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11TH INTERNATIONAL SEMINAR ON INDUSTRIAL ENGINEERING & MANAGEMENT

PROCEEDING 11th ISIEM 2018



*"Technology & Innovation Challenges
Towards Industry 4.0 Era"*

NOV
27-29

MAKASSAR

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11th ISIEM

The 11th International Seminar on
Industrial Engineering and Management

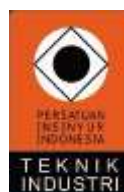
Swiss-Belhotel Makassar, Sulawesi Selatan-Indonesia
November 27 – 29, 2018

Organized by :

Industrial Engineering Department of

- Universitas Pasundan • Universitas Tarumanagara •
- Universitas Trisakti • Al Azhar Indonesia University •
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PREFACE

*Bismillahirrahmanirrahim,
Assalamu'alaikum Warrahmatullah Wabarrakatuh,*

This issue is published in line with the Eleventh International Seminar on Industrial Engineering and Management (11th ISIEM). The articles cover a broad spectrum of topics in Industrial Engineering and Management, which are Quality Engineering Management, Decision Support System and Artificial Intelligent, Ergonomics, Supply Chain Management, Production System, Operation Research, and Industrial Management. These articles provide an overview of critical research issues reflecting on past achievements and future challenges. Those papers were selected from 120 abstracts, and we send these papers to IOP to be published there as an Open Access Proceeding. This statistic shows the high competition to get published on this proceeding. This issue and seminar become special as more delegates come and join from various country as well as universities. We host 90 delegates both from abroad and local.

The 11th ISIEM is hosted by seven universities, which are Universitas Pasundan, Universitas Esa Unggul, Universitas Trisakti, Universitas Tarumanagara, Universitas Al-Azhar Indonesia, Atma Jaya Catholic University of Indonesia, and Universitas Pancasila.

This is the thirteenth years of the collaboration of those universities, and the second time we had MOU with IOP in United Kingdom to publishing the papers that is indexed by Scopus.

In this occasion, let us give special thanks to Prof. Dr. Md. Mamun Habib, from BRAC Business School (BBS), BRAC University, Bangladesh, Editor-in-Chief, International Journal of Supply Chain Management (IJSCM) UK, Prof. Dr. Dzuraidah Abd. Wahab from Center for Integrated Design of Advanced Mechanical Systems Faculty of Engineering and Built Environment, University Kebangsaan Malaysia, for their contribution as keynote speakers. We are also grateful to all reviewers, for their commitment, effort and dedication in undertaking the task of reviewing all of the abstracts and full papers. Reviewing a large number of submissions in a relatively short time frame is always challenging. Without their help and dedication, it would not be possible to produce this proceeding in such a short time frame. I highly appreciate all members of committees (advisory, steering, and organizing committees) for mutual efforts and invaluable contribution for the success of seminar.

Wassalamu'alaikum Warrahmatullah Wabarrakatuh.

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AGENDA

November 27, 2018

- 18:00 - 18:30 Registration
18:30 - 19:30 Dinner
19:30 - 20:00 Opening Ceremony: Representation of Universitas Pasundan, Al Azhar Indonesia University, Universitas Trisakti, Atma Jaya Catholic University of Indonesia, Universitas Tarumanagara, Universitas Esa Unggul, and University of Pancasila's greeting
20:00 - 21:15 Keynote Speech # 1
Prof. Dr. Md. Mamun Habib
BRAC Business School, BRAC University, Bangladesh
Moderator: Dr. Ir. Syarif Hidayat, M.Eng.Sc, M.M.
21:15 - 21:30 Photo Session

November 28, 2018

- 06:30 - 08:00 Breakfast and Registration
08:00 - 09:15 Keynote Speech # 2
Prof. Dr. Dzuraidah Abd. Wahab
**Center for Integrated Design of Advanced Mechanical System -
Faculty of Engineering and Built Environment, University
Kebangsaan Malaysia**
Moderator: Dr. Iphov Kumala Sriwana, S.T., M.Si., IPM
09:15 - 09:30 Coffee and Tea Break
09:30 - 12:10 Parallel session #1
12:10 - 13:00 Lunch break
13:00 - 15:40 Parallel session #2
15:40 - 16:00 Coffee and Tea Break
16:00 - 18:40 Parallel session #3
18:40 - 21:00 Dinner

November 29, 2018

- 06:00 - 08:00 Breakfast
08:00 - 21:00 City Tour

November 30, 2018

- 06:30 - 10:00 Breakfast
- 12:00 Check Out

KEYNOTE SPEECH

#1

Prof. Dr. Md. Mamun Habib

BRAC Business School, BRAC University, Bangladesh

Visiting Scientist, University of Texas - Arlington (UTA), USA

Editor-in-Chief, International Journal of Supply Chain Management (IJSCM), UK



#2

Prof. Dr. Dzuraidah Abd. Wahab

Center for Integrated Design of Advanced Mechanical System

Faculty of Engineering and Built Environment

University Kebangsaan Malaysia



PARALLEL SESSION

SESSION 1 ROOM 1

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

TIME	PAPER	PAPER NO	FIELD
9:30 - 9:40	Schedule risk analysis by different phases of construction project using CPM-PERT and Monte-Carlo simulation <i>Andrie Pasca Hendradewa.</i> Universitas Islam Indonesia	38	OR
9:40 - 9:50	Planting system modeling of chrysanthemum seedling plants stock for profit optimization <i>Anita Ilmaniati and Dani Hamdan Taufik.</i> Suryakencana University	50	OR
9:50 - 10:00	Analysis daily newspaper distribution in Solo by agent-based simulation <i>Izatul Fitria Febriandini, Yuniaristanto, Wahyudi Sutopo and Muhammad Hisjam.</i> Sebelas Maret University	7	OR
10:00 - 10:10	Improvement route for distribution solutions MDVRP (Multi Depot Vehicle Routing Problem) using Genetic algorithm (case study: PT. KM) <i>Rina Fitriana, Parwadi Moengin and Utami Kusumaningrum.</i> Universitas Trisakti	116	OR
10:10 - 10:20	Multi responses optimization for the sugar content and microbial impurities of carrot syrup <i>O Isabella and Yurida Ekawati.</i> Universitas Ma Chung	14	OR
10:20 - 10:30	Domino algorithm: a novel constructive heuristics for travelling salesman problem <i>Asrul Harun Ismail</i> University of Birmingham	119	OR
10:30 - 10:40	Integer Linear Programming Model and Algorithm to Integrate Heuristics Scheduling EDD, Inventory Control and Distribution Problems in a Modular Production System <i>Parwadi Moengin, Elfira Febriani Harahap, Sucipto Adisuwiryo, and Weny Ango Fransiska</i> Universitas Trisakti	79	OR
10:40 - 10:50	Waste assessment using lean manufacturing in rubber production <i>Elita Amrina, Nilda Tri Putri and Dwara Mitha Anjani.</i> Universitas Andalas	56	PS
10:50 - 11:00	Integration of lean manufacturing and group technology layout to increase production speed in the manufacture of furniture <i>Ukurta Tarigan, Uni Pratama P. Tarigan and Vincent Sukirman.</i> Univeristas Sumatera Utara	84	PS
11:00 - 11:10	Flow shop scheduling with drum-buffer-rope and CDS algorithm to minimize lateness and work in process at PT. AKS <i>Akma Septia Viady, Praty Poeri Suryadhini and Meldi Rendra.</i> Telkom University	92	PS

SESSION 1 ROOM 1

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

TIME	PAPER	PAPER NO	FIELD
11:10 - 11:20	A comparison of forecasting building material inventory with Back propagation Neural Network and Arima <i>Iwan Aang Soenandi and Cynthia Hayat.</i> Krida Wacana Christian University	16	PS
11:20 - 11:30	The applications of Cobb-Douglas Production Function in remanufacturing industry <i>Docki Saraswati, Debbie Kemala Sari and Dina Hapsari.</i> Universitas Trisakti	77	PS
11:30 - 11:40	The Relation of Indonesia's strategic industry principles and supply chain operations reference (SCOR) <i>Joko Sulistio and Rizal Bayu Al Fatih.</i> Universitas Islam Indonesia	91	SCM
11:40 - 11:50	A framework for the impact of lean six sigma on supply chain performance in manufacturing companies <i>Gihon Davilia Pardamean Gultom and Eric Wibisono.</i> University of Surabaya	106	SCM
11:50 - 12:00	Development of vendor management and e-procurement system using android platform <i>Bendy Angrian and Taufik Roni Sahroni.</i> Bina Nusantara University	28	SCM
12:00 - 12:10	Measurement of human resource performance and making proposed improvement with human resources scorecard approach and OMAX (objective matrix) tools in production division in PT. OCM <i>Lilyana Jap, Ahmad, Lamto Widodo, Lina Gozali dan Jesen Hardi</i> Universitas Tarumanagara	22	IM

SESSION 1 ROOM 2

Moderator: Nunung Nurhasanah, S.T., M.Si

TIME	PAPER	PAPER NO	FIELD
9:30 - 9:40	A Fuzzy Analytic Hierarchy Process approach for determining the criteria success factors of MRT parts' e-procurement: the case of Jakarta MRT project <i>Tony Hartanto, Meriastuti Ginting and Oki Sunardi.</i> Krida Wacana Christian University	15	DA&IS
9:40 - 9:50	Information system design using labor productivity measurement for construction <i>Abdullah 'Azzam, Suci Miranda and Sri Indrawati.</i> Universitas Islam Indonesia	90	DA&IS
9:50 - 10:00	Risk management analysis using FMECA and ANP methods in the supply chain of wooden toy industry <i>Widya Nurcahayanty Tanjung, Saaras Ayu Atikah, Syarif Hidayat, Endang Ripmiatin, Selvy Sekar Asti and Ratu Siti Khodijah.</i> University of Al Azhar Indonesia	80	DA&IS
10:00 - 10:10	Supply chain risk management analysis using the development of fuzzy reasoning methods and analytical network process (ANP) at wooden toy industries <i>Widya Nurcahayanty Tanjung, Selvy Sekar Asti, Syarif Hidayat, Endang Ripmiatin, Saaras Ayu Atikah and Ratu Siti Khodijah.</i>	81	DA&IS

