

# IConISE & ACISE

The Joint Conference of 2nd International Conference on Industrial and System Engineering (IConISE) & 7th Annual Conference on Industrial and System Engineering (ACISE)

Surabaya - Indonesia, July 22<sup>nd</sup>-23<sup>rd</sup> 2020

MAIN THEME: BIG DATA ANALYTICS: A COMPETITIVE TOOLS TOWARD SMART INDUSTRIAL SYSTEM







It is our great pleasure to welcome all participants to our international conferences, the 2nd International Conference on Industrial and System Engineering (IConISE), and the 7th Annual Conference on Industrial and System Engineering (ACISE) held on July 22-23, 2020.

This event provides a unique opportunity for authors to get together and share their latest research findings and results with the main theme of "Big Data Analytics: A Competitive Tools toward Smart Industrial System."

We are confident that over the two days, all participants will get the theoretical grounding, practical knowledge, and personal contacts that will help in building a long-term, profitable and sustainable communication among researchers and practitioners working in a wide variety of scientific areas.

On behalf of all the conference committees, we would like to thank those who have contributed to making our 2nd IConISE and the 7th ACISE another rousing success: our keynote speakers, presenters, session chairs, reviewers, and our participants.

We truly hope you will enjoy the conference and get what you expect from the conference.

**Organizing Committee** 









## Introduction

#### **ABOUT ICONISE 2020**

Industrial engineering is concerned with the design, improvement, and installation of integrated systems of people, materials, information, equipment, and energy. Since its beginning, this scientific field has played significant roles in every industry; be it extraction and agriculture, manufacturing, services, knowledge, culture, and research. The International Conference on Industrial and System Engineering (IConISE) is held by Industrial and Systems Engineering Department of Institut Teknologi Sepuluh Nopember for associating and exchanging the better industrial engineering education, researches, and information among academicians and practitioners from different countries. Formerly known as the International Conference on Industrial Engineering and Service Science (IESS), the conference has been conducted since 2011. In the last decade, industries experienced a shift towards digitalization; thus, big data become one of the primary concerns in industrial engineering. Realizing the vital role of big data analytics, this year's conference designates it as the main topic.

#### **ABOUT ACISE 2020**

Industrial development has now led to the employment of vast resources and technology in a swift time. It was also triggered by the need of the world for the target effectiveness, process efficiency, data accuracy, product diversity, strong core competencies, and other benefits. The desire to obtain fast information about this development encourages intense and productive collaboration between scientists, engineers, and industrial practitioners. The Industrial Engineering Department of UNDIP has instituted a platform for this need in the Annual Conference on Industrial and System Engineering (ACISE).

Starting from regional and national community events, ACISE has now advanced into an internationalscale conferences. ACISE's last event was profoundly successful for gathering 180 papers and around 200 participants. In 2020, the 7th ACISE will be held together with the 2nd IConISE for further enhance the event scopes and impacts.



### **ICONISE & ACISE 2020 COMMITTEE MEMBERS**

Advisory Committee: Nurhadi Siswanto, S.T., MSIE, Ph.D, Head of Industrial and System Engineering Dept. ITS, Dr. Ratna Purwaningsih, S.T., M.T., Head of Industrial Engineering Dept. Diponegoro University

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ACISE 2020 Chair: Dr. Manik Mahachandra, S.T., M.Sc

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**Program Team:** Dewanti Anggrahini, S.T., M.T., Yudha Prasetyawan, S.T., M.Eng., Sri Hartini, S.T., M.T.

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**Publication Team:** Dr. Denny Nurkertamanda, S.T., M.T., Atikah Aghdhi Pratiwi, S.T., M.T., Arief Rahman, S.T., M.Sc

**Sponsorship Team:** Dr. Adithya Sudiarno, S.T., M.T., Dr. Purnawan Adi Wicaksono, S.T., M.T., Dody Hartanto, S.T., M.T., Niken Anggraini Savitri, S.T., M.T., Rindi Kusumawardani, S.Si., M.Sc.

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- Prof. Dr. Cucuk Nur Rosyidi, S.T., M.T., Sebelas Maret University, Indonesia.
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- Muhammad Mujiya Ulkhaq, S.T., M.Sc., Diponegoro University, Indonesia.
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- Dr. Naniek Utami Handayani, S.Si, Diponegoro University, Indonesia.
- Nia Budi Puspitasari, S.T., M.T., Diponegoro University, Indonesia.
- Niniet Indah Arvitrida, S.T., M.T., PhD., ITS, Indonesia.
- Dr.-Ing Novie Susanto, S.T., M.Eng, Diponegoro University, Indonesia.
- Nurhadi Siswanto, S.T., MSIE, Ph.D, ITS, Indonesia.
- Dr. Purnawan Adi Wicaksono, S.T., M.T., Diponegoro University, Indonesia.
- Putu Dana Karningsih S.T., M.Eng.Sc, Ph.D, ITS, Indonesia.
- Dr. Ratna Purwaningsih, S.T., M.T., Diponegoro University, Indonesia.
- Ratna Sari Dewi, S.T., M.T., Ph.D., ITS, Indonesia.
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- Dr. Singgih Saptadi, M.T., Diponegoro University, Indonesia.
- Sri Hartini, S.T., M.T., Diponegoro University, Indonesia.
- Wiwik Budiawan, S.T., M.T., Diponegoro University, Indonesia.
- Prof. Yassierli, S.T., M.T., PhD., ITB, Indonesia.
- Yusuf Widharto, S.T., M.Eng., Diponegoro University, Indonesia.

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**Topic: Some Thinks of AI for Smart City** 

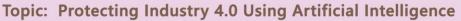
### Prof. Weijia Jia (Beijing Normal University (Zhuhai) - UIC and Shanghai Jiao Tong University – China)



Prof. Weijia Jia is a Chair Professor of Shanghai Jia Tong University, China. He was the Deputy Director of State Key Laboratory of Internet Things for Smart City in University of Macau, China. The first education he took was BSc in Computer Science, Central-South University (CSU), Changsha, Hunan, China until the last was PhD, Polytechnic Faculty of Mons, Belgium. He has a long employment history from Assist Lecturer, Dept. of Computer Science, CSU to Chair Professor, Shanghai Jiao Tong University, China.

He also has received several awards including 2017 : Science and Technological Development Award from China Ministry of Education, 2015 : Guangdong Science and Technological Development Award, 2013 : China National Thousand Talents Program, 2011, 2012 : Best Product Award of International High-Tech Exhibition (Shenzhen), 2005 : 2nd Prize of Science & Technology Award, Hunan Government, PR China, and 1999 : National Science and Tech. Achievements (China): Nast# 4912224000078. Besides that Prof. Weijia Jia also very often being a speaker at other international conferences.

He also did some research in 1999 on the topic of AI and Big Data; Men-Machines-Things Knowledge Graphs Completions; Smart City and IoT Designs; Next Generation Networking and Communications; Fog Computing. This research continues and he developed it until 2012. Not only that Prof. Weija Jia also has 13 patents including US Patent: "Mobile internet service system for long distance trains", US 9258759 B2, China Patent: On-line recognition and counting method and systems, Number: CN200310110417.5,16/10/2003, and many more. Which is considered as the best work in his field, among others "Six Most Infuential Publications": best theoritical bound, pioneer work on Any cast routing, pioneer work on sensor networks, pioneer work on IEEE 802.16 scheduling, and best paper award. Not only that, he also participated in referred international journals more than 160 journals. Several books of his work have also been published.



### Dr. Rer. Nat. Fal Sadikin (Scientist of Philips Eindhoven- Netherlands)

Dr. rer. nat. Fal Sadikin is Scientist (IoT Security) of Philips Eindhoven- Netherlands. He has employment history from Lecturer in University of Amikom Yogyakarta several subjects including Computer Networks, Network Security, **Mathematics** Cryptography, Discrete to PhD/Doctoral Researcher Freie Universitat Berlin, Postdoc/Reserach Engineer in Cybersecurity in University of Houston and Security Scientist in Signify Eindhoven Area, Netherlands. The first education he took was Master, Electrical Engineering and Information Technology Universitas Gadjah Mada, Indonesia until the last was Doctorate of Science (PhD), Computer Science in Freie Universitat Berlin (in conjuction with Technical University of Berlin and Fraunhofer FOKUS).



