

International Conference on Industrial Enterprise and System Engineering (ICoIESE 18)

**Integrated and Collaborative System: A
Strategic Step Towards Smart Enterprise**

Atlantis Highlights in Engineering Volume 2

Yogyakarta, Indonesia
21-22 November 2018

Editors:

**Luciana Andrawina
Hyerim Bae
Ku Ruhana Ku Mahamud
Aleksander Zgrzywa**

ISBN: 978-1-5108-8899-9

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.

Copyright© (2019) by Atlantis Press
All rights reserved.
Copyright for individual electronic papers remains with the authors.

For permission requests, please contact the publisher:

Atlantis Press
Amsterdam / Paris

Email: contact@atlantis-press.com

Conference Website: <http://www.atlantis-press.com/php/pub.php?publication=icoiese-18>

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

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

SESSION: SESSION 1 ROOM A

DESIGN AND MARKETING PERFORMANCE ANALYSIS ON UNIT BUSINESS GOVERNMENT AND ENTERPRISE SERVICE UNIT AT TELKOM XYZ AREA BY USING BALANCED SCORECARD FOR MARKETING	1
<i>Fauziyyah Fauziyyah, Endang Chumaidiyah, Sari Wulandari</i>	
OPERATIONAL RISK ANALYSIS FOR BARCODING PROJECT IN PT. XYZ WITH ENTERPRISE RISK MANAGEMENT METHOD	9
<i>Amanda Putri Kusumawardhani, Endang Chumaidiyah, Rita Zulbetti</i>	
MEASURING SCHEDULE PERFORMANCE OF FIBER TO THE HOME PROJECT USING EARNED VALUE MANAGEMENT.....	15
<i>Reynaldy Prayogi, Devi Pratami, Ika Arum Puspita, Ageak Raporte Bermano</i>	
A META ANALYSIS STUDY LEADERSHIP AND PROJECT SUCCESS	20
<i>Retno Wulan Damayanti, Budi Hartono, Andi Rahadiyan Wijaya, Avin Fadilla Helmi, Bagus Riyono</i>	
INTENTION DETERMINATION OF SHARING ECONOMY BUSINESS PROVIDER IN THE THEORY OF PLANNED BEHAVIOR MODEL USING PARTIAL LEAST SQUARE (STUDY CASE: AIRBNB INDONESIA).....	26
<i>Resha Akbar, Luciana Andrawina</i>	

SESSION: SESSION 1 ROOM B

INVESTIGATION ON SIMULATION OF WIND AND SOLAR POWER HYBRID SYSTEMS THROUGH HUMAN MACHINE INTERFACE BY INTOUCH WONDERWARE SOFTWARE.....	31
<i>Tatang Mulyana, Hari Setiawan, Rasidi Ibrahim</i>	
MULTI-CLASS CLASSIFICATION OF CERAMIC TILE SURFACE QUALITY USING ARTIFICIAL NEURAL NETWORK AND PRINCIPAL COMPONENT ANALYSIS	36
<i>Muhammad Hanif Ramadhan, Haris Rachmat, Denny Sukma Eka Atmaja, Rasidi Ibrahim</i>	

SESSION: SESSION 1 ROOM C

MEASURING PROJECT PERFORMANCE USING EARNED VALUE MANAGEMENT (EVM) IN XYZ SOFTWARE DEVELOPMENT PROJECT.....	41
<i>Olivia Permata Ariputri, Ika Arum Puspita, Wawan Tripiawan</i>	
DESIGN OF BUSINESS MODEL ON DIGITAL PRINTING STARTUP USING BUSINESS MODEL CANVAS APPROACH	47
<i>Muhammad Miftah Nur Huda, Endang Chumaidiyah, Farda Hasun</i>	
ESTABLISHING WASTE MANAGEMENT SYSTEM STRATEGY BY USING COMPETITIVE POSITIONING ANALYSIS	54
<i>Putra Fajar Alam, Sari Wulandari</i>	
THE DETERMINANTS OF ACCIDENT RISK PERCEPTION, TRAVEL MOTIVATION, EWOM AND TRAVEL INTENTION ON ISLAND TOURISM DESTINATION	63
<i>Sari Wulandari, Husni Amani, Nurdinintya Athari</i>	
BUSINESS PROCESS MAPPING IN SOFTWARE DEVELOPMENT COMPANY	68
<i>Made Andriani, Aya Aisha, Melianna Pranita, Joko Siswanto, Kadarsah Suryadi</i>	

