

ISSN : 1978-774X

# PROCEEDING

9<sup>th</sup> ISIEM

The 9<sup>th</sup> International Seminar on  
Industrial Engineering and Management

Grand Inna Muara Hotel Convention & Exhibition Padang,  
West Sumatera, Indonesia, September 20 – 22, 2016

Organized by :

## **Industrial Engineering Department of**

- Trisakti University • Al Azhar Indonesia University •
- Esa Unggul University • Telkom University •
- Tarumanagara University • Pasundan University •
- Atma Jaya Catholic University of Indonesia •
- Bung Hatta University •

Supported by :



Sponsored by :

trusted • IT • company  
**telkomsigma**

by Telkom Indonesia





# PREFACE

Dear Presenters and Delegates,

On behalf of the Organizing Committee, I am honored to welcome you to the 9<sup>th</sup> International Seminar on Industrial Engineering and Management (ISIEM). This seminar is organized by the Industrial Engineering Department from eight Universities, namely Trisakti University, Telkom University, Tarumanagara University, Atma Jaya Catholic University of Indonesia, Al Azhar Indonesia University, Esa Unggul University, Pasundan University, and Bung Hatta University.

The theme “**Collaborative Innovation Towards Borderless Industrial and Economic System**” which in accordance with the current economic era, we hope that through the exchange of ideas, experiences and recent progress in Industrial Engineering and Management from academicians, engineers, professionals and practitioners from Universities, research institutions, government agencies and industries be able to help us to deal with future challenges.

We hope that our presenter and delegates will gain many shared ideas and great experiences from this conference and also acquire additional insights from our honorable speakers, **Gursel Ilipinar, PhD** from ESADE Business School – Barcelona, **Profesor Emeritus Dato’ Ir. Dr. Zainai Bin Mohamed** from UTM Razak School of Engineering and Advance Technology – Malaysia, **Milko-Pierre Papazoff** from Vice President of French External Trade Counsellor (Malaysian Chapter).

The success of this seminar is due to the hard efforts of many people who we gratefully acknowledge. Special thank to all reviewers, speakers, and presenters, also highly appreciate to the committee for mutual effort and invaluable contribution.

Finally, we hope you will enjoy this conference and the natural beauty of Padang city – Indonesia and see you in the next ISIEM.

Best wishes,

Chair of the 9<sup>th</sup> ISIEM 2016

Dr. Wisnu Sakti Dewobroto, M.Sc



# COMMITTEE

## STEERING COMMITTEE

1. Dr. Ir. Tiena G. Amran, M.Sc. (Trisakti University)
2. Rino Andias Anugraha, S.T., M.M. (Telkom University)
3. Ir. Arief Suwandi, M.T. (Esa Unggul University)
4. Hotma Antoni Hutahaean, S.T., M.T. (Atma Jaya Catholic University of Indonesia)
5. Ir. Toto Ramadhan, M.T. (Pasundan University)
6. Budi Aribowo, S.T., M.Si. (Al Azhar Indonesia University)
7. Dr. Lamto Widodo S.T., M.T. (Tarumanagara University)
8. Yesmizarti Muchtar, S.T, M.T. (Bung Hatta University)

## OPERATING COMMITTEE

### Chairman

Dr. Wisnu Sakti Dewobroto, M.Sc (Trisakti University)

### Co-Chairman :

Rino Andias Anugraha, S.T., M.M. (Telkom University)

### Secretary

Dr. Lamto Widodo S.T., M.T. (Tarumanagara University)

### Treasury

Pratya Poeri Suryadhini., S.T., M.T. (Telkom University)

### Leaflet :

1. Rahmi Maulidya, S.T., M.T. (Trisakti University)
2. Widya Nurcahayanty T., S.T., M.T., MBA (Al Azhar Indonesia University)

### Public Relation

1. Dr. Ir. Nofi Erni, M.M. (Esa Unggul University)
2. Dr. Lamto Widodo, S.T., M.T. (Tarumanagara University)
3. Yusrizal Bakar, S.T, M.T (Bung Hatta University)

### Sponsorship :

1. Dr. Rina Fitriana, S.T., M.M. (Trisakti University)
2. Niken Parwati, S.T., M.M. (Al Azhar Indonesia University)

### Proceeding :

1. Rahmi Maulidya, S.T., M.T. (Trisakti University)
2. Nunung Nurhasanah, S.T., M.Si. (Al Azhar Indonesia University)
3. Endro Wahyono (Tarumanagara University)

### Seminar :

1. Dr. Ir. Nofi Erni, M.M. (Esa Unggul University)
2. Iphov Kumala Sriwana, S.T., M.Si. (Esa Unggul University)
3. Andre Sugioko, S.T., M.T. (Atma Jaya Catholic University of Indonesia)
4. Wilson Kosasih, S.T, MT (Tarumanagara University)
5. I Wayan Sukania, S.T., M.T. (Tarumanagara University)
6. Aidil Ikhsan, S.T, M.T (Bung Hatta University)

7. Eva Suryani, S.T., M.T. (Bung Hatta University)

**Acomodation :**

1. Vivi Triyanti, S.T., M.Sc. (Atma Jaya Catholic University)
2. Dr. Ir. Nofi Erni, M.M. (Esa Unggul University)
3. Lestari Setiawati, S.T., M.T. (Bung Hatta University)

**Website :**

1. Ir. Wahyu Katon, M.T. (Pasundan University)
2. Dr. Ir. Yogi Yogaswara, M.T. (Pasundan University)
3. Wawan Tripiawan, ST., MT. (Telkom University)
4. Rayinda Pramuditya Soesanto, ST. (Telkom University)

# REVIEWER

1. Dr. Paul Hong (University of Toledo, Ohio, USA)
2. Farhad Moeeni, Ph.D. (Arkansas State University)
3. Ahmad Syamil, Ph.D. (Binus School University)
4. Fajar Kurniawan, S.T., M.Si. (Saint Mary's University of Hongkong)
5. Assc. Prof. Dr. Chuvej Chansa-Ngavej (Shinawatra University, Thailand)
6. Dr. Ir. Tiena G. Amran (Trisakti University)
7. Prof. Parwadi Moengin (Trisakti University)
8. Dr. Ir. Nofi Erni, M.M. (Esa Unggul University)
9. Roesfiansjah, Ph.D (Esa Unggul University)
10. Prof. Ir. Hadi Sutanto, MMAE., Ph.D. (Atma Jaya Catholic University of Indonesia)
11. Dr. Ir. Syarif Hidayat, M.Eng.Sc, M.M. (Al Azhar Indonesia University)
12. Dr. Ir. Hj. Tjutju Tarliah Dimiyati, MSIE. (Pasundan University)
13. Dr. Ir. Hj. Arumsari, M.Sc. (Pasundan University)
14. Dr. Lamto Widodo, S.T., M.T. (Tarumanagara University)
15. Dr. Luciana Andrawina, M.T. (Telkom University)
16. Dr. Dida Diah Damayanti, M.Eng.Sc (Telkom University)
17. Inna Kholidasari, S.T., M.T., Ph.D. (Bung Hatta University)
18. Ayu Bidiawati J.R, S.T.,M.T. (Bung Hatta University)

# KEYNOTE SPEECH

#1

Prof. Emeritus Dato' Ir. Dr. Zainai Bin Mohamed  
UTM Razak School of Engineering and Advanced Technology  
UTM International Campus



#2

Gursel Ilipinar, PhD  
Innovation Management Expert  
ESADE Business School - Barcelona



#3

Milko-Pierre Papazoff  
VP of French External Trade Counsellor (Malaysian Chapter)



# AGENDA

## September 20, 2016

- 18:00 - 18:30 Registration
- 18:30 - 19:30 Dinner
- 19:30 - 19:40 Padang Dance by Bung Hatta University
- 19:40 - 19:45 Welcoming Speech from Head of Committee ISIEM 9<sup>th</sup>
- 19:45 - 20:00 Opening Ceremony by Bung Hatta University Rector
- 20:00 - 21:00 Keynote Speech # 1  
**Prof. Emeritus Dato' Ir. Dr. Zainai Bin Mohamed**  
**(UTM Razak School of Engineering and Advanced Technology,**  
**UTM International Campus – Malaysia)**  
**Moderator:** Dr. Adianto, M.Sc.
- 21:00 - 21:15 Photo Session with all participants

## September 21, 2016

- 6:30 - 8:00 Breakfast and Registration
- 8:00 - 9:00 Keynote Speech # 2  
**Gursel Ilipinar, PhD**  
**(Innovation Management Expert**  
**ESADE Business School – Barcelona)**  
**Moderator:** Ir. Wahyukaton, M.T.
- 9:00 - 10:00 Keynote Speech # 3  
**Milko-Pierre Papazoff**  
**VP of French External Trade Counsellor (Malaysian Chapter)**  
**Moderator:** Dr. Ir. Syarif Hidayat, M.Eng.Sc, M.M.
- 10:00 - 10:30 Question and Answer
- 10:30 - 11:15 Coffee and Tea Break
- 11:15 - 12:35 Parallel session #1
- 12:35 - 13:30 Lunch break
- 13:30 - 16:30 Parallel session #2
- 15:00 - 15:15 Coffee and Tea Break
- 18:30 - 20:00 Dinner