He also has professional certifications such as Certified Ethical Hacker (CEH), Security Specialist (Forensic, Web Security, Server Security, and Network Security). Topic that he interests is Patents and Scientific Publications in Security, IoT and Networking and he got some experience such as Applied Machine Learning for Cyber-security, Splunk Data Analytics, IoT Security, IoT Penetration Testing, Distributed Intrusions Detection System and Incident Response for IoT Systems, ZigBee Security, Bluetooth Security, DDoS Resilient Emergency Dispatch Center, VoIP DDoS, Security Protocols, Network Security, Network Measurements. He also has several awards including Best Paper Award, IoTBDS 2020. He also active to join some course, projects, organizations and publications, many course he took and got the license and certifications was Certified Ethical Hacker (CEH) EC-Council, Lean Foundation, Continous Improvement Certification Philips Lighting, Basic TRIZ, Theory of Inventive Problem Solving The International TRIZ Assocication (ATRIZ), Machine Learning Coursera, Security Specialist, Web Security Specialist, Server Security Specialist, Security Aware Administrator and Forensic Spesialist. *(Based on document published on 2020)*.

**Topic: Big Data Analysis - A Competitive Tools toward Smart Industrial System** 

### Doan Lingga (Head of Data Analytics Group Traveloka)



Doan Lingga is Head of Data Analytics Group Traveloka. The first education he took was Bachelor Degree in Computer Science, Trisakti University, Indonesia until the last was Master of Applied Finance, Bina Nusantara Business School, and Applied Finance (MBA). Topic that he interests is developing and building data warehouse, analytics, predictive modelling, & big data ecosystem, executing tactical and strategic framework to enhance company revenue and usage performance through product creation and creative & relevant CLM and paid digital campaign. He has a long employment history from Software Developer Panasonic Group to Head of Data Analytics Group Traveloka. He also did some research for his study on the topic Artificial Intelligence Implementation-Depth First Search and Empirical Studies Economics Value Added & Profitability Ratios Association with an Annual Stock Return for Indonesian Companies. He also has several awards including Most Inspiring Implementation - KXEN, XL Banget 2012 - Intelligent Location Based Service + Know Your Customer and Indonesia Cellular Award 2013. He also active to join some course, projects, organizations and publications, the last course he took was Data Science Toolbox, Coursera, John Hopkins University. (Based on document published on 2020).

Topic: The Role of Data Management and Analytics in Industry 4.0 Ecosystems

### Prof. Dr. Ing. Hendro Wicaksono (Jacobs University – Germany)



Hendro Wicaksono received the Dr.-Ing. degree from the Karlsruhe Institute of Technology, Karlsruhe, Germany, in 2016. He is currently a Professor of industrial engineering with the Jacobs University Bremen, Bremen, Germany. He was a Researcher with the Institute of Information Management in Engineering, Karlsruhe Institute of Technology. He is also a Visiting Professor with the Faculty of Economics and Business, Airlangga University, Surabaya, Indonesia. Publication topics that he interests and is wind turbines, PI control, building management systems, electric current control, energy management systems, knowledge based systems, optimization, variable structure systems, water pumps, Global Positioning System, Internet of Things, active filters, blades, cameras, closed loop systems, cloud computing, computer vision, data mining, energy conservation, frequency control, fuzzy neural nets, fuzzy reasoning, harmonic distortion, home automation and inductive power transmission. He has been researching and managing teens of international research projects in energy-management systems in buildings, production, and cities using semantic technologies and data mining. He has published over 40 papers (two nominations for Best Papers). He also active to participate in international conference such as International Conference on Electrical, Electronics and Information Engineering (ICEEIE) 2019, International Conference on Information and Communications Technology (ICOIACT) 2019, IEEE Conference on Energy Conversion (CENCON) 2019 and many more. (Based on document published on 2018).

**Topic: Supply Chain Big Data - An Opportunity for Future Research** 

### Assoc. Prof. Ferry Jie (Edith Cowan University - Australia)

Associate Professor Ferry Jie is Associate Professor in Supply Chain and Logistics Management, in the School of Business and Law, Commerce Discipline. In addition, Ferry Jie is a Deputy Director, Centre for Innovative Practice. Ferry has graduated his doctorate study from The University of Sydney in 2008. His PhD thesis is Supply Chain Analysis in the Australian Beef Industry. Currently Dr Jie is an Associate Professor at School of Business and Law, Edith Cowan University. Previously, he was a Senior Lecturer and taking a program coordinator role in Logistics and Supply Chain Management (LSCM) at RMIT University.



He was managing and coordinating the undergraduate program in LSCM at RMIT from 2015 to 2016. Associate Professor Ferry Jie has maintained a high quality of research throughout his academic career including international scholarly leadership in the areas of supply chain management and logistics, including being invited to be keynote speaker and to give public lectures at symposiums and international conferences in Indonesia, Malaysia, Vietnam, China, UK and Australia. He also did some research on the topic interets is supply chain and logistics management, operations/production management, quantitative management/operations research/management science, quality management, lean six sigma, strategic management, and project management. From 2013 to 2018, Dr Jie has published 33 refereed journal articles (including 8 (eight) articles in A Ranked Journal - ABDC Journal Lists) and 20 refereed conference papers. Furthermore, Dr Jie has professional and community engagement activities to contribute significantly to improve the university's reputation through contribution to the wider community. (*Based on document published on 2020*).





Prof. Dr. Wahyudi Sutopo, S.T., M.Si . Sebelas Maret University Topic: Intervening for Accelerating A Technology Commercialization in University Using Early Supply Chain Integration: A Case of Renewable Energy – LFP Battery

> Prof. Aries Susanty, S.T., M.T. Diponegoro University Topic: Toward Circular Economy through Green Supply Chain Data Analysis





Dr. Singgih Saptadi, M.T. Diponegoro University Topic: Data Research: Research Experiences Sharing

> Dr. Rifky Ismail, S.T., M.T. Diponegoro University Topic: Wearable Elbow Exoskeleton: Design, Prototype, and Applications





Dr. Ir. Patdono Suwignyo, M.Eng.Sc. Institut Teknologi Sepuluh Nopember Topic: Study on Process Innovation at Indonesia State Owned Entreprises

> Prof. Ir. Budi Santosa, M.Sc., Ph.D. Institut Teknologi Sepuluh Nopember Topic: Big Data in Manufacturing System

### Dr. Maria Anityasari, S.T., M.E.

Institut Teknologi Sepuluh Nopember Topic: Facing the Future by Embedding "Super" Taxonomy of STEM Competencies into Curriculum

> Niniet Indah Arvitrida, S.T., M.T., Ph.D. Institut Teknologi Sepuluh Nopember Topic: Retail Supply Chain Mangement: Now and Then

Dyah Santhi Dewi, S.T., M.Eng.Sc., Ph.D Institut Teknologi Sepuluh Nopember Topic: Workload Analysis in The New Normal Life Towards Industry 4.0: An Ergonomics Perspective









### **GENERAL GUIDE** OF THE JOINT CONFERENCE OF ICONISE & ACISE 2020



Dress Appropriately



Leave the Keyboard Alone



Use PAPER ID\_FIRST NAME as Your Zoom ID



Use Headset / Earphones to Get a Clear Sound



Be Aware of Your Surroundings



Check Your Connection



Mute Your Microphone When You're Not Talking



Stay Seated and Stay Present





### Due to the COVID-19 pandemic, IConISE & ACISE 2020 will be held in full streaming through ZOOM.

#### 1. DRESS APPROPRIATELY

This is an international with huge number of participants come from many countries. Please take few minutes to throw on a formal attire. Put yourself in the right headspace to be productive.

#### 2. BE AWARE OF YOUR SURROUNDINGS

The other participant will not be able to hear your ideas or take you seriously when there is a pile of dirty clothes in the corner behind you. Adjust your work setup so that you face a window or are exposed to plenty of light, and make sure your background is using professional and appropriate (the background will be given by the committee). This means:

- No beds (unmade or made) in the background.
- No messy rooms or open closets where everyone can see your clutter.
- No NSFW artwork.
- While kids and pets are adorable, and much needed distraction when you are feeling overwhelmed, other participants will not prefer to talk over a screaming child or barking dog. So, be mindful of noise.

#### 3. LEAVE THE KEYBOARD ALONE

Since your laptop's internal microphone is inches away from the keyboard, the sound of your typing will be distracting. It is not only distracting everyone else in the meeting, it is also preventing you from devoting your full attention to the meeting.

