

6th Annual Conference on Industrial and System Engineering (6th ACISE 2019)

IOP Conference Series: Materials Science and Engineering
Volume 598

Semarang, Indonesia
23 – 24 April 2019

Part 1 of 2

ISBN: 978-1-5108-9468-6
ISSN: 1757-8981

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution 3.0 International Licence. Licence details:
<http://creativecommons.org/licenses/by/3.0/>.

No changes have been made to the content of these proceedings. There may be changes to pagination and minor adjustments for aesthetics.

Printed with permission by Curran Associates, Inc. (2019)

For permission requests, please contact the Institute of Physics at the address below.

Institute of Physics
Dirac House, Temple Back
Bristol BS1 6BE UK

Phone: 44 1 17 929 7481

Fax: 44 1 17 920 0979

techtracking@iop.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

PART 1

THE DIFFERENCE OF TRADITIONAL FISHING BOATS IN BLIMBING AND BRONDONG SUB-DISTRICTS, LAMONGAN, INDONESIA	1
<i>Y Praharsi, M A Jami'in, G Suhardjito, H M Wee</i>	
INTEGRATING IMPORTANCE-PERFORMANCE ANALYSIS INTO E-S-QUAL AND E-RECS-QUAL SCALES FOR ASSESSING ELECTRONIC SERVICE QUALITY	7
<i>M M Ulkhaq, M Rabbani, B A Rachmania, A T Wibowo, F Ardi</i>	
AN ASSESSMENT OF SEBELAS MARET UNIVERSITY READINESS TO ESTABLISH PRODUCT CERTIFICATION BODIES (LSPRO) FOR BOTTLED DRINKING WATER (AMDK) PRODUCTS BASED ON SNI ISO/IEC 17065:2012	15
<i>S R Fauziah, F Fahma, R Zakaria</i>	
SAFETY CLIMATE ASSESSMENT OF FURNITURE INDUSTRY: A CASE STUDY	23
<i>N Susanto, H Prastawa, D D Oktaningrum</i>	
RE-DESIGN PRODUCTION PROCESS USING LEAN MANUFACTURING APPROACH FOR PRESSURE VESSEL 421 PSI	30
<i>A N Alifiya, M L Singgih</i>	
SUSTAINABLE CRITERIA IN SUPPLIER EVALUATION OF THE FOOD INDUSTRY	36
<i>I Nugraha, M Hisjam, W Sutopo</i>	
THE EFFECT OF COMPETENCE, MOTIVATION, AND ENVIRONMENT ON BUSINESS PERFORMANCE OF WOMEN ENTREPRENEURS RUNNING SMALL AND MEDIUM ENTERPRISES IN JAKARTA	44
<i>M Simanjuntak, H Sarjono</i>	
ANALYZING MENTAL WORKLOAD OF REMOTE WORKER BY USING SWAT METHODOLOGY (CASE STUDY: REMOTE SOFTWARE ENGINEER)	50
<i>A H Zulfany, R S Dewi, S G Partivi</i>	
MEASUREMENT OF INTERMEDIARY TRADER EFFICIENCY IN POULTRY DISTRIBUTION USING DATA ENVELOPMENT ANALYSIS METHOD	59
<i>R Purwaningsih, C G Pratiwi, N Susanto, H Santosa</i>	
CAMPUS SUSTAINABILITY PRACTICE ASSESSMENT: AN EMPIRICAL FINDING FROM JÖNKÖPING UNIVERSITY, SWEDEN	67
<i>M M Ulkhaq, R S George Joseph, B Javed, N R Nadekar</i>	
MODELLING RAW MATERIAL POLICY IN THE PALM SUGAR INDUSTRY WHILE CONSIDERING SUSTAINABILITY ASPECTS: A DYNAMIC SYSTEM APPROACH	75
<i>M Krisnawati, A Mustikasari, N S Uletika, T P Adhiana, E Sutrisno</i>	
MULTIPLE CORRESPONDENCE ANALYSIS USING BURT MATRIX: A STUDY OF BANDUNG INSTITUTE OF TECHNOLOGY STUDENT CHARACTERISTICS	83
<i>A W Mahdiyasa, U S Pasaribu</i>	
FACTORS SUPPORTING THE IMPLEMENTATION OF MASS TRANSPORT SYSTEM IN INDONESIA	90
<i>L Lady, M S Ardani, P F Ferdinant</i>	
SEVEN MANAGEMENT AND PLANNING TOOLS IN MEGAPROJECT MANAGEMENT: A LITERATURE REVIEW	99
<i>R W Damayanti, Subagyo, A R Wijaya, B Hartono</i>	
RISK ANALYSIS OF SUPPLY CHAIN CULTIVATION OF JOPER	106
<i>T Immawan, A Puruhita, W N Cahyo</i>	
DESIGN OF ERGONOMIC ASSAULT VEST FOR INDONESIAN ARMY WITH MODULAR CONCEPT	112
<i>A D Prayogi, D S Dewi, A Sudiarno</i>	
INTEGRATION ASSESSMENT AND EVALUATION OF SUPPLIER PERFORMANCE SYSTEM IN ELECTRICITY GENERATION COMPANY	120
<i>B Musyahidah, I Vanany</i>	
SUPPLIER SELECTION WITH GRAY BASED ROUGH SET THEORY METHOD (A CASE STUDY: PHARMACEUTICAL INSTALLATION OF RSU GRAND MEDICA TANJUNG ANOM, MEDAN)	125
<i>A Bakhtiar, Y S T Siahaan, A Susanty</i>	