SESSION 1 ROOM 2

Moderator: Nunung Nurhasanah, S.T., M.Si

TIME	PAPER	PAPER NO	FIELD
	University of Al Azhar Indonesia		
10:10 - 10:20	Best concept selection for dry-soybean cracking machine process optimization by TOPSIS method <i>Rino Andias Anugraha, Nadiah Mumtaz Darmawan and Muhamad Iqbal.</i> Telkom University	12	DA&IS
10:20 - 10:30	Development of Information Systems as a Means to Improve Sharia Cooperative Services <i>Riri Safitri, Dody Haryadi, Endah Sulisthyani and Vareza Noorliko.</i> University of Al Azhar Indonesia	114	DA&IS
10:30 - 10:40	Decision Making Strategy for Decreasing The Potential Hazards of Work Accidents at Division R&D Using SWOT and AHP Methods <i>Dino Rimantho, Annisa Elistiani, Sambas Sundana and Anggina Sandy Sundari.</i> Pancasila University	48	DA&IS
10:40 - 10:50	Taguchi experimental design to optimize the sugar content of candied carrot <i>Maria Notowidjaja, Yurida Ekawati and Sunday Noya.</i> Ma Chung University	13	QM
10:50 - 11:00	Mapping of noise levels made by drilling machines on projects Y using contour zone method <i>Bambang Cahyadi and Gita Timang.</i> Pancasila University	107	QM
11:00 - 11:10	Concept Selection of Dry-Soybean Cracking Machine for Process Optimization using TOPSIS (Technique for order of preference by similarity to ideal solution) <i>Rino Andias, Muhamad Yogaswara Wiraditya, Muhammad Iqbal, and Nadiah Mumtaz Darmawan</i> Telkom University	19	QM
11:10 - 11:20	Integrated logistics and transportation routing in rural logistics system <i>Tuti Sarma Sinaga and Senator Nur Bahagia.</i> USU	23	SCM
11:20 - 11:30	Cooperation between power plant in East Kalimantan by integrating renewable energy power plant <i>Muslimin, Willy Tambunan and Wahyuda.</i> Universitas Mulawarman	11	SCM
11:30 - 11:40	Supply chain risk management on wooden toys industries by using House of Risk (HOR) and Analytical Network Process (ANP) method <i>Widya Nurcahayanty Tanjung, Ratu Siti Khodijah, Syarif Hidayat, Endang Ripmiatin, Saaras Ayu Atikah and Selvy Sekar Asti.</i> University of Al Azhar Indonesia	85	SCM
11:40 - 11:50	Risk mitigation for agricultural products distribution in agro-business Terminal Mantung, Kabupaten Malang <i>Teguh Oktiarto and Andi Haifa Kania Nadira.</i> Universitas Ma Chung Malang	87	SCM
11:50 -	Multi echelon distribution model for electric market deregulation collaboration strategy in East Kalimantan	46	SCM

SESSION 1 ROOM 2**Moderator: Nunung Nurhasanah, S.T., M.Si**

TIME	PAPER	PAPER NO	FIELD
12:00	<i>Irwan Gani, Wahyuda, Budi Santosa and Muliati.</i> Universitas Mulawarman		
12:00 - 12:10	Analysis of supply chain network of FBS production in small and medium textile and textile product (TTP) industry <i>Nunung Nurhasanah, Marcia Devana, B Aribowo, R Safitri, B Samiono, CF Luthfia, P Kalifa, S W Fauzia and A Supriyanto.</i> University of Al Azhar Indonesia	58	SCM

SESSION 1 ROOM 3**Moderator: Dr. Ir. Syarif Hidayat, M.Eng.Sc, M.M.**

TIME	PAPER	PAPER NO	FIELD
9:30 - 9:40	The effect of country of origin and need for uniqueness on female customers purchase intention <i>Luthfia Puspitasari and Gunawan Alif</i> University of Indonesia	127	IM
9:40 - 9:50	Utilizing project management software in project scheduling: a case study <i>Suci Miranda and Muchamad Sugarindra.</i> Universitas Islam Indonesia	43	OR
9:50 - 10:00	Measuring acceptance level of online service for business permit in Surabaya using Technology Acceptance Model <i>I Made Ronyastra, Gunawan and Erlangga Kharisma Muhammad.</i> Universitas Surabaya	83	QM
10:00 - 10:10	Recommendation for marketing communication program of X Natural Skin Care Clinic, Cikupa–Tangerang. <i>Sesilia Michelle and Marsellinus Bachtiar.</i> Atma Jaya Catholic University of Indonesia	112	IM
10:10 - 10:20	Analyze of mitigation waste in Reconditioning Process of Iron Drum with Lean Six Sigma (Case Study at PT Mulya Adhi Paramita) <i>Ahmad, Lilyana Jap, Lamto Widodo, Lina Gozali and Aldian Maryadi</i> Tarumanagara University	21	IM
10:20 - 10:30	Competency measurement instrument design for maintenance staff of electronical expertise with SECI method <i>Agisni, Rayinda Pramuditya Soesanto, Amelia Kurniawati, Nia Ambarsari and Luciana Andrawina.</i> Telkom University	10	QM
10:30 - 10:40	The new management system ISO 21001:2018: what and why educational organizations should adopt it <i>Eric Wibisono</i> University of Surabaya	96	IM
10:40 - 10:50	Designing self-assessment tool for library performance measurement adopting Malcolm Baldrige framework (case study: central library of Andalas University) <i>Nilda Tri Putri, Desto Jumeno, Henmaidi Alfian, Eri Wirdianto, Prima Fithri and Fitryani Zulkhaira.</i> Andalas University	18	IM
10:50 -	Competitiveness model for ecotourism: a case study in Bogor Botanical Garden	111	IM

SESSION 1 ROOM 3

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

TIME	PAPER	PAPER NO	FIELD
11:00	<i>Gadiah Ranti, Linda Theresia, Silvia Mahardika and Ramon Bangun.</i> Institut Teknologi Indonesia		
11:00 - 11:10	Factors driving teacher's innovation: a case study at public high schools in Tangerang Selatan, Indonesia <i>Linda Theresia, Abdul Haris Lahuddin and Ramon Bangun.</i> Institut Teknologi Indonesia	34	IM
11:10 - 11:20	Strategy for developing micro small medium enterprise clusters using business model canvas and manufacturing system design <i>Yudha Prasetyawan, Imam Baihaqi, Bustanul Arifin Noer, Harimuti Adly Nindyanto and Fitriana Kartikasari.</i> Institut Teknologi Sepuluh Nopember	71	IM
11:20 - 11:30	Design of job scheduling system and software for packaging process with SPT, EDD, LPT, CDS and NEH algorithm at PT. ACP <i>Lina Gozali, Vincentius Kurniawan and Siti Rohana Nasution.</i> Tarumanagara University	24	PS
11:30 - 11:40	Implementation of Material Requirement Planning (MRP) on raw material order planning system for garment industry <i>Nidaul Hasanati, Efrizka Permatasari, Nunung Nurhasanah and Syarif Hidayat.</i> UIN Syarif Hidayatullah	115	PS
11:40 - 11:50	Advanced ERP Application for Marine Transportation Industry in the South Asia Pacific Country: A Case Study <i>Lalu Tri Wijaya Nata Kusuma, Jun-Der Leu, and Fu-Shiang Tseng</i> University of Brawijaya	49	PS
11:50 - 12:00	Design and improvement layout of a production floor using Automated Layout Design Program (ALDEP) and Craft algorithm at CV. Aji Jaya Mandiri <i>Didien Suhardini and Sarah Dian Rahmawati.</i> Universitas Trisakti	102	PS
12:00 - 12:10	Applying value stream mapping tools and kanban system for waste identification and reduction (case study: a basic chemical company) <i>Wilson Kosasih, Iphov Kumala Sriwana, Evlina C. Sari and Carla Olyvia Doaly.</i> Universitas Tarumanagara	55	PS

SESSION 2 ROOM 1

Moderator: Kirana Rukmayuninda Ririh, S.T., M.T.

TIME	PAPER	PAPER NO	FIELD
13:00 - 13:10	Situation awareness analysis on motorcycle riders using quantitative analysis of Situational Awareness <i>Hartomo Soewardi and Amalia Diah Ayu Kiranti.</i> Islamic University of Indonesia	61	ER&PD
13:10 - 13:20	Measuring influence from safety climate to safety behavior in bus rapid transit drivers <i>Dian Mardi Safitri, Winnie Septiani and Anisa Mediana.</i> Universitas Trisakti	2	ER&PD

SESSION 2 ROOM 1**Moderator: Kirana Rukmayuninda Ririh, S.T., M.T.**

TIME	PAPER	PAPER NO	FIELD
13:20 - 13:30	Design of wood pellet trolley using Finite Element Method (FEM) and Design for Assembly (DFA) approach at PT. Perkebunan Nusantara VIII Ciater <i>Riko Risqullah Putra, Mira Rahayu, Sri Martini, and M Ihsan Kurniawan</i> Telkom University	4	ER&PD
13:30 - 13:40	Development of laboratory website with usability design and testing participatory <i>Salaman Firdaus, Amarria Dila Sari and Muhammad Ragil Suryoputro.</i> Islamic University of Indonesia	86	ER&PD
13:40 - 13:50	Design of wood pellets carrier using Ergonomic Function Deployment (EFD) approach to increase productivity of work: a research at PTPN VIII Ciater <i>Windi Robbania Pradani, Mira Rahayu, Sri Martini, and M Ihsan Kurniawan</i> Universitas Telkom	5	ER&PD
13:50 - 14:00	Failure Mode and Effect Analysis (Fuzzy FMEA) implementation for forklift risk management in manufacturing company PT. XYZ <i>Muhammad Ragil Suryoputro, Khairizzahra, Amarria Dila Sari and Nawang Wahyu Widiatmaka.</i> Universitas Islam Indonesia	95	ER&PD
14:00 - 14:10	Workplace ergonomic risk assessment toward small-scale household business <i>Dessi Mufti, Aidil Ikhsan and Tri Marta Putri.</i> Universitas Bung Hatta	20	ER&PD
14:10 - 14:20	Analysis of double Indian ballbreaker net sorter machine based on overall equipment effectiveness method cases in tea plantation plants <i>Judi Alhilman, Aji Pamoso and Ahmad F. Abdillah.</i> Telkom University	27	PS
14:20 - 14:30	Lean Project Management Using Fabrication Manufacturing StorageTank Cap <i>Tiena Gustina Amran, Devi Saraswati, and Elfira Febriani Harahap</i> Universita Trisakti	57	PS
14:30 - 14:40	Line balancing application analysis of generator production process in DPG Inc. <i>Salsabila Alif and Budi Aribowo.</i> Universitas Al Azhar Indonesia	82	PS
14:40 - 14:50	Design of computer aided process planning system for holster mold at PT. Carnegie Universal Industries <i>Amal Witonohadi, Nanang Ali Sutisna, and Martulan Suryanto Naibaho.</i> Universitas Trisakti	100	PS
14:50 - 15:00	Line balancing with reduced number of operator: a productivity improvement <i>Achad Hasta Muhammad and Harwati Soetanto</i> Universitas Islam Indonesia	94	PS

SESSION 2 ROOM 1

Moderator: Kirana Rukmayuninda Ririh, S.T., M.T.