#### 4. CHECK YOUR CONNECTION

Please make sure your network adapter, Wi-Fi or internet connection to avoid **zoom** meeting problems during the plenary and parallel sessions.

#### 5. SET YOUR ZOOM MEETING ID

The conference committee will admit only the registered participants into the meeting room. Please use "PAPER ID\_FIRST NAME" as your zoom meeting ID. Example: "100\_JOHNSON". If you have submitted more than 1 paper, please use: ID1\_ID2\_FIRST NAME. If you are a non-presenter participant, please set your zoom meeting ID as "FIRST NAME\_NON PRESENTER". Example: "JOHNSON\_NON PRESENTER".

#### 6. MUTE THE MICROPHONE

The honorable speakers will deliver great speeches. Please mute your microphone when you are not speaking to give other participants the ability to chime in and share their thoughts without any distraction.

#### 7. USE HEADSET / EARPHONES

Your computer's default audio output and input probably produce a background noise or create feedback in your video. You may use a headset, earphone or Bluetooth earpieces that connect to your computer during the sessions, as all participants will be able to hear clearly.

#### 8. STAY SEATED AND STAY PRESENT

This conference will take around 8 hours of your day. It may be tempting to check your inbox or carry on a side conversation during the meeting, but please remain seated. You might miss out on key information or an opportunity to give input. If you are using your webcam, use attentive body language,

Sit up straight, do not make a big extraneous movement, and do not let your eyes wander too much.

Instructions for The Online Tools "ZOOM"

- 1. You can download the software "Zoom" from this URL : <u>https://www.zoom.us/</u>
- 2. How to join online conference in Zoom

🧧 Zoom		Home	□ Chat	() Meetings	© Contacts	Q Search
	New Meeting ~	(+) Join			<b>09:15 PI</b> sunday, July 5, 2020	
	19 Schedule	Share screen ~			No upcoming meetings t	oday

Please click "Join".

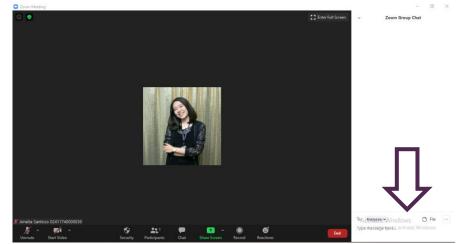
3. The Meeting ID for Each Session.

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- Please fill in the Meeting ID, then please put your paper ID\_FIRST NAME as your zoom ID and join the online conference. If you have submitted more than 1 paper, please use: ID1\_ID2\_FIRST NAME. If you are a non-presenter participant, please set your zoom meeting ID as FIRST NAME\_NON PRESENTER.
  Don't forget to do the General Guide which has stated before.
- In addition, please use the virtual background of this event. You can choose one among the five background themes provided in our official website. You can access by this link: <u>http://iconiseacise2020.com/iconise/downloads/</u>



4. How to chat with others in Zoom :



You can click "Chat" first.

Then, you can click "Everyone" to choose who you want to talk with.

5. How to raise our hands and ask questions in Zoom :

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	Amelia Santoso (Host)			×	⊠4	
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- If you have any problems during the conference, you can click "Raise Hand" or use "Chat" to communicate with the conference secretary and the conference secretary will help you.
- When you have questions about keynote speeches, you can also use "Raise Hand".
- After the keynote speech is over, keynote speakers will answer your questions.
- 6. In case there is some technical problem and you are accidentally disconnected from the zoom meeting, please re-join the meeting with same meeting ID.

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# Technical Agenda (The time in the schedule is according to GMT+7)

DAY I	Date	Time	Session	Speaker	Moderator / Session Chair	ZOOM Meeting Link
			DAY -	1		
		06.30 - 07.30 07.30 - 08.00	Pre-opening (preparation) Inviting conference organizers, speakers, MC, rector, moderator (zoom meeting room) Inviting participants (zoom			
		08.00 - 08.30	meeting room)			
		08.30 - 08.40	Opening ceremony	МС		
		08.40 - 08.55	Welcome speech by IConISE 2020 chair	Ratna Sari Dewi, Ph.D.		
		08.55 - 09.10	Welcome speech and opening by Rector of ITS	Prof. M. Ashari		Zoom meeting
		09.10 - 09.15		(break)		link: https://bit.ly/C
Wednesday	Plenary Session 1:09.15 - 10.15Some Thinks of ArtificialIntelligence for Smart City	Prof. Weijia Jia (Joint Al and Future Networking Institute of Beijing Normal University (Zhuhai) and UIC, Shanghai Jiao Tong University)	Dr. Maria Anityasari	ONFERENCE- DAY1 Meeting ID: 941 5530 3740 Password: 213583		
		10.15 - 10.20		(break)		
		10.20 - 11.20	Plenary Session 2: <i>Protecting Industry 4.0</i> Using Artificial Intelligence	Dr. rer. nat Fal Sadikin, S.T., M.Eng. (Phillips Eindhoven Belanda)	Dr. Bambang Purwanggono	
		11.20 - 11.30		(break)		
		11.30 - 12.30	Plenary Session 3: <i>Big Data Analysis-A Competitive Tools Toward Smart Industrial System</i>	Mr. Doan Lingga (Traveloka)	Nani Kurniati, Ph.D.	
		12.30 - 12.45		(break)		
		12.45 - 14.45	Parallel Session 1			
		14.45 – 15.00		(break)		
		15.00 – 17.00	Parallel Session 2			
		17.00 – 17.15		Closing		

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DAY II	Date	Time	Session	Speaker	Moderator / Session Chair	ZOOM Meeting Link		
			DAY -	2				
		06.30 - 07.30	Pre-opening (preparation)					
		07.30 - 08.00	Inviting conference organizers, speakers, MC, rector, moderator (zoom meeting room)					
		08.00 - 08.30	Inviting participants (zoom meeting room)					
		08.30 - 08.40	Opening remarks	мс		Zoom Meeting		
		08.40 - 08.55	Welcome speech by ACISE 2020 chair	Dr. Manik Mahachandra		https://bit.ly/C		
		08.55 - 09.10	Welcome speech by Rector of Universitas Diponegoro	Prof. Dr. Yos Johan Utama, S.H., M.Hum.		DAY2		
lay	2020	09.10 - 09.15		(break)		-		
Thursday	July 23 <sup>rd</sup> 2020	09.15 - 10.15	Plenary Session 4: <i>The role</i> of data management and analytics in industry 4.0 ecosystems	Prof. Dr-Ing. Hendro Wicaksono (Jacobs University Germany)	Prof. Dr. Aries Susanty	Password: 775576		
		10.15 - 10.20		(break)				
		10.20 - 11.20 Chain Big Data-An Jie, Ph	Assoc. Prof. Ferry Jie, Ph.D. (Edith Cowan University)	DrEng. Erwin Widodo	Link: https://bit.ly/C ONFERENCE- DAY2 Meeting ID: 998 9759 7904 Password:			
		11.20 -11.30		(break)	-			
		11.30 – 13.30	Parallel Session 3					
		13.30 – 14.00		(break)				
		14.00 – 16.00	Parallel Session 4					
		16.00 – 16.30		Closing				



Wednesday, July 22<sup>nd</sup> 2020 (12.45 - 14.45)

