Book of Abstract
Conference Proceeding

ICISETIM

International Conference on Industrial and Systems Engineering, Technology, Innovation, and Management

Conference Theme:
Innovative Contributions Towards Sustainability to Encounter the Impacts of Covid-19 Pandemic

Virtual Conference
April 22-23, 2022

Host

UNIVERSITAS KRISTEN MARANATHA

Co-Host

Chung Yuan Christian University

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Book of Abstract Conference Proceeding

The International Conference on Industrial and Systems Engineering, Technology, Innovation, and Management (ICISETIM)

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FOREWORD

Universitas Kristen Maranatha (Maranatha Christian University) is one of the best private universities in Bandung, West Java, Indonesia. The history of Maranatha Christian University began in 1965. Faculty of Medicine became the pillar for the founding of Maranatha Christian University as well as beginning the pace of higher education in Indonesia. At present, Maranatha Christian University has nine faculties consisting of 28 study programs, covering undergraduate, postgraduate, diploma and professional program. Those faculties are: Faculty of Medicine, Faculty of Dentistry, Faculty of Psychology, Faculty of Engineering, Faculty of Information Technology, Faculty of Business, Faculty of Law, Faculty of Languages and Cultures, Faculty of Arts and Design.

The vision of Maranatha Christian University is to become an independent and self-supporting institution of higher education which explores and instills knowledge in all areas of the arts and sciences, motivated by the love and living examples of Jesus Christ. **The mission** of the University is to educate competent scholars, create a conducive atmosphere, and practice christian values as an effort to develop science, technology, and art in line with carrying out the threefold purpose of higher education: education, research and community services.

Maranatha Christian University has more than 8.000 student body and 40.000 graduates taking part in various sectors in Indonesia and overseas. Having the necessary tools for education coupled with comfortable and conducive atmosphere is one key factor in an effective process of education. Moreover, a holistic approach is taken in carrying out education at Maranatha Christian University, covering both academic and nonacademic elements, including the support of high-quality infrastructure, competent lecturers, and adaptive curriculums. Emphasis is placed on equipping students with personal development, leadership, soft skills and character development as an integrated person upholding **three key values:** integrity, care and excellence.

Maranatha Christian University is continually developing relationships with national and international partners from academic world as well as industries. These partnerships aim to open up new opportunities and to promote innovations in the outcomes of the education, or in the education process itself.

https://www.maranatha.edu/profile/profil-universitas

https://icisetim.com/

Research Synergy Foundation is a digital social enterprise platform that focuses on developing Research Ecosystem towards outstanding global scholars. We built collaborative networks among researchers, lecturers, scholars, and practitioners globally for the realization of knowledge acceleration. We promote scientific journals among countries as an equitable distribution tool of knowledge. We open research collaboration opportunities among countries, educational institutions, organizations and among researchers as an effort to increase capabilities.

Known as a catalyst and media collaborator among researchers around the world is the achievement that we seek through this organization. By using the media of International Conference which reaches all researcher around the world we are committed to spread our vision to create opportunities for promotion, collaboration and diffusion of knowledge that is evenly distributed around the world

Our Vision:

As global social enterprise that will make wider impact and encourage acceleration quality of knowledge among scholars.

Our Mission:

First, developing a research ecosystem towards outstanding global scholars. Second, Promoting scientific journals among countries as an equitable distribution tool of knowledge. Third, opening research collaboration opportunities among countries, educational institutions, organizations and among researchers as an effort to increase capabilities. Fourth, creating global scientific forum of disciplinary forums to encourage strong diffusion and dissemination for innovation.

https://www.researchsynergy.org/

Our Mission

Chung Yuan Christian University is founded on the spirit of Christian love for the world. With faith, hope, and love, we endeavor to promote higher education for the benefit of the Chinese people, aiming at the pursuit and advancement of genuine knowledge in order to maintain our cultural heritage and, thus, to serve humankind.

Educational Philosophy

We respect the dignity of nature and of humanity, and we seek to promote harmony between the Creator, oneself, all other human beings, and the entire creation through the wise and prudent utilization of professional knowledge of the sciences and the humanities. We recognize individual differences with respect to talents, character, capability, and background. We believe that full development of one's potential signifies success.

We believe that education has broader goals than merely exploring knowledge and improving technology. Education is also a process of building character and searching for the meaning of life and oneself. We are convinced that love is the principal guiding force in education. We, teachers and students alike, pursue mutual growth through instruction by both words and deeds, in a spirit of love and respect for one another.

We respect academic freedom and autonomy, believing that knowledge produces understanding of the truth, and that this understanding makes people genuinely free. We believe that education through honest, diligent pursuit and practical experience is the best means of obtaining true knowledge.

We are proud of the University's tradition of fearing God, loving our country, respecting one another's work in a spirit of teamwork, and appreciating simplicity and sincerity.

https://www.cycu.edu.tw/eng/misson.html

https://www.cycu.edu.tw/eng/Edu_Philosophy.html

De La Salle University is an internationally recognized Catholic university in the Philippines established by the Brothers of the Christian Schools in 1911. Inspired by the charism of St. John Baptist de La Salle, the University community, together and by association, provides quality human and Christian education by teaching minds, touching hearts, and transforming lives.

Our Vision - Mission:

A leading learner-centered and research University bridging faith and scholarship, attuned to a sustainable Earth, and in the service of Church and society, especially the poor and marginalized

Core Values:

Faith
DLSU is committed to nurturing a community of distinguished and morally upright scholars that harmonizes faith and life with contemporary knowledge in order to generate and propagate new knowledge for human development and social transformation.

Service
DLSU is committed to being a resource for Church and nation and to being socially responsible in building a just, peaceful, stable, and progressive Filipino nation.

Communion
DLSU is committed to building a community of leaders, competent professionals, scholars, researchers, and entrepreneurs, who will participate actively in improving the quality of life in Philippine society within the perspective of Christian ideals and values.

https://www.dlsu.edu.ph/inside/vision-mission/

TRANSFORMING THE SOCIETY FOR THE GLORY OF GOD

Petra is where digital leaders are made and forged in Christian values. We invite you to become a part of a global and caring university, studying under accomplished and experienced faculty with fellow scholars who share the same vision—to make a lasting impact on the world.

Our Vision:

To be a world-leading Christian University that transforms the society for the glory of God.