VALUE CHAIN ANALYSIS TO IMPLEMENTATION OF INDONESIAN NATIONAL STANDARD (SNI) BATIK WITH ISO METHODOLOGY APPROACH	133
<i>F Fahma, D Pratiwi, R Zakaria</i>	
VEHICLE ROUTING PROBLEM WITH SPLIT SERVICE, TIME WINDOW AND INTERMEDIATE FACILITY FOR MUNICIPAL SOLID WASTE COLLECTION IN SURABAYA CITY WITH ANT COLONY OPTIMIZATION ALGORITHM	142
<i>D H Dayanara, N I Arvitrida, N Siswanto</i>	
DEVELOPING INDICATORS OF GREEN CONSTRUCTION OF GREEN SUPPLY CHAIN MANAGEMENT IN CONSTRUCTION INDUSTRY: A LITERATURE REVIEW	149
<i>N. Farida, N.U. Handayani, M.A. Wibowo</i>	
PROCUREMENT STRATEGY IN POWER PLANT COMPANIES (CASE STUDY IN THE SUPPLY OF WATER GENERATOR ENGINE PARTS).....	158
<i>D Pujotomo, H Suliantoro, A F Huseina</i>	
A NEW METAHEURISTICS FOR SOLVING VEHICLE ROUTING PROBLEM: PARTIAL COMPARISON OPTIMIZATION	166
<i>A Adhi, B Santosa, N Siswanto</i>	
A SYSTEMATIC LITERATURE REVIEW: FRAMEWORK DESIGN OF STUDENT PERFORMANCE MONITORING SYSTEM IN HIGHER EDUCATION.....	173
<i>R A Finata, L Andrawina</i>	
AN ANALYSIS OF CORRELATION OF THE DISTANCES BETWEEN TURBINES IN A TURBINE FARM WITH THEIR POWER AND COST	180
<i>J S Habiby, A Triwiyatno, T Andromeda</i>	
SINGLE MINUTE EXCHANGE OF DIES AS THE SOLUTION ON SETUP PROCESSES OPTIMIZATION BY DECREASING CHANGEOVER TIME, A CASE STUDY IN AUTOMOTIVE PART INDUSTRY	187
<i>M Sugarindra, M Ikhwan, M R Suryoputro</i>	
THE ASSESSMENT OF COLLEGE STUDENTS KNOWLEDGE AND PRACTICE REGARDING THE APPLICATION OF SUSTAINABLE CONSUMPTION PATTERNS IN YOGYAKARTA, INDONESIA	195
<i>H Purnomo, W I Kurnia</i>	
MACHINES MAINTENANCE INTERVAL ON FILLING LITHOS LUBRICANT PRODUCTION LINE: A CASE STUDY	203
<i>C N Rosyidi, M A E Suryono, P W Laksono</i>	
THE RISK ASSESSMENT OF REPETITIVE STRAIN INJURY (RSI) DISORDER USING OCCUPATIONAL REPETITIVE ACTION (OCRA) INDEX METHOD	210
<i>D P Restuputri, Eriko, I Masudin</i>	
AN EFFORT TO INCREASE THE POTENTIAL OF VIRGIN COCONUT OIL WITH PENDAWA TECHNIQUE.....	219
<i>E F Sapatra, I Yuniarti, R A S Imamsyah</i>	
DESIGN AND MANUFACTURE OF A LOW-COST DATA ACQUISITION BASED MEASUREMENT SYSTEM FOR DUAL FUEL ENGINE RESEARCHES.....	225
<i>N Sinaga, B Yuniarto, D Purba, Syaiful, A Nugroho</i>	
COMPARATIVE STUDY OF THE PERFORMANCE AND ECONOMIC VALUE OF A SMALL ENGINE FUELED WITH B20 AND B20-LPG AS AN EFFORT TO REDUCE THE OPERATING COST OF DIESEL ENGINES IN REMOTE AREAS	233
<i>N Sinaga, M Mel, D Purba, Syaiful, Paridawati</i>	
INNOVATIVE DESIGN OF ERGONOMIC WHEELCHAIR FOR DISABLED PEOPLE.....	241
<i>H Soewardi, M K A Afgani</i>	
INTERRELATIONSHIP OF GREEN SUPPLY CHAIN MANAGEMENT (GSCM) PERFORMANCE INDICATORS FOR PALM OIL INDUSTRY IN INDONESIA	248
<i>R Primadasa, A Sokhibi, D Tauhida</i>	
APPLICATION OF BAYESIAN ADDITIVE REGRESSION TREES TO ANALYZE THE GROWTH OF UNITED STATES ELECTRIC AUTOMOBILE INDUSTRY	256
<i>P Ajidarma, D Irianto</i>	
THE LITERATURE REVIEW OF CLOUD-BASED ENTERPRISE RESOURCE PLANNING.....	262
<i>R Aulia, A N Putri, M F Raihan, M Ayub, J Sulistio</i>	
REVISITING SUPPLY CHAIN SYSTEM WITH DETERIORATING ITEMS AND TRANSPORTATION COST	270
<i>C V Huang, Y D Huang, H M Wee</i>	
APPLICATION QUALITY FUNCTION DEPLOYMENT TO IMPROVE QUALITY OF PATIENT SERVICE IN HEMODIALYSIS INSTALLATION.....	277
<i>I Siregar</i>	