## **September 22, 2016**

08:00 - 09:30    Parallel session #3

09:30 - 17:00    City Tour

# PARALLEL SESSION

SEPTEMBER 21, 2016 SESSION 1 ROOM 1

Moderator : Dr. Lamto Widodo, S.T., M.T.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
| 11.15-11.25 | <b>MAINTENANCE PERFORMANCE MEASUREMENT TRANSJAKARTA BUS AT PERUM DAMRI SBU BUSWAY CORRIDOR I &amp; VIII USING MAINTENANCE SCORECARD</b><br>Didien Suhardini, Iveline Anne Marie, Amal Witonohadi, Auliandi Fahriditya Putra<br>Jurusan Teknik Industri, Fakultas Teknologi Industri, Universitas Trisakti, Jakarta, Indonesia   | IM   | 110        |
| 11.25-11.35 | <b>IDENTIFICATION OF SUPPLY CHAIN PERFORMANCE INDICATORS AND STRATEGIC OBJECTIVES USING THE BALANCED SCORECARD</b><br>Dwi Kurniawan, Adela Anggun Pertiwi, Lisye Fitria<br>Industrial Engineering Department, Institut Teknologi Nasional, Bandung, Indonesia   | SCM  | 26         |
| 11.35-11.45 | <b>IMPROVEMENT TO QUALITY OF TELECOMMUNICATION SERVICE BY MINIMIZE FAILURE OF SIMKARI APPLICATION DEVICE (A CASE STUDY IN PT DATALINK SOLUTION)</b><br>M. Hudori<br>Department of Logistic Management, Citra Widya Edukasi Polytechnic of Palm Oil, Bekasi, Indonesia   | QM   | 79         |
| 11.45-11.55 | <b>POSITIONING ANALYSIS FOR HIGHER EDUCATION BASED ON PERCEPTUAL MAPPING USING MULTIDIMENSIONAL SCALING</b><br>Hafizh Suharja, Yati Rohayati, Rio Aurachman<br>School of Industrial and System Engineering, Telkom University, Bandung, Indonesia   | IM   | 16         |
| 11.55-12.05 | <b>IMPROVING THE SERVICE QUALITY OF DISTANCE EDUCATION USING INTEGRATION SERVICE QUALITY FOR HIGHER EDUCATION AND KANO</b><br>Istianah Nedia, Yati Rohayati, Maria Dellarosawati Idawicasakti<br>School of Industrial and System Engineering, Telkom University, Bandung, Indonesia   | QM   | 40         |
| 12.05-12.15 | <b>DESIGN OF STANDARD OPERATING PROCEDURE (SOP) OF DESIGN AND DEVELOPMENT OF PRODUCT ACCORDING TO ISO 9001:2015 CLAUSE 8.3 BASED ON RISK BASED THINKING BY BUSINESS PROCESS IMPROVEMENT METHOD AT CV. XYZ</b><br>Rindy Aprilina Gita Prastyanti <sup>1</sup> , Sri Widaningrum, Heriyono Lalu<br>Faculty of Industrial Engineering, Telkom University, Bandung, Indonesia | QM   | 52         |
| 12.15-12.25 | <b>DESIGN OF NONCONFORMITY AND CORRECTIVE ACTION STANDARD OPERATING PROCEDURE BASED ON INTEGRATED REQUIREMENTS FROM ISO 9001 AND ISO 14001</b><br>Rahmah Fadhilah, Sri Widaningrum, Heriyono Lalu<br>Industrial Engineering Department, Telkom University of Engineering, Bandung Indonesia   | QM   | 53         |

**SEPTEMBER 21, 2016 SESSION 1 ROOM 1**

Moderator : Dr. Lamto Widodo, S.T., M.T.

| Time        | Paper  | Code | Paper Code |
|-------------|--|------|------------|
| 12.25-12.35 | <b>DESIGN AND ANALYSIS PHYSICAL AND LOGICAL SECURITY USING TIA-942 AND ISO/IEC 27000 SERIES IN DATA CENTER OF PDII-LIPI</b><br>Mukhlis Anugrah Pratama, Mochammad Teguh Kurniawan,<br>Information System Major, Industrial Engineering Faculty,<br>Telkom University, Bandung, Indonesia | DSS  | 68         |

**SEPTEMBER 21, 2016 SESSION 1 ROOM 2**

Moderator : Dr. Ir. Syarif Hidayat, M.Eng.Sc, M.M.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
| 11.15-11.25 | <b>INCREASING PRODUCTIVITY WITH OBJECTIVE MATRIX METHOD CASE STUDY ON BUILDING MAINTENANCE MANAGEMENT PIO PT. XXX</b><br>R Bagus Yosan, Muhammad Kholil, Winny Soraya<br>Industrial Engineering, Mercubuana University, Jakarta, Indonesia  | IM   | 42         |
| 11.25-11.35 | <b>LEAN PROJECT MANAGEMENT TO MINIMIZE WASTE, CASE STUDY : INDARUNGVI PROJECT, PT SEMEN PADANG</b><br>Nilda Tri Putri, Sarvina<br>Department of Industrial Engineering, Faculty of Engineering,<br>Andalas University, Padang, Indonesia  | QM   | 38         |
| 11.35-11.45 | <b>APPLICATION OF LEAN MANUFACTURING IN THE PRODUCTION OF SPUN PILE USING WASTE ASSESMENT MODEL AND VALUE STREAM ANALYSIS</b><br>Syarif Hidayat, Siti Nurlina<br>Industrial Engineering Department, Faculty of Science and<br>Technology, University Al Azhar Indonesia, Jakarta, Indonesia   | PS   | 11         |
| 11.45-11.55 | <b>THE IMPLEMENTATION OF CORPORATE SOCIAL RESPONSIBILITY OF STARBUCKS COMPANY</b><br>Charly Hongdiyanto<br>Ciputra University, Indonesia  | IM   | 72         |
| 11.55-12.05 | <b>A MODIFIED ECONOMIC PRODUCTION QUANTITY (EPQ) WITH SYNCHRONIZING DISCRETE AND CONTINUOUS DEMAND UNDER FINITE HORIZON PERIOD AND LIMITED CAPACITY OF STORAGE</b><br>Jonrinaldi, Henmaid, Nurike Oktavia<br>Department of Industrial Engineering, Andalas University, Padang,<br>Indonesia<br>Master Program of Industrial Engineering, Andalas University,<br>Padang, Indonesia                         | PS   | 44         |
| 12.05-12.15 | <b>APPLICATION OF VALUE STREAM MAPPING IN THE NVOCC FCL SERVICE PROCESS TO MINIMIZE DELAY IN SUBMISSION OF THE DOCUMENT (A CASE STUDY IN PT YUSEN LOGISTICS INDONESIA)</b><br>M. Hudori, Nismah Panjaitan<br>Department of Logistic Management, Citra Widya Edukasi<br>Polytechnic of Palm Oil, Bekasi, Indonesia<br>Department of Industrial Engineering, Sumatera Utara University,<br>Medan, Indonesia | QM   | 76         |
| 12.15-12.25 | <b>WAREHOUSE LAYOUT DESIGN USING SHARED STORAGE METHOD</b><br>Alan Dwi Wibowo, Rahmat Nurcahyo, Cut Khairunnisa<br>Department of Agro-Industrial Technology, Universitas Lambung<br>Mangkurat, Indonesia<br>Departemen of Industrial Engineering, Universitas Indonesia,  | PS   | 22         |

**SEPTEMBER 21, 2016 SESSION 1 ROOM 2**

Moderator : Dr. Ir. Syarif Hidayat, M.Eng.Sc, M.M.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
|             | Indonesia   |      |            |
| 12.25-12.35 | <b>CABLE CLAMP PRODUCTION CAPACITY PLANNING USING ROUGH CUT CAPACITY PLANNING (RCCP) METHOD (A CASE STUDY IN PT FAJAR CAHAYA CEMERLANG)</b><br>M. Hudori<br>Department of Logistic Management, Citra Widya Edukasi Polytechnic of Palm Oil, Bekasi, Indonesia | PS   | 80         |

**SEPTEMBER 21, 2016 SESSION 1 ROOM 3**

Moderator : Dr. Ir. Yogi Yogaswara, M.T.

| Time        | Paper  | Code | Paper Code |
|-------------|--|------|------------|
| 11.15-11.25 | <b>DEVELOPMENT OF ONLINE KNOWLEDGE MANAGEMENT CYCLE INDICATORS USING SECI APPROACH: CASE STUDY IN AN ENERGY COMPANY</b><br>Aldio Fikri Siddik, Amelia Kurniawati, Umar Yunan Kurnia Septo Hedyanto<br>Industrial Engineering Department, Telkom University, Bandung, Indonesia<br>Information System Department, Telkom University, Bandung, Indonesia   | DSS  | 51         |
| 11.25-11.35 | <b>MANAGEMENT INFORMATION SYSTEM FOR ORDER FULFILLMENT: A CASE STUDY</b><br>Johanes Fernandes Andry, Halim Agung, Yana Erlyana<br>Faculty Technology and Design, Bunda Mulia University, Jakarta, Indonesia  | DSS  | 3          |
| 11.35-11.45 | <b>Risk Factor Analysis of Liquefied Natural Gas (LNG) Supply Process Chain in Indonesia</b><br>Rahmat Nurcahyo, Farid Akbar, Yadrifil<br>Kampus UI Depok Indonesia  | SCM  | 14         |
| 11.45-11.55 | <b>ENHANCING PENDULUM NUSANTARA MODEL IN INDONESIAN MARITIME LOGISTICS NETWORK</b><br>Komarudin, Muhammad Reza, Armand Omar Moeis<br>System Engineering, Modeling and Simulation (SEMS) Laboratory, Department of Industrial Engineering, Universitas Indonesia  | OR   | 49         |
| 11.55-12.05 | <b>PURCHASING CONSORTIUM SYSTEM USING COMMON REPLENISHMENT EPOCH (CRE) MODEL BY DESIGNING MOBILE INFORMATION SYSTEM FOR SMALL and MEDIUM ENTERPRISES (SMEs)</b><br>Yudha Prasetyawan, Imam Baihaqi, Shinta Dewi<br>Industrial Engineering Department, Sepuluh Nopember Institut of Technology, Surabaya, Indonesia<br>Business and Management Department, Sepuluh Nopember Institut of Technology, Surabaya, Indonesia<br>Agroindustrial Technology Department, Universitas Internasional Semen Indonesia, Indonesia | DSS  | 10         |
| 12.05-12.15 | <b>DESIGN E-COMMERCE ANGON BASED ON MARKETPLACE TO INCREASE REVENUE FOR LIVESTOCK'S ACTORS (SELLING MODULE)</b><br>Atika Elysia, Irfan Darmawan, Muhammad Azani Hasibuan<br>Department of Industrial Engineering, Telkom University, Bandung, Indonesia  | IM   | 65         |

**SEPTEMBER 21, 2016 SESSION 1 ROOM 3**

Moderator : Dr. Ir. Yogi Yogaswara, M.T.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
| 12.15-12.25 | <b>CONTROL SYSTEMS DESIGN FOR AUTO JUDGEMENT CHECK MACHINE IN ROTOR ASSEMBLY LINE USING PROGRAMMABLE LOGIC CONTROLLER</b><br>Syahril Ardi, Moh Faiza Abu Rizal<br>Production and Process Manufacture, Polytechnic Manufacture Astra, Jakarta, Indonesia | PS   | 31         |
| 12.25-12.35 | <b>OPERATIONAL RISK IDENTIFICATION IN ADMINISTRATION SERVICES OF HIGHER EDUCATION</b><br>Robby Anzil Firdaus, Rahmat Nurcahyo, Anafi Yuan Septiari, Supriadi<br>Industrial Engineering Departement, Universitas Indonesia, Indonesia                    | IM   | 17         |