Our Mission:

- *Maintaining PCU's INTEGRITY as a Christian university.*
- *Increasing PCU's CREDIBILITY to be a world-class university.*
- *Building the CIVILITY of the people and state in PCU to form, develop, and strengthen Civil Society.*

https://petra.ac.id/about

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WELCOMING REMARKS ICISETIM2022 – DAY 1

Good Morning Everyone,
Ladies and gentlemen, distinguished participants, as the Conference Chair, on behalf of the Organizing Committee, we would like to welcome you to the International Conference on Industrial and Systems Engineering, Technology, Innovation, and Management (ICISETIM) 2022 – DAY 1.

In this occasion, we would like to express our sincere gratitude to Prof. Ir. Sri Widiyantoro, M.Sc., Ph.D. as Rector of Universitas Kristen Maranatha, Dr. Yosafat Aji Pranata, S.T., M.T. as Dean of Faculty of Engineering, Universitas Kristen Maranatha, Ms. Christina, S.T., M.T. as the Head of Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha, Dr. Hendrati Dwi Mulyaningsih, S.E., M.M. as the Co-Conference Chair of ICISETIM2022 and also the Founder & Chairperson of Research Synergy Foundation;

all of the Keynote Speakers in this event: your honorable Prof. Chew Ek Peng from National University of Singapore; your honorable Prof. Rosemary R. Seva from De La Salle University, Philippines, your honorable Dr. Ir. Christina Wirawan, M.T. from Universitas Kristen Maranatha, Indonesia;

and all of the Moderators and Session Chairs from various countries:
- Dr. Indah Victoria Sandroto, S.T., M.T. - Universitas Kristen Maranatha, Indonesia
- Ms. Rainisa Maini Heryanto, S.T., M.T. - Universitas Kristen Maranatha, Indonesia
- Dr. Miriam F. Bongo - De La Salle University, Philippines
- Dr. Ng Siew Imm - Universiti Putra Malaysia, Malaysia
- Prof. Dr. Daniel Marco-Stefan Kleber - Modul University Dubai, UAE
- Dr. Rita E. Diloy - Asian Institute of Maritime Studies, Philippines
- Ts. Dr. Ooi Shih Yin - Multimedia University, Malaysia
- Pei-Chia Wang, Ph.D. - Chung Yuan Christian University, Taiwan
- I Gede Agus Widyadana, Ph.D. - Universitas Kristen Petra, Indonesia
- Dr. Reshma V. K., Ph.D. - Hindusthan College of Engineering and Technology, India
- Prof. Zachariah John A. Belmonte - Technological University of the Philippines, Philippines
- Engr. Christopher C. Mira – Polytechnic University of the Philippines
- Dr. Lina Anatan, S.E., M.Si. - Universitas Kristen Maranatha, Indonesia
- Dr. Anamie R. Selencio - Asian Institute of Maritime Studies, Philippines

We would also like to express our appreciation to all of the Scientific Reviewers for their contributions to this event.

This international conference which will be held virtually on 22 - 23 April 2022 is jointly organized by Universitas Kristen Maranatha and Research Synergy Foundation, supported by the Co-Hosts from:
- Chung Yuan Christian University, Taiwan
- De La Salle University, Philippines
- Universitas Kristen Petra, Indonesia

ICISETIM2022 has the theme “Innovative Contributions Towards Sustainability to Encounter the Impacts of Covid-19 Pandemic”. Therefore, this conference aims to provide a global forum to share ideas, knowledge, and experiences in the fields of Industrial and Systems Engineering, Technology, Innovation, and Management, especially to overcome the challenges faced as a result of Covid-19 Pandemic.

To conclude, we sincerely hope that this two-day conference will run successfully, and with your cooperation, you will build a great research ecosystem for a better future for our world. Thank you.

CONFERENCE CHAIR MESSAGE

We are delighted to welcome you to **The International Conference on Industrial and Systems Engineering, Technology, Innovation, and Management (ICISETIM)** by Universitas Kristen Maranatha, Indonesia and Research Synergy Foundation (RSF) that held virtually on April 22-23, 2022.

This conference not only give you global forum to share and exchange idea, research, and work. But also, provide wider network and research ecosystem for further collaboration and projects. We are glad to share these good opportunities in the scientific community, that will be offered only for all participants who participate in the conference.

It has been our privilege to convene this conference. Our sincere thanks, to the conference organizing committee; to the Program Chairs for their wise advice and brilliant suggestion on organizing the technical program and to the Program Committee for their through and timely reviewing of the papers. Recognition should go to the Local Organizing Committee members who have all worked extremely hard for the details of important aspects of the conference programs and social activities.

We welcome you to this conference and hope that this year's conference will challenge and inspire you, and result in new knowledge, collaborations, and friendships.

Best regards,

David Try Liputra, S.T., M.T.

Conference Chair of ICISETIM 2022

CONFERENCE CHAIR

David Try Liputra, S.T., M.T.

Universitas Kristen Maranatha, Indonesia

David Try Liputra is a faculty member of Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha, Indonesia. Currently, he also serves as Head of the Facilities Layout Design Laboratory. He earned his Bachelor degree in Industrial Engineering (2009) from Universitas Kristen Maranatha and Master degree in Industrial Engineering and Management (2013) from Institut Teknologi Bandung, Indonesia. In 2015, he received the Best Paper Award at the 16th Asia Pacific Industrial Engineering and Management Systems (APIEMS) Conference, Ho Chi Minh, Vietnam. In 2018, he was certified as a Professional in International Supply Chain by PASAS Singapore. Since 2016, he is a member of the Indonesian Supply Chain and Logistics Institute (ISLI). His research interests are in the field of Supply Chain Management and Simulation.

CO-CONFERENCE CHAIR

Dr. Hendrati Dwi Mulyaningsih

Founder & Chairperson of Research Synergy Foundation

Dr. Hendrati Dwi Mulyaningsih is the chairperson and founder of Research Synergy Foundation that has shown great commitment on creating Global Network and Research Ecosystem. This GNR ecosystem has been developing since 2017 up to the present and having increasing numbers of the member up to more than 15.000 from all around the globe. Her passion in how to create impact and co creation value among all the stake holder of RSF has made her focus on upholding integrity in the scientific process through enhancement of RSF's support-support system as like Reviewer track, Scholarvein, Research Synergy Institute and RSFPress. Thus, her work in this area has made her as the Nominee of Impactful Leadership Awards from Tallberg Foundation Sweden 2019.