TIME	PAPER	PAPER NO	FIELD
15:00 - 15:10	Maintenance management improvement based on reliability centered maintenance II in energy generating industries <i>Moses Laksono Singgih, Yudha Prasetyawan, Sutikno, Dody Hartanto, Felicius Rindy Kurniawan and Winahyu Tyas Wicaksana.</i> Institut Teknologi Sepuluh Nopember	73	PS
15:10 - 15:20	Inventory level optimization of raw materials for ready-made garment industry X PTY LTD using Mamdani method of Fuzzy Interference System <i>Nunung Nurhasanah, Syita Wida Fauzia, B Aribowo, R Safitri, B Samiono, CF Luthfia, M Devana, P Kalifa, A Supriyanto</i> University of Al Azhar Indonesia	47	PS
15:20 - 15:30	Simulation model development for determination of components production quantity and lead time reduction in mass customization of single production stage <i>Muhammad Ridwan Andi Purnomo and Riadho Clara Shinta.</i> Universitas Islam Indonesia	120	PS
15:30 - 15:40	Workload analysis of chemical analyst at analytical research laboratory PT. UPA-Orang Tua Group <i>Nur Yulianti Hidayah, Irowati Purwaningsih, and Kirana R Ririh</i> Pancasila University	51	ER&PD

SESSION 2 ROOM 2

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

TIME	PAPER	PAPER NO	FIELD
13:00 - 13:10	The enhancement of education and industry alignment using Quality Function Deployment <i>Udisubakti Ciptomulyono, Yudha Prasetyawan, Elisabet Bertania Cahyaningtias and Winahyu Tyas Wicaksana.</i> Institut Teknologi Sepuluh Nopember	74	IM
13:10 - 13:20	Non-technical enablers to digital manufacturing implementation and industrial IOT implementation readiness: a literature review <i>Oki Sunardi, Meriastuti Ginting and Cynthia Hayat.</i> Krida Wacana Christian University	32	IM
13:20 - 13:30	Determining production cost of goyor woven fabric using full costing method to set the selling price: a case study <i>Pungki Mita, Eko Liquiddanu, Wayan Suletra, Muhammad Hisjam and Nanang Rizali.</i> Sebelas Maret University	67	IM
13:30 - 13:40	Analysis of influence of the PPK programs on tenants' business success <i>Niken Parwati and Astri Wibowo.</i> Universitas Al Azhar Indonesia	72	IM
13:40 - 13:50	Understanding mental model of Islamic banking system using System Dynamics <i>Nur Atikah, Akhmad Hidayatno and Komarudin.</i> University of Indonesia	89	IM

SESSION 2 ROOM 2

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

TIME	PAPER	PAPER NO	FIELD
13:50 - 14:00	Feasibility analysis on the development of steel sheet zinc plated and galvalum production factory at PT. S Steel Factory <i>Audira Zuraida Rahardja, Endang Chumaidiyah and Wawan Tripiawan.</i> Telkom University	9	IM
14:00 - 14:10	Improving the quality of MSMEs cluster products with Quality Function Deployment <i>Bustanul Arifin Noer, Imam Baihaqi, Yudha Prasetyawan, Harimuti 'Adly Nindyanto and Fitriana Kartikasari.</i> Institut Teknologi Sepuluh Nopember	70	QM
14:10 - 14:20	Design of flat shoes quality control system using PDCA (case study at PT DAT) <i>Debbie Kemala Sari, Dorina Hetharia, Docki Saraswati and Rania Marizka.</i> Universitas Trisakti	59	QM
14:20 - 14:30	Effects of cocoa clones and fermentation times on physical and chemical characteristics of cocoa beans (Theobroma cacao L.) <i>Asma Assa, Rosniati and Muh. Ruslan Yunus.</i> Ministry of Industry	104	QM
14:30 - 14:40	Quality and reliability engineering in service industry: a proposed alternative improvement framework <i>Mochammad Arbi Hadiyah, Rahman Dwi Wahyudi, Yenny Sari and Evy Herowati.</i> Universitas Surabaya	76	QM
14:40 - 14:50	Assistance program for the implementation of ISO 9001: 2015 case study of Telkom junior high school <i>Yati Rohayati and Kartika Sari</i> Telkom University	64	QM
14:50 - 15:00	Value Engineering towards the design of bread production process tools <i>Ayu Bidiawati, Inna Kholidasari and Bintang Manggala Elani</i> Universitas Bung Hatta Padang	97	QM
15:00 - 15:10	Measurement and proposal of improving marketing process to improve the quality of aftersales services with Fuzzy Quality Function Deployment and data mining methods in OV Agency <i>Rina Fitriana, Wawan Kurniawan and Muhammad Rizqi Anwar.</i> Universitas Trisakti	53	QM
15:10 - 15:20	Analyze of mitigation waste in reconditioning process of iron drum with lean six sigma (Case study at PT. Mulya Adhi Paramita) <i>Ahmad M, Lilyana Jap, Lamto Widodo, Lina Gozali and A Maryadi</i> Tarumanagara University	21	QM
15:20 - 15:30	Analysis of Increasing Quality of Surfactant Powder at Oversize Parameter Using PDCA and FMEA in PT BCCI <i>Rini Prasetyani, Ahmad Taufiqul Huda and Desinta Rahayu Ningtyas.</i> Pancasila University	65	QM

SESSION 2 ROOM 3

Moderator: Dino Rimantho, S.T., M.T.

TIME	PAPER	PAPER NO	FIELD
13:00 - 13:10	Design of Dust Collector on Sorting Machine Vibro Mesh Type using Design fo Assembly (DFA) Approach with Bootroyd and Dewhurst Method in PT. Perkebunan Nusantara VIII Ciater <i>Christy Ardyanto Gulo, Mira Rahayu, Sri Martini, and M Ihsan Kurniawan</i> Telkom University	3	ER&PD
13:10 - 13:20	An initial study into Indonesian consumer awareness of the ergonomic product <i>Gradiyan Budi Pratama, Nadira Nurfitrisari and Ari Widyanti.</i> Institut Teknologi Bandung	37	ER&PD
13:20 - 13:30	Selection process of sustainable production indicators using Eco-quality Function Deployment <i>Pregiwati Pusporini and Iwan Vanany.</i> University of Muhammadiyah Gresik	42	ER&PD
13:30 - 13:40	The survey on the perception of safety and security culture for nuclear workers <i>Atyanti Prabaswari and Rini Dharmastiti.</i> Universitas Islam Indonesia	39	ER&PD
13:40 - 13:50	The mental workload analysis of staff in study program of private educational organization <i>Atyanti Prabaswari, Chancard Basumerda and Bagus Wahyu Utomo.</i> Universitas Islam Indonesia	40	ER&PD
13:50 - 14:00	Internet addiction among Indonesia university students: musculoskeletal symptoms, physical and psychosocial behavior problems <i>Gradiyan Budi Pratama and Ari Widyanti.</i> Institut Teknologi Bandung	35	ER&PD
14:00 - 14:10	Design of the Kansei board game to motivate the elementary school student in learning English <i>Hartomo Soewardi and Selna Shalawati.</i> Islamic University of Indonesia	30	ER&PD
14:10 - 14:20	Analysis of machine maintenance processes by using FMEA method in the sugar industry <i>Hartomo Soewardi and Siska Ari Wulandari.</i> Islamic University of Indonesia	62	ER&PD
14:20 - 14:30	Empowering product development through creative culinary house design <i>Yudha Prasetyawan, Mokhammad Suef, Hari Supriyanto and Intan Oktasari Kusuma Wardani.</i> Institut Teknologi Sepuluh Nopember	69	ER&PD
14:30 - 14:40	Design of tofu cutting tools to improve repetitive tasks using OCRA <i>Benedikta Anna Haulian Siboro, Vera Methalina Afma, Annisa Purbasari and M Qodri Kasim.</i> Universitas Riau Kepulauan	101	ER&PD
14:40 - 14:50	Designing technical specifications for goyor woven fabric as material for civil servant official uniforms using Quality Function Deployment and Conjoint Analysis	66	ER&PD

SESSION 2 ROOM 3

Moderator: Dino Rimantho, S.T., M.T.

TIME	PAPER	PAPER NO	FIELD
	<i>Delta Refinda, Eko Liquiddanu, I Wayan Suletra, Wahyudi Sutopo and Murman Budijanto.</i> Sebelas Maret University		
14:50 - 15:00	The design of material transporter for paper sack in packaging to decrease the risk of musculoskeletal disorders using Ergonomic Function Deployment (EFD) approach: a research at PT. Perkebunan Nusantara VIII Ciater, west java <i>Muhammad Ikhsan Kurniawan, Mira Rahayu and Sri Martini.</i> Universitas Telkom	6	ER&PD
15:00 - 15:10	Estimating the cost of unreliability in tea plantation factory for sustainable production <i>Judi Alhilman and Aji Pamoso.</i> Telkom University	54	IM
15:10 - 15:20	Superior Agriculture Business Sector Development for multi region <i>Mokhammad Suef, Hari Supriyanto, Yudha Prasetyawan and Intan Oktasari Kusuma Wardani.</i> Institut Teknologi Sepuluh Nopember	68	IM
15:20 - 15:30	The Role of Perceived Leader and Organizational Control Effectively to Diminish Cyber Incivility and Workplace Deviance at Work <i>Kirana R Ririh, Bambang Cahyadi, Nur Yulianti Hidayah, Anggina S Sundari and Deshinta R Ningtyas</i> Pancasila University	26	IM
15:30 - 15:40	Structuring disaster resilience attributes for small and medium enterprises in Padang city – Indonesia <i>Dicky Fatrias, Insannul Kamil and Ahmad Syafruddin Indrapriyatna.</i> Andalas University	118	IM

SESSION 3 ROOM 1

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

TIME	PAPER	PAPER NO	FIELD
16:00 - 16:10	Fatigue-related differences in human facial dimensions based on static images <i>Vivi Triyanti, Yassierli Yassierli and Hardianto Iridiastadi.</i> Atma Jaya Catholic University of Indonesia	103	ER&PD
16:10 - 16:20	Design of Mechanical Roasting Machine using Ergonomic Approach to Increase Productivity of Small Medium Enterprise: A Research at Opak Craftsmen in Sumedang <i>Wawan Tripiawan, Husni Amani, Rosad Maali El Hadi, B H Sagita and Sri Martini</i> Telkom University	60	ER&PD
16:20 - 16:30	The Relationship between labor market efficiency and innovation <i>Rohollah Ghasemi, Bahareh Mahbanooei and Reza Ghourchi Beigi</i> University of Tehran	126	IM