**SEPTEMBER 21, 2016 SESSION 2 ROOM 1**

Moderator : Niken Parwati, S.T., M.M.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
| 13.30-13.40 | <b>SHELVES RE-DESIGN TO CONSIDER ASPECTS OF ERGONOMICS IN KOPETRI MINI MARKET, KARAWANG</b><br>Dene Herwanto, Sukanta<br>University of Singaperbangsa Karawang, Karawang, Indonesia   | 6    | ER         |
| 13.40-13.50 | <b>COGNITIVE ERGONOMIC ANALYSIS OF PROFESSIONALS IN INDUSTRIAL DESIGNER APPAREL (Case Study: Designer at PT. Kurnia ASTASURYA)</b><br>Erwin M Pribadi, Ari Robiana Rijalah<br>Industrial Engineering Department, Universitas Pasundan, Bandung, Indonesia | 13   | ER         |
| 13.50-14.00 | <b>DESIGN CONCEPT OF WASHING GALLON USING DESIGN METHOD RATIONAL</b><br>Antonio Bennarivo Nainggolan, Mira Rahayu, Teddy Syafrizal<br>Industrial Engineering Department, Telkom University, Bandung, Indonesia  | 56   | ER         |
| 14.00-14.10 | <b>DESIGNING ERGONOMIC CONVEYANCE TOOLS FOR SULFUR MINERS IN THE IJEN CRATER</b><br>Anny Maryani, Dyah Santhi Dewi, Elsa Camelia Harmadi, Pamungkas Dwi Admaja<br>Industrial Engineering Department, ITS Surabaya, Indonesia                              | 61   | ER         |
| 14.10-14.20 | <b>AUTOMATIC POLARIZING FILTER SYSTEM FOR WELDING MASK</b><br>Muhammad Ridwan Andi Purnomo, Riadho Clara Shinta, Rizqi Ramadhani, Ahmad Rizal Yassaruddin, Muhammad Iqbal Sabit<br>Department of Industrial Engineering<br>Universitas Islam Indonesia    | 47   | ER         |
| 14.20-14.30 | <b>DESIGN GALLON WASHING TOOLS USING ERGONOMIC FUNCTION DEPLOYMENT METHOD</b><br>Bintang Sri Perdana, Mira Rahayu, Teddy Syafrizal<br>Industrial Engineering Department, Telkom University, Bandung, Indonesia  | 57   | ER         |
| 14.30-14.40 | <b>ERGONOMIC ANALYSIS FOR THE ARMOURED PERSONNEL CARRIER DRIVER</b><br>Halim Mahfudh, Lilik Zulaihah, Reda Rizal<br>Department of Industrial Engineering, Universitas Pembangunan Nasional Veteran Jakarta  | 91   | ER         |

**SEPTEMBER 21, 2016 SESSION 2 ROOM 1**

Moderator : Niken Parwati, S.T., M.M.

| Time        | Paper  | Code | Paper Code |
|-------------|--|------|------------|
| 14.40-14.50 | <b>APPLICATION OF ANALYTICAL HIERARCHY PROCESS TO CHOOSE CRITERIA FOR MOBILE PHONES</b><br>Dessi Mufti, Yesmizarti Muchtiar, Iswanto<br>Industrial Engineering Department, Universitas Bung Hatta, Padang, West Sumatera, Indonesia  | 83   | IM         |
| 14.50-15.00 | <b>DESIGNING A PERSONAL SURVIVAL KIT IN FLOOD DISASTERS THROUGH PARTICIPATORY DESIGN APPROACH</b><br>Grace Novelia, Johanna Renny Octavia<br>Industrial Engineering Department, Parahyangan Catholic University, Bandung, Indonesia  | 89   | ER         |
| 15.00-15.10 | <b>DESIGN IMPROVEMENT FOR POTATOES CULTERY TOOLS "POTTY" USING PRODUCT ARCHITECTURE ANALYSIS</b><br>Rahmat Ramadhani Bayu, Dicha Keci Barakin, Rendra Gilang Yuniarto, Muhammad Iqbal<br>Industrial Engineering, Telkom University, Bandung, Indonesia                               | 30   | ER         |
| 15.10-15.20 | <b>STUDY OF SHAFT POSITION IN GAS TURBINE JOURNAL BEARING</b><br>Rizky Arman, Iman Satria<br>Mechanical engineering Dept, Faculty of Industrial Technolgy, Bung Hatta University, Padang, Indonesia  | 105  | PS         |
| 15.20-15.30 | <b>APPLICATION METHODS P-C-P TO IMPROVE QUEUE SERVICE QUALITY IN SUPERMARKET CASHIER AT THE PEAK DEMAND CONDITION</b><br>Yesmizarti Muchtiar, Muhibbullah Azfa Manik, Emil Endrison<br>Department of Industrial Engineering, Bung Hatta University, Padang, Indonesia                | 78   | QM         |
| 15.30-15.40 | <b>DESIGN E-COMMERCE ANGON BASED ON MARKETPLACE TO INCREASE PURCHASING EFFICIENCY FOR LIVESTOCK'S ACTOR (PURCHASE MODULE)</b><br>Pratiwi Galuh Putri, Irfan Darmawan, Muhammad Azani<br>Departemen of Industrial Engineering Telkom University, Bandung, Indonesia                   | 67   | IM         |
| 15.40-15.50 | <b>DEVELOPING INFORMATION SYSTEM OF LIBRARY ON E-SCHOOL QR-CODE BASED IN 13 NATIONAL HIGH SCHOOL USING EXTREME PROGRAMMING METHODOLOGY</b><br>Timbul Prawira Gultom, Nia Ambarsari, Muhammad Azani H.<br>Department of Industrial Engineering, Telkom University, Bandung, Indonesia | 71   | DSS        |
| 15.50-16.00 | <b>USING EDUQUAL AND KANO'S MODEL TO IMPROVE THE SERVICE QUALITY OF TRAINING AND CERTIFICATION PROGRAM</b><br>Iftitah Pratomo, Yati Rohayati, Sari Wulandari<br>School of Industrial and System Engineering, Telkom University, Bandung Indonesia                                    | 23   | IM         |
| 16.00-16.10 | <b>DEVELOPMENT DETAIL DESIGN GALLON WASHER USING DESIGN FOR ASSEMBLY (DFA)</b><br>Mohamad Walid Anshar Ichsan Shahib, Mira Rahayu, Teddy Sjafrizal<br>Industrial Engineering Department, Telkom University, Bandung, Indonesia   | 55   | ER         |

**SEPTEMBER 21, 2016 SESSION 2 ROOM 1**

Moderator : Niken Parwati, S.T., M.M.

| Time        | Paper  | Code | Paper Code |
|-------------|--|------|------------|
| 16.10-16.20 | <b>MAKING A PLYWOOD BOAT CATAMARANS MODEL FOR HANDLING OF FLOOD EMERGENCY IN AREAS OF DURI KEPA</b><br>Indra Gunara Rochyat, Asnawati, Wahyu Albin Tabrani<br>Product Design Department – Design & Creative Industry Faculty,<br>Esa Unggul University, Jakarta, Indonesia | 102  | ER         |
| 16.20-16.30 | <b>STUDY OF LIFT MARKET THROUGH GAP ANALYSIS</b><br>Niken Parwati, Nurhanisa Maysa, Aprilia Tri Purwandari<br>Department of Industrial Engineering, Faculty of Science and<br>Technology, Universitas Al Azhar Indonesia   | 93   | IM         |

**SEPTEMBER 21, 2016 SESSION 2 ROOM 2**

Moderator : Inna Kholidasari, S.T., M.T., Ph.D.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
| 13.30-13.40 | <b>MAXIMUM PROFIT CALCULATION BASED ON THE QUANTITY OF DEMAND VEGATABLES WITH THE SINGLE ORDER QUANTITY METHOD</b><br>Annura Minar Gayatri, Nunung Nurhasanah, Ahmad Juang Pratama<br>Industrial Engineering, Faculty of Science and Technology,<br>Univerisity of Al Azhar Indonesia, Jakarta, Indonesia   | 84   | PS         |
| 13.40-13.50 | <b>DETERMINING THE INVENTORY POLICY FOR V-BELT USING PROBABILISTIC METHOD</b><br>Sukanta, Dene Herwanto<br>University Singaperbangsa of Karawang, Indonesia   | 7    | PS         |
| 13.50-14.00 | <b>SYSTEM DYNAMICS BASED BALANCED SCORECARD TO SUPPORT DECISION MAKING IN STRATEGY OF PERFORMANCE IMPROVEMENT (A CASE STUDY IN THE UNIVERSITY)</b><br>Linda Theresia, Yenny Widianty, Dawi Karomati Baroroh<br>Department of Industrial Engineering, Institut Teknologi Indonesia,<br>Serpong, Indonesia<br>Industrial Engineering, Universitas Gadjah Mada, Yogyakarta,<br>Indonesia | 8    | DSS        |
| 14.00-14.10 | <b>DRUG INVENTORY POLICY PROPOSAL USING PROBABILISTIC METHODS TO INCREASE THE SERVICE LEVEL</b><br>Sabila Syafitri Pambudi, Dida Diah Damayanti, Budi Santosa Chulasoh<br>Departemen of Industrial Engineering, Telkom University,<br>Bandung, Indonesia  | 74   | PS         |
| 14.10-14.20 | <b>AN AUTOMATED GUIDED VEHICLE SIMULATION THROUGH ROBOTINO TO HELP LEARNING COURSE INDUSTRIAL AUTOMATION</b><br>Tatang Mulyana, Haris Rachmat, Prasetia Pramudita Yuliarso<br>Laboratory of Production Manufacturing and Automation, Faculty<br>of Industrial Engineering, Telkom University, Bandung, Indonesia  | 33   | PS         |
| 14.20-14.30 | <b>THE IMPLEMENTATION OF ANALYTIC HIERARCHY PROCESS ON THE SELECTION OF SUPPLIER IN START-UP BUSINESS: A CASE STUDY</b><br>Ahmad Setyo Irawan, Liliani<br>International Business Management, Universitas Ciputra, Surabaya,<br>Indonesia  | 27   | SCM        |