THE DESIGN OF AUXILIARY TOOL FOR FLAT MOTORCYCLE TIRES USING THE AXIOMATIC DESIGN METHOD	281
<i>H Purnomo, F Kurnia, R I Viridianawaty</i>	
PILOT FATIGUE RISK ANALYSIS: CONCEPTUAL STUDY AT FLIGHT OPERATION OF GARUDA INDONESIA'S BOEING 737 PILOTS	288
<i>M Hamsal, F A Zein</i>	
A SIMPLE BUTTERFLY LIFECYCLE ALGORITHM FOR MEASURING COMPANY'S GROWTH PERFORMANCE	295
<i>D N Utama, A Mitchell, B Fieri, H Richard</i>	
DESIGN KEY PERFORMANCE INDICATOR FOR SUSTAINABLE WAREHOUSE: A CASE STUDY IN A LEATHER MANUFACTURER	303
<i>E Kusriani, A Ahmad, W Murniati</i>	
ASSESSING THE EFFICIENCY OF SMALL AND MEDIUM INDUSTRY: AN APPLICATION OF DATA ENVELOPMENT ANALYSIS	311
<i>S N W Pramono, M M Ulkhaq, D Pujotomo, M A Ardhini</i>	
INTEGRATING HOUSE OF RISK METHOD WITH PESTLE AND CIMOSA FOR RISK ASSESSMENT OF JAVA-BALI I POWER PLANT CONSTRUCTION PROJECT	318
<i>A Muntoha, A Sudiarno</i>	
ANALYSIS AND CHARACTERIZATION HELM BASED ON HYACINT WATER COMPOSITES	326
<i>S A Albab, Sulistyio, S Nugroho</i>	
RELATIONSHIP ANALYSIS BETWEEN COMPANY STANDARD, SNI, AND INTERNATIONAL STANDARD IN WASHING MACHINE: A CASE STUDY AT AN ELECTRONIC COMPANY	333
<i>A Bakhtiar, Y Widharto, D I Rinawati, M Nurfajrianti</i>	
DETERMINING THE IMPORTANCE FACTORS OF FINANCIAL TECHNOLOGY ADOPTION IN HOSPITAL USING FUZZY ANALYTICAL NETWORK PROCESS (FANP)	340
<i>M. Dachyar, E N IlaHiyyah, Farizal</i>	
PROJECT SCHEDULING OF NEW PRODUCT DEVELOPMENT PROCESS IN AUTOMOTIVE INDUSTRY IN INDONESIA USING DESIGN STRUCTURE MATRIX (DSM)	348
<i>C M Reza, M Dachyar, R Nurcahyo</i>	
CAMISOLE MODIFICATION BASED ON HUMAN PHYSIOLOGY AND FASHION ASPECT FOR DIPONEGORO UNIVERSITY STUDENTS	356
<i>D Nurkertamanda, A S Utami, Sriyanto, Y Widharto</i>	
ANALYSIS OF DIVE INDUSTRY MINIMUM REQUIREMENT CRITERIA BASED ON RISK MANAGEMENT	364
<i>A T Setyoko, E Kristiningrum</i>	
MODELLING AND ANALYSIS OF MANUFACTURING PROCESS LAYOUT	369
<i>I Siregar, J B Saedon, M S Adenan, S Shawal, M F Othman</i>	
THE PREDICTION OF LOGISTIC NEEDS OF EMERGENCY RESPONSE FOR VICTIMS OF MERAPI VOLCANO ERUPTION IN REGENCY SLEMAN, YOGYAKARTA	374
<i>N U Handayani, D I Rinawati, D P Sari, P M Rifa'i</i>	
IMPROVING THE PERFORMANCE OF AN ASSEMBLY LINE TO INCREASE PRODUCTION CAPACITY USING VALUE STREAM MAPPING: A STUDY CASE	383
<i>W N Cahyo, W A Khaeruzzaman, F W Hasibuan</i>	
STRATEGY FOR MINIMIZING RISK OF ELECTRONIC WASTE MANAGEMENT USING THE ANALYTICAL HIERARCHY PROCESS (AHP)	391
<i>D Rimantho, E Noor, Eriyatno, H Effendi</i>	
IMPROVING THE PERFORMANCE OF PROCUREMENT AND INVENTORY MANAGEMENT OF HOSPITAL MATERIALS (CASE OF A TAIWANESE MEDICAL CENTRE)	399
<i>Y C Liu, M B Chiu, C C Chiou</i>	
THE DESIGN OF SHOE SIZES FOR BOYS AGED 4-6 YEARS OLD BASED ON FOOT ANTHROPOMETRIC DATA: LENGTH FOOT, WIDTH FOOT, AND FOOT BALL CIRCUMFERENCE	408
<i>G F Waluyono, B Suhardi, E Pujiyanto</i>	
SIX SIGMA BASED PERFORMANCE MEASUREMENT OF TAX RETURN PROCESSING IMPROVEMENT (CASE STUDY: DIRECTORATE GENERAL OF TAXES FOR REPUBLIC OF INDONESIA)	416
<i>A D Yuliyono, Baehaki, D Luqman, D N Utama, A Wibowo</i>	
APPLICATION OF SMED METHODOLOGY AND SCHEDULING IN HIGH-MIX LOW VOLUME PRODUCTION MODEL TO REDUCE SETUP TIME: A CASE OF S COMPANY	424
<i>S S Wang, C C Chiou, H T Luong</i>	