SESSION 3 ROOM 1

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

TIME	PAPER	PAPER NO	FIELD
16:30 - 16:40	The Development of Expert Management System for Handicraft Production Planning (Case Study: Embroidery at Bukittinggi) <i>Nofi Erni and Iphov Kumala Sriwana.</i> Esa Unggul University	113	IM
16:40 - 16:50	Business Model Feasibility based on Customer Development Method: The case of Worm Reactor Product <i>Wisnu Dewobroto and Kanzi Rachmandi.</i> Podomoro University	117	IM
16:50 - 17:00	Towards a wisdom based innovative community: action and decision making in DIKW hierarchy in Indonesia higher education institutions case study <i>Ferdian Suprata and Stefani Prima Dias Kristiana.</i> Atma Jaya Catholic University of Indonesia	99	IM
17:00 - 17:10	Bridging hunger and food surpluses through food bank (case study: food bank Neder-Value, Wageningen) <i>Gendis Ayu Satiti Irawan, Muchammad Gumilang Pramuwidyatama and Lous van Vloten Doting</i> Wageningen University	122	IM

SESSION 3 ROOM 2

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

TIME	PAPER	PAPER NO	FIELD
16:00 - 16:10	Job Scheduling for A Hybrid Assembly Differentiation Flow Shop to Minimize Total Actual Flow Time considering Multi-Due-Dates <i>Rahmi Maulidya, Suprayogi, Rachmawati Wangsaputra and Abdul Hakim Halim.</i> Institut Teknologi Bandung	109	PS
16:10 - 16:20	Redesign of office layout using activity relationship chart (ARC) at the "X" department administration office of a "Y" university <i>Wahyu Katon and Ghina Affifah.</i> Universitas Pasundan	78	PS
16:20 - 16:30	The Effect of The Processing Time's Variance to The Performance of Sequencing Rule <i>Arum Sari and Yolanda Yulia Citra.</i> Universitas Pasundan	63	PS
16:30 - 16:40	Forecasting Methods and Implementation of DRP (Distribution Requirement Planning) Methods in Determining the Master Production Schedule <i>Riana Magdalena and Theresia Suli.</i> Atma Jaya Catholic University of Indonesia	52	PS
16:40 - 16:50	Strategic planning of food diversification to improve food security in west java using soft-system methodology <i>Iphov Kumala Sriwana.</i> Esa Unggul University	108	IM
16:50 -	Multiple lifecycles in the circular economy: making it happen with enabling technologies of IR4.0	125	IM

SESSION 3 ROOM 2

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

TIME	PAPER	PAPER NO	FIELD
17:00	Dzuraidah Abd Wahab Universiti Kebangsaan Malaysia		

SESSION 3 ROOM 3

Moderator: Chendrasari Wahyu Oktavia, S.Si., M.T.

TIME	PAPER	PAPER NO	FIELD
16:00 - 16:10	Calculation of Raw Material Costs for the Palm Oil Supply Chain Value Added Using Modified Hayami Method <i>Syarif Hidayat Ismail.</i> Al-Azhar Indonesia	45	SCM
16:10 - 16:20	Supply Chain Management (SCM) - is it value addition toward academia? <i>Md. Mamun Habib</i> BRAC Business School (BBS), BRAC University, Bangladesh	128	SCM
16:20 - 16:30	The Optimization of Semi Finished Garment Distribution of Forboys SME in Pandeglang Area using Genetic Algorithm <i>Widya N Tanjung, Nunung Nurhasanah, Cut Firda Lutfia, B Aribowo, R Safitri, B Samiono, M Devana, P Kalifa, S W Fauzia and A Supriyanto</i> Al-Azhar Indonesia	41	OR
16:30 - 16:40	Genetic Algorithm for Waste Transportation Route In Eastern Bandung (Case Study: PD. Kebersihan Kota Bandung) <i>Yogi Yogaswara and Laras Shinta Mega Dewi Saputra.</i> Universitas Pasundan	110	OR
16:40 - 16:50	Optimum Container Network Route in Papua Region <i>Christine Natalia, Chendrasari Wahyu Oktavia and Gabrielle Eirene Natasha Djaya.</i> Atma Jaya Catholic University of Indonesia	88	OR
16:50 - 17:00	The Pattern Failure Analysis of Sulfuric Acid Production Process with the Association Rules Algorithm Apriori <i>Winnie Septiani, Iveline Anne Marie, Dedy Sugiarto, L Hakim</i> Universitas Trisakti	17	QM
17:00 - 17:10	Ergonomic risk and work load analysis on material handling of PT. XYZ <i>Lamto Widodo, Frans Jusuf Daywin and Marisca Nadya.</i> Universitas Tarumanegara	105	ER&PD

TABLE OF CONTENT

Preface
Committee
Reviewer
Agenda
Parallel Session
Table of Content

DA&IS – Decision Analyst and Information System			
No	Paper	Title and Author	Page
1	12	BEST CONCEPT SELECTION FOR DRY-SOYBEAN CRACKING MACHINE PROCESS OPTIMIZATION USING TOPSIS METHOD Rino Andias Anugraha, Nadiah Mumtaz Darmawan and Muhamad Iqbal School of Industrial and System Engineering, Telkom University, 40257 Bandung, West Java, Indonesia	Paper_12
2	15	A FUZZY ANALYTIC HIERARCHY PROCESS APPROACH FOR DETERMINING THE CRITERIA SUCCESS FACTORS OF MRT PARTS' E-PROCUREMENT: THE CASE OF JAKARTA MRT PROJECT Tony Hartanto, Meriastuti Ginting and Oki Sunardi Department of Industrial Engineering, Krida Wacana Christian University, Jakarta 11470, Indonesia	Paper_15
3	48	DECISION MAKING STRATEGY FOR DECREASING THE POTENTIAL HAZARDS OF WORK ACCIDENTS AT DIVISION R&D USING SWOT AND AHP METHODS Dino Rimantho, Annisa Elistiani, Sambas Sundana and Anggina Sandy Sundari Industrial Engineering Department, Pancasila University, Jagakarsa – Jakarta 12640 Indonesia	Paper_48
4	80	RISK MANAGEMENT ANALYSIS USING FMECA AND ANP METHODS IN THE SUPPLY CHAIN OF WOODEN TOY INDUSTRY Widya Nurcahayanty Tanjung, Saaras Ayu Atikah, Syarif Hidayat, Endang Ripmiatin, Selvy Sekar Asti and Ratu Siti Khodijah Industrial engineering department, Faculty of science and technology, Universitas Al Azhar Indonesia, Jakarta 12110, Indonesia Informatics engineering department, Faculty of science and technology, Universitas Al Azhar Indonesia, Jakarta 12110, Indonesia	Paper_80

DA&IS – Decision Analyst and Information System			
No	Paper	Title and Author	Page
5	81	<p>SUPPLY CHAIN RISK MANAGEMENT ANALYSIS USING THE DEVELOPMENT OF FUZZY REASONING METHODS AND ANALYTICAL NETWORK PROCESS (ANP) AT WOODEN TOYS INDUSTRIES</p> <p>Widya Nurcahayanty Tanjung, Selvy Sekar Asti, Syarif Hidayat, Endang Ripmiatin, Saaras Ayu Atikah and Ratu Siti Khodijah Industrial engineering department, Faculty of science and technology, Al Azhar University of Indonesia, Jakarta 12110, Indonesia Informatics engineering department, Faculty of science and technology, Al Azhar University of Indonesia, Jakarta 12110, Indonesia</p>	Paper_81
6	90	<p>INFORMATION SYSTEM DESIGN USING LABOR PRODUCTIVITY MEASUREMENT FOR CONSTRUCTION</p> <p>Abdullah 'Azzam, Suci Miranda, Sri Indrawati Industrial Engineering Department, Faculty of Industrial Technology, Universitas Islam Indonesia, Yogyakarta, Indonesia</p>	Paper_90
7	114	<p>DEVELOPMENT OF INFORMATION SYSTEMS AS A MEANS TO IMPROVE SHARIA COOPERATIVE SERVICES</p> <p>Riri Safitri, Dody Haryadi, Endah Sulisthyani and Vareza Noorliko Informatics Engineering of University of Al Azhar Indonesia</p>	Paper_114

ER&PD – Ergonomics & Product Design			
No	Paper	Title and Author	Page
1	2	<p>MEASURING INFLUENCE FROM SAFETY CLIMATE TO SAFETY BEHAVIOR IN BUS RAPID TRANSIT DRIVERS</p> <p>Dian Mardi Safitri, Winnie Septiani and Anisa Mediana Industrial Engineering Department, Laboratory of Work System Design and Ergonomics Faculty of Industrial Technology, Universitas Trisakti, Jakarta, Indonesia</p>	Paper_2
2	3	<p>DESIGN OF DUST COLLECTOR ON SORTING MACHINE VIBRO MESH TYPE USING DESIGN OF ASSEMBLY (DFA) APPROACH WITH BOOTHROYD AND DEWHURST METHOD IN PT. PERKEBUNAN NUSANTARA VIII CIATER</p> <p>Christy Ardyanto Gulo, Mira Rahayu, Sri Martini and Muhammad Ihsan Kurniawan Telkom University, Bandung, Indonesia</p>	Paper_3
3	4	<p>DESIGN OF WOOD PELLET TROLLEY USING FINITE ELEMENT METHOD (FEM) AND DESIGN FOR ASSEMBLY (DFA) APPROACH AT PT. PERKEBUNAN NUSANTARA VIII CIATER</p> <p>Riko Risqullah Putra, Mira Rahayu, Sri Martini and Muhammad Ihsan Kurniawan Telkom University, Bandung, Indonesia</p>	Paper_4
4	5	<p>DESIGN OF WOOD PELLETS CARRIER USING ERGONOMIC FUNCTION DEPLOYMENT (EFD) APPROACH TO INCREASE PRODUCTIVITY OF WORK: A RESEARCH AT PTPN VIII CIATER</p> <p>Windi Robbania Pradani, Mira Rahayu, Sri Martini and Muhammad Ihsan Kurniawan Kurniawan</p>	Paper_5