Room Meeting I [Green Manufacturing and Sustainability] Session Chair: Dr. Ratna Purwaningsih					
Zoom meeting link: <u>https://bit.ly/DAY1-R1</u> Meeting ID: 979 9947 4320 / Password: 805341					
Title	Author				
Quantifying Energy Consumption and Greenhouse Gas Emissions of Construction Projects: A Case Study of Semarang - Bawen Road Project	Jati Utomo Dwi Hatmoko and Lendra Lendra				
How Sustainable are Flexible and Rigid Pavement? A Life Cycle Impact Assessment (LCIA) Approach	Jati Utomo Dwi Hatmoko and Lendra Lendra				
Environmental Impact Reduction in Broiler Chicken Farm Using Life Cycle Assessment in The Implementation Of Circular Economy	Purnawan Adi Wicaksono and Devi Kaswara				
Analysis of the Eco-Efficiency Level in the Dining Table Production Process Using Life Cycle Assessment Method to increase industry sustainability	Ratna Purwaningsih, Novie Susanto, Damar Azis Adhyaksa and Ade Aisyah Arifna Putri				
Trends and future studies on policies to improve renewable energy share	Joko Sulistio, Budisantoso Wirjodirdjo and Putu Dana Karningsih				
Room Meeting II [Occupational Heath & Safety] Session Chair: Dr. Novie Susanto					
Zoom meeting link: <u>https://bit.ly/DAY1-R2</u> Meeting ID: 935 5284 0452 / Password: 316269					
Title	Author				
The Expired Period of Liquefied Petroleum Gas (LPG) Rubber Hose Supports Consumer Safety Aspects	Ary Budi Mulyono and Endi Hari Purwanto				
Determine effective pedestrian paths as evacuation routes for landslide disaster (Case study : Manyaram and Kembangarum Villages)	Deliana W Latuihamallo, Novie Susanto and Aries Susanty				
Human Error Analysis using Success Likelihood Index Method (SLIM) in Grinding Activitiesv	Indri Santiasih and Ratna Ayu Ratriwardhani				
Analysis of Factors that Affecting Safety Risk Perception in Oil Refinery Industry	Indra Rizki Pratama, Ratna Sari Dewi and Adithya Sudiarno				
The influence of day time, traffic density, and rush hour on mobile phone use among Indonesian motorcyclist	Amelia, Gradian Budi Pratama and Ari Widyanti				
Session Chair: Yusuf Widharto, M.Eng.					
Zoom meeting link: <u>https://bit.ly/DAY1-R3</u> Meeting ID: 942 8581 2389 / Password: 942832					
Title	Author				
Applying the ISO 31000:2009 in Livestock Industries (Case Study: XYZ Livestock Group)	Hanin Fitria and Agus Mansur				
Risk Management at Cozy Carwash Yogyakarta with ISO 31000 Implementation	Famelga Clea Putri and Agus Mansur				
RISKS ANALYSIS FOR PRODUCTION AND DISTRIBUTION SYSTEM IN LOCAL WATER SUPPLY UTILITY	Nailul Khalid and Iwan Vanany				
THE CONTRIBUTION OF INTELLECTUAL CAPITAL ON INDONESIAN BANKS' RISK MANAGEMENT	Agus Gama and Ni Luh Wiagustini				
Enterprise Risk Management Disclosure and Firm Value: The Role of Risk Monitoring Committee	Ni Wayan Rustiarini and Ni Nyoman Ayu Suryandari				
	Session Chair: Dr. Ratna Purwaningsih        Zoom meeting link: https://bit.ly/DAY1-R1        Meeting ID: 979 9947 4320 / Password: 805341        Title        Quantifying Energy Consumption and Greenhouse Gas Emissions of Construction Projects: A Case Study of Semarang - Bawen Road Project        How Sustainable are Flexible and Rigid Pavement? A Life Cycle Impact Assessment (LCIA) Approach        Environmental Impact Reduction in Broiler Chicken Farm Using Life Cycle Assessment in The Implementation Of Circular Economy        Analysis of the Eco-Efficiency Level in the Dining Table Production Process Using Life Cycle Assessment Method to increase industry sustainability        Trends and future studies on policies to improve renewable energy share        Zoom meeting link: https://bit.ly/DAY1-R2 Meeting ID: 935 5284 0452 / Password: 316269        Title        The Expired Period of Liquefied Petroleum Gas (LPG) Rubber Hose Supports Consumer Safety Aspects        Determine effective pedestrian paths as evacuation routes for landslide disaster (Case study : Manyaram and Kembangarum Villages)        Human Error Analysis using Success Likelihood Index Method (SLIM) in Grinding Activitiesv        Analysis of Factors that Affecting Safety Risk Perception in Oil Refinery Industry        The influence of day time, traffic density, and rush hour on mobile phone use among Indonesian motorcyclist        Room Meeting III [Risk Management] Session Chair: Yusuf Widharto, M.Eng. Zoom meeting link: https://bit.ly/DAY1-R3 Meeting ID: 942				

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Wednesday, July 22<sup>nd</sup> 2020 (12.45 - 14.45)

	Room Meeting IV [Optimization] Session Chair: Dr. Arfan Bachtiar	
	Zoom meeting link: <u>https://bit.ly/DAY1-R4</u> Meeting ID: 945 6542 8345 / Password: 098762	
ID	Title	Author
	Data Science: Research Experiences Sharing	Dr Singgih Saptadi (Invited Speaker)
155	Literature Review: Design Improvement of Pallet Part in Automotive Companies	Arfan Bakhtiar and Steffany Audina Puspitasari
160	Analysis on Acquisition of Philippine Civil Registry Documents and Inclination towards Paperless e-Government	Lizette Erin Villena, Rex Aurelius Robielos and Wei-Jung Shiang
138	LOCATION OPTIMIZATION OF THE FIGHTER SQUADRON FOR INDONESIAN AIR DEFENSE	Gagat Riano and Komarudin Bin Sayuti
51	Bi-objective Optimization Model for Integrated Planning in Container Terminal Operations	Dina Prayogo, Akhmad Hidayatno and Komarudin Komarudin
95	Provision model for line balancing in multi-echelon multi-product continuous cement production	Nalendra Permana, Sri Partiwi and Erwin Widodo
	Room Meeting V [Industrial Management] Session Chair: Dr. Naniek Utami H Zoom meeting link: <u>https://bit.ly/DAY1-R5</u> Meeting ID: 995 6462 3299 / Password: 894866	
ID	Title	Author
20	Procurement Manager Skills and Competencies: Empirical Evidence from Student's Perception of Industrial Engineering	Ilyas Masudin, Nika Tampi, Revon Awalia Wahyu Agata, Rizky Purnama Hadi Prawita and Dian Palupi Restuputri
123	Analysis Factors That Influence Mall Customer Loyalty in Semarang	Nia Budi Puspitasari, Dyah Ika Rinawati, Awalya Tiffany Jonenetha and Zainal Fanani Rosyada
164	Effect of Service Quality on Customer Loyalty with Customer Satisfaction as Intervening Variables at PT. Bank Rakyat Indonesia (Persero), Tbk Branch Cepu Financial Services Industry: A Literature Review	Murni Elfrida Br Sipayung, Arfan Bakhtiar and Nainek Utami Handayani
16	The Effect of Relational Benefits, Service Quality, and Product Quality on Customer Satisfaction and Loyalty	Aditya Sastra and Imam Baihaqi
135	Utilization of Facial Expression Analysis in the Pricing Strategy Formulation	Hasrini Sari, Marsya Sinclairianiputri Rahadian and Aldila Rizkiana

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### **PRESENTATION SCHEDULE**

Wednesday, July 22nd 2020 (12.45 - 14.45)

	Room Meeting VI [Supply Chain Management]	1
	Session Chair: Dr.Eng. Erwin Widodo	
	Zoom meeting link: <u>https://bit.ly/DAY1-R6</u>	
	Meeting ID: 910 5427 7785 / Password: 080642	
ID	Title	Author
	Towards Circular Economy through Green Supply Chain Data Analysis	Prof. Dr. Aries Susanty
	Towards Circulal Economy through Green supply Chain Data Analysis	(Invited Speaker)
159	Development of a Multi Echelon Economic Dispatch Model for Combined	Wahyuda Wahyuda
	Optimization between the Production and Distribution Side of the Electricity	
		Susatyo Nugroho Widyo Pramono,
174	Analyzing the Barriers of Reverse Logistics Implementation: A Case Study	M. Mujiya Ulkhaq and Zanjabila
		Aulia
201	Determination of Route for Estimating Number of Truck Needed in Periodic Distribution : A Case Study	Dody Hartanto and Rahmadilah Wahyuningtyas
	Distribution : A Case Study	Sherly A. Wardani, Mochamad
40	The Evaluation of Reverse Logistic as Indicator of the Green Material	Agung Wibowo and Naniek Utami
40	Management Performance in a Construction Project: A Literature Review	Handayani
	Determining 150kV Transmission Tower Route Using FAHP(Fuzzy Analytical	
117	Hierarchy Process) Method	Abdul Muis and Budi Santosa
	Room Meeting VII [Technology & Innovation Manage	ement]
	Session Chair: Putu Dana Karningsih, Ph.D.	
	Zoom meeting link: <u>https://bit.ly/DAY1-R7</u>	
	Meeting ID: 926 7749 7302 / Password: 022895	
ID	Title	Author
	Study (in Progress) on Process Innovation at Indonesia State Owned	Dr. Patdono Suwignjo
	Enterprises	(Invited Speaker)
		Adhatus S. Ahmadiyah, Tubagus I I
23	Investment Recommendation System on Agriculture Peer-to-Peer Lending	Apriwibowo, Adnan E Raharja,
25	Websites	Salsha A Amosea and Hayu A
		Radriyantami
27	PCA Effect on The 3D Face Recognition System Speed	Adhi Kusnadi, Wella Wella, Ivransa
		Zuhdi Pane and Rangga Winantyo
82	PASSENGERS ACCEPTANCE OF CASHLESS PAYMENT SYSTEM IN PUBLIC	Leonidas Nzaramyimana and Tony
	TRANSPORTATION SYSTEM	Dwi Susanto
147	Business Incubator and Digital Startup Company – Coming Together is A Boginning: A Poview	Averyadi Setiawan and Arviansyah
	Beginning: A Review	Arviansyah Putu Karningsih, Rindi
		Kusumawardani, Nur Syahroni,
193	Automated fish feeding management system for an offshore aquaculture unit	Yeyes Mulyadi and Mohd Syafaad
		Mohd Saad