EXTENDED-RSA FOR ENCRYPTION PROCESS TO IMPROVE APPLICATION SERVER AVAILABILITY	432
<i>A Susanto, Herman, M I Putranto, D N Utama, A Wibowo</i>	
HOUSE OF RISK APPROACH FOR ASSESSING SUPPLY CHAIN RISK MANAGEMENT OF MATERIAL PROCUREMENT IN CONSTRUCTION INDUSTRY	438
<i>T L Ahmad, A Susanty</i>	
THE RELIABILITY OF CRASH CAR PROTECTION LEVEL BASED ON THE CIRCLE CONFIDENCE REGION ON THE CORRESPONDENCE PLOT	445
<i>K E Lestari, U S Pasaribu, S W Indratno, H Garminia</i>	
MANUFACTURING EFFICIENCY IMPROVEMENT THROUGH LEAN MANUFACTURING APPROACH: A CASE STUDY IN A STEEL PROCESSING INDUSTRY	452
<i>S Indrawati, A Azzam, A C Ramdani</i>	
PRODUCT SEGMENTATION OF WOODEN HANDICRAFT MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES) IN INDONESIA	459
<i>M G F Christine, M Dachyar, R Nurcahyo</i>	
SUPPLIER SELECTION MODEL BASED ON RISK IN AN INDONESIAN HEALTHCARE SERVICE INDUSTRY	467
<i>S Indrawati, A 'Azzam, H I Cahaya</i>	
COMPREHENSIVE FRAMEWORK OF E-COMMERCE ADOPTION IN INDONESIAN SMES	474
<i>I Hayati, L Andrawina</i>	
PRODUCTION SCHEDULING TO MINIMIZE MAKESPAN USING SEQUENCING TOTAL WORK (TWK) METHOD AND CAMPBELL DUDEK SMITH (CDS) ALGORITHM	481
<i>D Setiawan, A Ramadhani, W N Cahyo</i>	
DESIGN OF E-COMMERCE COMPETENCY IMPROVEMENT PROGRAM FOR BATIK SMES IN SURAKARTA	488
<i>A R T Putri, Y Priyandari, E Liquiddanu</i>	