As lecturer, she has been working in the University since 2008 – at present in Indonesia as assistant professor and she hold her Doctoral Science of Management graduated from School of Business and Management Institute of Technology Bandung (SBM-ITB) and she has strong interest to her research project as well as her research field in Social Entrepreneurship, Social Innovation and Knowledge Management.

As researcher, her work studies and research on this research field made her being invited as reviewer in many reputable Scopus and WOS indexed journals and also as keynote speaker in many International Conferences in Philippines, Thailand, Malaysia, Indonesia, Australia, Japan and US . She also has shown her great passion on writing her research study into some books chapter, papers and contemporary scientific articles that has already been published in Springer, Emerald, Taylor and Francis and in many reputable international journals. The terrific association between her professional experiences as researcher, lecturer, the certified Trainer & Coach combined with her wider horizon on networking in the research area made her establish the strong commitment on having global learning platform to accelerate knowledge through many workshops and research coaching in Research Synergy Institute as one of RSF's support system.

INVITED SPEAKERS

Dr. Yosafat Aji Pranata, S.T., M.T.

Associate Professor
Dean, Faculty of Engineering, Universitas Kristen Maranatha, Indonesia

Education background: Bachelor of Civil Engineering (Universitas Atma Jaya Yogyakarta, Indonesia), Master of Civil Engineering (Parahyangan Catholic University, Indonesia), and Doctor of Civil Engineering (Parahyangan Catholic University, Indonesia). Research Interest: Earthquake Engineering, Timber Engineering, Orthotropic Material, and Nonlinear Finite Element Analysis. Scientific Advisor at the Directorate General of Human Settlements, Ministry of Public Works Indonesia. Members of Indonesian Wood Research Society, Indonesian Society of Civil and Structural Engineers, and The Institution of Engineers Indonesia.

Publications (selected): Annual Convention Society of Wood Science and Technology (2011), World Conference on Timber Engineering (2012), Journal of Engineering and Technological Science (2013), Book Chapter: Lecture Notes in Civil Engineering, Springer (2018), Book: Struktur Kayu (2019), Book Chapter: Lecture Notes in Civil Engineering, Springer (2022).

Ms. Christina, S.T., M.T.

Head of Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha, Indonesia

Christina, S.T., M.T. is a faculty member of Bachelor Program in Industrial Engineering, Faculty of Engineering, Universitas Kristen Maranatha, Indonesia. Currently, she is actively serving as Head of Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha for the period 2020-2024. She studied Bachelor Program in Industrial Engineering at Universitas Kristen Maranatha and earned Master Degree in Industrial Engineering and Management from Institut Teknologi Bandung, Indonesia. Her research interest is in the field of industrial management.

OPENING SPEAKERS

Prof. Ir. Sri Widiyantoro, M.Sc., Ph.D., IPU

Rector of Universitas Kristen Maranatha, Indonesia

Prof. Ir. Sri Widiyantoro, M.Sc., Ph.D. is a professor of Geophysics, and currently he serves as Rector of Universitas Kristen Maranatha, Indonesia. He received his B.Sc. degree in Geophysics from Institut Teknologi Bandung, Indonesia, M.Sc. degree in Geophysics from Kyoto University, Japan, and Ph.D. degree in Geophysics from Australian National University, Australia. Moreover, he also studied Postdoc in Seismology at Tokyo University, Japan. His research interests are in the field of Geophysics and Seismology. He has many articles published in reputable journals, such as SCIENCE and NATURE, which have been cited as many as 4,567 with an H-index of 24 on Scopus.

MODERATOR - Seminar

Dr. Indah Victoria Sandroto, S.T., M.T.

Universitas Kristen Maranatha, Indonesia

Dr. Indah Victoria Sandroto, S.T., M.T., PGDipBusAdmin is a lecturer in the Department of Industrial Engineering at Universitas Kristen Maranatha. She is currently serving as Secretary of the Internal Control Unit at Universitas Kristen Maranatha. She holds Bachelor's, Master's, and Doctoral degrees from the Department of Industrial Engineering at Institut Teknologi Bandung. She also graduated with a Postgraduate Diploma in Business Administration in Management from Massey University, New Zealand. Her research interests include Customer Relationship Management, Enterprise Resource Planning, Corporate Planning, and Systems Thinking.

Ms. Rainisa Maini Heryanto, S.T., M.T.

Faculty Member of Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha, Indonesia

Rainisa Maini Heryanto is a lecturer, currently she is actively teaching since 2008, editorial team Journal of Integrated System since 2018 and Journal of Innovation and Community Engagement since 2019, and head of Production System Laboratory since 2019. She studied Bachelor of Industrial Engineering at Universitas Kristen Maranatha, Master in Industrial Engineering and Management at Institut Teknologi Bandung. She is certified for SketchUp, Professional in Industrial Supply Chain by PASAS Singapore, and SolidWorks Associate-Mechanical Design. Her research interest in Production Planning and Inventory Control and Supply Chain Management.

KEYNOTE SPEAKERS

Prof. Chew Ek Peng

National University of Singapore

Dr. CHEW Ek Peng is a Professor in the Department of Industrial Systems Engineering and Management at the National University of Singapore. He holds positions as the Deputy Head (Undergraduate Studies), Director for the Centre of Excellence in Modeling and Simulation for Next Generation Ports, and Director for Centre of Maritime Studies. His current research areas are in port logistics and maritime transportation, and simulation optimization. His research works are found in journals such as Transportation Science, Transportation Research Part B, IISE Transactions, European Journal of Operational Research, and Naval Research Logistics. He is serving as Editor-in-Chief of the Asia Pacific Journal of Operational Research, Editorial Board Editor of the Transportation Research Part B, Editorial Board of Flexible Services and Manufacturing Journal. He has led a team of multidisciplinary researchers and practitioners to win the Next Generation Container Port Challenge with a grand prize of US$1 million by proposing a revolutionary double-storey container terminal, called the SINGA port.

Title: Digital Acceleration for Smart Ports in the 4th Industrial Revolution

Synopsis

The recent pandemic had created a huge disruption in the global supply chain creating shortages and delays in many parts of the world. It has also forced organization to change how people work and rethink how to transform their supply chain processes. One of the visible changes is the acceleration growth in the adoption of digital tools to facilitate work processes. Specifically in the maritime sector, which is the backbone for economic development and globalization, we see an emerging trend of using automation and digitalization. It has been reported by end of this year, the rate of digital technology adoption in this area will accelerate three years ahead of what was originally estimated. This presentation discusses some of the digitalization initiatives Singapore is embarking on, in particular to the digital twin technology for making ports smarter. The digital twin is seen to drive many innovative solutions and help to increase performance and profitability. The port digital twin will provide the capability to do prediction on how future scenarios will impact on the port and provides opportunity to use big data and machine learning to help make better decision. It will help to make port operations and planning more resilient.