**SEPTEMBER 21, 2016 SESSION 2 ROOM 2**

Moderator : Inna Kholidasari, S.T., M.T., Ph.D.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
| 14.30-14.40 | <b>OPTIMAL PREVENTIVE MAINTENANCE OF TWO-PHASE MAINTENANCE POLICY FOR LEASED PRODUCT</b><br>Hennie Husniah, Andi Cakravastia, Bermawi P. Iskandar<br>Department of Industrial Engineering, Langlangbuana University, Bandung, Indonesia<br>Department of Industrial Engineering, Bandung Institute of Technology, Bandung, Indonesia  | 28   | PS         |
| 14.40-14.50 | <b>A SIMPLE MATHEMATICAL MODEL OF TECHNOLOGICAL TRANSFER WITH TWO COMPETING FOLLOWERS (A PRELIMINARY RESULT)</b><br>Hennie Husniah, Asep K. Supriatna<br>Department of Industrial Engineering, Langlangbuana University, Bandung, Indonesia<br>Department of Mathematics, Padjadjaran University, Bandung, Indonesia  | 29   | OR         |
| 14.50-15.00 | <b>INCREASING PRODUCTIVITY OF PT. XYZ THROUGH THE UTILIZATION OF STANDARD TIME AND THE TWO HANDED PROCESS FOR PANEL BOX PRODUCTION</b><br>Arnolt Kristian Pakpahan; Didien Suhardini; Arum Tri Astuti<br>Organizational and Business Development Laboratorium, Industrial Engineering, Faculty of Industrial Engineering, Trisakti University   | 100  | IM         |
| 15.00-15.10 | <b>JOB SHOP SCHEDULING AT IN-HOUSE REPAIR DEPARTMENT IN COLD SECTION MODULE CT7 ENGINE TO MINIMIZE MAKESPAN USING GENETIC ALGORITHM AT PT XYZ</b><br>Michael Whizo Mayto, Praty Poeri Suryadhini, Murni Dwi Astuti<br>Industrial Engineering Study Program, Industrial Engineering Faculty, Telkom University, Bandung, Indonesia   | 99   | PS         |
| 15.10-15.20 | <b>CAPACITATED VEHICLE ROUTING PROBLEM WITH TIME WINDOWS FOR MILK COLLECTION AT KPBS PANGALENGAN</b><br>Tjutju Tarliah Dimiyati<br>Industrial Engineering Department, Pasundan University, Bandung, Indonesia   | 34   | OR         |
| 15.20-15.30 | <b>AN APPLICATION OF DIFFERENTIAL EVOLUTION ALGORITHM IN SPARE PART LOGISTICS</b><br>Said Badrul Nahar , Sakesun Suthummanon, Wanatchapong Kongkaew.<br>Industrial and Systems Engineering, Prince of Songkla University, Songkla, Thailand   | 109  | SCM        |
| 15.30-15.40 | <b>DETERMINATION OF FAILURE RISK FOR TRANSFORMER SYSTEM BASED ON CLASSIFICATION TECHNIQUE</b><br>Iveline Anne Marie, Anung B Ariwibowo, Docki Saraswati, Amal Witonohadi<br>Faculty of Industrial Technology, Industrial Engineering Department, Trisakti University, Jakarta, Indonesia<br>Faculty of Industrial Technology, Informatics Engineering Department, Trisakti University, Jakarta, Indonesia | 90   | DSS        |
| 15.40-15.50 | <b>INFORMATION SYSTEM STRATEGIC PLANNING BASED ON TOGAF ADM FRAMEWORK IN 1ST REVENUE FUNCTIONS DEPARTMENT OF REVENUE AND FINANCIAL MANAGEMENT BANDUNG REGENCY</b><br>Theresia Yudith Dwi Prisila, Yuli Adam Prasetyo, Ridha Hanafi<br>Department of Industrial Engineering Telkom University, Bandung, Indonesia  | 66   | DSS        |

**SEPTEMBER 21, 2016 SESSION 2 ROOM 2**

Moderator : Inna Kholdasari, S.T., M.T., Ph.D.

| Time        | Paper  | Code | Paper Code |
|-------------|--|------|------------|
| 15.50-16.00 | <b>ANALYSIS &amp; EVALUATION OF PLANT PRODUCTION LAYOUT PT ARKHA JAYANTI PERSADA USING GROUP OF TECHNOLOGY CONCEPT WITH GENETIC ALGORITHM APPROACH</b><br>Agung Yugo Ngumboro, Budi Aribowo<br>Majoring In Industrial Engineering, Faculty of Science and Technology, Universitas Al Azhar Indonesia, Jakarta, Indonesia | 58   | PS         |
| 16.00-16.10 | <b>RELIABILITY ANALYSIS AND MAINTENANCE MANAGEMENT EVALUATION OF FLASH BUTT WELDING MACHINE WITH RCM II</b><br>Arief Suwandi, Ulia Rahma<br>Industrial Engineering Department of Esa Unggul University, Jakarta, Indonesia   | 54   | PS         |
| 16.10-16.20 | <b>CONCEPTUAL FRAMEWORK IN PRINTING PRESS MAINTENANCE DESIGN BY USING DATA MINING</b><br>Meldi Rendra<br>School of Industrial and Systems Engineering, Telkom University, Bandung, Indonesia   | 25   | DSS        |
| 16.20-16.30 | <b>VARIABLE ANALYSIS OF IMPROVING THE QUALITY OF SERVICE DELIVERY PACKAGE BY USING IMPORTANCE PERFORMANCE MATRIX METHOD AND KANO MODEL</b><br>Dwi Novirani, Abu Bakar, Janet Apongtingnamba.<br>Industrial of Engineering Institut Teknologi Nasional, Bandung, Indonesia  | 15   | QM         |
| 16.30-16.40 | <b>AGGREGATE PRODUCTION PLANNING OF WOODEN TOYS USING MODIFIED PARTICLE SWARM OPTIMIZATION</b><br>Adri Fajar Jenie, Syarif Hidayat<br>Department of Industrial Engineering, Faculty of Science and Technology, Universitas Al Azhar Indonesia, Jakarta, Indonesia  | 111  | PS         |

**SEPTEMBER 21, 2016 SESSION 2 ROOM 3**

Moderator : Aidil Ikhsan, S.T., M.T.

| Time        | Paper  | Code | Paper Code |
|-------------|--|------|------------|
| 13.30-13.40 | <b>IMPLEMENTATION OF CRISP-DM MODEL IN ORDER TO DEFINE THE SALES PIPE LINES OF PT X</b><br>Dadan Umar Daihani, Dina Feblian<br>Master Program in Industrial Engineering, Faculty of Industrial Technology, University of Trisakti, Jakarta, Indonesia                    | 59   | DSS        |
| 13.40-13.50 | <b>HOW ICT ADOPTION COULD AFFECT INDONESIAN SMEs ORGANIZATIONAL PERFORMANCE</b><br>Lucy Chairael, Fuad Salleh, Setyawan Widyarto, Vera Pujani<br>Universitas Dharma Andalas Padang, Indonesia<br>Universiti Selangor, Malaysia<br>Universitas Andalas, Padang, Indonesia | 48   | IM         |
| 13.50-14.00 | <b>STRUCTURAL MODEL FOR SUSTAINABLE CAMPUS ASSESSMENT: A CASE OF ANDALAS UNIVERSITY</b><br>Elita Amrina, Insannul Kamil, Nilda Tri Putri, Yunessa Astari<br>Department of Industrial Engineering, Andalas University, Padang, Indonesia.                                 | 62   | IM         |
| 14.00-14.10 | <b>ANALYSIS AND DESIGN ENTERPRISE ARCHITECTURE OF DEVELOPMENT ANALYSIS BUSINESS FUNCTION AT BADAN PERENCANAAN DAN PEMBANGUNAN DAERAH (BAPPEDA) WEST JAVA PROVINCE USING TOGAF ADM FRAMEWORK</b><br>Anida Shafa, Yuli Adam Prasetyo, Rahmat Mulyana                       | 69   | DSS        |

**SEPTEMBER 21, 2016 SESSION 2 ROOM 3**

Moderator : Aidil Ikhsan, S.T., M.T.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
|             | Information System, Industrial and System Engineering Faculty, Telkom University, Bandung, Indonesia  |      |            |
| 14.10-14.20 | <b>ANALYSIS OF EARNINGS PER SHARE BEFORE AND AFTER IPO AND THE STRATEGY (CASE STUDY: COMPANIES PERFORM IPO IN INDONESIA STOCK EXCHANGE YEAR 2013)</b><br>Dewa Ayu Jessica Putri, Endang Chumaidiyah, Rita Zulbetti<br>Faculty of Industrial Engineering, Telkom University, Bandung, Indonesia  | 73   | IM         |
| 14.20-14.30 | <b>PERCEIVED BARRIERS TO INNOVATION FOR START-UP BUSINESSES</b><br>Liliani<br>International Business Management, Universitas Ciputra  | 81   | IM         |
| 14.30-14.40 | <b>THE DEVELOPMENT OF TECHNOLOGY READINESS ASSESSMENT FOR COMMERCIALIZATION INNOVATION AND PRODUCT DEVELOPMENT BASED ON DIGITAL BUSINESS ECOSYSTEM</b><br>Elfira Febriani, Taufik Djatna<br>Industrial Engineering Department, Faculty of Industrial Technology, Trisakti University, Jakarta, Indonesia<br>Agro Industrial Technology Department, Faculty of Agricultural Engineering and Industry, Bogor Agricultural University, Indonesia | 45   | IM         |
| 14.40-14.50 | <b>DEFINING THE CORPORATE METRICS</b><br><b>MarsellinusBachtiar</b><br>Engineering Faculty, Industrial Engineering Program, Atma Jaya Catholic University of Indonesia, Jakarta   | 87   | IM         |
| 14.50-15.00 | <b>A BRIEF REVIEW IN SOME DISSERTATIONS ABOUT BUSINESS INCUBATOR PROCESS FRAMEWORK AND PERFORMANCE IN SOME COUNTRIES</b><br>Lina Gozali<br>Universiti Teknologi Malaysia, Jalan Sultan Yahya Petra, Kuala Lumpur, Malaysia  | 37   | IM         |
| 15.00-15.10 | <b>GREEN DATA CENTER POWER MANAGEMENT DESIGN AND ANALYSIS IN PDII-LIPI USING TIA-942 STANDARD</b><br>Algadilan Susanto, Mochammad Teguh Kurniawan<br>Information System Major, Industrial Engineering Faculty, Telkom University, Bandung, Indonesia  | 70   | DSS        |
| 15.10-15.20 | <b>RELIABILITY BASED PERFORMANCE ANALYSIS OF BASE TRANSCIVER STATION (BTS) USING RELIABILITY, AVAILABILITY, AND MAINTAINABILITY (RAM) METHOD</b><br>Judi Alhilman, Rd. Rohmat Saedudin<br>Industrial Engineering Department, School of Industrial and Systems Engineering, Telkom University, Bandung, Indonesia  | 35   | QM         |
| 15.20-15.30 | <b>MEASURING LABORATORY ADMINISTRATION SYSTEM SATISFACTION : A CASE STUDY</b><br>Rayinda Pramuditya Soesanto, Amelia Kurniawati, Muhammad Iqbal<br>Industrial Engineering Department, Telkom University, Indonesia  | 9    | IM         |
| 15.30-15.40 | <b>THE RELATIONSHIP BETWEEN TEACHING PROCESS AND QUALITY USING THE LINEAR STRUCTURE (LISREL) MODEL IN INDUSTRIAL ENGINEERING DEPARTMENT</b><br>Tiena Gustina Amran<br>Trisakti University, Jakarta, Indonesia   | 98   | IM         |