SESSION: SESSION 1 ROOM D

FLASH-AWARE CLUSTERED INDEX FOR MOBILE DATABASES	75
<i>Wojciech Macyna, Michal Kukowski</i>	
LATENT DIRICHLET ALLOCATION MODELING FOR CPS PATENT TOPIC DISCOVERY	81
<i>Usharani Hareesh Govindarajan, Amy J. C. Trappey, Gopal Kumar</i>	
SELF-ADAPTIVE CYBERSECURITY SYSTEM.....	87
<i>Aradea Aradea, Iping Supriana, Kridanto Surendro, Husni Mubarak, Irfan Darmawan</i>	

CLUSTERING OF USER QUERY IN SEARCH ENGINE ON INDONESIAN E-COMMERCE BY USED AD-OPTICS ALGORITHMS	93
<i>Ranita Windriani, Ibnu Asror, Dana Sulistyo Kusumo</i>	
EXPLICIT AND IMPLICIT ASPECT EXTRACTION USING WHALE OPTIMIZATION ALGORITHM AND HYBRID APPROACH.....	100
<i>Mohammad Tubishat, Norisma Idris</i>	
ANALYSIS ON OPINION MINING USING COMBINING LEXICON-BASED METHOD AND MULTINOMIAL NAÏVE BAYES.....	106
<i>Geriska Isabelle, Warih Maharani, Ibnu Asror</i>	

SESSION: SESSION 1 ROOM E

INFORMATION SYSTEM PLANNING FOR EMERGING START-UP COMPANY: A CASE FROM SOFTWARE HOUSE	112
<i>Rayinda Pramuditya Soesanto, Wawan Tripiawan, Afrin Fauzya Rizana, Amelia Kurniawati, Fadillah Ramadhan</i>	
SELF-ADAPTIVE LOAD BALANCING SYSTEM FOR GRID COMPUTING.....	118
<i>Irfan Darmawan, Aradea Aradea</i>	
A COMPARISON OF NAÏVE BAYES AND BAYESIAN NETWORK ON THE CLASSIFICATION OF HIJAIYAH PRONUNCIATION WITH PUNCTUATION LETTERS.....	123
<i>Adiwijaya Adiwijaya, Annisa Riyani, Mohamad Syahrul Mubarak</i>	
MODEL TREE WITH MODIFIED L1 LOSS FUNCTION FOR PREDICTING MISSING ATTENDANCE DATA OF FACULTIES	128
<i>Mohammad Arif Rasyidi, Rachmadita Andreswari</i>	
WEB APPLICATION DESIGN USING SINGLE PAGE APPLICATION TO INCREASE WEBSITE PERFORMANCE ON RUMANTARA	133
<i>Ilham Farobi, Soni Fajar Surya Gumilang, Muhammad Azani Hasibuan</i>	
APPLICATION OF RISK IT BASED ON ISO 31000 STANDARDS PROCESS CAPABILITY ASSESSMENT MODEL (CASE STUDY: ANDALAS UNIVERSITY)	139
<i>Mohammad Hafiz Hersyah, Kridanto Surendro</i>	