PART 2

AN ANALYSIS OF VARIABLES AFFECTING THE IMPLEMENTATION OF PATIENT SAFETY IN BUDI SEHAT HOSPITAL PURWOREJO USING PARTIAL LEAST SQUARE	494
<i>R I Buwono, B Suhardi, E Pujiyanto</i>	
APPLICATION OF RISK IDENTIFICATION, RISK ANALYSIS, AND RISK ASSESSMENT IN THE UNIVERSITY LABORATORY	502
<i>M A Budihardjo, F I Muhammad, A R Rizaldianto</i>	
SCOR: BUSINESS PROCESS ANALYSIS AND SUPPLY CHAIN PERFORMANCE IN BUILDING MATERIALS INDUSTRY	507
<i>I Rizkya, K Syahputri, R M Sari, I Siregar, J Utaminingrum</i>	
AUTOREGRESSIVE INTEGRATED MOVING AVERAGE (ARIMA) MODEL OF FORECAST DEMAND IN DISTRIBUTION CENTRE	512
<i>I Rizkya, K Syahputri, R M Sari, I Siregar, J Utaminingrum</i>	
ANALYSIS OF CHANGING WORKING PATTERNS ON AN OVERHAUL ACTIVITY IN A POWER PLANT INDUSTRY USING LEAN MANUFACTURING CONCEPT	518
<i>A A Fattah, A Sudiarno</i>	
HEALTH STATE INDICATOR-BASED VIBRATION SIGNATURE FOR GEARBOX CONDITION MONITORING AND MAINTENANCE	525
<i>A Widodo, Dj Satrijo, T Prahasto, I Haryanto</i>	
PRODUCTIVITY EVALUATION THROUGH AMERICAN PRODUCTIVITY CENTER APPROACH AT PT SEJAHTERA FURNINDO	532
<i>Ahmudi, M Mahachandra, N U Handayani</i>	
PROJECT SCHEDULE EVALUATION USING PROJECT MANEGEMENT SOFTWARE: A CASE STUDY IN AN ELECTRIC STEAM POWER PLANT IN INDONESIA	541
<i>S Miranda, V N Helia</i>	
THE INFLUENCE OF GREEN SUPPLY CHAIN MANAGEMENT ON COMPANY'S PERFORMANCE AND COMPETITIVENESS IN WOOD FURNITURE INDUSTRY: AN OVERVIEW OF CONCEPTUAL MODEL	549
<i>F M Likumahwa, R Purwaningsih, N U Handayani</i>	
THE MUNDEL AND OBJECTIVE MATRIX MODEL OF PRODUCTIVITY MEASUREMENT AT PT ADI PERKAPALAN	555
<i>R Yahya, M Mahachandra, N U Handayani</i>	

