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# PROCEEDING

The 7<sup>th</sup> International Seminar on Industrial Engineering and  
Management (7<sup>th</sup> ISIEM)

Sanur Paradise Hotel, Bali, Indonesia  
March 11<sup>th</sup> – 13<sup>th</sup>, 2014

Organized by :

## **Industrial Engineering Department of**

- Al Azhar University •Pasundan University•Trisakti University•
- Atma Jaya Catholic University of Indonesia •Esa Unggul University•
- Tarumanagara University•Mahendradatta University•

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# PREFACE

Dear Colleagues,

On behalf of the Organizing Committee, I am honored to welcome you to the 7<sup>th</sup> International Seminar on Industrial Engineering and Management (ISIEM). This seminar is organized by the Industrial Engineering Department from seven Universities, namely Trisakti, Esa Unggul, Atma Jaya Jakarta, Al Azhar Indonesia, Pasundan, Tarumanagara and Mahendradatta Universities. The purpose of this seminar is to provide an effective forum for distinguished invited speakers, academicians, engineers, professionals and practitioners coming from universities, research institutions, government agencies and industries to share or exchange their ideas, experience and recent progress in industrial engineering and management and other related fields in dealing with the dynamics and challenges of the 21<sup>st</sup> century. The seminar is also expected to foster networking, collaboration and joint efforts among the conference participants to advance the theory and practice as well as to identify major trends in Industrial Engineering and Management field.

The main theme of this seminar is “**Green Technology on Industrial Engineering, Information and Management**”. Under this theme, we will explore sustainable innovation in industrial technology, information, and management concerning global issues. We also discuss approaches to collect, manage, and use any information efficiently and effectively, thus the results will be able to upgrade industrial competitiveness and value in facing the global challenges in industrial environment.

This year we received 93 paper submissions from various universities, research centers, and its affiliations. The Technical Program Committee accepted 84 selected papers that will be presented in this seminar. The accepted papers are categorized into four groups; Supply Chain Management, Production System, Operation Research, Ergonomic, Industrial Management, Quality Engineering and Management, and Decision Support System and Artificial Intelligent. And finally, the success of this seminar is due to the hard efforts of many people who we gratefully acknowledge. We also thank the authors whose papers are presented, invited keynote speakers, and all parties that we are not able to mention here.

We hope you all will enjoy the three days of discussion through this seminar and enjoy the beauty of Bali Island. We hope to see you again next year, in the 8<sup>th</sup> International Seminar on Industrial Engineering and Management (ISIEM).

Bali, March 11<sup>th</sup>, 2014

Chairman of The 7<sup>th</sup> ISIEM

Nunung Nurhasanah, ST., M.Si

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# AGENDA

## Day 1 (March 11<sup>th</sup>, 2014)

- 18:00 - 18:30 Registration
- 18:30 - 19:30 Dinner
- 19:30 - 19:45 Opening Ceremony: Representation of Al Azhar Indonesia, Esa Unggul, Trisakti, Atma Jaya, Pasundan, Tarumanagara, and Mahendradatta University's greeting
- 19:45 - 21:00 Keynote # 1  
**Dr. Ramesh Shastry**  
**(International Visiting Lecturer of Mahendradatta University)**
- 21:00 - 21:15 Photo Session with all participants

## Day 2 (March 12<sup>th</sup>, 2014)

- 6:30 - 8:00 Breakfast and Registration
- 8:00 - 9:15 Keynote # 2  
**Asst. Prof. Natcha Thawesaengskulthai**  
**(Deputy Dean of Engineering Faculty, Chulalongkorn University, Bangkok, Thailand)**
- 9:15 - 9:30 Coffee and Tea Break
- 9:30 - 12:00 Parallel session #1
- 12:00 - 13:00 Lunch break
- 13:00 - 15:30 Parallel session #2
- 15:30 - 15:45 Coffee and Tea Break
- 18:15 - 20:00 Dinner

## Day 3 (March 13<sup>th</sup>, 2014)

- 6:30 - 8:30 Breakfast
- 8:30 - 10:00 Parallel session #3
- 10:00 - 17:00 City Tour