SESSION: SESSION 1 ROOM F

WEB-BASED FOOD DELIVERY MANAGEMENT SYSTEM.....	145
<i>Soni Fajar Surya Gumilang, Nia Ambarsari, Mei Dina Isti Nurmala</i>	
INFORMATION SYSTEM STRATEGY AND APPLICATION GOVERNANCE IN THE GOVERNMENT OF BANDUNG REGENCY.....	150
<i>Soni Fajar Surya Gumilang, Heru Nugroho</i>	
EXTENDING THE UTAUT MODEL TO UNDERSTAND THE CITIZENS' ACCEPTANCE AND USE OF ELECTRONIC GOVERNMENT IN DEVELOPING COUNTRY: A STRUCTURAL EQUATION MODELING APPROACH.....	156
<i>Deden Witarsyah Jacob, Irfan Darmawan</i>	
DEVELOPMENT OF PROJECT DOCUMENT MANAGEMENT SYSTEM BASED ON DATA GOVERNANCE WITH DAMA INTERNATIONAL FRAMEWORK.....	161
<i>Hanung Nindito Prasetyo, Regina Nathania Djepapu, Ferra Arik Tridalestari, Irman Hariman</i>	
OLAP CUBE PROCESSING OF PRODUCTION PLANNING REAL-LIFE EVENT LOG: A CASE STUDY	167
<i>Rachmadita Andreswari, Mohammad Arif Rasyidi</i>	
GROUP-CENTERED FRAMEWORK TOWARDS A POSITIVE DESIGN OF DIGITAL COLLABORATION IN GLOBAL SETTINGS	173
<i>Irawan Nurhas, Jan Pawlowski, Stefan Geisler, Maria Kovtunen, Bayu Rima Aditya</i>	

SESSION: SESSION 2 ROOM A

DETERMINING THE SUITABLE MATERIAL HANDLING EQUIPMENT IN PT. XYZ.....	179
<i>Zhafran Ega, Judi Alhilman, Fransiskus Tatas Dwi Atmaji</i>	
FISHERY SUPPLY CHAINS IN INDONESIA: IMPROVEMENT OPPORTUNITIES ON THE DOWNSTREAM SIDE	185
<i>Niniet Indah Arvitrida, Dian Rahmawati, Dwi Lastomo, Rindawati, Kusnadi</i>	

DEVELOPMENT OF INVENTORY CONTROL APPLICATION FOR PHARMACEUTICAL PRODUCT USING ABC-VED CYCLE COUNTING METHOD TO INCREASE INVENTORY RECORD ACCURACY	190
<i>Fadhilah Amin Fathoni, Ari Yanuar Ridwan, Budi Santosa</i>	
AN INVENTORY SYSTEM FOR PACKAGING MATERIAL UNDER THE PROBABILISTIC DEMAND USING JOINT REPLENISHMENT METHOD AT COCOA COMPANY	196
<i>Rafif Prayogi, Ari Yanuar Ridwan, Budi Santosa</i>	

SESSION: SESSION 2 ROOM B

DESIGN OF DECISION SUPPORT SYSTEM APPLICATION FOR DETERMINING SCHOLARSHIP GRANTEE USING ANALYTICAL HIERARCHY PROCESS AND FACTOR RATING	200
<i>Afrin Fauzya Rizana, Rayinda Pramuditya Soesanto</i>	
DESIGN OF GEOGRAPHIC-BASED DECISION SUPPORT SYSTEM FOR ROAD REPAIRMENT WITH GDSS METHOD: CASE STUDY IN BANDUNG DISTRICT	204
<i>Dicky Faisal Dramar, Farid Wira Darmawan, Audira Zuraida, Rayinda Pramuditya Soesanto, Ika Arum Puspita</i>	
DEDUPLICATION FOR DATA PROFILING USING OPEN SOURCE PLATFORM	211
<i>Margo Gunatama, Tien Fabrianti, Muhammad Azani Hasibuan</i>	
WEB SERVICES TO OVERCOME INTEROPERABILITY IN FINGERPRINT-BASED ATTENDANCE SYSTEM	216
<i>Alam Rahmatulloh, Rohmat Gunawan, Irfan Darmawan</i>	
COMPARISON OF WEB SCRAPING TECHNIQUES : REGULAR EXPRESSION, HTML DOM AND XPATH	222
<i>Rohmat Gunawan, Alam Rahmatulloh, Irfan Darmawan, Firman Firdaus</i>	
DATA MINING APPROACH TO CLASSIFY TUMOUR MORPHOLOGY USING NAÏVE BAYES ALGORITHM	227
<i>Shahmirul Hafizullah Imanuddin, Irfan Darmawan, Rahmat Fauzi</i>	
PRIVACY PROTECTION DRIVERS TOWARDS ELECTRONIC PLATFORM: A SYSTEMATIC REVIEW	231
<i>Muharman Lubis, Rahmat Fauzi, Ahmad Almaarif</i>	
ANALYSIS COMPARISON OF DATA MINING ALGORITHM FOR PREDICTION STUDENT GRADUATION TARGET	239
<i>Rachmadita Andreswari, Muhammad Azani Hasibuan, Dela Youlina Putri, Qalbinuril Setyani</i>	