### **PRESENTATION SCHEDULE**

Wednesday, July 22<sup>nd</sup> 2020 (12.45 - 14.45)

	Room Meeting VIII [Ergonomics] Session Chair: Dr. Manik Mahachandra						
	Zoom meeting link: <u>https://bit.ly/DAY1-R8</u> Meeting ID: 948 1936 8285 / Password: 278412						
ID	Title	Author					
180	Design of Therapy Equipment for Osteoarthritis Patients Based on Static Bikes Using QFD and Human Centre Design Method	Heru Prastawa, Manik Mahachandra, Rizqina Salma Mahmudati and Dwi Sa'Nu					
186	REBA : an ergonomics assessment for machine operator of porang (amorphophallus muelleri)	Eko Nurmianto, Arino Anzip and Dwi Endah Kusrini					
195	Ergonomics Redesign of Mountain Backpack for Female Hikers in Indonesia	Manik Mahachandra, Heru Prastawa, Zainal Fanani Rosyada and Tahmida Fatmala Zulva					
176	Work System Analysis on Puncher Bar Repair Process in the Production Division of Akademi Teknik Soroako (Soroako Technical Academy)	Burhanuddin Burhanuddin and Ratna Sari Dewi					
88	Workstation and Posture Improvement in Cutting Machine Process Using Virtual Modelling	Linda Studiyanti, Winnie Septiani and Nanda Aulia					

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Wednesday, July 22<sup>nd</sup> 2020 (15.00 - 17.00)

Room Meeting I [Inventory Management] Session Chair: Dr. Purnawan Adi W	
Meeting ID: 979 9947 4320 / Password: 805341	
Title	Author
Spare Part Inventory Management With A Cross-Functional Perspective	Bayu Pratama Putra, Niniet Indah Arvitrida and I Nyoman Pujawan
Inventory Control For Electrical And Instrumentation Spare Parts In Cement Industries	Imran and Iwan Vanany
Spare parts inventory management using continuous review, periodic review, and reliability method in the warehouse	Dedy Ermawanto and Nani Kurniati
Inventory Model for Multi-Perishable Goods with Limited Storage Capacity	Firza Faiz Afiffi and Niniet Indah Arvitrida
Eliminating Shadow Warehouse and Improving Inventory Performance in a Mining Company	Rahma Mulyati, Nyoman Pujawan and Iwan Vanany
Room Meeting II [Ergonomics & Workload Analysis]	
Session Chair: Dr. Adithya Sudiarno	
Zoom meeting link: <u>https://bit.ly/DAY1-R2</u> Meeting ID: 935 5284 0452 / Password: 316269	
Title	Author
Workload Analysis in The New Normal Life Towards Industry 4.0: An Ergonomics Perspective	Dyah Santhi Dewi, Ph.D. (Invited Speaker)
Workload Analysis for Laboratory and Sample House Employees in Mining Industry using Full-Time Equivalent	Andi Agrah Arundana Djabba, Moses Laksono Singgih and Iwan Vanany
A Review of Respiratory-based Measurement Methods for Assessing the Cognitive Workload	Sheila Amalia Salma and Ari Widyanti
Physiological and Biochemical Measures of Mental Workload of Air Traffic Controllers: A Systematic Review	Wiediartini, Udisubakti Ciptomulyono and Ratna Sari Dewi
WORK LOAD ANALYSIS USING MODIFIED FULL TIME EQUIVALENT (M-FTE) AND NASA-TLX METHODS TO OPTIMIZE ENGINEER HEADCOUNT IN THE ENGINEERING SERVICES DEPARTMENT	Yunita Rachmuddin, Dyah Shanti Dewi and Ratna Sari Dewi
Understanding the Effects of Satisfaction and Trust on E-Repeat Purchase Intention: An Ergonomic Cognitive Approach	Dyah Santhi Dewi, Adithya Sudiarno, Ratna Sari Dewi and Joshua Aritonang
Room Meeting III [Supply Chain & Distribution] Session Chair: Niniet Indah A, Ph.D.	
Zoom meeting link: <u>https://bit.ly/DAY1-R3</u> Meeting ID: 942 8581 2389 / Password: 942832	
Title	Author
Supply-demand optimization in the product distribution process through the branching method	Valeriana Lukitosari and Apol Pribadi
Designing Clusters of Distribution Area and Delivery Route for maximizing vehicle utilization and minimizing workload gap and distribution cost	Amelia Santoso, Joniarto Parung, Dina Natalia Prayogo and Winardi
Production And Distribution Model In Cement Industry To Minimize Supply Chain Costs	Muhammad Reza Nooranda and Iwan Vanany
Decision Making Behavior of Traditional Retail in Distribution System: A Conceptual Framework	Ary Arvianto, Bertha Maya Sopha, Anna Maria Sri Asih and Muhammad Ali Imron
Retail Pricing Strategy for Supply Chains: A Literature Review and Research Opportunity	Niniet Arvitrida, Niken Savitri and Rifki Pramudita
	Session Chair: Dr. Purnawan Adi W        Zoom meeting link: https://bit.ly/DAY1-R1        Meeting ID: 979 9947 4320 / Password: 805341        Title        Spare Part Inventory Management With A Cross-Functional Perspective        Inventory Control For Electrical And Instrumentation Spare Parts In Cement Industries        Spare parts inventory management using continuous review, periodic review, and reliability method in the warehouse        Inventory Model for Multi-Perishable Goods with Limited Storage Capacity        Eliminating Shadow Warehouse and Improving Inventory Performance in a Mining Company        Room Meeting II [Ergonomics & Workload Analysis] Session Chair: Dr. Adithya Sudiarno        Zoom meeting link: https://bit.ly/DAYI-R2 Meeting ID: 935 5284 0452 / Password: 316269        Workload Analysis for Laboratory and Sample House Employees in Mining Industry using Full-Time Equivalent        A Review of Respiratory-based Measurement Methods for Assessing the Cognitive Workload        Physiological and Biochemical Measures of Mental Workload of Air Traffic Controllers: A Systematic Review        WORK LOAD ANALYSIS USING MODIFIED FULL TIME EQUIVALENT (M-FTE) AND NASA-TLX METHODS TO OPTIMIZE ENGINEER HEADCOUNT IN THE ENGINEERING SERVICES DEPARTMENT        Understanding the Effects of Satisfaction and Trust on E-Repeat Purchase Intention: An Ergonomic Cognitive Approach        Room Meeting III [Supply Chain & Distribution] Session Chair: Niniet Indah A, Ph.D.        Zoom mee

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Wednesday, July 22<sup>nd</sup> 2020 (15.00 - 17.00)

