which shows supply chain risk in the e-commerce system, regarded as the research gap. Hence, one way to analyze and map out complex system as potential risk is to make Supply Chain Risk Management (SCRM) framework. This study is conducted to develop a framework about SCRM in the e-commerce area. Taking a case study on e-commerce based company, the SCRM framework is developed incorporating 8 perceived risk model in e-commerce: such as financial, social, time, performance, physical, privacy, security, and psychological risk. The expected contribution in theory and practice is discussed.

Keywords

Supply Chain Risk Management, framework, e-commerce

1. Introduction

At the moment, global competition is tight and supply chain be continues to be long and more complex (Tummala & Schoenherr, 2011). Not achieving the desired supply chain performance is expected to increase, especially because the risks. Supply chain risk can be defined as an explanation in terms of the causes of abnormality that affect the management of the supply chain efficiently (Ghadge et al, 2012).Companies are important to adapt the strategy of abnormalities especially on their network. Risk involved in supply chain as well as the relative the damage can be seen from the recalls and lawsuits for car toy (Story, 2007), animal food (FDA, 2008), and recently withdrawal one of the products Samsung in 2016.

According to Djojosoedarso (2003) risk management is the implementation of the functions management in risk reduction, especially risk faced by organization / company, the family and social. Function management it includes activities plan, organizing, composing, lead, and supervise (including evaluate) risk reduction programs.

Risk management is a process identification, set risk, and shape a strategy for managing them through resources available. Strategy that can be used among other: transfer risk on other parties, avoid the risk, reduce ill effects from risk, and receive a portion nor the whole a consequence of certain risks. Supply chain risk management (SCRM) is an integrated the concept of between supply chain and risk management where the collaboration between partner supply chain in application of the process risk management (Brindley , 2004) .Today supply chain risk management requiring attention serious risk because were often happens and had an impact long-term on performance company management . SCRM Activity covering activity identification , assessment , and mitigation systematically to disorder in a web of logistics to the objective to reduce a negative impact on network performance supply chain (Paul , 2014) .SCRM demanding company to have a good performance , especially in the reliability , in responding to speed , exactness in procurement , exactness in the fulfillment of demand , flexibility , the cost , the accuracy of lead time of activity logistics (Zaroni , 2015) .

E-commerce played an important role in the strategy everyday business, and that role will continue to increase every year (Reinsch, 2005). E-commerce involve electronic transfers, electronic data exchange, automatic inventory management system, and collection systems automated data. According to Wong (2010), e-commerce is the purchase, sales, and marketing goods and services through an electronic system. With the development of e-commerce which is quite rapid, existing risk will be identified.

The best way to analyze and develop a complex system is to set it in meaningful structure (Zwass , 1996) . Developing framework is expected to help map complex problem as on risk e-commerce. Of various research on risk management has conducted, found that framework about risk management still limited number of, especially if associated with e-commerce. The SCRM framework is developed incorporating 8 perceived risk model in e-commerce: such as financial, social, time, performance, physical, privacy, security, and psychological risk (Xiao, 2004). This study is conducted to develop a framework about SCRM in the e-commerce area.

2. Literature review and hypotheses development

Hypotheses about E-commerce Performance will be proposed according to the current research on the relationship between SCRM and E-commerce

2.1 Perceived risk as E-commerce barriers

Researchers in psychology and other disciplines have widely studied the risk theory. Bauer (1967) introduced the notion of perceived risk. He suggested, “Consumer behavior involves risk in the sense that any action of a consumer will produce consequences that he cannot anticipate with anything approximating certainty, and some of which are likely to be unpleasant” (Bauer, 1967). Stone and Gronhaug (1993), in their studies on perceived risk, showed the existence of an important difference between how the risk concept is introduced and adopted in consumer behavior research and how risk concept is conceived and used in other disciplines such as economics, psychology, statistical decision theory and game theory. They pointed out that, in other disciplines, “the concept of risk is related to choice situations involving both potentially positive and potential negative outcomes” (Weber and Bottom, 1989; Stone and Gronhaug, 1993) while in studying perceived risk in consumer behavior, however, “the focus has primarily been on potentially negative outcomes only” (Stone and Gronhaug, 1993). In the context of E-commerce adoption, when studying perceived risk, the focus is primarily on potentially negative outcomes or potential losses/harms. Perceived risk is defined as a person’s perception on the possibility of having negative outcomes or suffering harm or losses associated with E-commerce.