Prof. Rosemary R. Seva

De La Salle University, Philippines

Rosemary Seva is a Professor of Industrial Engineering and Assistant Dean for Quality Assurance at the Gokongwei College of Engineering - De La Salle University, Philippines.
She is the president of the Human Factors and Ergonomics Society of the Philippines (HFESP) and from 2018-2020 also served as the President of the Asian Council on Ergonomics and Design (ACED) and the Southeast Asian Network of Ergonomics Societies (SEANES). She heads the IEA Technical Committee on Affective Design and one of the early researchers in this field. She obtained her doctorate degree at the Nanyang Technological University (Singapore). She is an ASEAN Engineer and a Professional Industrial Engineer.

The Hidden Power of Affective Products and Environments
The use of emotion in design is a powerful way of influencing people. It works in the absence of people's consciousness as the response is sometimes automatic. Early studies in this field considered the role of product characteristics in eliciting specific emotions to drive consumption. Designing the relevant emotion to the product by manipulating its form or function promotes customer satisfaction and sustained use of the product. The method is especially useful in designing high-involvement products that display users' distinct personalities. Affective products are attractive because they cater to consumers' hedonic needs. They induce consumers to engage in irrational behavior such as impulse buying. The use of this hedonistic approach to promote difficult environmental behaviors such as energy conservation, waste disposal, and recycling was explored. The process for identifying the target emotion was done by analyzing online texts related to each context. An affective design framework for influencing specific environmental behavior related to waste disposal and energy conservation was considered. Case studies showed that judicious choice of emotion and resultant design features are essential success factors.

Dr. Christina Wirawan

Universitas Kristen Maranatha, Indonesia

Christina Wirawan obtained her doctoral degree from the School of Business Management, Bandung Institute of Technology, and a master's degree in Industrial Engineering and Management from the Industrial Engineering Department, Bandung Institute of Technology. She is currently a lecturer in Industrial Engineering Department, Maranatha Christian University, Indonesia. Her research areas are in the product-service system, quality engineering, and small-medium enterprises. Currently, she likes to combine engineering study with social and management science in her research. Some of her articles were published in reputable international journals. She also served as a reviewer for national and international journals.

Summary of Speech

The issue of sustainability is getting more and more attention from researchers. One of the concepts to maintain sustainability is the product-service system (PSS). PSS is a concept that seeks to replace the use of tangible products with packages consisting of products and services and endeavor to enlarge the service proportion. With this concept, the consumption of tangible products will decrease so that it will have a good effect on sustainability.

In this discussion, the PSS concept is used for industrial estate firms. Industrial estate firms in the beginning have a lot of lands which causes them to be able to get income only from selling land. But then after the land starts to sell out, income will decrease drastically, even though industrial estate firms have a responsibility to continue to provide benefits for the companies in it. Considering that condition, the PSS concept can be used. Industrial estate firms no longer only sell land but sell more and more various types of services.

From research in Indonesia, it was found that there are 3 types of industrial estate company patterns that can survive, especially in Indonesia. The first pattern is a long-established industrial estate company. These industrial estate firms experience a significant decline in income but then can increase again the income from innovative services. The second pattern is industrial estate companies that can be sustainable at the maturity stage. These industrial estate firms usually only lease land, create alternative income from services earlier than the first pattern industrial estate firms, or have the opportunity to expand the land. The third pattern is industrial estate companies which from the beginning have been regulated with service as the main income generator. This is a new pattern for new industrial estate firms that maintain their sustainability.

Thus, it can be concluded that the PSS concept can also be applied to industrial estate firms as a strategy for sustainability.

SESSION CHAIRS

Assoc. Prof. Dr. Ng Siew Imm

Universiti Putra Malaysia, Malaysia

Siew Imm Ng completed PhD in Management from University of Western Australia. She is currently an Associate Professor in the School of Business and Economics, University Putra Malaysia. She has industry experience in the areas of human resource and export management with internationalizing Malaysian companies. She teaches Principles of Management, Cross Cultural Management and Business Research Methods. She has authored and co-authored many articles in refereed and professional journals, including Tourism Management, International Marketing Review, Journal of Hospitality & Tourism Research, British Food Journal, Asia Pacific Journal of Marketing and Logistics, and Journal of Air Transport Management. She can be contacted at imm_ns@upm.edu.my.

Dr. Rita E. Diloy

Research and Creative Works Chairperson
School of Graduate Studies Asian Institute of Maritime Studies, Philippines

Dr. Rita E. Diloy is an expert in the field of education and research and currently Research and Creative Work Chairperson and at the same time Faculty members of School of Graduate Studies of Asian Institute of Maritime Studies, an editor -in chief of Faculty Research Journal (FRJ) of the same institution, a consultant on Research and Development of Fiat Lux Academe, Cavite.

Invitation to different research activities and workshops in research writing in basic education for both public and private schools made Dr. Diloy a recognized and known resource person in the field of research and innovations.

She has also publication in a peer basic education journals and has presented research studies at PCBER in 2018. She has also written books in Mathematics, has been scholar in specialize Training on Management Leadership Development Training for the Middle Level Managers for four months in 2016, participated in Scholarship for Science and Math Supervisors and Master Teachers for 3 month.

Prof. Dr. Daniel Marco-Stefan Kleber

Modul University Dubai, UAE

Prof. Dr. Daniel Marco-Stefan Kleber is currently holding a professorship in International Business Management and was appointed as Program Area Director in International Management and Economics at MODUL University Dubai. In addition, he is an elected member of the Studies and Examination Committee (SEC) of the university.

Before moving to Dubai, Prof. Kleber completed his Doctoral Studies in Management Science within an International Joint Doctoral Programme of universities in Germany, Latvia, Sweden and the United Kingdom. During his PhD research he focused on concepts of Value Co-Creation to increase Value Propositions in Business.

In addition, Prof. Kleber is holding three Master degrees in business administration namely in International Management and Entrepreneurship, Financial Services Management and Information Management as well as a Bachelor degree in International Hospitality and Tourism Management and a German diploma in hotel-economics.