	Wednesday, July 22 2020 (13.00 - 17.00)	
	Room Meeting IV [Economic Evaluation & Finance Analys Session Chair: Naning Aranti Wessiani, M.M.	sis]
	Zoom meeting link: <u>https://bit.ly/DAY1-R4</u> Meeting ID: 910 5427 7785 / Password: 080642	
ID	Title	Author
54	Analysis of Stocks Return to the Internal Factors and Macroeconomics for Investor's Decision Making at Building Construction Companies in Indonesia Stock Exchange 2014-2019	Ghina Salsabila, Endang Chumaidiyah and Rita Zulbetti
76	THE EFFECT OF FINANCIAL RATIOS AND MACROECONOMICS ON STOCK RETURN IN INFRASTRUCTURE SECTOR	Ghina Mayliana, Endang Chumaidiyah and Rita Zulbetti
91	Economic Analysis Of Heavy Equipment Supply For Fulfilling Raw Materials	Lilik Agus Sugiyono and Bambang Syairudin
133	Economic Evaluation of Mobile Screening Station Waterless System Operation of Nickel Laterit Ore	Andy Yustian, Erwin Widodo and Moses L. Singgih
105	Economic Evaluation of Burner Unit Removal Project at Nickel Processing Company	Hendik Irawan and Erwin Widodo
	Room Meeting V [Maintenance Management] Session Chair: Nani Kurniati, Ph.D.	
	Zoom meeting link: <u>https://bit.ly/DAY1-R5</u> Meeting ID: 995 6462 3299 / Password: 894866	
ID	Title	Author
86	Proposing Predictive Maintenance Strategy to Increase OEE Through System Upgrade Scenarios and AHP	Yudha Prasetyawan and Indriyani Rachmayanti
108	Reducing Unplanned Downtime Using Predictive Maintenance (PdM)	Inman Yasin, Nani Kurniati and Bambang Syairudin
110	Joint Decision Between Production Planning and Maintenance Strategy of Heavy Equipment	Yufendy Munda and Erwin Widodo
146	The Reliability-centered Maintenance (RCM) Practice Relation with Availability and Downtime Loss in The Process Industry	Rahayu Khasanah, Imam Sodikin, Basuki Rachmad and Aditya Pradana
127	Modeling Opportunistic Maintenance using Discrete Event Simulation	Anggoro Laily Budiono, Nurhadi Siswanto and Nani Kurniati
	Room Meeting VI [Production Planning] Dr. Hery Suliantoro	
	Zoom meeting link: <u>https://bit.ly/DAY1-R6</u> Meeting ID: 910 5427 7785 / Password: 080642	
ID	Title	Author
56	LOT-SIZING SINGLE ITEM MODEL WITH STOCASTIC DEMAND, MULTIPLE SUPPLIERS, BACKLOGGING AND QUANTITY DISCOUNTS	Agung Sriyono, Sri Martini and Deni Abufatih
75	Joint Economic Lot Sizing at two level supply chain in food and beverage industry	Moch. Anshori, Nurul Hidayatul Isnaini and Gusti Adriansyah
98	Raw Material Order Allocation Problem Using Mixed Integer Linear Programming and Simulation	Ary Tri Wibowo, Niniet Indah Arvitrida and Erwin Widodo
189	Economic Order Quantity Model Considering Product Damage and Payment Delay	Roland Y. H. Silitonga and Cliff Iskandar
190	STRATEGIC ROLE OF PROCUREMENT FUNCTION ON PRIVATE HOSPITAL	Hery Suliantoro and Naniek Utami Handayani

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Wednesday, July 22<sup>nd</sup> 2020 (15.00 - 17.00)

	Room Meeting VII [Industrial Management] Session Chair: Dr. Denny Nurkertamanda					
	Zoom meeting link: <u>https://bit.ly/DAY1-R7</u> Meeting ID: 926 7749 7302 / Password: 022895					
ID	Title	Author				
	Facing the Future by Embedding "Super" Taxonomy of STEM Competencies into Curriculum	Dr. Maria Anityasari (Invited Speaker)				
157	The analysis of factors affecting the buying interest in poultry frozen food processed product	Ratna Purwaningsih, Novie Susanto and Ade Aisyah Arifna Putri				
162	Concise consumer needs for women Muslim fashion by integrating Online Product Review and Designer Voice	Yunia Dwie Nurcahyanie, Moses L Singgih and Dyah Santhi Dewi				
158	Literature Review: Impact of brand image, halal, and government certification on purchasing decisions for food and beverage	Arfan Bakhtiar, Novi Rahayu Ningsih and Naura Muthia Sari				
19	The Benefits of Gamification on User Experience: A Systematic Literature Review	Mutia Fadhila Putri and Osi Hayuni Putri				
196	Neglected Pregnant Women in Surabaya: A System Analysis to Provide Necessary Support	Maria Anityasari				
	Room Meeting VIII [Ergonomics] Zainal Fanany R, ST.,MT					
	Zoom meeting link: <u>https://bit.ly/DAY1-R8</u> Meeting ID: 948 1936 8285 / Password: 278412					
ID	Title	Author				
5	Usability Testing on Developed FES Device According to the Operator Perspective	Kevin Leonardo, Ratna Sari Dewi and Adithya Sudiarno				
187	P300 and Vigilance Level of University Student Under Hot and Humid Condition	Wiwik Budiawan and Kazuyo Tsuzuki				
41	Analysis of stressors factors on occupational stress and performance blue collar employees in pharma manufacturer	Dewi Arum Sekti, Manik Mahachandra and Naniek Utami Handayani				
192	Designing Integrated Testing for Product Development of Prosthetic Hand	Novie Susanto, Heru Prastawa and Ardania Meilaningrum				
144	Mobile phone use behaviour of application-based motorcyclist: a field experiment	Fita Permata Sari, Gradiyan Budi Pratama and Ari Widyanti				



Thursday, July 23rd 2020 (11.30 - 13.30)

	Room Meeting I [Industrial Management] Session Chair: Dyah Santhi Dewi, Ph.D.	
	Zoom meeting link: <u>https://bit.ly/DAY2-R1</u> Meeting ID: 949 7154 0579 / Password: 632857	
ID	Title	Author
25	Cluster analysis to determine business strategy for MSMEs in Yogyakarta	Rangga Satya Nugraha, Wandhansari Sekar Jatiningrum and Reni Dwi Astuti
47	Evaluation of Business Model in Application Based Dropship Business with Business Model Canvas Approach	Virda Berlianti Pratiwi and Endang Chumaidiyah
143	Integrating Business Process Improvement and Information Systems to Improve Service Quality: A Conceptual Model	Pipin Anggaliya and Endang Chumaidiyah
89	Service Quality Assessment of E-Wallet	Aditya Cahyo, Anita Rustanti, Leoni Gobel, Mindo Dasminar and M. Mujiya Ulkhaq
182	University Organizational Culture Mapping Using Organizational Culture Assessment Instrument (OCAI)	Arief Rahman, Sri Gunani Partiwi and Daniel Surya Theopilus
	Room Meeting II [Supply Chain Management] Session Chair: Dr. Novie Susanto	
	Zoom meeting link: <u>https://bit.ly/DAY2-R2</u> Meeting ID: 949 5571 9289 / Password: 958409	
ID	Title	Author
	Intervening for Accelerating a Technology Commercialization in University using Early Supply Chain Integration : A Case Study of Renewable Energy - LFP Battery	Prof. Dr. Wahyudi Sutopo (Invited Speaker)
38	Development of a Three-Phase Inventory Management Model for Perishable (Chili) Products by Considering Quality Deterioration	Meidina Boer and Ahmad Rusdiansyah
39	Designing model of supply chain with blockchain technology for fishery industry in Indonesia	Stephani Larissa
9	Analysis of Supply Chain Performance Based on the Supply Chain Management Maturity Level in Manufacturing Industry	Niken Trisnawati and I Nyoman Pujawan
28	Supply Chain Performance Measurement with Supply Chain Operation References Approach (A Case Study in A Batik Company)	Novie Susanto, Ratna Purwaningsih, Emanuela Septia and Rani Rumita
42	SCOR and ANP Methods for Measuring Supplier Performance with Sustainability Principle of Green Supply Chain Management in Furniture Company PT. XYZ	Pyadasi Widya Hapsari, Haryo Santoso and Denny Nurkertamanda
	Room Meeting III [Production and Operations Management] Session Chair: Dr. Purnawan Adi	
	Zoom meeting link: <u>https://bit.ly/DAY2-R3</u> Meeting ID: 988 6620 3385 / Password: 463107	
ID	Title	Author
21	Tensile Properties of 1wt% graphene/epoxy nanocomposites prepared with low content of ethanol.	Mohd Shahneel Saharudin, Syafawati Hasbi, Chinyere Okolo and Fawad Inam
80	Evaluation of the SAP R/3 System Implementation by Means of Optimize Modules (Case Study : Chemicals Company)	Tiena Amran and Sri Yuniati
191	Food Security Model in Corn Commodity Concerning on Welfare Corn Farmers and Chicken Farmers in East Java	Ni Made Cyntia Utami and Iwan Vanany
130	Designing Facility Layout using Business Intelligence Approach: A Case Study in an Amusement Arcade	Christian Alianto,Tanti Octavia, Siana Halim
132	A Safety-First Portfolio Selection Framework: Estimating Returns of Exchange Traded Funds through Regression Analysis	Michael Young