# PARALLEL SESSION

## MARCH 12<sup>TH</sup> SESSION 1 ROOM 1 (DSS)

Moderator : Iphov Kumala, ST, MSi

Time	Paper	Code	Paper Code
9.30-9.45	HUMAN RESOURCE DECISION SUPPORT SYSTEM DESIGN IN MAINTENANCE DEPARTMENT OF XXL COMPANY USING WATERFALL METHOD Rayinda Pramuditya Soesanto , Amelia Kurniawati, Nia Ambarsari Telkom University	DSS	017
9.45-10.00	DEVELOPMENT OF DECISION SUPPORT SYSTEM FOR SELECTING QUALITY MANAGEMENT SYSTEMS AND MANAGEMENT TOOLS Saranya Sukkarn , Natcha Thawesaengkulthai Chulalongkorn University	DSS	012
10.00-10.15	SIMULATION MODEL DESIGN OF REFUELING SYSTEM AT PERTAMINA ALAM SUTERA GAS STATION Abel Anthony, Eric Jobiliong, Enda D. Layuk Allo Universitas Pelita Harapan	DSS	060
10.15-10.30	HELPDESK SYSTEM DESIGN AND DEVELOPMENT IN A UNIVERSITY BASED ON ITIL V3 FRAMEWORK (CASE STUDY: AL AZHAR INDONESIA UNIVERSITY) Endang Ripmiatin, Arum Fitriati University Al Azhar Indonesia,	DSS	070
10.30-10.45	CARBON MONOXIDE POLLUTION DETECTION AND MEASUREMENT USING KNOWLEDGE-BASED AND PROBABILITY APPROACHES Ferry Wahyu Wibowo, Pandan Pareanom Purwacandra Informatics Engineering, STMIK AMIKOM	DSS	007
10.45-11.00	EXPERT SYSTEM DEVELOPMENT FOR IMPROVING QUALITY AT RICE MILLING UNIT Dedy Sugiarto , Dadang Surjasa, Binti Solihah, Nirdukita Ratnawati, Jimmy Susanto Trisakti University	DSS	035
11.00-11.15	ANALYSIS OF USABILITY OPCS SOFTWARE A TEST TO THE STUDENT Rizky Junianto, Laurence, Agustina Christiani, Helena J. Kristina University of Pelita Harapan	DSS	052
11.15-11.30	HOW RFID TECHNOLOGY SUPPORTS E-BUSINESS PROCESSES Sudarmawan, Ferry Wahyu Wibowo, Rizqi Sukma Kharisma Informatics Engineering, STMIK AMIKOM	DSS	008
11.30-11.45	MANUFACTURING INFORMATION SYSTEM FOR SMALL AND MEDIUM ENTERPRISE (CASE STUDY TEXTILE SME) Nida'ul Hasanati, Munawir Biki, Muhammad Aulia Taqwa, Laksmi Saraswati, Winangsari Pradani, Nunung	DSS	071

**MARCH 12<sup>TH</sup> SESSION 1 ROOM 1 (DSS)**

Moderator : Iphov Kumala, ST, MSi

Time	Paper	Code	Paper Code
	Nurhasanah, Syarif Hidayat University Al Azhar Indonesia,		
11.45-12.00	WASTE REDUCTION IN THE PRODUCTION PROCESS PLATE PRODUCT TYPE Pc 27 C USING VALUE STREAM MAPPING METHOD AT PT XYZ Iphov Kumala Sriwana, Arie Wijaya Esa Unggul University	DSS	086