ER&PD – Ergonomics & Product Design			
No	Paper	Title and Author	Page
		Telkom University, Bandung, Indonesia	
5	6	THE DESIGN OF MATERIAL TRANSPORTER FOR PAPER SACK IN PACKAGING TO DECREASE THE RISK OF MUSCOLOSKELETAL DISORDERS USING ERGONOMIC FUNCTION DEPLOYMENT (EFD) APPROACH: A RESEARCH AT PT. PERKEBUNAN NUSANTARA VIII CIATER, WEST JAVA Muhammad Ikhsan Kurniawan, Mira Rahayu and Sri Martini Telkom University, Bandung, Indonesia	Paper_6
6	20	WORKPLACE ERGONOMIC RISK ASSESSMENT TOWARD SMALL-SCALE HOUSEHOLD BUSINESS Dessi Mufti, Aidil Ikhsan, and Tri Marta Putri Industrial Engineering, Faculty of Industrial Technology, Bung Hatta University, Gunung Pangilun, West Sumatera	Paper_20
7	30	DESIGN OF THE KANSEI BOARD GAME TO MOTIVATE THE ELEMENTARY SCHOOL STUDENT IN LEARNING ENGLISH Selna Shalawati and Hartomo Soewardi Industrial Engineering Department, Faculty of Industrial Technology, Islamic University of Indonesia, Yogyakarta, Indonesia	Paper_30
8	35	INTERNET ADDICTION AMONG INDONESIA UNIVERSITY STUDENTS: MUSCULOSKELETAL SYMPTOMS, PHYSICAL AND PSYCHOSOCIAL BEHAVIOR PROBLEMS Gradiyan Budi Pratama and Ari Widyanti Department of Industrial Engineering, Bandung Institute of Technology (ITB), Indonesia	Paper_35
9	37	AN INITIAL STUDY INTO INDONESIAN CONSUMER AWARENESS OF THE ERGONOMIC PRODUCT Gradiyan Budi Pratama, Nadira Nurfitriari and Ari Widyanti Department of Industrial Engineering, Bandung Institute of Technology (ITB), Indonesia	Paper_37
10	39	THE SURVEY ON THE PERCEPTION OF SAFETY AND SECURITY CULTURE FOR NUCLEAR WORKERS Atyanti Dyah Prabaswari and Rini Dharmastiti Universitas Islam Indonesia, Jl. Kaliurang, DI Yogyakarta, Indonesia Universitas Gadjah Mada, Jl. Grafika No. 2, DI Yogyakarta, Indonesia	Paper_39
11	40	THE MENTAL WORKLOAD ANALYSIS OF STAFF IN STUDY PROGRAM OF PRIVATE EDUCATIONAL ORGANIZATION Atyanti Dyah Prabaswari, Chancard Basumerda and Bagus Wahyu Utomo Universitas Islam Indonesia, Jl. Kaliurang, DI Yogyakarta, Indonesia Sekolah Tinggi Teknologi Adisutjipto, Jl. Janti Blok R, DI Yogyakarta, Indonesia	Paper_40
12	42	SELECTION PROCESS OF SUSTAINABLE PRODUCTION INDICATORS USING ECO-QUALITY FUNCTION DEPLOYMENT Pregiwati Pusporini and Iwan Vanany University of Muhammadiyah Gresik, East Java, Indonesia Institute of Sepuluh Nopember (ITS) Surabaya, East Java, Indonesia	Paper_42

ER&PD – Ergonomics & Product Design			
No	Paper	Title and Author	Page
13	51	WORKLOAD ANALYSIS OF CHEMICAL ANALYST AT ANALYTICAL RESEARCH LABORATORY PT.UPA – ORANG TUA GROUP Nur Yulianti Hidayah, Irowati Purwaningsih and Kirana Rukmayuninda Ririh Department Industrial Engineering, Pancasila University, Jagakarsa, Jakarta, Indonesia PT UPA – Orang Tua Grup, Jl. Lingkar Luar Barat Kav. 35-36, Cengkareng 11740, Jakarta, Indonesia	Paper_51
14	60	DESIGN OF MECHANICAL ROASTING MACHINE USING ERGONOMIC APPROACH TO INCREASE PRODUCTIVITY OF SMALL MEDIUM ENTERPRISE: A RESEARCH AT OPAK CRAFTSMEN IN SUMEDANG Wawan Tripiawan, Husni Amani, Rosad Maali El Hadi, B H Sagita and Sri Martini Industrial Engineering Program, Telkom University, Bandung, Indonesia	Paper_60
15	61	SITUATION AWARENESS ANALYSIS ON MOTORCYCLE RIDERS USING QUANTITATIVE ANALYSIS OF SITUATIONAL AWARENESS Hartomo Soewardi and Amalia Diah Ayu Kiranti Industrial Engineering Department, Faculty of Industrial Technology, Islamic University of Indonesia Yogyakarta Indonesia	Paper_61
16	62	ANALYSIS OF MACHINE MAINTENANCE PROCESSES BY USING FMEA METHOD IN THE SUGAR INDUSTRY Hartomo Soewardi and Siska Ari Wulandari Industrial Engineering Department, Faculty of Industrial Technology Islamic University of Indonesia Yogyakarta Indonesia	Paper_62
17	66	DESIGNING TECHNICAL SPECIFICATIONS FOR GOYOR WOVEN FABRIC AS MATERIAL FOR CIVIL SERVANT OFFICIAL UNIFORMS USING QUALITY FUNCTION DEPLOYMENT AND CONJOINT ANALYSIS Delta Refinda, Eko Liquiddanu, I Wayan Suletra, Wahyudi Sutopo and Murman Budijanto Department of Industrial Engineering, Sebelas Maret University, Surakarta, Indonesia	Paper_66
18	69	EMPOWERING PRODUCT DEVELOPMENT THROUGH CREATIVE CULINARY HOUSE DESIGN Yudha Prasetyawan, Mokhammad Suef, Hari Supriyanto and Intan Oktasari Kusuma Wardani Industrial Engineering Department, Institut Teknologi Sepuluh Nopember	Paper_69
19	86	DEVELOPMENT OF LABORATORY WEBSITE WITH USABILITY DESIGN AND TESTING PARTICIPATORY Salaman Firdaus, Amarria Dila Sari and Muhammad Ragil Suryoputro Industrial Engineering Program, Industrial Engineering Faculty, Islamic University of Indonesia, Yogyakarta, Indonesia	Paper_86

ER&PD – Ergonomics & Product Design			
No	Paper	Title and Author	Page
20	95	FAILURE MODE AND EFFECT ANALYSIS (FUZZY FMEA) IMPLEMENTATION FOR FORKLIFT RISK MANAGEMENT IN MANUFACTURING COMPANY PT.XYZ Muhammad Ragil Suryoputro, Khairizzahra, Amarria Dila Sari and Nawang Wahyu Widiatmaka Industrial Engineering Department, Faculty of Industrial Technology, Universitas Islam Indonesia, Yogyakarta, Indonesia	Paper_95
21	101	DESIGN OF TOFU CUTTING TOOLS TO IMPROVE REPETITIVE TASKS USING OCRA Benedikta Anna Haulian Siboro, Vera Methalina Afma, Annisa Purbasari, Muhammad Qodri Kasim Department of Industrial Engineering, Universitas Riau Kepulauan	Paper_101
22	103	FATIGUE-RELATED DIFFERENCES IN HUMAN FACIAL DIMENSIONS BASED ON STATIC IMAGES Vivi Triyanti, Yassierli Yassierli and Hardianto Iridiastadi Faculty of Industrial Technology, Institut Teknologi Bandung, Bandung 40132, Indonesia Department of Industrial Engineering, Atma Jaya Catholic University of Indonesia, Jakarta 12930, Indonesia	Paper_103
23	105	ERGONOMIC RISK AND WORK LOAD ANALYSIS ON MATERIAL HANDLING OF PT. XYZ Lamto Widodo, Frans Jusuf Daywin and Marisca Nadya Industrial Engineering Department of Tarumanagara University, Jakarta, Indonesia	Paper_105

IM – Industrial Management			
No	Paper	Title and Author	Page
1	9	FEASIBILITY ANALYSIS ON THE DEVELOPMENT OF STEEL SHEET ZINC PLATED AND GALVALUM PRODUCTION AT PT. S STEEL FACTORY Audira Zuraida Rahardja, Endang Chumaidiyah and Wawan Tripiawan Industrial Engineering Program, Telkom University, Bandung, Indonesia	Paper_9
2	18	DESIGNING SELF-ASSESSMENT TOOL FOR LIBRARY PERFORMANCE MEASUREMENT ADOPTING MALCOLM BALDRIGE FRAMEWORK (CASE STUDY: CENTRAL LIBRARY OF ANDALAS UNIVERSITY) Nilda Tri Putri, Desto Jumeno, Henmaidi Alfian, Eri Wirdianto, Prima Fithri and Fitryani Zulkhaira Department of Industrial Engineering, Faculty of Engineering, Andalas University, Padang, West Sumatra Indonesia	Paper_18
3	22	MEASUREMENT OF HUMAN RESOURCES PERFORMANCE AND MAKING PROPOSED IMPROVEMENT WITH HUMAN RESOURCES SCORECARD APPROACH AND OMAX (OBJECTIVE MATRIX) TOOLS IN PRODUCTION DIVISION IN PT. OCM Lilyana, Ahmad, Lamto Widodo and Jesen Hardi Industrial Engineering Program Faculty of Engineering Tarumanegara University, Jakarta, Indonesia	Paper_22

IM – Industrial Management			
No	Paper	Title and Author	Page
4	26	THE ROLE OF PERCEIVED LEADER AND ORGANIZATIONAL CONTROL EFFECTIVELY TO DIMINISH CYBER INCIVILITY AND WORKPLACE DEVIANCE AT WORK Kirana R Ririh, Bambang Cahyadi, Nur Yulianti Hidayah, Anggina S Sundari, and Deshinta R Ningtyas Department of Industrial Engineering, Faculty of Engineering Pancasila University, Jakarta, Indonesia	Paper_26
5	32	NON-TECHNICAL ENABLERS TO DIGITAL MANUFACTURING IMPLEMENTATION AND INDUSTRIAL IOT IMPLEMENTATION READINESS: A LITERATURE REVIEW Oki Sunardi, Meriastuti Ginting and Cynthia Hayat Department of Industrial Engineering, Krida Wacana Christian University, Jakarta 11470, Indonesia Department of Information Systems, Krida Wacana Christian University, Jakarta 11470, Indonesia	Paper_32
6	34	FACTORS DRIVING TEACHER’S INNOVATION: A CASE STUDY AT PUBLIC HIGH SCHOOLS IN TANGERANG SELATAN, INDONESIA Linda Theresia, Abdul Haris Lahuddin and Ramon Bangun Department of Industrial Engineering, Institut Teknologi Indonesia, Serpong, Indonesia	Paper_34
7	54	ESTIMATING THE COST OF UNRELIABILITY IN TEA PLANTATION FACTORY FOR SUSTAINABLE PRODUCTION Judi Alhilman and Aji Pamoso School of Industrial and Systems Engineering, Telkom University Bandung, West Java, Indonesia	Paper_54
8	67	DETERMINING PRODUCTION COST OF GOYOR WOVEN FABRIC USING FULL COSTING METHOD TO SET THE SELLING PRICE: A CASE STUDY Pungki Mita, Eko Liquiddanu, Wayan Suletra, Muhammad Hisjam and Nanang Rizali Department of Industrial Engineering, Sebelas Maret University, Indonesia Departement of Craft Arts, Sebelas Maret University, Indonesia	Paper_67
9	68	SUPERIOR AGRICULTURE BUSINESS SECTOR DEVELOPMENT FOR MULTI REGION Mokhammad Suef, Hari Supriyanto, Yudha Prasetyawan and Intan Oktasari Kusuma Wardani Industrial Engineering Department, Institut Teknologi Sepuluh Nopember	Paper_68
10	71	STRATEGY FOR DEVELOPING MICRO SMALL MEDIUM ENTERPRISE CLUSTERS USING BUSINESS MODEL CANVAS AND MANUFACTURING SYSTEM DESIGN Yudha Prasetyawan, Imam Baihaqi, Bustanul Arifin Noer, Harimuti, Adly Nindyanto and Fitriana Kartikasari Industrial Engineering Department, Institut Teknologi Sepuluh Nopember, Surabaya Business Management Department, Institut Teknologi Sepuluh Nopember, Surabaya	Paper_71