Thursday, July 23rd 2020 (11.30 - 13.30)

	Room Meeting IV [Decision Making] Session Chair: Zainal Fanany R, ST.,MT	
	Zoom meeting link: https://bit.ly/DAY2-R4	
	Meeting ID: 959 1447 0886 / Password: 861803	
ID	Title	Author
175	Data Analytics in Asset Valuation Under Uncertainty: A Case Study of Unexplored Oilfields	Fransiscus Pratikto, Sapto Indratno, Kadarsah Suryadi and Djoko Santoso
202	Data analytics for transforming towards smart supplier relationship management (a case study in manufacturing company)	Dewanti Anggrahini, Nani Kurniati and Anggi Prienda Sukma
166	An assessment of hotels in the Philippines using analytic hierarchy process (AHP) and vikor on guest score distribution	Elijah Pagdatoon
3	Decision Making Model For Auto-ID Technology Adoption In The Banking Industry	Fandi Afrizal and Iwan Vanany
26	In the Search of Oil and Gas Incident Causes Factors: The Gaussian Fuzzy Analytic Hierarchy Process Approach	Fermi Dwi Wicaksono, Yusri Bin Arshad and Boon Cheong Chew
	Room Meeting V [System Dynamics & Simulation]	
	Session Chair: Dr. Herry Suliantoro	
	Zoom meeting link: <u>https://bit.ly/DAY2-R5</u> Meeting ID: 974 1996 0161 / Password: 157569	
ID	Title	Author
2	System Dynamic Model for Restaurant's Food Waste in Surabaya	Sakura Ayu Oktaviasari, Iwan Vanany and Diesta Iva Maftuhah
8	Impact of Infrastructure Development on Economic Growth (Case Study of Lumajang Regency): A Dynamic Systems Approach	Muhammad Budi Adiputra Reski and Budi Santoso Wirjodirjo
53	Analysis of Sugar Import Policy Effects on Sugar Cane Farmer's Income in East Java: A System Dynamic Approach	Ahmad Fatih Fudhla, Windi Rachmawati and Dini Retnowati
113	AN INTEGRATED ANALYSIS OF PORT AND COAL STORAGE DEVELOPMENT PLAN IN A MINING COMPANY: A SIMULATION APPROACH	Endra Kusuma and Niniet Indah Arvitrida
134	Empty Container Reposition Using Max-Min Review System: Simulation Approach	Adi Budipriyanto, Mirsa Novianti and Tri Susanto
	Room Meeting VI [Lean Manufacturing] Session Chair: Nani Kurniati, Ph.D.	
	Zoom meeting link: <u>https://bit.ly/DAY2-R6</u> Meeting ID: 913 3856 3992 / Password: 792863	
ID	Title	Author
177	Sustainable-value stream mapping to improve manufacturing sustainability performance: a case study in a natural dye batik SME's.	Sri Hartini, Jefri Teguh Iman Manurung and Rani Rumita
178	Integration Lean manufacturing and 6R to reduce wood waste in furniture company toward circular economy	Sri Hartini, Purnawan Adi Wicaksono, Muhammad Dias Rizal and Makhrul Hamdi
30	Process Improvement Using Value Stream Mapping and Lean Methodology: a Case Study Application in Batch Chemical Process Industry	Sudono Riady Lie and Ratih Dyah Kusumastuti
85	Lean Manufacturing With Multilevel Value Stream Mapping	Yudha Prasetyawan, Bagas Abdurrahman Ramadhan and Latifah Salsabila
17	Implementation of Lean Manufacturing Method of Plywood Manufacturer Company	Jastine Koh and Moses Laksono Singgih

### **PRESENTATION SCHEDULE**

Thursday, July 23rd 2020 (11.30 - 13.30)

Room Meeting VII [Ergonomics] Session Chair: Dr. Heru Prastawa		
Zoom meeting link: <u>https://bit.ly/DAY2-R7</u> Meeting ID: 943 3482 6060 / Password: 329103		
ID	Title	Author
	Wearable elbow exoskeleton: design, prototype and applications	Dr. Rifky Ismail (Invited Speaker)
163	Kansei Engineering Application in Redesigning Carica Packaging to Support Local- Small Industry in Central Java	Heru Prastawa, Manik Mahachandra and Deandy Audy
156	The development of Kansei-based mining model for robust service design	Markus Hartono
139	Analysis Of Usability And User Experience On The Batik's Website Design	Hartomo Soewardi and Cikal Bakal Tejo Salatoen
154	Analysis of Handgrip Strength and Anthropometric Measurement of Manufacturing Workers in the Philippines	Klint Allen Mariñas, Rex Aurelius Robielos and Yung-Tsan Jou
173	Evaluation of Chair Dimensions, Anthropometric Measurement, and Subjective Comfort among Filipino High School Students: A Structural Equation Modeling Approach	Yogi Tri Prasetyo, Ashutosh Kumar, Alyza Joy P. Alyza Joy P., Karl Timothy Andrew M. Ong, Ma.Karylle Ashlie S. Siochi and Ardvin Kester S. Ong
	Room Meeting VIII [Eye-Tracking & Virtual Laboratory] Session Chair: Dr. Adithya Sudiarno	
	Zoom meeting link: <u>https://bit.ly/DAY2-R8</u> Meeting ID: 970 2240 2410 / Password: 100298	
ID	Title	Author
161	Eye-Hand Movement in 3D Displays: A Structural Equation Modeling Approach	Yogi Tri Prasetyo and Retno Widyaningrum
145	Designing Sweet Biscuits Packaging by Considering the Level of Attractiveness based on Eye Tracking Data	l Made Ronyastra, Argo Hadi Kusumo, Markus Hartono and Evan Sugianto Tantoisworo
203	Development of Virtual Laboratory Applications Based on Virtual Reality Using the Requirements Engineering Method	Singgih Saptadi, M Aswin Arliawan, Denny Nurkertamanda, Yusuf Widharto and Purnawan Adi Wicaksono
204	The Virtual Laboratory for Turning machine operations using the goal-directed design method in the production system laboratory as simulation devices	Yusuf Widharto, Moh Rizal Tahqiqi, Denny Nurkertamanda, Singgih Saptadi and Purnawan Adi Wicaksono
205	Virtual Laboratory Application Based on Virtual Reality Simulation as Training Tool of Turning Machine Using Goal-Directed Design Method	Denny Nurkertamanda, Fega Frendiansyah, Singgih Saptadi, Yusuf Widharto and Purnawan Adi Wicaksono

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Thursday, July 23rd 2020 (14.00 - 16.00)