THE ENVIRONMENTAL IMPACT ASSESSMENT OF FURNITURE PRODUCTION PROCESS USING THE LIFE CYCLE ASSESSMENT	564
<i>S Hartini, P A Wicaksono, H Prastawa, A F Hadyan, Sriyanto</i>	
SCOR-BSC INTEGRATED MODEL FOR A SMALL MEDIUM ENTERPRISE CLOTHING INDUSTRY USING MTS-BASED PRODUCTION STRATEGY IN INDONESIA	572
<i>B W Permadi, A Y Ridwan, W Juliani</i>	
MATERIAL HANDLING PERFORMANCE MEASUREMENT AND METRICS FOR INTERNAL MILK-RUN AREA USING OVERALL TRANSPORTATION EFFECTIVENESS. CASE STUDY: AUTOMOTIVE INDUSTRY	580
<i>F M A M Putra, A Y Ridwan, M D Astuti</i>	
THE MAIN CRITICAL RISK IN THE SUPPLY CHAIN OF COMPONENT AUTOMOTIVE INDUSTRY: A CASE STUDY	589
<i>F Alitosa, L H Kusumah</i>	
LEAN ASSESSMENT MATRIX: A PROPOSED SUPPORTING TOOL FOR LEAN MANUFACTURING IMPLEMENTATION	596
<i>P D Karningsih, A T Pangesti, M Suef</i>	
INTEGRATED BATCH PRODUCTION AND MULTIPLE PREVENTIVE MAINTENANCE SCHEDULING ON A SINGLE MACHINE TO MINIMIZE TOTAL ACTUAL FLOW TIME	605
<i>R Yusriski, B Astuti, M Ilham, Zahedi</i>	
ENVIRONMENTAL PERFORMANCE IN INDONESIA AUTOMOTIVE INDUSTRY	613
<i>G A Bintang, R Nurcahyo, D S Gabriel</i>	
BUSINESS INTELLIGENT IN AN E-COMMERCE INDUSTRY	619
<i>A M Purnamasari, C E A Pah, M D I Yoga, A S Girsang, S M Isa</i>	
DETERMINANTS OF INNOVATION STRATEGY IN INDONESIA TELECOMMUNICATION INDUSTRY	627
<i>D R Pramudita, R Nurcahyo, M Dachyar</i>	
PRODUCT DESIGN FOR POST-STROKE REHABILITATION BICYCLE WITH KANSEI ENGINEERING APPROACH	635
<i>D S Dewi, A Rakhmawati, I M L Batan, N A Wessiani</i>	
FEATURE EXTRACTION O CONDITION MONITORING DATA ON HEAVY EQUIPMENT'S COMPONENT USING PRINCIPAL COMPONENT ANALYSIS (PCA)	643
<i>M A Yudha, I Surjandari, Zulkarnain</i>	
TRAFFIC ACCIDENT SEVERITY PREDICTION USING NAIVE BAYES ALGORITHM - A CASE STUDY OF SEMARANG TOLL ROAD	651
<i>W Budiawan, S Saptadi, Sriyanto, C Tjioe, T Phommachak</i>	
ORIGINAL EQUIPMENT MANUFACTURER (OEM) SITE SELECTION OF TRADITIONAL MEDICINE COMPANIES IN INDONESIA USING ANALYTIC HIERARCHY PROCESS (AHP) METHOD	659
<i>M. Dachyar, A.T. Tjiptadi, Farizal</i>	
DESCRIPTIVE RELATIONSHIP ANALYSIS BETWEEN THE PROGRAM FOR POLLUTION CONTROL EVALUATION AND RATING (PROPER) AND ISO 14001	667
<i>F R Nurkhaeriyah, R Nurcahyo, M Dachyar</i>	
IMPLEMENTATION FUGL MEYER ASSESSMENT OF LOWER EXTREMITY METHOD TO DEVELOP A POST-STROKE REHABILITATION PROCEDURE USING ITS TRICYCLE	675
<i>R Febritasari, I M L Batan</i>	
APPLICATION OF SPATIAL ANALYSIS FOR DELINEATING GROUNDWATER RECHARGE ZONE FOR INDUSTRIAL USAGE IN TANAH BUMBU REGENCY, SOUTH BORNEO/INDONESIA	684
<i>T T Putranto, S Purba</i>	
A PROTOTYPE DECISION SUPPORT SYSTEM FOR SUSTAINABILITY PERFORMANCE MEASUREMENT IN FURNITURE INDUSTRY	692
<i>Sriyanto, D Pujotomo, S Hartini</i>	
MAPPING DELAY RISKS OF EPC PROJECTS: A CASE STUDY OF A PLATFORM AND SUBSEA PIPELINE OF AN OIL AND GAS PROJECT	699
<i>J.U.D. Hatmoko, R.R. Khasani</i>	
CONCEPTUAL MODEL IN IMPROVING INTERNAL PERFORMANCE OF A COMPANY	708
<i>E Megawati, P A Wicaksono</i>	
ANALYSING THE SUCCESS FACTORS OF SMES ON PUBLIC PROCUREMENT	715
<i>H Suliantoro, B A Winarno, N U Handayani</i>	
MANAGING BLOOD SAFETY AND AVAILABILITY: A PRELIMINARY INVESTIGATION OF THE BLOOD SUPPLY CHAIN DYNAMICS IN INDONESIA	729
<i>L. Lusiantoro, B. Tjahjono</i>	