IM – Industrial Management			
No	Paper	Title and Author	Page
11	72	ANALYSIS OF INFLUENCE OF THE PPK PROGRAMS ON TENANTS' BUSINESS SUCCESS Niken Parwati and Astri Wibowo Industrial Engineering Departement, Al Azhar Indonesia University, Jakarta 12110, Indonesia	Paper_72
12	74	THE ENHANCEMENT OF EDUCATION AND INDUSTRY ALIGNMENT USING QUALITY FUNCTION DEPLOYMENT Udisubakti Ciptomulyono, Yudha Prasetyawan, Elisabet Bertania Cahyaningtias and Winahyu Tyas Wicaksana Industrial Engineering Department, Institut Teknologi Sepuluh Nopember, Indonesia	Paper_74
13	89	UNDERSTANDING MENTAL MODEL OF ISLAMIC BANKING SYSTEM USING SYSTEM DYNAMICS Nur Atikah, Akhmad Hidayatno and Komarudin Department of Industrial Engineering, University of Indonesia, Depok, Indonesia	Paper_89
14	96	THE NEW MANAGEMENT SYSTEM ISO 21001:2018: WHAT AND WHY EDUCATIONAL ORGANIZATIONS SHOULD ADOPT IT Eric Wibisono Department of Industrial Engineering, University of Surabaya, Surabaya, Indonesia	Paper_96
15	99	TOWARDS A WISDOM BASED INNOVATIVE COMMUNITY: ACTION AND DECISION MAKING IN DIKW HIERARCHY IN INDONESIAN HIGHER EDUCATION INSTITUTIONS CASE STUDY Ferdian Suprata and Stefani Prima Dias Kristiana Innovation System Laboratory, Department of Industrial Engineering, Atma Jaya Catholic University of Indonesia, South Tangerang, Indonesia Production System Laboratory, Department of Industrial Engineering, Atma Jaya Catholic University of Indonesia, South Tangerang, Indonesia	Paper_99
16	108	STRATEGIC PLANNING OF FOOD DIVERSIFICATION TO IMPROVE FOOD SECURITY IN WEST JAVA USING SOFT-SYSTEM METHODOLOGY Iphov Kumala Sriwana Industrial Engineering Department, Universitas Esa Unggul, Jakarta 11510, Indonesia	Paper_108
17	111	COMPETITIVENESS MODEL FOR ECOTOURISM: A CASE STUDY IN BBG Gadiah Ranti, Linda Theresia, Silvia Mahardika and Ramon Bangun Department of Industrial Engineering, Institut Teknologi Indonesia, Indonesia	Paper_111
18	112	RECOMMENDATION FOR MARKETING COMMUNICATION PROGRAM OF X NATURAL SKIN CARE CLINIC, CIKUPA – TANGERANG Sesilia Michelle and Marsellinus Bachtiar Industrial Engineering Department, Faculty of Engineering, Atma Jaya Catholic University of Indonesia, Jakarta 12930, Indonesia	Paper_112

IM – Industrial Management			
No	Paper	Title and Author	Page
19	113	THE DEVELOPMENT OF EXPERT MANAGEMENT SYSTEM FOR HANDICRAFT PRODUCTION PLANNING (CASE STUDY: EMBROIDERY AT BUKITTINGGI) NOFIERNI AND IPHOV KUMALA SRIWANA Industrial Engineering Unggul University, Jakarta, Indonesia	Paper_113
20	117	BUSINESS MODEL FEASIBILITY BASED ON CUSTOMER DEVELOPMENT METHOD: THE CASE OF WORM REACTOR PRODUCT Wisnu Dewobroto and Kanzi Rachmandi Department of Entrepreneurship, Faculty of Social Science, Podomoro University Department of Industrial Engineering, Faculty of Industrial Technology, Trisakti University	Paper_117
21	118	STRUCTURING DISASTER RESILIENCE ATTRIBUTES FOR SMALL AND MEDIUM ENTERPRISES IN PADANG CITY – INDONESIA Dicky Fatrias, Insannul Kamil and Ahmad Syafruddin Indrapriyatna Dept. of Industrial Engineering, Andalas University, Padang 25163, Indonesia	Paper_118
22	122	BRIDGING HUNGER AND FOOD SURPLUSES THROUGH FOOD BANK (CASE STUDY: FOOD BANK NEDER-VELUWE, WAGENINGEN) Gendis Ayu Satiti Irawan, Muchammad Gumilang Pramuwidyatama, Lous van Vloten-Doting Food Bank Neder-Veluwe, Industrieweg 22, 6702 DE, Wageningen, The Netherlands Business Economics Group, Wageningen University & Research, Hollandseweg 1 6706 KN, Wageningen, The Netherlands	Paper_122
23	125	MULTIPLE LIFE CYCLES IN THE CIRCULAR ECONOMY: MAKING IT HAPPEN WITH ENABLING TECHNOLOGIES OF IR4.0 Dzuraidah Abd Wahab Center for Integrated Design of Advanced Mechanical Systems, Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia, 43600 UKM Bangi Selangor, Malaysia	Paper_125
24	126	THE RELATIONSHIP BETWEEN LABOR MARKET EFFICIENCY AND INNOVATION Rohollah Ghasemi, ² Bahareh Mahbanooei and ³ Reza Ghourchi Beigi Ph.D in Operations and production management, Department of Industrial Management, Faculty of Management, University of Tehran, Tehran, Iran Ph.D Candidate in Organizational Behavior Management, Faculty of Management and Accounting, College of Farabi, University of Tehran, Tehran, Iran M.Sc. student of Industrial Management, Faculty of Management, University of Tehran, Tehran, Iran	Paper_126
25	127	THE EFFECT OF COUNTRY OF ORIGIN AND NEED FOR UNIQUENESS ON FEMALE CUSTOMERS PURCHASE INTENTION Luthfia Puspitasari and Gunawan Alif Management Department, University of Indonesia, Central Jakarta 10430, Indonesia	Paper_127

OR – Operation Research			
No	Paper	Title and Author	Page
1	7	ANALYSIS DAILY NEWSPAPER DISTRIBUTION IN SOLO BY AGENT BASED SIMULATION Izatul Fitria Febriandini, Yuniaristanto, Wahyudi Sutopo and Muhammad Hisjam Laboratory Assistant Logistics Systems and Business, Industrial Engineering Department, Sebelas Maret University, Indonesia Research Group of Industrial Engineering and Techno Economic, Industrial Engineering Department, Sebelas Maret University, Indonesia	Paper_7
2	14	MULTI RESPONSES OPTIMIZATION FOR THE SUGAR CONTENT AND MICROBIAL IMPURITIES OF CARROT SYRUP O Isabella and Yurida Ekawati Industrial Engineering Department, Ma Chung University	Paper_14
3	38	SCHEDULE RISK ANALYSIS BY DIFFERENT PHASES OF CONSTRUCTION PROJECT USING CPM-PERT AND MONTE-CARLO SIMULATION Andrie Pasca Hendradewa Industrial Engineering Department, Faculty of Industrial Technology, Universitas Islam Indonesia, Yogyakarta Indonesia	Paper_38
4	41	THE OPTIMIZATION OF SEMI FINISHED GARMENT DISTRIBUTION OF FORBOYS SME IN PANDEGLANG AREA USING GENETIC ALGORITHM Widya N Tanjung, Nunung Nurhasanah, Cut Firdha Lutfia, B Aribowo, R Safitri, B Samiono, M Devana, P Kalifa, SW Fauzia, A Supriyanto Industrial Engineering Department, Faculty of Science and Technology, Universitas Al Azhar Indonesia, Sisingamangaraja Street, Jakarta 12110, Indonesia Informatic Engineering Department, Faculty of Science and Technology, Universitas Al Azhar Indonesia, Sisingamangaraja Street, Jakarta 12110, Indonesia Management Department, Faculty of Economy, Universitas Al Azhar Indonesia, Sisingamangaraja Street, Jakarta 12110, Indonesia	Paper_41
5	43	UTILIZING PROJECT MANAGEMENT SOFTWARE IN PROJECT SCHEDULING: A CASE STUDY Suci Miranda and Muchamad Sugarindra Industrial Engineering Department, Faculty of Industrial Technology, Universitas Islam Indonesia, Yogyakarta, Indonesia	Paper_43
6	50	PLANTING SYSTEM MODELING OF CHRYSANTHEMUM SEEDLING PLANTS STOCK FOR PROFIT OPTIMIZATION Anita Ilmaniati and Dani Hamdan Taufik Industrial Engineering Department, Universitas Suryakencana, Cianjur 43216, Indonesia	Paper_50
7	79	INTEGER LINEAR PROGRAMMING MODEL AND ALGORITHM TO INTEGRATE HEURISTICS SCHEDULING EDD, INVENTORY CONTROL AND DISTRIBUTION PROBLEMS IN A MODULAR PRODUCTION SYSTEM Parwadi Moengin, Sucipto Adisuwiry, Weny Ango Fransiska and Elfira Febriani Harahap System and Industrial Simulation Laboratory, Department of Industrial Engineering, Trisakti University, Jakarta 11440 Indonesia	Paper_79