**MARCH 12<sup>TH</sup> SESSION 1 ROOM 2 (DSS, IM)**

Moderator : Dr. Ir. Triwulandari SD, MM

Time	Paper	Code	Paper Code
9.30-9.45	FRAMEWORK FOR MEASURING KNOWLEDGE MANAGEMENT PERFORMANCE USING KM BALANCE SCORECARD Luciana Andrawina , Amelia Kurniawati Telkom University	DSS	016
9.45-10.00	ANALYSIS OF PHILIPPINES INFORMATION TECHNOLOGY BUSINESS PROCESS OUTSOURCING (IT-BPO) INDUSTRY Jason Baculinao, Yang Ching Chow Chung Yuan Christian University	DSS	050
10.00-10.15	INTEGRATED SYSTEM DESIGN FOR ORDER RELEASE AT MACHINING DEPARTMENT PT. ABC Pratya Poeri Suryadhini, Dida Diah Damayanti, Widia Juliani Telkom University	DSS	025
10.15-10.30	AN ANALYSIS OF SERVICE PERFORMANCE INFLUENCE TOWARDS CUSTOMER SATISFACTION IN SHAPING CUSTOMER LOYALTY (CASE STUDY AT X RESTORANT) Eka KA Pakpahan, Roland YH Silitonga, Metta Erikka. Institut Teknologi Harapan Bangsa	IM	015
10.30-10.45	ETHICAL ASPECTS IN GREEN MARKETING; AN META ANALYSIS APPROACH Erni Rusyani Pasundan University	IM	029
10.45-11.00	BLUE OCEAN STRATEGY WITH CONJOINT ANALYSIS APPROACH TOWARDS THE COOKING SPICE PRODUCTS Tiena Gustina Amran Trisakti University	IM	024
11.00-11.15	DESIGNING BUSINESS STRATEGY TO IMPROVE THE SCALE OF FOOD AND BEVERAGES INDUSTRY IN MOJOKERTO THROUGH INNOVATION WITH CLUSTER APPROACH Sri Gunani Partawi, Anny Maryani, Agung Subyakto Institut Teknologi Sepuluh Nopember	IM	068



**MARCH 12<sup>TH</sup> SESSION 1 ROOM 2 (DSS, IM)**

Moderator : Dr. Ir. Triwulandari SD, MM

Time	Paper	Code	Paper Code
11.15-11.30	IMPLEMENTATION SAK-ETAP, MANAGEMENT CONSULTATION, BUSINESS GOING CONCERN AND EASINESS OF CAPITAL ACQUISITION ON SMALL AND MEDIUM ENTERPRISES (SME's) IN BANDUNG Liza Laila Nurwulan and Budi Septiawan Pasundan University	IM	031
11.30-11.45	BUSINESS MODEL INNOVATION in INDONESIAIAN JAMU COMPANY Jahja Hamdani Widjaja Maranatha Christian University	IM	009
11.45-12.00	PROPOSAL OF KEY PERFORMANCE INDICATOR WITH INTEGRATION OF BALANCED SCORECARD AND PRISM FRAMEWORK (Case Study : PT TU) I Dewa Made Ari Dananjaya, Triwulandari S. Dewayana Trisakti University	IM	076

**MARCH 12<sup>TH</sup> SESSION 1 ROOM 3 (ER, PS)**

Moderator : Ir. Lina Gozali, MM

Time	Paper	Code	Paper Code
9.30-9.45	STATIC BACK STRENGTH - A STUDY AMONG YOUNG ADULTS Anisah. H, Hardianto Iridiastadi, Zulfa Fitri Ikatrinasari Universitas Mercu Buana & Institut Teknologi Bandung	ER	059
9.45-10.00	EFFECT OF THE WORK ENVIRONMENT, LEADERSHIP, WORKPLACE DESIGN, AND WELFARE FACILITIES ON WORK PERFORMANCE Abdul Djalal, Adrianus Ilra, Amalia Azka Rahmayani, Hartomo Islamic University of Indonesia	ER	062
10.00-10.15	DESIGNING ERGONOMIC TOOTHBRUSH, TOOTHBRUSH REFILL, AND TOOTHBRUSH CAP Andriyani Theresia, Novi, Christina Maranatha Christian University,	ER	038
10.15-10.30	INVENTORY DETERMINATION MODEL FOR PACKAGING MATERIALS WITH VARIOUS DEMMAND DATA DISTRIBUTIONS IN CHEMICAL COMPANY Inaki Maulida Hakim, Putri Larassati University of Indonesia	PS	047
10.30-10.45	INVENTORY CONTROL SYSTEM ANALYSIS OF GOODS AT COMPANY X'S MODERN TRADE Victor Suhandi, Lydiawari Silalahi, Vivi Arisandhy Maranatha Christian University	PS	043
10.45-11.00	INVENTORY PLANNING FOR FAST MOVING CONSUMER GOODS USING PERIODIC-REVIEW ORDER-UP-TO-LEVEL (R,S) SYSTEM IN RETAIL X BANDUNG La Nashia, Mira Rahayu, Budi Santosa C, Telkom University	PS	023