AN INTEGRATED RELATIVE IMPORTANCE INDEX, RISK ALLOCATION AND BOW TIE ANALYSIS FOR ANALYZING RISKS OF THE AMARTHA VIEW APARTMENT DEVELOPMENT PROJECT	734
<i>D P Sari, D Pujotomo, P A Wicaksono, K H R Yunanto</i>	
GREEN LOGISTICS APPROACH IN BIOETHANOL CONVERSION FROM POTATO STARCH IN CENTRAL JAVA	742
<i>R Yusianto, Marimin, Suprihatin, H Hardjomidjojo</i>	
INTEGRATION OF SERVQUAL, KANO MODEL, AND QFD TO DESIGN IMPROVEMENT ON PUBLIC SERVICE SYSTEM	750
<i>A Mansur, A N Farah, W N Cahyo</i>	
ANTHROPOMETRIC AND BIOMECHANICS ANALYSIS OF LOWER LIMB EXOSKELETON FOR INDONESIAN POPULATION	757
<i>Z F Rosyada, Sulardjaka, Munadi, E Muslim</i>	
INDIVIDUAL-BASED SIMULATION FOR ONLINE MARKETPLACE DIFFUSION AMONG BATIK SMALL MEDIUM ENTERPRISES (SMES) IN INDONESIA	764
<i>S Saptadi, Sriyanto, B M Pangaribuan</i>	
SIMULATION OF MITSUBISHI RV-M1 ROBOTIC ARMS BY USING MATLAB® FOR HIGH SCHOOL TEACHING	774
<i>D Prabowo, M Wiannastiti, R Hedwig</i>	
THE IDENTIFICATION OF VARIABLES OF QUALITY INFLUENCE MOBILE LOCATION-BASED SERVICE (M-LBS) (A CASE STUDY: GO-FOOD SERVICES IN SEMARANG CITY)	783
<i>N B Puspitasari, W Budiawan, V Hurisandi</i>	
SERVICE ORIENTED DESIGN FOR INDONESIAN E-GOVERNMENT SYSTEM USING SOA	790
<i>A N Fajar, I M Shofi</i>	
STARTING THE IMPLEMENTATION OF RISK MANAGEMENT IN A HIGHER EDUCATION INSTITUTION: THE CASE OF IPB UNIVERSITY	795
<i>D S Priyarsono, A P Widhiyani, D L Sari</i>	
IMPLEMENTATION OF PDCA CYCLE IN CALIBRATION AND TESTING LABORATORY BASED ON ISO/IEC 17025:2017	802
<i>M H Habibie, R H Kresiani</i>	
LOCATION SELECTION ANALYSIS FOR NEW SHIPYARD USING INTEGRATION OF DEMATEL AND ANP: A CASE STUDY (PT IKI)	809
<i>Sukisno, M L Singgih</i>	
MODIFIED DOUBLE SAMPLING CONTROL CHART FOR MONITORING THE COEFFICIENT OF VARIATION	815
<i>F Rozi, U S Pasaribu, U Mukhaiyar, D Irianto</i>	
DESIGNING OF RAW MATERIAL SCHEDULING SUPPLY MULTI ON SUPPLIER STRATEGIES WITH PRICE, LEAD TIME, AND STOCHASTIC DEMAND VARIATIONS. CASE STUDY: ELECTRICITY MANUFACTURER	823
<i>P Amelia, A Y Ridwan, B Santosa</i>	
PSYCHOSOCIAL RISK FACTORS FOR MUSCULOSKELETAL SYMPTOMS OF CONSTRUCTION WORKERS	830
<i>W Kusmasari, Yassierli</i>	
EVALUATION OF BABY CARRIERS IN INDONESIA: PHYSIOLOGICAL AND BIOMECHANICAL APPROACH	836
<i>B Fista, A Widyanti, K Muslim, S A Salma</i>	
AN INVENTORY MANAGEMENT MODEL FOR PRODUCT-SERVICE SYSTEM IN DUAL-CHANNEL SUPPLY CHAIN	841
<i>E Widodo, E A G Sitohang, I Vanany</i>	
CRITICAL SUCCESS FACTORS EVALUATION OF THE ISO 50001 ENERGY MANAGEMENT SYSTEM IMPLEMENTATION (CASE STUDY: PT. APAC INTI CORPORA, BAWEN, SEMARANG INDONESIA)	851
<i>B Purwanggono, K Ferastra, A Bachtiar</i>	
LOYALTY IMPROVEMENT OF INDONESIAN LOCAL BRAND FASHION CUSTOMER BASED ON CUSTOMER LIFETIME VALUE (CLV) SEGMENTATION	861
<i>M Dachyar, F M Esperanca, R Nurcahyo</i>	
BUSINESS INTELLIGENCE FOR PRODUCT DEFECT ANALYSIS	869
<i>A S Girsang, S M Isa, A L Haris, Arwan, K Mandagie, L R Ariana, V Ardinda</i>	
FINANCIAL STRATEGY MODEL FOR SOCIAL HEALTH INSURANCE IN INDONESIA USING SIMULATION	877
<i>D Kurnianingtyas, B Santosa, N Siswanto</i>	