2.2 Perceived SCRM development

Taking into account of the scope of supply chain management, the activities of e-commerce system mostly deal with information flow, rather than either product or service flows. Xiao (2004) have developed 8 perceived risk model in e-commerce: such as financial, social, time, performance, physical, privacy, security, and psychological risk. E-commerce is a part of SCM since e-commerce mostly deal with information flow. The framework will then be developed variables and indicators to measure the perceived SCRM.

Table.1 Definition of Eight dimension of Risk in E-commerce (Xiao, 2004)

Financial Risk	The possibility of suffering monetary losses .
Social Risk	The possibility of having the losses related to the influences of social value and views from friends or family.
Time Risk	The possibility of having the feeling of losses of time as spending too much time in E-commerce.
Performance Risk	The possibility that the actual products or services are not performing as desired and are far from expected.
Physical Risk	The possibility of having potential physical harms.
Psychological Risk	The possibility of feeling psychological uncomfortable.
Privacy Risk	The possibility of suffering the losses due to the misuse of personal information by Internet stores.
Security Risk	The possibility of suffering the losses due to the misuse of personal information by third parties.

2.3 Customer trust as E-commerce Performance indicator

Trust has direct effect on intention to purchase online (Oliveira et al, 2017). Building trust in the digital age is very important. By building trust in customers, they will gladly use the products or services they offer, in this case, help grow the company's business. Since the e-commerce business is hardly face-to-face, the e-commerce company's performance is strongly influenced by trust. How well their growth will be influenced by consumer trust, it will be an indicator of its performance. There are 3 sources influence the dimension of consumer trust: competence, integrity and benevolence (Oliveira et al, 2017)

2.4 Relationship between Perceived SCRM and E-commerce Performance

The bigger risk perception the greater the consumer the potential involvement on the purchase (Engel et al, 1995). Consumers were being in an arena thought of the risks that may be will be faced when consume a product. Risk contemplated by consumers because consume a product or service will coloring behavior buying them .In other words, risk to be wrong or factor under consideration by the consumer for decryption the purchase of a product .When perception to high risk, is motivation whether to avoid purchase and use or risk to minimize through the search for and evaluation alternative after purchase in the decision making. Consumer perceptions of products and their risk perceptions of online shopping will significantly affect consumer online shopping decisions when they are considering buying certain physical goods. (Xiao, 2004). Thus, companies must improve consumer perceptions about the product and reduce the perceived risk consumers in e-commerce environments. Risk reduction activities in perceived SCRM conclusion will help companies gain consumer trust. Based on the literature that has conducted research on the relationship of perceived SCRM with performance, the hypotheses for this research:

H1. Perceived SCRM positively influence on E-commerce performance

3. Research methodology

This is a theoretical research, so the result is the result of the overall the study literature and collecting data have not done. This research will focus on develop framework about SCRM in e-commerce area. The framework will develop the relationship between the 8 perceived risk of SCRM and e-commerce area i.e. financial, social, time, performance, physical, privacy, security, and psychological risk, and competence, integrity, and benevolence.

4. Analysis and result

Modeling for perceived SCRM and e-commerce performance has been illustrated in the model. Indicators of each construct based on the relationship will be described.

4.1 Proposed framework

The relationship between SCRM and e-commerce is presented based on the relationship between several literature review indicators