**MARCH 12<sup>TH</sup> SESSION 1 ROOM 3 (ER, PS)**

Moderator : Ir. Lina Gozali, MM

Time	Paper	Code	Paper Code
11.00-11.15	PREVENTIVE MAINTENANCE SCHEDULING BASED ON SERVICE CENTER AND CUSTOMER'S PERSPECTIVE (CASE STUDY: CAR TYPE X OF COMPANY Y) Yudha Prasetyawan, Mita Musoffa Asti Institut Teknologi Sepuluh Nopember (ITS)	PS	027
11.15-11.30	PERFORMANCE COMPARISON OF HEURISTIC LOT-SIZING MODELS Jason Baculinao, Hui-Ming Wee, Yang Ching Chow Chung Yuan Christian University Taiwan	PS	051
11.30-11.45	GENERATE AND TEST ALGORITHM DEVELOPMENT FOR JOB SCHEDULING IN PARALLEL MACHINES WHICH CONSIDERING SETUP TIME FOR MINIMIZING TARDINESS AND MINIMIZING MAKESPAN FOR ALTERNATIVE SEQUENCES THAT HAVE SAME TARDINESS Victor Suhandi , Melissa Septina Ismanto Maranatha Christian University	PS	020
11.45-12.00	SCHEDULING ANALYSIS AND METALLURGY TESTING RESOURCE ALLOCATION AT METALLURGY LABORATORY B4T BANDUNG Moh. Syarwani, Wahyukaton, Viani Ezra Azizah Pasundan University	PS	063

**MARCH 12<sup>TH</sup> SESSION 2 ROOM 1 (QC, OR)**

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

Time	Paper	Code	Paper Code
13.00-13.15	APPLICATION OF QUALITY FUNCTION DEPLOYMENT AND SERVQUAL FOR DESIGN SERVICE INNOVATION Waraporn Yothinsirikul, Natcha Thawesaengskulthai Chulalongkorn University	QC	011
13.15-13.30	DESIGN OF QUALITY PROCESS STANDARD BASED ISO 9001:2008 CLAUSE 7.5.1 FOR TRADITIONAL BATIK CAP INDUSTRY Dida D Damayanti , Sri Widaningrum, Luciana Andrawina, Irma Pramudya A Telkom University	QC	040
13.30-13.45	DESIGNING SETTING PARAMETER OF TABLET COMPRESSION PROCESS TO MINIMALIZE WEIGHT VARIATION Teuku Yuri Zagloel, Kinanti Rakayantias University of Indonesia	QC	048
13.45-14.00	QUALITY OF COMPUTER MUSIC USING MIDI LANGUAGE FOR DIGITAL MUSIC ARRANGEMENT Pandan Pareanom Purwacandra , Ferry Wahyu Wibowo Informatics Engineering, STMIK AMIKOM	QC	032