**SEPTEMBER 21, 2016 SESSION 2 ROOM 3**

Moderator : Aidil Ikhsan, S.T., M.T.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
| 15.40-15.50 | <b>ANALYSIS OF LOCAL ELEVATOR COMPANY CORPORATE CULTURE</b><br>Syarif Hidayat, Ainun Jariyah, Achmad Chirzun<br>Industrial Engineering, Faculty of Science and Technology,<br>Univerisity of Al Azhar Indonesia, Jakarta, Indonesia   | 85   | IM         |
| 15.50-16.00 | <b>FEASIBILITY STUDY OF BUSINESS DEVELOPMENT PT NUSAPATI PRATAMA WITH LEAN STARTUP</b><br>Agung Sasongko, Wisnu S Dewobroto, Said Saleh Al-Amry.<br>Trisakti University, Jl. Kyai Tapa No. 1 Grogol, Jakarta Barat,<br>Jakarta, Indonesia   | 96   | IM         |
| 16.00-16.10 | <b>PROPOSED MAINTENANCE POLICY AND SPARE PART MANAGEMENT OF GOSS UNIVERSAL PRINTING MACHINE WITH RELIABILITY CENTERED MAINTENANCE, RELIABILITY CENTERED SPARES, AND PROBABILISTIC INVENTORY MODEL</b><br>Valinouski Aulia, Judi Alhilman, Nurdinintya Athari S.<br>Industrial Engineering, Faculty of Industrial and System<br>Engineering, Telkom University, Bandung, Indonesia | 75   | PS         |
| 16.10-16.20 | <b>PAYROLL ADMINISTRATION SYSTEM IMPLEMENTATION USING ODOO AT PT.PRIMARINDO ASIA INFRASTRUCTURE, TBK WITH RAPID APPLICATION METHOD</b><br>Kevin Rohni Goklas Sinaga <sup>1</sup> , Wahjoe Witjaksono <sup>2</sup> , Faishal Mufied Al-Anshary <sup>3</sup> .<br>Telkom University   | 64   | IM         |
| 16.20-16.30 | <b>DEFINING TECHNOLOGY STRATEGY FOR SMALL TO MEDIUM ENTERPRISE WITHIN LEAN AND GREEN MANUFACTURING FRAMEWORK</b><br>Yudha Prasetyawan<br>Industrial Engineering Department, Institut Teknologi Sepuluh<br>Nopember Surabaya   | 107  | IM         |

**SEPTEMBER 22, 2016 SESSION 3 ROOM 1**

Moderator : Dr. Rina Fitriana, S.T., M.M.

| Time        | Paper  | Code | Paper Code |
|-------------|--|------|------------|
| 08.00-08.10 | <b>VALUE PROPOSITION DESIGN AND BUSINESS MODEL GENERATION METHOD USE FOR BUSINESS INNOVATION FEASIBILITY ON THE MICROBIAL FERTILIZER – LAPTIAP BPPT</b><br>Wisnu Dewobroto, Bernard Marthin<br>Department of Industrial Engineering, Faculty of Industrial<br>Technology, Trisakti University  | 97   | IM         |
| 08.10-08.20 | <b>ENHANCING COMPETITIVENESS OF TEXTILE AND CLOTHING SMALL-MEDIUM INDUSTRIES THROUGH PERFORMANCE MEASUREMENT OF MATERIAL PLANNING USING SCOR METHOD</b><br>Nunung Nurhasanah <sup>1</sup> , Widya Tanjung Nurcahayanti <sup>1</sup> , Meliantika <sup>1</sup> ,<br>Endang Ripmiatin <sup>2</sup> , Mariyatul<br>Qibtiyah <sup>1</sup> , Shifa Aini Wulandari <sup>1</sup><br><sup>1</sup> Industrial Engineering, Faculty of Science and Technology,<br>Univerisity of Al Azhar Indonesia <sup>2</sup> Informatics Technology, Faculty<br>of Science and Technology, Univerisity of Al Azhar Indonesia | 77   | SCM        |

**SEPTEMBER 22, 2016 SESSION 3 ROOM 1**

Moderator : Dr. Rina Fitriana, S.T., M.M.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
| 08.20-08.30 | <b>CONCEPTUAL MODEL OF SUPPLY CHAIN MANAGEMENT FOR HIGHER EDUCATION</b><br>Fajar Kurniawan<br>Saint Mary's University of Hong Kong  | 105  | SCM        |
| 08.30-08.40 | <b>FEEDBACK FROM USERS ON A DESIGN OF WEB-BASED INVENTORY AND PRODUCT ORDERING SYSTEM FOR A UNIFORM MAKER</b><br>Gamma Habie Azzaky, Endang Chumaidiyah, Wawan Tripiawan<br>Industrial Engineering Faculty, Telkom University, Bandung, Indonesia | 88   | DSS        |
| 08.40-08.50 | <b>FACTORS INFLUENCING INNOVATION MANAGEMENT PRACTICES IN NIGERIA TEXTILE MANUFACTURING FIRM'S</b><br>Mohammed Ndaliman Abubakar<br>Department of Business Admin & Management, The Federal Polytechnic (FPB), Niger State, Nigeria                | 112  | IM         |

**SEPTEMBER 22, 2016 SESSION 3 ROOM 2**

Moderator : Dr. Ir. Nofi Erni, M.M.

| Time        | Paper  | Code | Paper Code |
|-------------|--|------|------------|
| 08.00-08.10 | <b>BUSINESS INTELLIGENCE SYSTEM MODEL PROPOSALS TO IMPROVE THE QUALITY OF SERVICE AT PT GIA</b><br>Rina Fitriana, Johnson Saragih, M. Andika Firmansyah<br>System and Industrial Simulation Laboratory, Department of Industrial Engineering, Faculty of Industrial Technology, Trisakti University, Jakarta, Indonesia  | 86   | QM         |
| 08.10-08.20 | <b>WORK RISK ASSESSMENT TOWARDS WOOD FURNITURE PRODUCTION ACTIVITIES USING MANUAL TASK RISK ASSESSMENT METHOD AND RODGERS MUSCLE FATIGUE ANALYSIS METHOD</b><br>Cindy Wibisono, Vivi Triyanti<br>Department of Industrial Engineering, Atma Jaya Catholic University of Indonesia, Jakarta, Indonesia  | 4    | ER         |
| 08.20-08.30 | <b>EXPERIMENTAL DESIGN OF CLASS CHARACTERISTIC FACTORS AGAINST ENERGY EXPENDITURE, MENTAL FATIGUE AND PERFORMANCE USING ANOVA METHOD</b><br>Albertus Steven, Vivi Triyanti<br>Industrial Engineering Studies Program – Faculty Of Engineering Atma Jaya Indonesian Catholic University, Jakarta, Indonesia   | 32   | ER         |
| 08.30-08.40 | <b>WORKLOAD ANALYSIS OF THE CONTAINER UNLOADING PROCESS WORKER</b><br>Lamto Widodo, I Wayan Sukania, Cynthia Kristiani<br>Industrial Engineering Department, Engineering Faculty, Tarumanagara University, Jakarta, Indonesia  | 1    | ER         |
| 08.40-08.50 | <b>DETERMINING THE ROUTE FOR SOLID WASTE TRANSPORTATION FROM TPS TO SPA USING VRP – NEAREST NEIGHBOR FOR 10m<sup>3</sup> VEHICLE ON SERVICE AREA SOUTHERN BANDUNG AND EASTERN BANDUNG</b><br>Wahyukaton, Anni Rochaeni, Sunarya<br>Industrial Engineering Pasundan University, Bandung, Indonesia<br>Environmental Engineering Pasundan University, Bandung, Indonesia | 21   | OR         |

**SEPTEMBER 22, 2016 SESSION 3 ROOM 2**

Moderator : Dr. Ir. Nofi Erni, M.M.

| Time        | Paper   | Code | Paper Code |
|-------------|---|------|------------|
| 08.50-09.00 | <b>STUDY OF LIFT MARKET THROUGH GAP ANALYSIS</b><br>Niken Parwati, Nurhanisa Maysa, Aprilia Tri Purwandari<br>Department of Industrial Engineering, Faculty of Science and Technology, Universitas Al Azhar Indonesia, Jakarta, Indonesia | 93   | IM         |
| 09.00-09.10 | <b>PROPOSED DESIGN OF TABLE AND SEAT WORK IN AFBRAMEN WORKSTATION USING ULRICH-EPPINGER</b><br>Rino Andias Anugraha, Yusuf Nugroho Doyoyekti<br>Industrial Engineering Study Program, Industrial Engineering Faculty, Telkom University   | 104  | ER         |

**SEPTEMBER 22, 2016 SESSION 3 ROOM 3**

Moderator : Andre Sugioko, S.T., M.T.

| Time        | Paper  | Code | Paper Code |
|-------------|--|------|------------|
| 08.00-08.10 | <b>DESIGNING PRODUCTION SCHEDULING WITH FUZZY PERT TO SOLVE RESOURCE CONSTRAINTS THROUGH LANG'S ALGORITHM</b><br>N. Nurhasanah, W.N. Tanjung, E. Ripmiatin, A. Supriyanto, S.A. Wulandari, C.A. Nurpraja, Meliantika, M. Qibtiyah<br>Department of Industrial Engineering, University of Al Azhar, Jakarta, Indonesia<br>Department of Informatics Engineering, University of Al Azhar, Jakarta, Indonesia | 41   | PS         |
| 08.10-08.20 | <b>PRODUCTION SCHEDULING OF BIG PART AT MACHINING DEPARTMENT IN PT. XYZ</b><br>Rizki Wahyuniardi, Wahyukaton, Moch Rifqi Fathoni<br>Industrial Engineering, Pasundan Universitas, Bandung, Indonesia   | 20   | PS         |
| 08.20-08.30 | <b>DYNAMIC SIMULATION SYSTEM FOR MAIZE COMMODITIES (CASE STUDY: TUBAN, EAST JAVA)</b><br>Christine Natalia, Agustinus Silalahi, Andre Sugioko, Trifenaus Prabu Hidayat, Cavin Natalio Simanjuntak<br>Industrial Engineering, Atma Jaya Catholic University of Indonesia  | 18   | OR         |
| 08.30-08.40 | <b>SUPPLY CHAIN ANALYSIS OF CASSAVA AGROINDUSTRY TO IMPROVE NATIONAL FOOD SECURITY</b><br>Iphov Kumala Sriwana, Nofi Erni<br>Industrial Engineering, Esa Unggul University, Jakarta, Indonesia   | 94   | SCM        |
| 08.40-08.50 | <b>GROUP TECHNOLOGY AND DYNAMIC MODIFIED SPANNING TREE (DMoST) IMPLEMENTATION FOR DYNAMIC CELLULAR LAYOUT PROBLEM</b><br>Yogi Yogaswara , Sri Wahyuni<br>Industrial Engineering, Faculty of Engineering, Pasundan University , Bandung, Indonesia  | 63   | OR         |
| 08.50-09.00 | <b>USING FUZZY INFERENCE SYSTEM ON PRODUCTION PLANNING CASE STUDY : PANDANUS HANDICRAFT INDUSTRY</b><br>Nofi Erni, Iphov Kumala S., Roesfiansjah R., Riya Widayanti<br>Industrial Engineering Department Esa Unggul University Jakarta, Indonesia  | 103  | PS         |
| 09.00-09.10 | <b>CRITICALLY ASSESS THE DEVELOPMENT OF GREEN SUPPLY CHAIN MANAGEMENT IN THE FAST MOVING CONSUMER GOODS INDUSTRY</b><br>Ilhamsyah Mahendra <sup>1</sup> , Elizabeth Williamson <sup>2</sup><br>Glasgow Caledonian University, United Kingdom   | 101  | SCM        |