Prof. Kleber gained valuable professional experience at renowned multinational corporations such as SAP AG in Switzerland. In addition, he worked for well known hotel brands such as Deutsche Hospitality and the Steigenberger Hotel Group. Additionally, he worked as a project manager for the German based consultancy company Fa. Conequity UG and he was a founding member of the consultancy agency SBC e.V.

During his PhD-studies, Prof. Kleber deepened his intercultural expertise while attending international scientific conferences in Dubai, Singapore, Riga, Seoul and Miami. Additionally, Prof. Kleber took the opportunity to participate in a research semester at the prestigious, AACSB accredited Northumbria University in the United Kingdom, which was awarded as the best UK Business School by the Time Magazine.

Prof. Kleber´s areas of specialization are Innovation Management, Entrepreneurship, International Management and Marketing as well as Event Management and Tourism. His publications and research primarily concentrates on concepts of Value Co-Creation to achieve Value Propositions in Dynamic Markets. Moreover, he is the country representative of Germany for the globally operating Research Synergy Foundation. Furthermore, Prof. Kleber is a member of international programme committees of multiple scientific conferences e.g. in Hong Kong, Singapore, Tokyo, Bangkok and Kyoto among others.

In the past, Prof. Kleber was appointed as visiting professor in Event Management at University of Applied Sciences Kaiserslautern in Germany. As international university guest lecturer, he gained intercultural competencies while delivering professional workshops in European countries such as the Netherlands, Latvia, Portugal, Poland and the United Kingdom among others.

Ts. Dr. Ooi Shih Yin

Multimedia University, Malaysia

Ooi Shih Yin received the Bachelor of Information Technology (Hons), Master of Science (Information Technology), and PhD (Information Technology) from the Multimedia University, Malaysia, in 2017. From 2018 to 2019, she was a research fellow with the School of Electrical and Electronic Engineering, College of Engineering, Yonsei University, South Korea. She is currently served as a Deputy Director of Technology Transfer Office at Multimedia University, Malaysia. She is the author of more than 50 articles, and more than 10 inventions. Her research interests include temporal classification, tree-based algorithms, and machine learning applications in the field of biometrics and cybersecurity.

Dr. Reshma V. K. Ph.D.

Associate Professor,
Department of Artificial Intelligence and Machine Learning,
Hindusthan College of Engineering and Technology

A Ph.D. recipient, in Information and Computer Engineering, from Noorul Islam Centre for Higher Education in 2021, Master of Engineering in Software Engineering in 2012 from Sri Ramakrishna Engineering College, Coimbatore, Bachelor of Technology in Information Technology in 2010 from P.S.R Engineering College, Sivakasi, both affiliated to Anna University Chennai. Her area of interest is Image Processing, Steganography, Neural Networks, and Machine Learning. She has contributed 20+ technical papers in SCI/SCOPUS and other International journals and 10+ papers in various international conferences. She has published more than 10 patents in her field of Expertise and also focused on Multidisciplinary areas. Granted Two Australian Innovative Patent, German Patent Granted (International Patent),Awarded as India Prime Award 2021 Top 100 Professor, Young Researcher Award 2021 in Institute of Scholars (InSc),India Glory Award 2021 as Young Professor Award, Currently Acting as Reviewer, Editor in Various Journals and Conferences. And also been a session chair for Various Conferences both Nationally and Internationally. She is presently working as an Associate Professor in the Department of Artificial Intelligence and Machine Learning in Hindusthan College of Engineering and Technology.

Prof. Zachariah john A. Belmonte

Technological University of the Philippines, Philippines

Prof. Zachariah John A. Belmonte is a graduate of Non-destructive Testing Engineering Technology & Bachelor of Engineering in Manufacturing at Technological University of the Philippines and He is also a graduate of Master of Science in Engineering Management at Mapua University-Manila and currently pursuing His Ph.D. in Industrial Engineering in Mapua University.

His academic & research interests mostly focus on Quality Management systems, Management Science & Industrial Engineering.

He is a Full-time faculty at the Technological University of the Philippines, currently a member of the TUP Highest Governing Board and the Co-chairman of TUP Research and Extension Policy Committee.

He Presented and published researches in International Conference & Scientific Journals like 7th International Conference on Industrial and Business Engineering in China, The Kuala Lumpur International Multidisciplinary Conference on Social Sciences in Malaysia, 62nd International Scientific Conference on Information Technology and Management Science in Latvia, 36th World Conference on applied science and engineering and technology in Thailand, etc.

Technology drives us in more ways than you could imagine. With the increasing rate of technological advancement because of globalization and internalization, I am sure that you are also taking advantage of it in improving ourselves and our institution better.

Now more than ever, the world needs you to discover and innovate things that can help humanity. Humanity is now driving towards the techno-scientific age that the sense of urgency has become the velocity of this age.

In this generation, there are countless twists and turns, that no one can ever predict what the future can give us and what technology outcomes will bring us.

Friends, we need to keep our eyes open and our head-turning, while our minds are thinking and generating new ideas for new discoveries and innovations. Man is gifted with intelligence. It is God's given gift to mankind for human development that man ought to share.

Our nation depends on the outcomes and output brought by Science, Technology, and Engineering. Truly, we cannot deny the fact that each one of us can contribute in a very unique way to be a blessing in the lives of others, and it begins by consciously doing what we love and continuously loving what we do.

As you engage in research and innovation, you are transforming society into a better one. Let other people be inspired by your innovations and always be good stewards of God as the Scriptures said: "Each has received a gift, use it to serve others.", so continue serving and inspiring others with your unique skills and brainpower".

In conclusion, we recognize the effort and contributions of the men and women who worked for the realization of ICISETIM 2022 amidst the challenges brought by the COVID 19 Pandemic.

Dr. Anamie R. Selencio

Asian Institute of Maritime Studies, Philippines

Dr. ANAMIE R. SELENCIO is an instruction specialist and an expert in the field of education, research and extensions. She is currently a Master Teacher 2, a School Information Coordinator, a Partnerships Focal Person, a Critique Teacher, and Broadcaster in the Basic Education likewise functions as Asst. Dean and a Program Head of Doctor of Philosophy in Maritime Education in the graduate program of Asian Institute of Maritime Studies. She is also an active coach and mentor of Curriculum and Module Development in basic education, tertiary, and in the graduate program, a resource speaker of writing a research paper, a panel member, an adviser and used to chair graduate program defenses. She is also a visiting professor in John B Lacson Foundation Maritime University teaching thesis and dissertation writing, Lyseum of Alabang, Taguig City University, PNTC Colleges teaching Language and Social Sciences courses. An invited lecturer in Norwegian Training Center for Module development.