OR – Operation Research			
No	Paper	Title and Author	Page
8	88	OPTIMUM CONTAINER NETWORK ROUTE IN PAPUA REGION Christine Natalia, Chendrasari Wahyu Oktavia and Gabriela Eirene Department of Industrial Engineering, Faculty of Engineering Atma Jaya Catholic University of Indonesia	Paper_88
9	110	GENETIC ALGORITHM FOR WASTE TRANSPORTATION ROUTE IN EASTERN BANDUNG (CASE STUDY: PD. KEBERSIHAN KOTA BANDUNG) Yogi Yogaswara and Laras Shinta Mega Dewi Saputra Department of Industrial Engineering, Faculty of Engineering Universitas Pasundan	Paper_110
10	116	IMPROVEMENT ROUTE FOR DISTRIBUTION SOLUTIONS MDVRP (MULTI DEPOT VEHICLE ROUTING PROBLEM) USING GENETIC ALGORITHM Rina Fitriana, Parwadi Moengin, and U Kusumaningrum Simulation and System Industry Laboratorium, Industrial Engineering Department Industrial Technology Faculty, Trisakti University	Paper_116
11	119	DOMINO ALGORITHM: A NOVEL CONSTRUCTIVE HEURISTICS FOR TRAVELING SALESMAN PROBLEM Asrul Harun Ismail The Department of Mechanical Engineering, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom The Department of Industrial Engineering, University of Pancasila, Jagakarsa, Jakarta Selatan 12640, Indonesia	Paper_119

PS – Production & Maintenance System			
No	Paper	Title and Author	Page
1	16	A COMPARISON OF FORECASTING BUILDING MATERIAL INVENTORY BETWEEN BACKPROPAGATION NEURAL NETWORK AND ARIMA Iwan Aang Soenandi and Cynthia Hayat Department of Industrial Engineering Faculty of Engineering & Computer Science Krida Wacana Christian University, Jakarta 11470, Indonesia Department of Information System Faculty of Engineering & Computer Science, Krida Wacana Christian University, Jakarta 11470, Indonesia	Paper_16
2	24	DESIN OF JOB SCHEDULING SYSTEM AND SOFTWARE FOR PACKAGING PROCESS WITH SPT, EDD, LPT, CDS AND NEH ALGORITHM AT PT. ACP Lina Gozali, Vincentius Kurniawan and Siti Rohana Nasution Industrial Engineering Department of Tarumanagara University, Jakarta Industrial Engineering Department of Pancasila University, Jakarta	Paper_24

PS – Production & Maintenance System			
No	Paper	Title and Author	Page
3	27	ANALYSIS OF DOUBLE INDIAN BALLBREAKER NET SORTER MACHINE BASED ON OVERALL EQUIPMENT EFFECTIVENESS METHOD CASES IN TEA PLANTATION PLANTS Judi Alhilman, Aji Pamoso and Ahmad F. Abdillah School of Industrial and System Engineering, Telkom University, 40257 Bandung, West Java, Indonesia	Paper_27
4	47	INVENTORY LEVEL OPTIMIZATION OF RAW MATERIALS FOR READY-MADE GARMENT INDUSTRY X PTY LTD USING MAMDANI METHOD OF FUZZY INTERFERENCE SYSTEM Nunung Nurhasanah, Syita Wida Fauzia, B Aribowo, R Safitri, B Samiono, CF Lutfia, M Devana, P Kalifa, A Supriyanto Industrial Engineering Department, Faculty of Science and Technology, Universitas Al Azhar Indonesia, Jakarta 12110, Indonesia Informatic Engineering Department, Faculty of Science and Technology, Universitas Al Azhar Indonesia, Jakarta 12110, Indonesia Management Department, Faculty of Economy, Universitas Al Azhar Indonesia, Jakarta 12110, Indonesia	Paper_47
5	49	ADVANCED ERP APPLICATION FOR MARINE TRANSPORTATION INDUSTRY IN THE SOUTH ASIA PACIFIC COUNTRY: A CASE STUDY Lalu Tri Wijaya Nata Kusuma, Jun-Der Leu and Fu-Shiang Tseng Faculty of Engineer, University of Brawijaya, Indonesia National Central University, Taiwan	Paper_49
6	52	FORECASTING METHODS AND IMPLEMENTATION OF DRP (DISTRIBUTION REQUIREMENT PLANNING) METHODS IN DETERMINING THE MASTER PRODUCTION SCHEDULE Riana Magdalena and Theresia Suli Industrial Engineering, Engineering Faculty, Atma Jaya Indonesian Catholic University, Banten 15345, Indonesia.	Paper_52
7	55	APPLYING VALUE STREAM MAPPING TOOLS AND KANBAN SYSTEM FOR WASTE IDENTIFICATION AND REDUCTION (CASE STUDY: A BASIC CHEMICAL COMPANY) Wilson Kosasih, Iphov Kumala Sriwana, Evlina C Sari and Carla Olyvia Doaly Department of Industrial Engineering, Faculty of Engineering, Universitas Tarumanagara, Jakarta, Indonesia Department of Industrial Engineering, Faculty of Engineering, Universitas Esa Unggul, Jakarta Indonesia	Paper_55
8	56	WASTE ASSESSMENT USING LEAN MANUFACTURING IN RUBBER PRODUCTION Elita Amrina, Nilda Tri Putri, Dwara Mitha Anjani Department of Industrial Engineering, Andalas University, Padang, Indonesia	Paper_56
9	57	LEAN PROJECT MANAGEMENT USING FABRICATION MANUFACTURING STORAGE TANK CAP Tiena Gustina Amran, Devi Saraswati and Elfira Febriani Harahap University of Trisakti, Jakarta, Indonesia	Paper_57
10	63	THE EFFECT OF THE PROCESSING TIME'S VARIANCE TO THE PERFORMANCE OF SEQUENCING RULE Arum Sari and Yolanda Yulia Citra Pasundan University, Bandung, Indonesia	Paper_63

PS – Production & Maintenance System			
No	Paper	Title and Author	Page
11	73	MAINTENANCE MANAGEMENT IMPROVEMENT BASED ON RELIABILITY CENTERED MAINTENANCE II IN ENERGY GENERATING INDUSTRIES Moses Laksono Singgih, Yudha Prasetyawan, Sutikno Sutikno, Dody Hartanto, Felicius Rindy Kurniawan and Winahyu Tyas Wicaksana Industrial Engineering Department, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia Mechanical Engineering Department, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia	Paper_73
12	77	THE APPLICATIONS OF COBB-DOUGLAS PRODUCTION FUNCTION IN REMANUFACTURING INDUSTRY Docki Saraswati, Debbie Kemala Sari and Dina Hapsari Industrial Engineering Department, Universitas Trisakti, Jakarta, Indonesia	Paper_77
13	78	REDESIGN OF OFFICE LAYOUT USING ACTIVITY RELATIONSHIP CHART (ARC) AT THE “X” DEPARTMENT ADMINISTRATION OFFICE OF A “Y” UNIVERSITY Wahyukaton and Ghina Affifah Industrial Engineering Department, Engineering Faculty, Universitas Pasundan, Bandung, Indonesia,	Paper_78
14	82	LINE BALANCING APPLICATION ANALYSIS OF GENERATOR PRODUCTION PROCESS IN DPG Inc. Salsabila Alif and Budi Aribowo Industrial Engineering Department, Faculty of Science and Technology, Universitas Al Azhar Indonesia, Jakarta 12110, Indonesia	Paper_82
15	84	INTEGRATION OF LEAN MANUFACTURING AND GROUP TECHNOLOGY LAYOUT TO INCREASE PRODUCTION SPEED IN THE MANUFACTURE OF FURNITURE Ukurta Tarigan, Uni Pratama P Tarigan and Vincent Sukirman Faculty of Engineering, Industrial Engineering Department, University of Sumatera Utara, Indonesia	Paper_84
16	92	FLOWSHOP SCHEDULING WITH DRUM-BUFFER-ROPE AND CDS ALGORITHM TO MINIMIZE LATENESS AND WORK IN PROCESS AT PT. AKS Akma Septia Viady, Pratya Poeri Suryadhini and Meldi Rendra School of Industrial and System Engineering, Telkom University, 40257 Bandung, West Java, Indonesia	Paper_92
17	94	LINE BALANCING WITH REDUCED NUMBER OF OPERATOR: A PRODUCTIVITY IMPROVEMENT Achad Hasta Muhammad and Harwati Industrial Engineering Department, Universitas Islam Indonesia,	Paper_94
18	100	DESIGN OF COMPUTER AIDED PROCESS PLANNING SYSTEM FOR HOLSTER MOLD AT PT. CARNEGIE UNIVERSAL INDUSTRIES Amal Witonohadi, Nanang Ali Sutisna and Martulan Suryanto Naibaho Department Industrial Engineering, Trisakti University, Jakarta 11440 Indonesia	Paper_100

PS – Production & Maintenance System			
No	Paper	Title and Author	Page
19	102	DESIGN AND IMPROVEMENT LAYOUT OF A PRODUCTION FLOOR USING AUTOMATED LAYOUT DESIGN PROGRAM (ALDEP) AND CRAFT ALGORITHM AT CV. AJI JAYA MANDIRI Didien Suhardini and Sarah Dian Rahmawati Industrial Engineering Department, Universitas Trisakti, Jakarta 11440, Indonesia	Paper_102
20	109	JOB SCHEDULING FOR HYBRID ASSEMBLY DIFFERENTIATION FLOW SHOP TO MINIMIZE TOTAL ACTUAL FLOW TIME CONSIDERING MULTI-DUE-DATES Rahmi Maulidya, Suprayogi, Rachmawati Wangsaputra and Abdul Hakim Halim Industrial Engineering Faculty, Institut Teknologi Bandung, Bandung 40132, Indonesia	Paper_109
21	115	IMPLEMENTATION OF MATERIAL REQUIREMENT PLANNING (MRP) ON RAW MATERIAL ORDER PLANNING SYSTEM FOR GARMENT INDUSTRY Nidaul Hasanati, Effrizka Permatasari, Nunung Nurhasanah and Syarif Hidayat UIN Syarif Hidayatullah, Jakarta, Indonesia Universitas Al Azhar Indonesia, Jakarta, Indonesia	Paper_115
22	120	SIMULATION MODEL DEVELOPMENT FOR DETERMINATION OF COMPONENTS PRODUCTION QUANTITY AND LEAD TIME REDUCTION IN MASS CUSTOMISATION OF SINGLE PRODUCTION STAGE Muhammad Ridwan Andi Purnomo and Riadho Clara Shinta Department of Industrial Engineering, Faculty of Industrial Technology, Universitas Islam Indonesia, Yogyakarta, Indonesia	Paper_120