SESSION: SESSION 2 ROOM C

THE PROPOSED OF VENDOR SELECTION IN GOODS PROCUREMENT USING FUZZY ANALYTICAL HIERARCHY PROCESS (FAHP) METHOD AT PT. PERTAMINA HULU ENERGI OFFSHORE NORTH WEST JAVA (PHE ONWJ).....	245
<i>Kristoforus Maximinus Krisnabayu Tandra Widyatama, Ika Arum Puspita, Mumu Natapriatna</i>	
COMPANY STRATEGY BASED ON LINIER REGRESSION OF STOCKS RETURN TO THE EPS AND DOLLAR EXCHANGE AT PHARMACEUTICAL INDUSTRY IN INDONESIA STOCK EXCHANGE 2010-2016	252
<i>Nico Septian, Endang Chumaidiyah, Rita Zulbetti</i>	
CONTAINER LOADING PROBLEM IN MULTIPLE HETEROGENEOUS LARGE OBJECT PLACEMENT PROBLEM TO MINIMIZE DELIVERY DELAYS	258
<i>Budi Santosa Chulasoh, Erlangga Bayu Setyawan</i>	
A MODEL DEVELOPMENT OF PERISHABLE PRODUCT TO MINIMIZE TOTAL SUPPLY CHAIN COST ON FRESH FOOD AND FROZEN PRODUCT SALES ON THE TRAINS	263
<i>Nia Novitasari, Dida Diah Damayanti, Anton Abdulbasah Kamil</i>	
INTEGRATED MODEL DEVELOPMENT OF SPARE PART INVENTORY AND MAINTENANCE.....	269
<i>Prafajar Suksesanno Muttaqin, Dida Diah Damayanti, Anton Abdulbasah Kamil</i>	

SESSION: SESSION 2 ROOM D

HIGH SECURITY ADAPTIVE BCH CODE DISCRETE WAVELET TRANSFORM COPYRIGHT PROTECTION	274
<i>Irma Safitri, Rizki R. Ginanjar, Yosa Yunawan</i>	
COPYRIGHT PROTECTION HIGH ROBUSTNESS ARNOLD TRANSFORM WAVELET METHOD.....	280
<i>Bruguiera A. F. Agradriya, Irma Safitri, Ledy Novamizanti, Muhammad Ainul Yaqin</i>	
COST-BASED STORAGE OF THE R-TREE AGGREGATED VALUES OVER FLASH MEMORY	285
<i>Wojciech Macyna, Krzysztof Majcher</i>	
FACE RECOGNITION USING LOCAL BINARY PATTERN (LBP) AND LOCAL ENHANCEMENT (LE) METHODS AT NIGHT PERIOD	291
<i>Abdurrahman Fi Zhilali'L, Muhammad Nasrun, Casi Setianingsih</i>	
LOCALIZED ISLAND MODEL GENETIC ALGORITHM IN POPULATION DIVERSITY PRESERVATION	297
<i>Alfian Akbar Gozali, Shigeru Fujimura</i>	
PRIVACY PROTECTION AND ROLE OF TECHNOLOGY: CITIZEN PERCEPTION ON ELECTRONIC VOTING INITIATIVE.....	304
<i>Muharman Lubis, Tien Fabrianti Kusumasari</i>	
FACTORS THAT INFLUENCE AN ACADEMIC INSTITUTION'S INTENTION TO ACCEPT CLOUDIOT: A PROPOSED FRAMEWORK	311
<i>Ali Mehmed Ahmed Ireda, Mohommed Awadh Ben-Mubarak, Adubhahir Buhari</i>	
HIGH IMPERCEPTIBLE COPYRIGHT PROTECTION: ADAPTIVE WAVELET FOR SECURITY	315
<i>Irma Safitri, Rizki R. Ginanjar, Aliffian S. Laksono</i>	