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Engr. Christopher C. Mira

Polytechnic University of the Philippines

Engr. Mira is a graduate of B.S. Industrial Engineering and has been a Master in Industrial Engineering and Management. He has been with the university as a fulltime assistant professor since November 2006 initially handling major Industrial Engineering subjects. Later in 2017, he has been given subjects in Quality Management for BS Accountancy and BS Business Administration Major in Human Resource Management. His involvement in research has been commended during his being a member of the University Research Group for Engineering, Architecture and Technology Colleges. He has presented various research papers in the local and international settings likewise, invited as panelist and session chair in various research presentations. He is also regularly invited by some business establishments reference to their quality and performance evaluation. He is presently the adviser of the Phil. Inst. of Ind'l. Engineers (PIIE) PUP Binan Chapter and former adviser of the Manila Innovators and Dev't. Society (MINDS). Engr. Mira is a member of several groups involving research peer evaluation, scholarly research.

Dr. Lina Anatan, S.E., M.Si.

Universitas Kristen Maranatha, Indonesia

Dr. Lina Anatan is a lecturer and researcher at the Faculty of Business, Maranatha Christian University Bandung. She earned her Bachelor's Degree in Economics from the Faculty of Economics, Airlangga University Surabaya in 2001 and her Master's and Doctorate's Degree in Management from Faculty of Economics and Business, Gadjah Mada University Yogyakarta in 2005 and 2017. Her research interest is Manufacturing Strategy, Supply Chain Management, Knowledge Management, and Strategic Alliance.

Academic Profile: https://maranatha.academia.edu/LinaAnatan

Pei-Chia Wang, Ph.D.

Chung Yuan Christian University, Taiwan

Pei-Chia Wang received her B.S. (2004) degree in the Department of Industrial Engineering and Management from National Chiao Tung University, Taiwan, and M.S. (2006) and Ph.D. (2013) degrees in the Department of Industrial Engineering and Engineering Management from National Tsing Hua University, Taiwan. She had been an Industrial Engineering engineer (2006-2008) at Taiwan Semiconductor Manufacturing Company, Taiwan, and a deputy manager who was responsible for ergonomics program implementation for iPhone and iPad manufacturing production, ergonomics product design and development, and ergonomics consulting services at Foxconn Technology Group, China (2013-2020). Currently, she serves as an Assistant Professor in the Department of Industrial and Systems Engineering at Chung Yuan Christian University, Taiwan. Her research interests include Ergonomics, Display Image Quality Research, and Human Machine Interface Design.
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I Gede Agus Widyadana, Ph.D.

Universitas Kristen Petra, Indonesia

I Gede Agus Widyadana is a senior lecturer and head of E-Logistic Lab at Petra Christian University, Indonesia. His research interests are deteriorating inventory models, supply chain, simulation, and optimization, and have an experience as a guest researcher at Sophia University, Japan. He has published some papers in reputed journals such OMEGA, International Journal of Production Economics, and International Journal of Production Research. He also serves as a reviewer for some reputed journals dan the editorial board member of Jurnal Teknik Industri. In the industrial practice area, he has experience to give training to some industries and has certification as Supply Chain Manager.

Dr. Miriam F. Bongo

De La Salle University, Philippines

Dr. Miriam F. Bongo is an Associate Professor of the Industrial and Systems Engineering Department of Gokongwei College of Engineering at De La Salle University (DLSU). She earned her Bachelor of Science in Industrial Engineering and Master of Engineering in Industrial Engineering degrees last 2014 and 2016, respectively, at the University of San Carlos, Cebu. Later, she earned her Doctor of Philosophy in Industrial Engineering degree at DLSU last June 2021. She was granted a full graduate scholarship under the Engineering Research and Development for Technology (ERDT) Department of Science and Technology (DOST) for both her master's and Ph.D. degrees. She is an active member of professional organizations namely Philippine Institute of Industrial Engineers (PIIE) and also serves as a member of the Editorial Team of the International Foundation for Production Research (IFPR), The Asia Pacific Roundtable on Sustainable Consumption and Production (APRSCP), and International Society for Industry Ecology - Asia Pacific. She is currently a Guest Editor of the Journal of Cleaner Production (Impact factor: 9.297) and the Editor-in-Chief of the upcoming Philippine Association of Engineering Schools (PAES) Journal. She has published several Scopus-indexed journal articles and conference papers under research areas on decision-making, optimization modeling, and air transportation system, among others. As of March 2022, her Scopus h-index is 7 and her Google Scholar h-index is 10.

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CONFERENCE PROGRAM

Friday, April 22nd, 2022

https://icisetim.com/			

CONFERENCE PROGRAM International Conference on Industrial and Systems Engineering, Technology, Innovation, and Management (ICISETIM) VIRTUAL CONFERENCE: 22-23 April 2022			
DAY 1 - Friday, 22 April 2022			
Time (UTC+7)			***Dur'***	***Activity***
Main Room				Link Zoom for ICISETIM https://us06web.zoom.us/j/86756890727?pwd=eXBPVllqbXJLQXpSdmdpc2hiZ2t5dz09 Meeting ID: 867 5689 0727 Passcode: icisetim
7:50	-	8:00	0:10	**Participant Login and Join Virtual Conference by ZOOM**
8:00	-	8:15	0:15	**Welcome Address** and Conference Publication Announcement by MC Listening the national anthem "Indonesia Raya"
8:15	-	8:20	0:05	**Doa Recitation**

8:20	-	8:30	0:10	**Welcome Remarks of ICISETIM Day 1** Mr. David Try Liputra, S.T., M.T. Conference Chair of ICISETIM Universitas Kristen Maranatha, Indonesia
8:30	-	8:40	0:10	**Opening Speech** Prof. Ir. Sri Widiyantoro, M.Sc., Ph.D., IPU Rector of Universitas Kristen Maranatha, Indonesia
8:40	-	8:50	0:10	**Speech** Dr. Yosafat Aji Pranata, S.T., M.T. Dean of Faculty of Engineering, Universitas Kristen Maranatha, Indonesia
8:50	-	9:00	0:10	**Speech** Ms. Christina, S.T., M.T. Head of Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha, Indonesia
9:00	-	9:15	0:15	**Global Research Ecosystem Introduction** Dr. Hendrati Dwi Mulyaningsih Co-Conference Chair of ICISETIM Founder & Chairperson of Research Synergy Foundation
9:15	-	9:20	0:05	**Token of Appreciation for Co-Host:** Chung Yuan Christian University, Taiwan. De La Salle University, Philippines. Universitas Kristen Petra, Indonesia.
9:15	-	9:20	0:05	**E-Group Photo**
9:20	-	9:30	0:10	**ICISETIM Moderator Introduction & Opening of Keynote Speaker Panel Session Day 1** Dr. Indah Victoria Sandroto, S.T., M.T.