MUSLIM ABLUTION ECO WATER TAP: FROM FIRST DESIGN ALPHA PROTOTYPE TO SECOND DESIGN	885
<i>W Trusaji, M 'A A Rafsanjani, A R Irhamna, D Irianto</i>	
AN EMPIRICAL STUDY OF VEHICLE ROUTING PROBLEM FOR MEDICAL CONSUMABLE MATERIALS BY USING CLUSTERING APPROACH: TAKING ZUELING PHARMA CORPORATE AS AN EXAMPLE	891
<i>W-H Ouyang, T-Y Lin, C-C Chiou</i>	
USER CENTERED DESIGN: DESIGN AND DEVELOPMENT METHODOLOGY OF SEED PLANTING TOOLS	899
<i>H Purnomo, O Achmadi, I Hasan, M Mardijanto</i>	
A SIMULATION-BASED APPROACH TO ASSESS ECO-PROCESS INNOVATION PERFORMANCE.....	906
<i>S M Dahan, S M Yusof</i>	
HAZARD IDENTIFICATION, RISK ASSESSMENT, AND RISK CONTROLLING USING HAZARD IDENTIFICATION AND RISK ASSESSMENT METHOD.....	915
<i>R Aulia, Qurtubi</i>	
PRIORITY PROPOSAL IN SELECTING FRESH FRUIT BUNCH SUPPLIERS USING ANALYTICAL HIERARCHY PROCESS (AHP) AND WEIGHTED SCORING MODEL	923
<i>M F Alfaris, Qurtubi</i>	
CHANGES IN LAYOUT AND HANDLING METHOD FOR RAW MATERIALS TO REDUCE PUT AWAY AND PICKING TIME: A PLASTIC PACKAGING MANUFACTURER CASE STUDY	932
<i>Z Parameswari, I N Pujawan</i>	
SUPPLY CHAIN PERFORMANCE MEASUREMENT SYSTEM DEVELOPMENT FOR SHOES SME USING SUBCONTRACT PRODUCTION STRATEGY BASED ON INTEGRATED SCOR-BSC MODEL	940
<i>A R Fauzi, A Y Ridwan, W Juliani</i>	
WATER HYACINTH (ECENG GONDOK) AS FIBRE REINFORCEMENT COMPOSITE FOR PROSTHETICS SOCKET	949
<i>D Widhata, R Ismail, Sulardjaka</i>	
A LITERATURE REVIEW OF SUSTAIN ENTERPRISE RESOURCE PLANNING.....	958
<i>M F Alfaris, G Y Edikuncoro, A L Savitri, D Yogiari, J Sulistio</i>	
READINESS FOR IMPLEMENTING INDUSTRY 4.0 IN FOOD AND BEVERAGE MANUFACTURER IN INDONESIA	965
<i>M Ichsan, M Dachyar, Farizal</i>	
LEADERSHIP STYLE AND CAPABILITY ON THE FORMULATION OF BUSINESS STRATEGY IN THE STATE-OWNED ENTERPRISES IN INDONESIA.....	972
<i>B Arif, E T Sule</i>	
REVIEW OF COGNITIVE ERGONOMIC MEASUREMENT TOOLS	980
<i>B Fista, H A Azis, T Aprilya, S Saidatul, M K Sinaga, J Pratama, F A Syalfinaf, Steven, S Amalia</i>	
Author Index	