QM – Quality Engineering & Management			
No	Paper	Title and Author	Page
1	10	COMPETENCY MEASUREMENT INSTRUMENT DESIGN FOR MAINTENANCE STAFF OF ELECTRONIC EXPERTISE WITH SECI METHOD Agisni, R P Soesanto, A Kurniawati, Nia Ambarsari, Luciana Andrawina School of Industrial Engineering, Telkom University, Bandung, Indonesia	Paper_10
2	13	TAGUCHI EXPERIMENTAL DESIGN TO OPTIMIZE THE SUGAR CONTENT OF CANDIED CARROT Maria S I Notowidjaja, Yurida Ekawati ¹ and Sunday Noya Industrial Engineering Department, Ma Chung University	Paper_13
3	17	THE PATTERN FAILURE ANALYSIS OF SULFURIC ACID PRODUCTION PROCESS WITH THE ASSOCIATION RULES ALGORITHM APRIORI Winnie Septiani, Iveline Anne Marie, Dedy Sugiarto and Lukman Hakim Faculty of Industrial Technology, Kampus A Universitas Trisakti, Jakarta Barat 11440, Indonesia	Paper_17

QM – Quality Engineering & Management			
No	Paper	Title and Author	Page
4	19	CONCEPT SELECTION OF DRY-SOYBEAN CRACKING MACHINE FOR PROCESS OPTIMIZATION USING TOPSIS (TECHNIQUE FOR ORDER OF PREFERENCE BY SIMILARITY TO IDEAL SOLUTION) Rino Andias, Muhamad Yogaswara Wiraditya, Muhammad Iqbal and Nadiah Mumtaz Darmawan School of Industrial and System Engineering, Telkom University, 40257 Bandung, West Java, Indonesia	Paper_19
5	21	ANALYZE OF MITIGATION WASTE IN RECONDITIONING PROCESS OF IRON DRUM WITH LEAN SIX SIGMA (Case Study at PT Mulya Adhi Paramita) Ahmad, Lilyana, Lamto Widodo and A Maryadi Industrial Engineering Study Program Tarumanagara, Jakarta, Indonesia	Paper_21
6	53	MEASUREMENT AND PROPOSAL OF IMPROVING MARKETING PROCESS TO IMPROVE THE QUALITY OF AFTERSALES SERVICES WITH FUZZY QUALITY FUNCTION DEPLOYMENT AND DATA MINING METHODS IN OV AGENCY Rina Fitriana, Wawan Kurniawan and Muhammad Rizqi Anwar Quality Engineering Laboratory, Department of Industrial Engineering, Faculty of Industrial Technology, Universitas Trisakti, Jakarta, Indonesia	Paper_53
7	59	DESIGN OF FLAT SHOES QUALITY CONTROL SYSTEM USING PDCA (CASE STUDY AT PT DAT) Debbie Kemala Sari, Dorina Hetharia, Docki Saraswati and Rania Marizka Industrial Engineering Department, Universitas Trisakti, Jakarta 11440, Indonesia	Paper_59
8	64	ASSISTANCE PROGRAM FOR THE IMPLEMENTATION OF ISO 9001 2015: CASE STUDY OF TELKOM JUNIOR HIGH SCHOOL Yati Rohayati and Kartika Sari Industrial Engineering, Telkom University, Bandung 40257, Indonesia	Paper_64
9	65	ANALYSIS OF INCREASING QUALITY OF SURFACTANT POWDER AT OVERSIZE PARAMETER USING PDCA AND FMEA IN PT BCCI Rini Prasetyani, Ahmad Taufiqul Huda and Desinta Rahayu Ningtyas Jurusan Teknik Industri, Fakultas Teknik, Universitas Pancasila, Jakarta Selatan, Indonesia	Paper_65
10	70	IMPROVING THE QUALITY OF MSMES CLUSTER PRODUCTS WITH QUALITY FUNCTION DEPLOYMENT Bustanul Arifin Noer, Imam Baihaqi, Yudha Prasetyawan, Harimuti 'Adly Nindyanto and Fitriana Kartikasari Business Management Department, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia Industrial Engineering Department, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia	Paper_70
11	76	QUALITY AND RELIABILITY ENGINEERING IN SERVICE INDUSTRY: A PROPOSED ALTERNATIVE IMPROVEMENT FRAMEWORK Mochammad Arbi Hadiyat, Rahman Dwi Wahyudi, Yenny Sari and Evy Herowati Industrial Engineering, University of Surabaya	Paper_76

QM – Quality Engineering & Management			
No	Paper	Title and Author	Page
12	83	MEASURING ACCEPTANCE LEVEL OF ONLINE SERVICE FOR BUSINESS PERMIT IN SURABAYA USING TECHNOLOGY ACCEPTANCE MODEL I Made Ronyastra, Gunawan and Erlangga Kharisma Muhammad Industrial Engineering Department, University of Surabaya, Surabaya, Indonesia	Paper_83
13	97	VALUE ENGINEERING TOWARDS THE DESIGN OF BREAD PRODUCTION PROCESS TOOLS Ayu Bidiawati, Inna Kholidasari and Bintang Manggala Elani Department of Industrial Engineering, Faculty of Industrial Technology, Universitas Bung Hatta, Padang, Indonesia	Paper_97
14	104	EFFECTS OF COCOA CLONES AND FERMENTATION TIMES ON PHYSICAL AND CHEMICAL CHARACTERISTICS OF COCOA BEANS (<i>THEOBROMA CACAO</i> L.) A Assa, Rosniati and M R Yunus Center for Plantation Based Industry, Agency for Research and Development of Industry, Ministry of Industry, Makassar, South Sulawesi, Indonesia	Paper_104
15	107	MAPPING OF NOISE LEVELS MADE BY DRILLING MACHINES ON PROJECT Y USING CONTOUR ZONE METHOD Bambang Cahyadi and Gita A Timang Industrial Engineering, Faculty of Engineering, Pancasila University, Jakarta, Indonesia	Paper_107

SCM – Supply Chain Management			
No	Paper	Title and Author	Page
1	11	COOPERATION BETWEEN POWER PLANT IN EAST KALIMANTAN BY INTEGRATING RENEWABLE ENERGY POWER PLANT Muslimin, Willy Tambunan and Wahyuda Electrical Engineering, Universitas Mulawarman, Samarinda, Indonesia Industrial Engineering, Universitas Mulawarman, Samarinda, Indonesia	Paper_11
2	23	INTEGRATED LOGISTICS AND TRANSPORTATION ROUTING IN RURAL LOGISTICS SYSTEM Tuti Sarma Sinaga and Senator Nur Bahagia Faculty of Industrial Technology, Bandung Institute of Technology, Bandung, Indonesia Departement of Industrial Engineering, Faculty Of Engineering, University of Sumatera Utara, Medan, Indonesia	Paper_23
3	28	DEVELOPMENT OF VENDOR MANAGEMENT AND E-PROCUREMENT SYSTEMS USING ANDROID PLATFORM Bendy Angrian and Taufik Roni Sahroni Industrial Engineering Department, BINUS Graduate Program – Master of Industrial Engineering, Bina Nusantara University 11480, Jakarta, Indonesia	Paper_28

SCM – Supply Chain Management			
No	Paper	Title and Author	Page
4	45	CALCULATION OF RAW MATERIAL COSTS FOR THE PALM OIL SUPPLY CHAIN VALUE ADDED USING MODIFIED HAYAMI METHOD Syarif Hidayat Department of Industrial Engineering, Universitas Al Azhar Indonesia, Jakarta Selatan, Indonesia	Paper_45
5	46	MULTI ECHELON DISTRIBUTION MODEL FOR ELECTRIC MARKET DEREGULATION COLLABORATION STRATEGY IN EAST KALIMANTAN Irwan Gani, Wahyuda, Budi Santosa and Muliati Economics Faculty, Universitas Mulawarman, Samarinda, Indonesia Industrial Engineering, Universitas Mulawarman, Samarinda, Indonesia Industrial Engineering, Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia	Paper_46
6	58	ANALYSIS OF SUPPLY CHAIN NETWORK OF FBS PRODUCTION IN SMALL AND MEDIUM TEXTILE AND TEXTILE PRODUCT (TTP) INDUSTRY Nunung Nurhasanah, Marcia Devana, B Aribowo, R Safitri, B Samiono, CF Lutfia, P Kalifa, SW Fauzia and A Supriyanto Industrial Engineering Department, Faculty of Science and Technology, Universitas Al Azhar Indonesia, Jakarta 12110, Indonesia Informatic Engineering Department, Faculty of Science and Technology, Universitas Al Azhar Indonesia, Jakarta 12110, Indonesia Management Department, Faculty of Economy, Universitas Al Azhar Indonesia, Jakarta 12110, Indonesia	Paper_58
7	85	SUPPLY CHAIN RISK MANAGEMENT ON WOODEN TOYS INDUSTRIES BY USING HOUSE OF RISK (HOR) AND ANALYTICAL NETWORK PROCESS (ANP) METHOD Widya Nurcahayanty Tanjung, Ratu Siti Khodijah, Syarif Hidayat, Endang Ripmiatin, Saaras Ayu Atikah and Selvy Sekar Asti Industrial engineering department, Faculty of science and technology, Universitas Al Azhar Indonesia, Sisingamangaraja Road, Jakarta 12110, Indonesia Informatic engineering department, Faculty of science and technology, Universitas Al Azhar Indonesia, Sisingamangaraja Road, Jakarta 12110, Indonesia	Paper_85
8	87	RISK MITIGATION FOR AGRICULTURAL PRODUCTS DISTRIBUTION IN AGRO-BUSINESS TERMINAL MANTUNG, KABUPATEN MALANG Teguh Oktiarso and Andi Haifa Kania Nadira Industrial Engineering Department, Universitas Ma Chung, Malang, Indonesia	Paper_87
9	91	THE RELATION OF INDONESIA'S STRATEGIC INDUSTRY PRINCIPLES AND SUPPLY CHAIN OPERATIONS REFERENCE (SCOR) PERFORMANCE ATTRIBUTE Joko Sulistio and Rizal Bayu Al Fatih Universitas Islam Indonesia, Yogyakarta, Indonesia	Paper_91

SCM – Supply Chain Management			
No	Paper	Title and Author	Page
10	106	A FRAMEWORK FOR THE IMPACT OF LEAN SIX SIGMA ON SUPPLY CHAIN PERFORMANCE IN MANUFACTURING COMPANIES Gihon Davilia Pardamean Gultom and Eric Wibisono Department of Industrial Engineering, University of Surabaya	Paper_106
11	128	SUPPLY CHAIN MANAGEMENT (SCM) – IS IT VALUE ADDITION TOWARDS ACADEMIA? Md. Mamun Habib BRAC Business School (BBS), BRAC University, Bangladesh University of Texas – Arlington (UTA), USA	Paper_128