9:30	-	10:10	0:40	**Keynote Speaker 1: Prof. Chew Ek Peng** National University of Singapore
10:10	-	10:50	0:40	**Keynote Speaker 2: Prof. Rosemary R. Seva** De La Salle University, Philippines
10:50	-	11:20	0:30	**Discussion (Question & Answer) Session**
11:20	-	11:25	0:05	**Token of Appreciation for Keynote Speakers & Moderator**
11:25	-	11:30	0:05	**Announcement and preparation of Online Parallel Presentation Session**
11:30	-	12:55	1:25	**Break** (Video played: University Profile, and Industrial Engineering Program of Universitas Kristen Maranatha; Research Synergy Foundation Profile; ICISETIM Agenda & Sessions)
Breakout Rooms 1 & 2				**DAY 1 - Online Presentation Session**
12:55	-	13:05	0:10	**Session Chair Introduction at each parallel breakout rooms** **Breakout Room 1: Dr. Miriam F. Bongo - De La Salle University, Philippines** **Dr. Ng Siew Imm - Universiti Putra Malaysia, Malaysia** **Breakout Room 2: Prof. Dr. Daniel Marco-Stefan Kleber - Modul University Dubai, UAE** **Dr. Rita E. Diloy - Asian Institute of Maritime Studies, Philippines**
13:05	-	15:05	2:00	**Online Presentation Session at each parallel breakout rooms: max. 8 presenters** **15 minutes/presenter**
15:05	-	15:15	0:10	Awarding Certificate of Presentation, Testimonial, and Post-conference information announcement

15:15	-	15:35	0:20	Short Break and Back to Main Room for ICISETIM Day 1 Closing Ceremony
Main Room				Link Zoom for ICISETIM https://us06web.zoom.us/j/86756890727?pwd=eXBPVllqbXJLQXpSdmdpc2hiZ2t5dz09 Meeting ID: 867 5689 0727 Passcode: icisetim
15:35	-	15:50	0:15	**Awarding Ceremony** **Best Presentation** **Session Chair**
15:50	-	15:55	0:05	**Closing Speech of DAY 1** Ms. Christina, S.T., M.T. Head of Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha, Indonesia

Saturday, April 23rd, 2022

https://icisetim.com/			
DAY 2 - Saturday, 23 April 2022			
Time (UTC+7)		***Dur'***	***Activity***
Main Room			Link Zoom for ICISETIM https://us06web.zoom.us/j/86756890727?pwd=eXBPVllqbXJLQXpSdmdpc2hiZ2t5dz09 Meeting ID: 867 5689 0727 Passcode: icisetim
7:50	- 8:00	0:10	**Participant Login and Join Virtual Conference by ZOOM**
8:00	- 8:15	0:15	Welcome Address and Conference Publication Announcement by MC
8:15	- 8:25	0:10	**Welcome Remarks of ICISETIM Day 2** Mr. David Try Liputra, S.T., M.T. Conference Chair of ICISETIM Universitas Kristen Maranatha, Indonesia
8:25	- 8:35	0:10	**ICISETIM Moderator Introduction & Opening of Keynote Speaker Session Day 2** Ms. Rainisa Maini Heryanto, S.T., M.T.
8:35	- 9:15	0:40	**Keynote Speaker 3: Dr. Christina Wirawan** Universitas Kristen Maranatha, Indonesia

9:15	-	9:25	0:10	**Discussion (Question & Answer) Session**
9:25	-	9:30	0:05	**Token of Appreciation for Keynote Speaker & Moderator**
9:30	-	9:35	0:05	**E-Group Photo**
9:35	-	9:40	0:05	**Announcement and preparation of Online Parallel Presentation Session**
Breakout Rooms 1 & 2				**DAY 2 - Online Presentation Session 1**
9:40	-	9:50	0:10	**Session Chair Introduction at each parallel breakout rooms** **Breakout Room 1: Ts. Dr. Ooi Shih Yin - Multimedia University, Malaysia** **Pei-Chia Wang, Ph.D. - Chung Yuan Christian University, Taiwan** **Breakout Room 2: I Gede Agus Widyadana, Ph.D. - Universitas Kristen Petra, Indonesia** **Dr. Reshma V. K. Ph.D. - Hindusthan College of Engineering and Technology, India**
9:50	-	11:50	2:00	**Online Presentation Session at each parallel breakout rooms: max. 8 presenters** **15 minutes/presenter**
11:50	-	12:00	0:10	Awarding Certificate of Presentation, Testimonial, and Post-conference information announcement
12:00	-	13:00	1:00	**Break** (Video played: University Profile, and Industrial Engineering Program of Universitas Kristen Maranatha; Research Synergy Foundation Profile; ICISETIM Agenda & Sessions)
Breakout Rooms 1 & 2				**DAY 2 - Online Presentation Session 2**
13:00	-	13:10	0:10	**Session Chair Introduction at each parallel breakout rooms** **Breakout Room 1: Prof. Zachariah john A. Belmonte - Technological University of the Philippines, Philippines** **Engr. Christopher C. Mira - Polytechnic University of the Philippines**

				Breakout Room 2: Dr. Lina Anatan, S.E., M.Si. - Universitas Kristen Maranatha, Indonesia **Dr. Anamie R. Selencio - Asian Institute of Maritime Studies, Philippines**
13:10	-	15:10	2:00	**Online Presentation Session at each parallel breakout rooms: max. 8 presenters** **15 minutes/presenter**
15:10	-	15:20	0:10	Awarding Certificate of Presentation, Testimonial, and Post-conference information announcement
15:20	-	15:40	0:20	Short Break and Back to Main Room for ICISETIM Day 2 Closing Ceremony
Main Room				Link Zoom for ICISETIM https://us06web.zoom.us/j/86756890727?pwd=eXBPVllqbXJLQXpSdmdpc2hiZ2t5dz09 Meeting ID: 867 5689 0727 Passcode: icisetim
15:40	-	15:55	0:15	**Awarding Ceremony** **Best Presentation** **Best Paper** **Session Chair**
15:55	-	16:00	0:05	**Closing Speech of DAY 2** Ms. Christina, S.T., M.T. Head of Bachelor Program in Industrial Engineering, Universitas Kristen Maranatha, Indonesia
16:00	-	16:05	0:05	**Doa Recitation**