**MARCH 12<sup>TH</sup> SESSION 2 ROOM 1 (QC, OR)**

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

Time	Paper	Code	Paper Code
14.00-14.15	QUALITY IMPROVEMENT EFFORT USING TRIZ METHOD CASE STUDY IN CV 'X', A METALCASTING INDUSTRY Christina Wirawan , Maria Sari Desiana Maranatha Christian University	QC	005
14.15-14.30	PARAMETER IDENTIFICATION OF SCANNING QUALITY IN 3D LASER SCANNER: HARDWARE AND LIGHT INTENSITY SETTINGS Catharina Badra Nawangpalupi, Hanky Fransiscus, Bagus Arthaya, Adiyoga I Putra Catholic University Parahyangan	QC	037
14.30-14.45	THE APPLICATION OF OVERALL EQUIPMENT EFFECTIVENESS (OEE) TO ANALYZE LEAN SIX SIGMA CAPABILITY OF SHRINK LABELS PRODUCTION AT COMPANY X David Sungkono, Yurida Ekawati Ma Chung University	QC	006
14.45-15.00	THE MEASUREMENT OF WORKLOAD AND OPTIMAL NUMBER OF EDUCATION PERSONNEL USING WORK SAMPLING AND TASK PER JOB METHODS (A CASE STUDY AT PT X.) SYAMSUL ANWAR, JASRIL AKADEMI TEKNOLOGI INDUSTRI PADANG	OR	018
15.00-15.15	DEMAND FORECASTING FOR SALES ORDER AND DISTRIBUTION REQUIREMENTS PLANNING SYSTEM (CASE STUDY : IKM XYZ) Winangsari Pradani, Cut Nuraini, Anela Septieni Zulkifli, Nida'ul Hasanati, Nunung Nurhasanah, Syarif Hidayat University Al Azhar Indonesia	OR	072
15.15-15.30	COMPARING TRANSPORTATION COST IN CPO TENDER USING GENETIC ALGORITHM AND OPERATIONS RESEARCH TOOLS Syarif Hidayat, Rizky Betadi Putra University of Al Azhar Indonesia	OR	001

**MARCH 12<sup>TH</sup> SESSION 2 ROOM 2 (PS, ER)**

Moderator : Dr. Lamto Widodo, ST, MT

Time	Paper	Code	Paper Code
13.00-13.15	REENGINEERING PROCESS FOR REDUCING TIME OF PROCUREMENT AND INVENTORY PROCESS IN TELECOMMUNICATION TOWER COMPANY WITH IDEFO TOOLS AND ESIA METHOD Indramawan, Rahmat Nurcahyo, Yadrifil, M.Dachyar University of Indonesia	PS	065
13.15-13.30	MULTI-LEVEL INVENTORY MANAGEMENT CONSIDERING TRANSPORTATION COST AND QUANTITY DISCOUNT Eko Pratomo, Hui Ming Wee, Sukoyo Chung Yuan Christian University	PS	054

**MARCH 12<sup>TH</sup> SESSION 2 ROOM 2 (PS, ER)**

Moderator : Dr. Lamto Widodo, ST, MT

Time	Paper	Code	Paper Code
13.30-13.45	REFURBISHMENT OF USED MACHINE ELEMENTS FOR MAKING 2½ AXES MILLING MACHINE PROTOTYPE Bagus Arthaya, Ali Sadiyoko, Oke Setiawan Parahyangan Catholic University	PS	004
13.45-14.00	THE REDESIGN OF BAJAJ STUDY CASE FOR THE OLD BAJAJ IN JAKARTA Indra Gunara Rochyat, Andre Hambali, Esa Unggul University	ER	079
14.00-14.15	ANALYSIS OF CULTURAL ATTRIBUTE IN PRODUCT DESIGN OF CRAFT TO INCREASE PURCHASE INTENTION Lusia Permata Sari Hartanti, Dian Trihastiuti University of Pelita Harapan	ER	041
14.15-14.30	ANALYSIS AND IMPROVEMENT PROPOSAL OF SDN 7 KIARACONDONG BASED ON DIKNAS AUDIT VIEWED FROM ERGONOMICS ASPECT Dina Magdalena, Elty Sarvia, Winda Halim University of Kristen Maranatha,	ER	046
14.30-14.45	DEVELOPMENT OF MATHEMATICAL MODEL AND SOFTWARE FOR DIGITAL CIRCUMFERENCE ANTHROPOMETRIC MEASUREMENT Benedikta Anna H Siboro , Herianto Riau Kepulauan University	ER	049
14.45-15.00	PSYCHOMOTOR VIGILANCE TASK AS A MEASURE OF PERFORMANCE-BASED FATIGUE Rida Zuraida, Hardianto Iridiastadi Binus University, Bandung Institut of Technology	ER	081
15.00-15.15	PRODUCT CONCEPT OF RECHARGEABLE BATTERY FOR ENVIRONMENTALLY FRIENDLY TOWARD ELECTRONIC COMMUNICATIONS EQUIPMENT TO FACILITATE THE USER Geggy Gamal Surya, Efrhenrycx Esa Unggul University	ER	083
15.15-15.30	DESIGNING OF CARTON BOX STACKING TOOL TO INCREASE THE EFFICIENCY OF POND MACHINE AT PT. SUPREME TIRTA LARISINDO Lamto Widodo, Silvi Ariyanti, Alvin Khumara Tarumanagara University & Mercubuana University	ER	077