	Room Meeting I [Optimization] Session Chair: Dr. Singgih Saptadi	
	Zoom meeting link: <u>https://bit.ly/DAY2-R1</u> Meeting ID: 949 7154 0579 / Password: 632857	-
ID	Title	Author
35	Optimization in Job Shop Scheduling Problem using Genetic Algorithm (Study Case in Furniture Industry)	Sara Aquinaldo, Cucuk Nur Rosyidi and Yuniaristanto Ya
13	MODELING OF DETERMINATION OF TANK TRUCK ROUTE FOR OPTIMIZATION OF CITY PARK WATERING PROBLEMS IN SURABAYA	Nuskha I. Arini, Nurhadi Siswanto and Ahmad Rusdiansyah
18	An Optimization Model for Course Scheduling in Undergraduate Industrial Engineering Program of Universitas Sebelas Maret	Mega Pratiwi and Cucuk Nur Rosyidi
59	Implementation KPKU (Kriteria Penilaian Kinerja Unggul) to increase the Company's Performance (Case Study: PT XYZ)	Siswanto Soemono, Singgih Saptadi and Arfan Bakhtiar
66	Waste Transportation Route Garbage Using Network Analysis Method, A Research Method design	Billy James Maspaitella, Aries Susanty and Ratna Purwaningsih
	Room Meeting II [Risk Assessment] Session Chair: Naning Aranti Wessiani, MM	
	Zoom meeting link: <u>https://bit.ly/DAY2-R2</u> Meeting ID: 949 5571 9289 / Password: 958409	
ID	Title	Author
1	RISK ASSESSMENT IN APARTMENT BUILDING MAINTENANCE USING FUZZY- FMEA METHOD	Achmad Reza, Iwan Vanany and Machsus Machsus
4	Risk Analysis In Mini Container Stevedoring Activities at Dock Company	Andri Dharana, Sri Partiwi and Patdono Suwignjo
37	Conceptual Model of Relationship between Trust, Perceived Risk, Price Dispersion, E-WOM, Perceived Value, and Online Transaction Intention	Claudha Alba Pradhana, Hery Suliantoro and Aries Susanty
170	Aircraft Redelivery Project Risk Assessment: A Case Study in Maintenance, Repair and Overhaul (MRO) Company	Atikah Aghdhi Pratiwi, Naning Wessiani, Hasna Dzakiyah and Upik Nurhalizah
	Room Meeting III [Quality Engineering & Management] Session Chair: Prof. Dr. Aries Susanty	· ·
	Zoom meeting link: <u>https://bit.ly/DAY2-R3</u> Meeting ID: 988 6620 3385 / Password: 463107	
ID	Title	Author
12	QUALITY IMPROVEMENT OF PUBLIC SERVICE IN SURABAYA RADIO FREQUENCY SPECTRUM MONITORING OFFICE WITH INTEGRATION OF SERVICE QUALITY (SERVQUAL), IMPORTANT PERFORMANCE ANALYSIS (IPA) AND HOUSE OF QUALITY (HoQ)	Henry Pribadi and Dr.Ir.Mokh Suef
32	Analysis of Implementation Level and Barriers in Implementing Quality Management System ISO 9001 in Electricity Sector Company: A case of PT ABC	Wiwid Ari Hendarto and Ratih Dyah Kusumastuti
142	Quality Control Of Palm Oil Crude (CPO) Using Six Sigma Method in PT. Karya Tanah Subur West Aceh Regency	Sofiyanurriyanti Sofi, Gaustama Putra Gaustama and Ahmad Refa Arifin Refa
151	Supplementary Quality Control Features for The Production Department in Odoo ERP	Adhatus S. Ahmadiyah, Yuki Y Ratna, Nitama N Yotifa and Izzah Dinillah
172	Understanding "IS Effectiveness and Efficiency": Based on Management Levels in the Organization	Ari Widianto and Apol Pribadi Subriadi



Thursday, July 23rd 2020 (14.00 - 16.00)

	Room Meeting IV [Systems Analysis] Session Chair: Dr. Arfan Bachtiar	
	Zoom meeting link: <u>https://bit.ly/DAY2-R4</u> Meeting ID: 959 1447 0886 / Password: 861803	
ID	Title	Author
33	Understanding user feedback on Learning Management System of SIPEJAR by using Text Mining techniques	Puji Rahmawati, Aisyah Larasati, Muhammad Farhan, Nabila Azzahra and Apif Hajji
15	DESIGN AND IMPLEMENTATION OF GENERATING BUSSINESS UNIT PERFORMANCE MEASUREMENT SYSTEM IN THE OPERATION & MAINTENANCE SERVICES COMPANY	Puput Andrias and Iwan Vanany
6	ONLINE STUDENT LEARNING IMPROVEMENT USING QFD METHOD	Muhammad Hazbi Assiddiqi and Iwan Vanany
36	Knowledge Management System (KMS) Using The Maynard Operation Sequence Technique (MOST) Approach to Improve Manufacturing Efficiency at CV. XYZ Leathercraft	Garda Kharisma Sidanta, Novie Susanto and Manik Mahachandra
	Room Meeting V [Supply Chain Management] Session Chair: Dr.Eng. Erwin Widodo	
	Zoom meeting link: <u>https://bit.ly/DAY2-R5</u> Meeting ID: 974 1996 0161 / Password: 157569	
ID	Title	Author
	Retail Supply Chain Mangement: Now and Then	Niniet Indah Arvitrida (Invited Speaker)
58	Designing Education Development Model: The Educational Supply Chain	Bedi Susanto, Endang Chumaidiyah and Husni Amani
71	Categorizing Supplier in an Indonesian Shipping Company Using Kraljic's Portfolio Model	Muningrum Muningrum and Ratih Dyah Kusumastuti
90	Aggregate Production Planning Under Demand Uncertainty: A Case Study in an Indonesian Cement Company	Imron Gozali, I Nyoman Pujawan and Niniet Indah Arvitrida
92	Supply Chain Network Design to Adjust with Acquisition of Competitor: Case Study of a Cement Company in Indonesia	Roi Budi Setiyawan, I Nyoman Pujawan and Niniet Indah Arvitrida
131	Asymmetric Relationship in Supply Chain: A Conceptual Framework and Research Opportunities	Shovella Santy Alrosjid, I Nyoman Pujawan and Niniet Indah Arvitrida

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	Room Meeting VI [Industrial Management] Session Chair: Yusuf Widharto, M.Eng.	
	Zoom meeting link: https://bit.ly/DAY2-R6	
ID	Meeting ID: 913 3856 3992 / Password: 792863 Title	Author
U		
46	EFFICIENCY MEASUREMENTS OF DIPONEGORO UNIVERSITY FACULTY USING THE DATA ENVELOPMENT ANALYSIS HIERARCHICAL NETWORK MODEL	Bagus Maulana Hendrawan, Bambang Purwanggono and Hery Suliantoro
62	Are You Ready with Digital Challenges?	Riza Iskandar
103	Feasibility Study of Waste Utilization Facilities in Cement Factory for Spent Bleaching Earth	Febri Fahrudin Nugroho and Moses Laksono Singgih
111	Driving Factors of the Intention to Purchase Travel Products Through Online Travel Agent (OTA)	Nia Budi Puspitasari, Ratna Purwaningsih, Nurul Fadlia and Zainal Fanani Rosyada
165	The effect of soygurt fortification with black rice bran extract anthocyanin in hyperlipidemia	Enny Purwati Nurlaili
	Room Meeting VII [Technology & Innovation Manageme Session Chair: Putu Dana Karningsih, Ph.D.	nt]
	Zoom meeting link: <u>https://bit.ly/DAY2-R7</u> Meeting ID: 943 3482 6060 / Password: 329103	
ID	Title	Author
63	Analysis of Human Behavior towards the Use of Financial Technology (Fintech) Lending Application in Indonesia with TAM and UTAUT Approaches	Rana Atikah Ardlianti and Ratna Sari Dewi
61	Structural Modeling for Usability Attributes on Technology Acceptance Model for Smart Parking Mobile Application	Amaliah Amiruddin, Ratna Sari Dewi and Erwin Widodo
136	Conceptual Modelling of Resilience Measurement During Natural Disaster for SMEs	Issa Utami, Iwan Santosa and Emon Rifa'I
150	Measurement of Technology Capability at Batik Anugerah, Bangkalan with Technometric Methods	Retno Indriartiningtias
169	IoT based kWh Meter Recorder System for Electrical Substation	Moh Khozain and Adhatus S Ahmadiyah
	Room Meeting VIII [Operations Research] Session Chair: Dr. Naniek Utami H	
	Zoom meeting link: https://bit.ly/DAY2-R8 Meeting ID: 970 2240 2410 / Password: 100298	
ID	Title	Author
	Big Data in Manufacturing System	Prof. Budi Santosa, Ph.D. (Invited Speaker)
100	A Model for Joint Decision between Production Rate and Clinker Export	Hilmi Tahta Amrillah and Erwin
100	Proportion Using Cooperative Game Theory Approach	Widodo
	SELECTING PLANT SITE FOR PRODUCT DIVERSIFICATION USING LINEAR	Akhmad Yani Yulianto, I
102	PROGRAMMING AND ENTERPRISE VALUE CONVERSION	Nyoman Pujawan and Iwan Vanany
106	REGRESSION ANALYSIS IN PREDICTING COATING APLICATION LIFETIME ON ASSET INTEGRITY PROJECT	Ridwan Setiawan and Budi Santosa
114	Maintenance Cost Optimization on Heavy Equipment Tires by Goal Programming Method at Nickel Mine Operation	Dwinda Suryo Wibowo and Buc Santosa
120	Optimization Operation Strategy of Electric Boilers by Mixed Integer Programming Method in Nickel Production Process	Wahyu Setya Djati and Nurhadi Siswanto



### **CONFERENCE SECRETARIAT (FURTHER INFORMATION)**

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> All information can be found in our official website <u>http://iconiseacise2020.com</u>