# TABLE OF CONTENT

**Preface**  
**Committee**  
**Reviewer**  
**Agenda**  
**Parallel Session**  
**Table of Content**

| <b>DSS – Decision Support System and Artificial Intelligence</b> |       |  |          |
|--|-------|--|----------|
| No   | Paper | Title and Author   | Page     |
| 1  | 3     | MANAGEMENT INFORMATION SYSTEM FOR ORDER FULFILLMENT: A CASE STUDY<br><b>Johanes Fernandes Andry, Halim Agung, Yana Erlyana</b>   | Paper_3  |
| 2  | 8     | SYSTEM DYNAMICS BASED BALANCED SCORECARD TO SUPPORT DECISION MAKING IN STRATEGY OF PERFORMANCE IMPROVEMENT (A CASE STUDY IN THE UNIVERSITY)<br><b>Linda Theresia, Yenny Widianty, Dawi Karomati Baroroh</b>  | Paper_8  |
| 3  | 10    | PURCHASING CONSORTIUM SYSTEM USING COMMON REPLENISHMENT EPOCH (CRE) MODEL BY DESIGNING MOBILE INFORMATION SYSTEM FOR SMALL and MEDIUM ENTERPRISES (SMEs)<br><b>Yudha Prasetyawan, Imam Baihaqi, Shinta Dewi</b>                                    | Paper_10 |
| 4  | 25    | CONCEPTUAL FRAMEWORK IN PRINTING PRESS MAINTENANCE DESIGN BY USING DATA MINING<br><b>Meldi Rendra</b>  | Paper_25 |
| 5  | 51    | DEVELOPMENT OF ONLINE KNOWLEDGE MANAGEMENT CYCLE INDICATORS USING SECI APPROACH: CASE STUDY IN AN ENERGY COMPANY<br><b>Aldio Fikri Siddik, Amelia Kurniawati, Umar Yunan Kurnia Septo Hedyanto</b>   | Paper_51 |
| 6  | 59    | IMPLEMENTATION OF CRISP-DM MODEL IN ORDER TO DEFINE THE SALES PIPE LINES OF PT X<br><b>Dadan Umar Daihani, Dina Feblian</b>  | Paper_59 |
| 7  | 66    | INFORMATION SYSTEM STRATEGIC PLANNING BASED ON TOGAF ADM FRAMEWORK IN 1ST REVENUE FUNCTIONS DEPARTMENT OF REVENUE AND FINANCIAL MANAGEMENT BANDUNG REGENCY<br><b>Theresia Yudith Dwi Prisila, Yuli Adam Prasetyo, Ridha Hanafi</b>                 | Paper_66 |
| 8  | 68    | DESIGN AND ANALYSIS PHYSICAL AND LOGICAL SECURITY USING TIA-942 AND ISO/IEC 27000 SERIES IN DATA CENTER OF PDII-LIPI<br><b>Mukhlis Anugrah Pratama, Mochammad Teguh Kurniawan</b>  | Paper_68 |
| 9  | 69    | ANALYSIS AND DESIGN ENTERPRISE ARCHITECTURE OF DEVELOPMENT ANALYSIS BUSINESS FUNCTION AT BADAN PERENCANAAN DAN PEMBANGUNAN DAERAH (BAPPEDA) WEST JAVA PROVINCE USING TOGAF ADM FRAMEWORK<br><b>Anida Shafa, Yuli Adam Prasetyo, Rahmat Mulyana</b> | Paper_69 |
| 10   | 70    | GREEN DATA CENTER POWER MANAGEMENT DESIGN AND ANALYSIS IN PDII-LIPI USING TIA-942 STANDARD<br><b>Algadilan Susanto, Mochammad Teguh Kurniawan</b>  | Paper_70 |
| 11   | 71    | DEVELOPING INFORMATION SYSTEM OF LIBRARY ON E-SCHOOL QR-CODE BASED IN 13 NATIONAL HIGH SCHOOL USING EXTREME PROGRAMMING METHODOLOGY<br><b>Timbul Prawira Gultom, Nia Ambarsari, Muhammad Azani H.</b>  | Paper_71 |

| <b>DSS – Decision Support System and Artificial Intelligence</b> |       |  |          |
|--|-------|--|----------|
| No   | Paper | Title and Author   | Page     |
| 12   | 88    | FEEDBACK FROM USERS ON A DESIGN OF WEB-BASED INVENTORY AND PRODUCT ORDERING SYSTEM FOR A UNIFORM MAKER<br><b>Gamma Habie Azzaky, Endang Chumaidiyah, Wawan Tripiawan</b> | Paper_88 |
| 13   | 90    | DETERMINATION OF FAILURE RISK FOR TRANSFORMER SYSTEM BASED ON CLASSIFICATION TECHNIQUE<br><b>Iveline Anne Marie, Anung B Ariwibowo, Docki Saraswati, Amal Witonohadi</b> | Paper_90 |

| <b>ER – Ergonomics</b> |       |   |           |
|------------------------|-------|---|-----------|
| No                     | Paper | Title and Author  | Page      |
| 1                      | 1     | WORKLOAD ANALYSIS OF THE CONTAINER UNLOADING PROCESS WORKER<br><b>Lamto Widodo, I Wayan Sukania, Cynthia Kristiani</b>  | Paper_1   |
| 2                      | 4     | WORK RISK ASSESSMENT TOWARDS WOOD FURNITURE PRODUCTION ACTIVITIES USING MANUAL TASK RISK ASSESSMENT METHOD AND RODGERS MUSCLE FATIGUE ANALYSIS METHOD<br><b>Cindy Wibisono, Vivi Triyanti</b> | Paper_4   |
| 3                      | 6     | SHELVES RE-DESIGN TO CONSIDER ASPECTS OF ERGONOMICS IN KOPETRI MINI MARKET, KARAWANG<br><b>Dene Herwanto, Sukanta</b>   | Paper_6   |
| 4                      | 13    | COGNITIVE ERGONOMIC ANALYSIS OF PROFESSIONALS IN INDUSTRIAL DESIGNER APPAREL (Case Study: Designer at PT. Kurnia ASTASURYA)<br><b>Erwin M Pribadi, Ari Robiana Rijalah</b>                    | Paper_13  |
| 5                      | 30    | DESIGN IMPROVEMENT FOR POTATOES CULTERY TOOLS “POTTY” USING PRODUCT ARCHITECTURE ANALYSIS<br><b>Rahmat Ramadhani Bayu, Dicha Keci Barakin, Rendra Gilang Yuniarto, Muhammad Iqbal</b>         | Paper_30  |
| 6                      | 32    | Experimental Design of Class Characteristic Factors against Energy Expenditure, Mental Fatigue and Performance Using Anova Method<br><b>Albertus Steven, Vivi Triyanti</b>                    | Paper_32  |
| 7                      | 55    | DEVELOPMENT DETAIL DESIGN GALLON WASHER USING DESIGN FOR ASSEMBLY ( DFA )<br><b>Mohamad Walid Anshar Ichsan Shahib, Mira Rahayu, Teddy Syafrizal</b>  | Paper_55  |
| 8                      | 56    | DESIGN CONCEPT OF WASHING GALLON USING DESIGN METHOD RATIONAL<br><b>Antonio Bennarivo Nainggolan, Mira Rahayu, Teddy Syafrizal</b>  | Paper_56  |
| 9                      | 57    | DESIGN GALLON WASHING TOOLS USING ERGONOMIC FUNCTION DEPLOYMENT METHOD<br><b>Bintang Sri Perdana, Mira Rahayu, Teddy Syafrizal</b>  | Paper_57  |
| 10                     | 61    | DESIGNING ERGONOMIC CONVEYANCE TOOLS FOR SULFUR MINERS IN THE IJEN CRATER<br><b>Anny Maryani, Dyah Santhi Dewi, Elsa Camelia Harmadi, Pamungkas Dwi Admaja</b>                                | Paper_61  |
| 11                     | 89    | DESIGNING A PERSONAL SURVIVAL KIT IN FLOOD DISASTERS THROUGH PARTICIPATORY DESIGN APPROACH<br><b>Grace Novelia, Johanna Renny Octavia</b>   | Paper_89  |
| 12                     | 91    | Ergonomic Analysis for the Armoured Personnel Carrier Driver<br><b>Halim Mahfudh, Lilik Zulaihah, Reda Rizal</b>  | Paper_91  |
| 13                     | 102   | MAKING A PLYWOOD BOAT CATAMARANS MODEL FOR HANDLING OF FLOOD EMERGENCY IN AREAS OF DURI KEPA<br><b>Indra Gunara Rochyat, Asnawati, Wahyu Albin Tabrani</b>                                    | Paper_102 |

| <b>ER – Ergonomics</b> |       |  |           |
|------------------------|-------|--|-----------|
| No                     | Paper | Title and Author   | Page      |
| 14                     | 104   | PROPOSED DESIGN OF TABLE AND SEAT WORK IN AFBRAMEN WORKSTATION USING ULRICH-EPPINGER<br><b>Rino Andias Anugraha, Yusuf Nugroho Doyoyekti</b> | Paper_104 |