**MARCH 12<sup>TH</sup> SESSION 2 ROOM 3 (SCM, IM)**

Moderator : Ir. Lina Gozali, MM

Time	Paper	Code	Paper Code
13.00-13.15	POLICY ANALYSIS ON SMEs VEHICLE COMPONENTS IN ORDER TO IMPROVE ITS SUPPLY CHAIN ABILITY WITH SYSTEM DYNAMICS APPROACH M. Nurman Helmi Pasundan University	SCM	073

**MARCH 12<sup>TH</sup> SESSION 2 ROOM 3 (SCM, IM)**

Moderator : Ir. Lina Gozali, MM

Time	Paper	Code	Paper Code
13.15-13.30	SUPPLIER BUYER RELATIONSHIP SELECTION USING SUPPLY POSITIONING MODEL METHOD Ramadian Puspitasari, Mira Rahayu Telkom University	SCM	022
13.30-13.45	BIO-DIGESTER INSTALLATION PROGRAM TO IMPROVE ENERGY SECURITY: INITIATING VALUE CHAIN MODEL FOR DAIRY FARMERS IN CIATER Catharina Badra Nawangpalupi, Meity Martaleo, Loren Pratiwi, Yani Herawati Catholic University Parahyangan	SCM	067
13.45-14.00	STRATEGIC PROCESS DESIGN FOR FISH – BASED SMEs Sitnah Aisyah Marasabessy Ambon University of Darussalam	IM	045
14.00-14.15	CUSTOMER CRITERIA ANALYSIS FOR EDUCATIONAL ORGANIZATION DESIGN Hartomo, Catur Siwi Handayaningtyas Islamic University of Indonesia	IM	061
14.15-14.30	CRM DIMENSIONAL ANALYSIS AND ANP METHOD FOR SUB-CONTRACTOR COMPANY OF OIL AND GAS INDUSTRY IN ORDER TO REDUCE CUSTOMER COMPLAINTS Doddy Prasetyo Nugroho, Rahmat Nurcahyo, Yadrifil, M.Dachyar University of Indonesia	IM	064
14.30-14.45	HOW TO OBTAIN STUDENTPRENEURSHIP THROUGH ENTREPRENEURSHIP-BASED CURRICULUM JajaSuteja Pasundan University	IM	030
14.45-15.00	HIGHER EDUCATION INSTITUTION XYZ PERFORMANCE MEASUREMENT USING MBCfPE BASED ON KPKU-BUMN APPROACH Sugih Arijanto, Ambar Harsono Institut Teknologi Nasional (Itenas) Bandung; Indonesia Quality Award (IQA) Examiners; KPKU-BUMN Evaluator (1)	IM	053
15.00-15.15	ANALYSIS OF THE RELATIONSHIP BETWEEN LECTURER TEACHING METHOD FOR QUANTITATIVE COURSES AND STUDENTS' LEARNING MOTIVATION (Case Study: Industrial Engineering Department, Maranatha Christian University, Bandung-Indonesia) Yulianti, Jimmy Gozaly Maranatha Christian University	IM	010
15.15-15.30	BUSINESS PROCESS IMPROVEMENT: ORDER FULFILLMENT PROCESS Vivi Triyanti, Savina Salim Atma Jaya Catholic University of Indonesia	IM	085