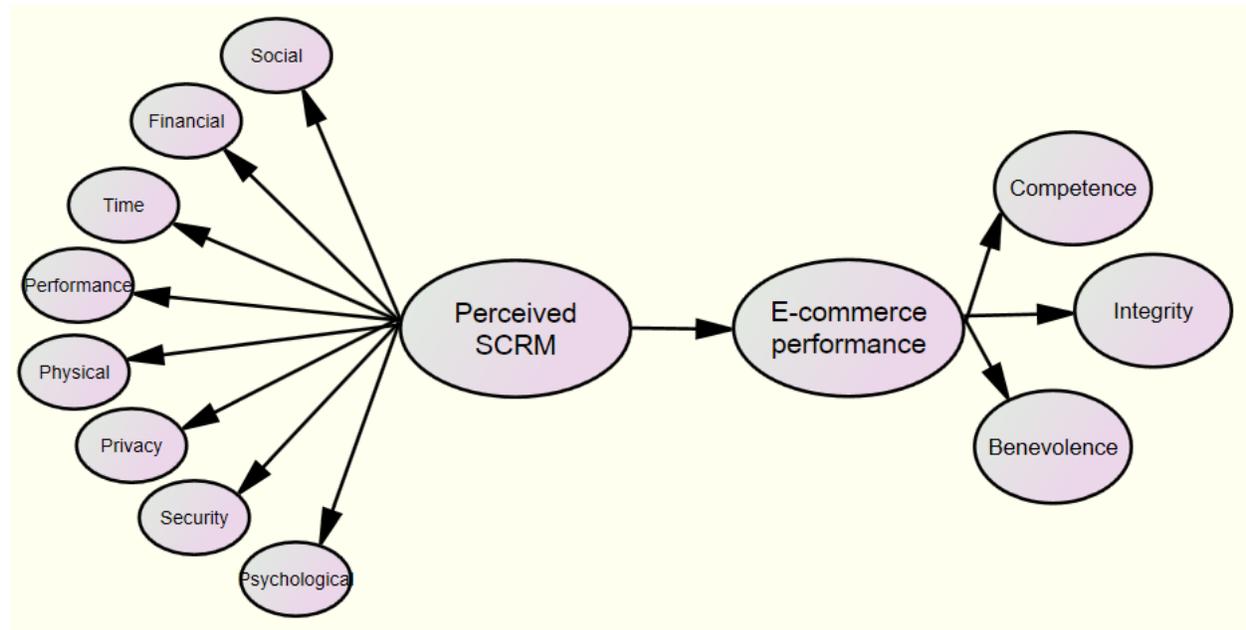


Figure 1. Proposed Model

4.2 Construct between framework

Perceived SCRM in e-commerce consist of 8 constructs. Construct of Perceived SCRM will be explained in Table 2

Table 2. Perceived SCRM in E-commerce

Construct	Code	Description
Financial Risk	FR1	E-commerce would be a bad way to manage my money as it may cause me some monetary losses
	FR2	If I accepted E-commerce methods, I would be not safe and I would be concerned that I may have financial losses through this service.
Social Risk	SR1	The thought of E-commerce causes me concern because some friends would think I was just being showy.
	SR2	My experience of E-commerce action would cause me to be thought of as being foolish by some people whose opinion I value.
Time Risk	TR1	I am concerned that I would have to spend too much time searching the information I need on E-commerce website.
	TR2	I am concerned that I would have to spend too much time learning how to use the systems on E-commerce website.
Performance Risk	PF1	I worry about whether the E-commerce will really perform as well as it is supposed to.
	PF2	I worry about whether the E-commerce will guaranteed that I will get the right products at the right time.
Physical Risk	PH1	It may do harm to me physically if I spend too much time in front of computer.
	PH2	I become concerned about some uncomfortable physical side-effects associated with this E-commerce.
Psychological Risk	PS1	The thought of E-commerce makes me feel psychologically uncomfortable
	PS2	The thought of E-commerce causes me to experience unnecessary tension.
Privacy Risk	PR1	I may suffer from privacy risk.
	PR2	I worry that E-commerce platform share my private information without my consent in the future.
Security Risk	SE1	I do not have confidence in the security of my online transaction.
	SE2	I worry that the information I provide during my transaction will reach inappropriate parties during storage in E-commerce databases.

E-commerce Performance Indicator consist of 3 Constructs. Construct of E-commerce Performance Indicator will be explained in Table 3.

Table 3. E-commerce Performance Indicator

Constructs	Code	Description
Competence (CM)	CM1	Company has sufficient capacity to do their work
	CM2	Company has sufficient experience in marketing the products/services they offer
	CM3	Company has all the resources necessary to perform their activity successfully
Integrity (IT)	IT1	Company usually fulfill its commitments
	IT2	Company offer is true and honest
	IT3	Company never make false statements
Benevolence (BN)	BN1	Company address their user needs
	BN2	Company is concerned about their users present and future interest/benefits
	BN3	Company wouldn't doing anything to their user intentionally

5. Conclusions and Recommendation

This study shows how perceived risk as e-commerce barrier can have an effect on e-commerce performance. It is obvious that consumers would have to look for evidence of the quality in means other than the physical inspection of the goods on offer. In this aspect, perceived risk as e-commerce barrier is given particular attention. E-commerce Performance Indicators consist of 3 constructs and there are 9 indicators for measuring those constructs. Future research is expected to use a variety of methodologies and further research and development on the relationship between SCRM and e-commerce.

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