| <b>IM – Industrial Management</b> |       |  |          |
|-----------------------------------|-------|--|----------|
| No                                | Paper | Title and Author   | Page     |
| 1                                 | 9     | MEASURING LABORATORY ADMINISTRATION SYSTEM SATISFACTION : A CASE STUDY<br><b>Rayinda Pramuditya Soesanto, Amelia Kurniawati, Muhammad Iqbal</b>  | Paper_9  |
| 2                                 | 16    | POSITIONING ANALYSIS FOR HIGHER EDUCATION BASED ON PERCEPTUAL MAPPING USING MULTIDIMENSIONAL SCALING<br><b>Hafizh Suharja, Yati Rohayati, Rio Aurachman</b>  | Paper_16 |
| 3                                 | 17    | OPERATIONAL RISK IDENTIFICATION IN ADMINISTRATION SERVICES OF HIGHER EDUCATION<br><b>Robby Anzil Firdaus, Rahmat Nurcahyo, Anafi Yuan Septiari, Supriadi</b>   | Paper_17 |
| 4                                 | 23    | USING EDUQUAL AND KANO'S MODEL TO IMPROVE THE SERVICE QUALITY OF TRAINING AND CERTIFICATION PROGRAM<br><b>Iffitah Pratomo, Yati Rohayati, Sari Wulandari</b>   | Paper_23 |
| 5                                 | 37    | A BRIEF REVIEW IN SOME DISSERTATIONS ABOUT BUSINESS INCUBATOR PROCESS FRAMEWORK AND PERFORMANCE IN SOME COUNTRIES<br><b>Lina Gozali</b>  | Paper_37 |
| 6                                 | 42    | INCREASING PRODUCTIVITY WITH OBJECTIVE MATRIX METHOD CASE STUDY ON BUILDING MAINTENANCE MANAGEMENT PIO PT. XXX<br><b>R Bagus Yosan, Muhammad Kholil, Winny Soraya</b>  | Paper_42 |
| 7                                 | 45    | THE DEVELOPMENT OF TECHNOLOGY READINESS ASSESSMENT FOR COMMERCIALIZATION INNOVATION AND PRODUCT DEVELOPMENT BASED ON DIGITAL BUSINESS ECOSYSTEM<br><b>Elfira Febriani, Taufik Djatna</b>                         | Paper_45 |
| 8                                 | 48    | HOW ICT ADOPTION COULD AFFECT INDONESIAN SMEs ORGANIZATIONAL PERFORMANCE<br><b>Lucy Chairoel, Fuad Salleh, Setyawan Widyarto, Vera Pujani</b>  | Paper_48 |
| 9                                 | 60    | STUDY OF LIFT MARKET THROUGH GAP ANALYSIS<br><b>Niken Parwati, Nurhanisa Maysa, Aprilia Tri Purwandari</b>   | Paper_60 |
| 10                                | 62    | STRUCTURAL MODEL FOR SUSTAINABLE CAMPUS ASSESSMENT: A CASE OF ANDALAS UNIVERSITY<br><b>Elita Amrina, Insannul Kamil, Nilda Tri Putri, Yunessa Astari</b>   | Paper_62 |
| 11                                | 64    | PAYROLL ADMINISTRATION SYSTEM IMPLEMENTATION USING ODOO AT PT.PRIMARINDO ASIA INFRASTRUCTURE,TBK WITH RAPID APPLICATION METHOD<br><b>Kevin Rohni Goklas Sinaga, Wahjoe Witjaksono, Faishal Mufied Al-Anshary</b> | Paper_64 |
| 12                                | 65    | DESIGN E-COMMERCE ANGON BASED ON MARKETPLACE TO INCREASE REVENUE FOR LIVESTOCK'S ACTORS (SELLING MODULE)<br><b>Atika Elysia, Irfan Darmawan, Muhammad Azani Hasibuan</b>   | Paper_65 |
| 13                                | 67    | DESIGN E-COMMERCE ANGON BASED ON MARKETPLACE TO INCREASE PURCHASING EFFICIENCY FOR LIVESTOCK'S ACTOR (PURCHASE MODULE)<br><b>Pratiwi Galuh Putri, Irfan Darmawan, Muhammad Azani</b>                             | Paper_67 |
| 14                                | 72    | THE IMPLEMENTATION OF CORPORATE SOCIAL RESPONSIBILITY OF STARBUCKS COMPANY<br><b>Charly Hongdiyanto</b>  | Paper_72 |

| <b>IM – Industrial Management</b> |       |   |           |
|-----------------------------------|-------|---|-----------|
| No                                | Paper | Title and Author  | Page      |
| 15                                | 73    | ANALYSIS OF EARNINGS PER SHARE BEFORE AND AFTER IPO AND THE STRATEGY (CASE STUDY: COMPANIES PERFORM IPO IN INDONESIA STOCK EXCHANGE YEAR 2013)<br><b>Dewa Ayu Jessica Putri, Endang Chumaidiyah, Rita Zulbetti</b>      | Paper_73  |
| 16                                | 81    | PERCEIVED BARRIERS TO INNOVATION FOR START-UP BUSINESSES<br><b>Liliani</b>  | Paper_81  |
| 17                                | 83    | APPLICATION OF ANALYTICAL HIERARCHY PROCESS TO CHOOSE CRITERIA FOR MOBILE PHONES<br><b>Dessi Mufti, Yesmizarti Muchtiar, Iswanto</b>  | Paper_83  |
| 18                                | 85    | ANALYSIS OF LOCAL ELEVATOR COMPANY CORPORATE CULTURE<br><b>Syarif Hidayat, Ainun Jariah</b>   | Paper_85  |
| 19                                | 87    | DEFINING THE CORPORATE METRICS<br><b>MarsellinusBachtiar</b>  | Paper_87  |
| 20                                | 93    | STUDY OF LIFT MARKET THROUGH GAP ANALYSIS<br><b>Niken Parwati, Nurhanisa Maysa, Aprilia Tri Purwandari</b>  | Paper_93  |
| 21                                | 96    | FEASIBILITY STUDY OF BUSINESS DEVELOPMENT PT NUSAPATI PRATAMA WITH LEAN STARTUP<br><b>Agung Sasongko, Wisnu S Dewobroto, Said Saleh Al-Amry</b>   | Paper_96  |
| 22                                | 97    | VALUE PROPOSITION DESIGN AND BUSINESS MODEL GENERATION METHOD USE FOR BUSINESS INNOVATION FEASIBILITY ON THE MICROBIAL FERTILIZER – LAPTIAP BPPT<br><b>Wisnu Dewobroto, Bernard Marthin</b>                             | Paper_97  |
| 23                                | 98    | THE RELATIONSHIP BETWEEN TEACHING PROCESS AND QUALITY USING THE LINEAR STRUCTURE (LISREL) MODEL IN INDUSTRIAL ENGINEERING DEPARTMENT<br><b>Tiena Gustina Amran</b>  | Paper_98  |
| 24                                | 100   | INCREASING PRODUCTIVITY OF PT. XYZ THROUGH THE UTILIZATION OF STANDARD TIME AND THE TWO HANDED PROCESS FOR PANEL BOX PRODUCTION<br><b>Arnolt Kristian Pakpahan; Didien Suhardini; Arum Tri Astuti</b>                   | Paper_100 |
| 25                                | 107   | DEFINING TECHNOLOGY STRATEGY FOR SMALL TO MEDIUM ENTERPRISE WITHIN LEAN AND GREEN MANUFACTURING FRAMEWORK<br><b>Yudha Prasetyawan</b>   | Paper_107 |
| 26                                | 110   | MAINTENANCE PERFORMANCE MEASUREMENT TRANSJAKARTA BUS AT PERUM DAMRI SBU BUSWAY CORRIDOR I & VIII USING MAINTENANCE SCORECARD<br><b>Didien Suhardini, Iveline Anne Marie, Amal Witonohadi, Auliandi Fahriditya Putra</b> | Paper_110 |
| 27                                | 112   | FACTORS INFLUENCING INNOVATION MANAGEMENT PRACTICES IN NIGERIA TEXTILE MANUFACTURING FIRM'S<br><b>Mohammed Ndaliman Abubakar</b>  | Paper_112 |

| <b>OR – Operation Research</b> |       |   |          |
|--------------------------------|-------|---|----------|
| No                             | Paper | Title and Author  | Page     |
| 1                              | 18    | DYNAMIC SIMULATION SYSTEM FOR MAIZE COMMODITIES (CASE STUDY: TUBAN, EAST JAVA)<br><b>Christine Natalia, Agustinus Silalahi, Andre Sugioko, Trifenaus Prabu Hidayat, Cavin Natalio Simanjuntak</b> | Paper_18 |

**OR – Operation Research**

| No | Paper | Title and Author   | Page     |
|----|-------|--|----------|
| 2  | 21    | DETERMINING THE ROUTE FOR SOLID WASTE TRANSPORTATION FROM TPS TO SPA USING VRP – NEAREST NEIGHBOR FOR 10m <sup>3</sup> VEHICLE ON SERVICE AREA SOUTHERN BANDUNG AND EASTERN BANDUNG<br><b>Wahyukaton, Anni Rochaeni, Sunarya</b> | Paper_21 |
| 3  | 29    | A Simple Mathematical Model of Technological Transfer with Two Competing Followers (A Preliminary Result)<br><b>Hennie Husniah, Asep K. Supriatna</b>  | Paper_29 |
| 4  | 34    | CAPACITATED VEHICLE ROUTING PROBLEM WITH TIME WINDOWS FOR MILK COLLECTION AT KPBS PANGALENGAN<br><b>Tjutju Tarliah Dimyati</b>   | Paper_34 |
| 5  | 49    | ENHANCING PENDULUM NUSANTARA MODEL IN INDONESIAN MARITIME LOGISTICS NETWORK<br><b>Komarudin, Muhammad Reza, Armand Omar Moeis</b>  | Paper_49 |
| 6  | 63    | GROUP TECHNOLOGY AND DYNAMIC MODIFIED SPANNING TREE (DMoST) IMPLEMENTATION FOR DYNAMIC CELLULAR LAYOUT PROBLEM<br><b>Yogi Yogaswara, Sri Wahyuni</b>   | Paper_63 |