**MARCH 13<sup>TH</sup> SESSION 3 ROOM 1 (QC, PS)**

Moderator : Dr. Rina Fitriana, ST, MM

Time	Paper	Code	Paper Code
8.30-8.45	DESIGN OF INSPECTION AND CLASSIFICATION PROTOTYPE FOR CERAMIC TILES BASED ON THE DIGITAL IMAGE PROCESSING Yudha Prasetyawan, Maria Christina Institut Teknologi Sepuluh Nopember	QC	026
8.45-9.00	PARTICLE SWARM OPTIMIZATION BASED ON BOTTLENECK MACHINE FOR JOBSHOP SCHEDULING Rahmi Maulidya Trisakti University	PS	078
9.00-9.15	DYNAMIC MODIFIED SPANNING TREE ALGORITHM FOR SINGLE-ROW DYNAMIC FACILITY LAYOUT PROBLEM Yogi Yogaswara Pasundan University	PS	074
9.15-9.30	INCREASE OF EFFICIENCY OF WORKSTATION DESIGN THROUGH PRODUCTION SCHEDULING FOR MOSLEM CLOTHES IN SME "XYZ" Nunung Nurhasanah, Laksmi Saraswati, Syarif Hidayat, Nida'ul Hasanati, Winangsari Pradani, Muhammad Aulia Taqwa, Anela Septiani Zulfikar, Cut Nuraini, Munawir Biki University of Al-Azhar Indonesia	PS	028
9.30-9.45	MACHINE SCHEDULING PROPOSED FOR MINIMIZING MAKESPAN AT PT ADIPERKASA ANUGRAH PRATAMA Lina Gozali , Silvi Ariyanti , Febrina Lesley Natali Tarumanagara University	PS	002
9.45-10.00	IMPROVEMENT WORK EFFICIENCY AND MANUFACTURING PRODUCTIVITY AT PT. XYZ WITH LINE BALANCING ANALYSIS Arief Suwandi, Prianggara NAL Esa Unggul University	PS	090
10.00-10.15	IMPLEMENTATION SIX SIGMA AND DATA MINING TO IMPROVE DIE CASTING PRODUCTION PROCESS AT PT. AB Rina Fitriana, Johnson Saragih, Sitta Sarasaty Trisakti University	QC	058
10.15-10.30	SELECTION OF OPEN SOURCE ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM FOR FURNITURE MANUFACTURING SMEs AS A COMPETITIVE STRATEGY Wiwid Dolianto, Zulfa Fitri Ikatrinasari University of Mercu Buana	DSS	080
10.30-10.45	QUALITY STUDY OF WASTE WATER PROCESSING I Nyoman Sudipa Mahendradatta Mercu Buana	QC	093

**MARCH 13<sup>TH</sup> SESSION 3 ROOM 2 (DSS, IM)**

Moderator : Niken Parwati, ST, MM

Time	Paper	Code	Paper Code
8.30-8.45	KNOWLEDGE MANAGEMENT IMPLEMENTATION WITH SECI MODEL APPROACH IN SARINAH ORGANIC FARMER GROUPS Dadang Surjasa, Dedy Sugiarto , Brian Arif Jingga, Binti Solihah, Nirdukita Ratnawati Trisakti University	DSS	033
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8.45-9.00	STRUCTURE AND ACTOR ANALYSIS IN DKI JAKARTA RICE SUPPLY CHAIN Dadang Surjasa , Dedy Sugiarto, Nirdukita Ratnawati , Binti Solihah Trisakti University	SCM	034
9.00-9.15	CAPABILITY PROCESS ANALYSIS WELDING MACHINE HEAD CAP MODIFIED Siti Rohana Nasution, Adham Chalid Rizqie Pancasila University	QC	039
9.15-9.30	SIX SIGMA IMPLEMENTATION AS PREPROCESSOR TO IMPROVE SERVICE QUALITY IN UNIVERSITIES Fajar Kurniawan Saint Mary's University of Hongkong	QC	087
9.30-9.45	IMPLEMENTATION OF SERVQUAL AND TRIZ METHOD TO IMPROVE SERVICE QUALITY (CASE STUDY AT PT. JNE) Nofi Erni, Iphov Kumala S, Wira Tri Yolanda Esa Unggul University & Tarumanagara University	QC	088
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