SESSION: SESSION 2 ROOM E

ON THE RELATIONSHIP OF TRAVEL TIME AND ENERGY EFFICIENCY OF INDUSTRIAL ROBOTS	320
<i>Kai Eggers, Zygimantas Ziaukas, Jens Kotlarski, Tobias Ortmair</i>	
PROPOSAL OF MAINTENANCE POLICY ON BARMAG FK6800 MACHINE IN FT3 PT XYZ USING RELIABILITY-CENTERED MAINTENANCE AND RISK-BASED MAINTENANCE METHOD.....	327
<i>Irsalina Maharani, Fransiskus Tatas Dwi Atmaji, Nopendri Nopendri</i>	
MAINTENANCE POLICY OF JET DYEING MACHINE USING LIFE CYCLE COST (LCC) AND OVERALL EQUIPMENT EFFECTIVENESS (OEE) IN PT.XYZ.....	331
<i>Akbar Perwira Wibowo, Fransiskus Tatas Dwi Atmaji, Endang Budiasih</i>	
DESIGN OF AUTOMATION SYSTEM FOR CERAMIC SURFACE QUALITY CONTROL USING ARTIFICIAL NEURAL NETWORK AT BALAI BESAR KERAMIK.....	335
<i>Puspita Ayu Lestari, Haris Rachmat, Mohd. Rasidi Ibrahim, Denny Sukma Eka Atmaja</i>	
INVENTORY CONTROL POLICY FOR FARM-OUT PARTS AT COLD SECTION MODULE CT 7 ENGINE WITH PERIODIC REVIEW (R, S, S) AND (R, S) TO MINIMIZE TOTAL INVENTORY COST	342
<i>Pratya Poeri Suryadhini, Ayulia Fitriane Setiawan, Widia Juliani</i>	
LOW COST ELECTRONIC SEAL FOR TANKER TRUCK IN INDONESIA	347
<i>Ahmad Musnansyah, Bernardo Arianto</i>	
OPTIMIZING WOVEN FABRIC DEFECT DETECTION USING IMAGE PROCESSING AND FUZZY LOGIC METHOD AT PT. BUANA INTAN GEMILANG.....	353
<i>Ratna Safitri, Tatang Mulyana</i>	

SESSION: SESSION 2 ROOM F

BEHAVIOR PROPORTION ACCORDING TO MERAPI VOLCANO ERUPTION EVACUATIONS IN 2010	359
<i>Dwi Handayani, Bertha Maya Sopha, Budi Hartono, M. Kusumawan Herliansyah</i>	
APPLYING AN OVERLAPPED DESIGN SCHEDULE BASED DEPENDENCY STRUCTURE MATRIX TO MINIMIZE PROJECT MAKESPAN.....	365
<i>Chao Ou-Yang, Indy Cesara</i>	

AN ANALYSIS OF CORE COMPETENCIES AND BUSINESS PERFORMANCES IN SOFTWARE SMES : A CONCEPTUAL FRAMEWORK.....	371
<i>Atya Nur Aisha, Iman Sudirman, Joko Siswanto, Yassierli Yassierli</i>	
PERFORMANCE APPRAISAL DESIGN USING 360 DEGREE FEEDBACK AT UNIVERSITY X.....	377
<i>Deniar Yudithama, Fida Nirmala Nugraha, Devi Pratami</i>	
TOOL DESIGN FOR TEA CUTTING MACHINE TO REDUCE MSDS USING ERGONOMIC FUNCTION DEPLOYMENT : A RESEARCH AT PTPN 8 CIATER	383
<i>Mira Rahayu, Muhamad Adhi Guna Dwyantoro</i>	
Author Index	