**PS – Production System**

| No | Paper | Title and Author  | Page     |
|----|-------|---|----------|
| 1  | 7     | DETERMINING THE INVENTORY POLICY FOR V-BELT USING PROBABILISTIC METHOD<br><b>Sukanta, Dene Herwanto</b>   | Paper_7  |
| 2  | 11    | APPLICATION OF LEAN MANUFACTURING IN THE PRODUCTION OF SPUN PILE USING WASTE ASSESMENT MODEL AND VALUE STREAM ANALYSIS<br><b>Syarif Hidayat and Siti Nurlina</b>  | Paper-11 |
| 3  | 20    | PRODUCTION SCHEDULING OF BIG PART AT MACHINING DEPARTMENT IN PT. XYZ<br><b>Rizki Wahyuniardi, Wahyukaton, Moch Rifqi Fathoni</b>  | Paper_20 |
| 4  | 22    | WAREHOUSE LAYOUT DESIGN USING SHARED STORAGE METHOD<br><b>Alan Dwi Wibowo, Rahmat Nurcahyo, Cut Khairunnisa</b>   | Paper_22 |
| 5  | 28    | OPTIMAL PREVENTIVE MAINTENANCE OF TWO-PHASE MAINTENANCE POLICY FOR LEASED PRODUCT<br><b>Hennie Husniah, Andi Cakravastia, Bermawi P. Iskandar</b>   | Paper_28 |
| 6  | 31    | CONTROL SYSTEMS DESIGN FOR AUTO JUDGEMENT CHECK MACHINE IN ROTOR ASSEMBLY LINE USING PROGRAMMABLE LOGIC CONTROLLER<br><b>Syahril Ardi, Moh Faiza Abu Rizal</b>  | Paper_31 |
| 7  | 33    | AN AUTOMATED GUIDED VEHICLE SIMULATION THROUGH ROBOTINO TO HELP LEARNING COURSE INDUSTRIAL AUTOMATION<br><b>Tatang Mulyana, Haris Rachmat, Praselia Pramudita Yuliarso</b>  | Paper_33 |
| 8  | 41    | DESIGNING PRODUCTION SCHEDULING WITH FUZZY PERT TO SOLVE RESOURCE CONSTRAINTS THROUGH LANG'S ALGORITHM<br><b>N. Nurhasanah, W.N. Tanjung, E. Ripmiatin, A. Supriyanto, S.A. Wulandari, C.A. Nurpraja, Meliantika, M. Qibtiyah</b> | Paper_41 |
| 9  | 44    | A MODIFIED ECONOMIC PRODUCTION QUANTITY (EPQ) WITH SYNCHRONIZING DISCRETE AND CONTINUOUS DEMAND UNDER FINITE HORIZON PERIOD AND LIMITED CAPACITY OF STORAGE<br><b>Jonrinaldi, Henmaid, Nurike Oktavia</b>                         | Paper_44 |

| <b>PS – Production System</b> |       |   |           |
|-------------------------------|-------|---|-----------|
| No                            | Paper | Title and Author  | Page      |
| 10                            | 54    | RELIABILITY ANALYSIS AND MAINTENANCE MANAGEMENT EVALUATION OF FLASH BUTT WELDING MACHINE WITH RCM II<br><b>Arief Suwandi, Ulia Rahma</b>  | Paper_54  |
| 11                            | 58    | ANALYSIS & EVALUATION OF PLANT PRODUCTION LAYOUT PT ARKHA JAYANTI PERSADA USING GROUP OF TECHNOLOGY CONCEPT WITH GENETIC ALGORITHM APPROACH<br><b>Agung Yugo Ngumboro, Budi Aribowo</b>   | Paper_58  |
| 12                            | 74    | DRUG INVENTORY POLICY PROPOSAL USING PROBABILISTIC METHODS TO INCREASE THE SERVICE LEVEL<br><b>Sabila Syafitri Pambudi, Dida Diah Damayanti, Budi Santosa Chulasoh</b>  | Paper_74  |
| 13                            | 75    | PROPOSED MAINTENANCE POLICY AND SPARE PART MANAGEMENT OF GOSS UNIVERSAL PRINTING MACHINE WITH RELIABILITY CENTERED MAINTENANCE, RELIABILITY CENTERED SPARES, AND PROBABILISTIC INVENTORY MODEL<br><b>Valinouski Aulia, Judi Alhilman, Nurdinintya Athari S.</b> | Paper_75  |
| 14                            | 80    | CABLE CLAMP PRODUCTION CAPACITY PLANNING USING ROUGH CUT CAPACITY PLANNING (RCCP) METHOD (A CASE STUDY IN PT FAJAR CAHAYA CEMERLANG)<br><b>M. Hudori</b>  | Paper_80  |
| 15                            | 84    | MAXIMUM PROFIT CALCULATION BASED ON THE QUANTITY OF DEMAND VEGATABLES WITH THE SINGLE ORDER QUANTITY METHOD<br><b>Annura Minar Gayatri, Nunung Nurhasanah, Ahmad Juang Pratama</b>  | Paper_84  |
| 16                            | 99    | JOB SHOP SCHEDULING AT IN-HOUSE REPAIR DEPARTMENT IN COLD SECTION MODULE CT7 ENGINE TO MINIMIZE MAKESPAN USING GENETIC ALGORITHM AT PT XYZ<br><b>Michael Whizo Mayto, Praty Poeri Suryadhini, Murni Dwi Astuti</b>  | Paper_99  |
| 17                            | 103   | USING FUZZY INFERENCE SYSTEM ON PRODUCTION PLANNING CASE STUDY : PANDANUS HANDICRAFT INDUSTRY<br><b>Nofi Erni, Iphov Kumala S., Roesfiansjah R., Riya Widayanti</b>   | Paper_103 |
| 18                            | 105   | STUDY OF SHAFT POSITION IN GAS TURBINE JOURNAL BEARING<br><b>Rizky Arman, Iman Satria</b>   | Paper_105 |
| 19                            | 111   | AGGREGATE PRODUCTION PLANNING OF WOODEN TOYS USING MODIFIED PARTICLE SWARM OPTIMIZATION<br><b>Adri Fajar Jenie, Syarif Hidayat</b>  | Paper_111 |

| <b>QM – Quality Engineering &amp; Management</b> |       |   |          |
|--|-------|---|----------|
| No   | Paper | Title and Author  | Page     |
| 1  | 15    | VARIABLE ANALYSIS OF IMPROVING THE QUALITY OF SERVICE DELIVERY PACKAGE BY USING IMPORTANCE PERFORMANCE MATRIX METHOD AND KANO MODEL<br><b>Dwi Novirani, Abu Bakar, Janet Apongtingnamba</b>   | Paper_15 |
| 2  | 35    | RELIABILITY BASED PERFORMANCE ANALYSIS OF BASE TRANSCEIVER STATION (BTS) USING RELIABILITY, AVAILABILITY, AND MAINTAINABILITY (RAM) METHOD<br><b>Judi Alhilman, Rd. Rohmat Saedudin</b>       | Paper_35 |
| 3  | 38    | LEAN PROJECT MANAGEMENT TO MINIMIZE WASTE, CASE STUDY : INDARUNGVI PROJECT, PT SEMEN PADANG<br><b>Nilda Tri Putri, Sarvina</b>  | Paper_38 |
| 4  | 40    | IMPROVING THE SERVICE QUALITY OF DISTANCE EDUCATION USING INTEGRATION SERVICE QUALITY FOR HIGHER EDUCATION AND KANO<br><b>Istianah Nedia, Yati Rohayati, Maria Dellarosawati Idawicasakti</b> | Paper_40 |

**QM – Quality Engineering & Management**

| No | Paper | Title and Author  | Page     |
|----|-------|---|----------|
| 5  | 52    | DESIGN OF STANDARD OPERATING PROCEDURE (SOP) OF DESIGN AND DEVELOPMENT OF PRODUCT ACCORDING TO ISO 9001:2015 CLAUSE 8.3 BASED ON RISK BASED THINKING BY BUSINESS PROCESS IMPROVEMENT METHOD AT CV. XYZ<br><b>Rindy Aprilina Gita Prastyanti, Sri Widaningrum, Heriyono Lalu</b> | Paper_52 |
| 6  | 53    | DESIGN OF NONCONFORMITY AND CORRECTIVE ACTION STANDARD OPERATING PROCEDURE BASED ON INTEGRATED REQUIREMENTS FROM ISO 9001 AND ISO 14001<br><b>Rahmah Fadhilah, Sri Widaningrum, Heriyono Lalu</b>   | Paper_53 |
| 7  | 76    | APPLICATION OF VALUE STREAM MAPPING IN THE NVOCC FCL SERVICE PROCESS TO MINIMIZE DELAY IN SUBMISSION OF THE DOCUMENT (A CASE STUDY IN PT YUSEN LOGISTICS INDONESIA)<br><b>M. Hudori, Nismah Panjaitan</b>   | Paper_76 |
| 8  | 78    | APPLICATION METHODS P-C-P TO IMPROVE QUEUE SERVICE QUALITY IN SUPERMARKET CASHIER AT THE PEAK DEMAND CONDITION<br><b>Yesmizarti Muchtiar, Muhibbullah Azfa Manik, Emil Endrivot</b>   | Paper_78 |
| 9  | 79    | IMPROVEMENT TO QUALITY OF TELECOMMUNICATION SERVICE BY MINIMIZE FAILURE OF SIMKARI APPLICATION DEVICE (A CASE STUDY IN PT DATALINK SOLUTION)<br><b>M. Hudori</b>  | Paper_79 |
| 10 | 86    | Business Intelligence System Model Proposals to Improve the Quality of Service at PT GIA<br><b>Rina Fitriana, Johnson Saragih, M. Andika Firmansyah</b>   | Paper_86 |

**SCM – Supply Chain Management**

| No | Paper | Title and Author   | Page      |
|----|-------|--|-----------|
| 1  | 14    | RISK FACTOR ANALYSIS OF LIQUIFIED NATURAL GAS (LNG) SUPPLY PROCESS CHAIN IN INDONESIA<br><b>Rahmat Nurcahyo, Farid Akbar, Yadrifil</b>   | Paper_14  |
| 2  | 26    | IDENTIFICATION OF SUPPLY CHAIN PERFORMANCE INDICATORS AND STRATEGIC OBJECTIVES USING THE BALANCED SCORECARD<br><b>Dwi Kurniawan, Adela Anggun Pertiwi, Lisye Fitria</b>  | Paper_26  |
| 3  | 27    | THE IMPLEMENTATION OF ANALYTIC HIERARCHY PROCESS ON THE SELECTION OF SUPPLIER IN START-UP BUSINESS: A CASE STUDY<br><b>Ahmad Setyo Irawan, Liliani</b>   | Paper_27  |
| 4  | 77    | ENHANCING COMPETITIVENESS OF TEXTILE AND CLOTHING SMALL-MEDIUM INDUSTRIES THROUGH PERFORMANCE MEASUREMENT OF MATERIAL PLANNING USING SCOR METHOD<br><b>Nunung Nurhasanah, Widya Tanjung Nurcahayanti, Meliantika, Endang Ripmiatin, Mariyatul Qibtiyah, Shifa Aini Wulandari</b> | Paper_77  |
| 5  | 94    | SUPPLY CHAIN ANALYSIS OF CASSAVA AGROINDUSTRY TO IMPROVE NATIONAL FOOD SECURITY<br><b>Iphov Kumala Sriwana, Nofi Erni</b>  | Paper_94  |
| 6  | 101   | CRITICALLY ASSESS THE DEVELOPMENT OF GREEN SUPPLY CHAIN MANAGEMENT IN THE FAST MOVING CONSUMER GOODS INDUSTRY<br><b>Ilhamsyah Mahendra, Elizabeth Williamson</b>   | Paper_101 |
| 7  | 105   | CONCEPTUAL MODEL OF SUPPLY CHAIN MANAGEMENT FOR HIGHER EDUCATION<br><b>Fajar Kurniawan</b>   | Paper_105 |
| 8  | 109   | AN APPLICATION OF DIFFERENTIAL EVOLUTION ALGORITHM IN SPARE PART LOGISTICS<br><b>Said Badrul Nahar, Sakesun Suthummanon, Wanatchapong Kongkaew</b>   | Paper_109 |