List of Presenters

Friday, April 22, 2022		
ICISETIM: Day 1		
Link Zoom for ICISETIM https://us06web.zoom.us/j/86756890727?pwd=eXBPVllqbXJLQXpSdmdpc2hiZ2t5dz09 Meeting ID: 867 5689 0727 Passcode: icisetim		
Breakout Room 1		
Session Chair: Dr. Miriam F. Bongo & Dr. Ng Siew Imm		
Track Technology and Innovation Management		
Paper ID	**Presenter**	**Paper Title**
ISM22106	Roland Yosua Hasudungan Silitonga	Assessment of Managerial Innovation in a Dairy Company
ISM22111	Alexander Christian	A Proposal on How to Use Software Reliability Growth Model to Build Confidence in Dashboard Testing
ISM22120	Khanis Satya Nugraha	Two-Stage Memory Allocation using AHP & Knapsack at PT Berca Hardayaperkasa
ISM22126	Jani Rahardjo	Implementation of Six Sigma Philosophy and 6S Principles on Bag Making Warehouse at PT. X
ISM22115	Ezekiel Landicho Bernardo	Explanatory Modelling of Factors Influencing Senior Citizen Telehealth Adoption in COVID-19 Pandemic
Track Knowledge Management		
Paper ID	**Presenter**	**Paper Title**
ISM22108	Jiabao Wu	Knowledge Management for Thai SMEs Exporting Thai Local Products from Thailand to China during COVID-19
ISM22130	Anggita Leviastuti	Empowering Women through Social Media-based Financial-Literacy Education Programme

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ICISETIM: Day 1

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Breakout Room 2

Session Chair: Prof. Dr. Daniel Marco-Stefan Kleber & Dr. Rita E. Diloy

Track Entrepreneurship

Paper ID	Presenter	Paper Title
ISM22127	Maya Malinda	Entrepreneurship Training of Culinary Business for Micro Small Medium Entrepreneurs in Bojong Soang, Bandung, Indonesia
ISM22139	Sugih Arijanto Mukti	The Correlation of Credible Online Reviews of Skincare Products on Social Media on Brand Equity and Its Impact on Purchase Intention
ISM22135	Donard Games	Impulsivity and Entrepreneurship during and Post-Pandemic Crises

Track Sustainability Studies

Paper ID	Presenter	Paper Title
ISM22119	Shiela Mhay Rosales Dalisay	Worker-Machine Relationship based Strategy for Sustainable Management in a Machine Shop
ISM22132	Axel Varian Kurniawan	Improving Service Quality to Enhance the Sustainability of Higher Education (Case Study: Division of Creativity and Study Consultation, University X)
ISM22146	Johanna Renny Octavia	Empowering the Community to Design a Household Waste Management System Through Design Thinking

Track Supply chain management

Paper ID	Presenter	Paper Title
ISM22116	Richard Chua Li	A Process-Based Dead Stock Management Framework for Retail Chain Store Systems

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ICISETIM: Day 2 Session 1

Link Zoom for ICISETIM
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Meeting ID: 867 5689 0727
Passcode: icisetim

Breakout Room 1

Session Chair: Ts. Dr. Ooi Shih Yin & Pei-Chia Wang, Ph.D.

Track Big Data

Paper ID	Presenter	Paper Title
ISM22104	Feliks Prasepta Sejahtera Surbakti	Exploration of Data Scientist's Current Expertise and Qualification Gap in Indonesia (Case Study: Jakarta Metropolitan Area)
ISM22143	Chin-Hui Lia	Applying Data Mining Technique to Improve the Precision of Predicting Patients' Ultrasound Scan Time
5020	Wu Chia Yu	Applying Mathematical Programming to Solve a Case Flexible Job Shop Scheduling Problem
ISM22142	Chin-Hui Lai	Applying Random Forests and Time Series to Forecast the Hospital's Pharmacy Drug Consumption

Track Technology and Innovation Management

Paper ID	Presenter	Paper Title
ISM22147	Prima Fithri	A Review of Technology Commercialization Research: Current Research Trend and Directions for Future Research
5042	Hazhar Mohammed Ahmed	Brain Tumour Segmentation Based on MRI Image: Article Review

Track Industrial design (product design)

Paper ID	Presenter	Paper Title
ISM22131	Hsueh-Lin Chang	Application of Ranked Position Weight and Region Approach Method in Overcoming Bottlenecks in Garment Industry

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Breakout Room 2		
Session Chair: I Gede Agus Widyadana, Ph.D. & Dr. Reshma V. K. Ph.D.		
Track Information Technology		
Paper ID	**Presenter**	**Paper Title**
ISM22112	Gerand Boy Ocsan Elinzano	Adoption and Use of Online Bank Account Opening through e-KYC using UTAUT and its Extensions
ISM22117	Wei-Jung Shiang	A Study of AGV Collaboration with Internet of Things Concept for Collision Avoidance at Warehouse Intersection
ISM22136	Kuan-chun Huang	A Study of Design and Development of Cyber-physical Applications
Track Supply Chain Management		
Paper ID	**Presenter**	**Paper Title**
ISM22134	Frittandi	The Application of U-shaped Line Balancing at Furniture Manufacturing
ISM22144	Samuel Sunya Reongjareonsook	A Short Note for Vaccine Cold Chain Network Models
ISM22137	Hendri Cahya Aprilianto	Analysis of the Factors Affecting the Palm Oil Industry's Supply Chain with Consideration of Circular Economy

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ICISETIM: Day 2 Session 2

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Meeting ID: 867 5689 0727
Passcode: icisetim

Breakout Room 1

Session Chair: Prof. Zachariah john A. Belmonte & Engr. Christopher C. Mira

Track Ergonomics

Paper ID	Presenter	Paper Title
ISM22107	Indah Kunia Mahasih Lianny	Implementation of Single Minute Exchange of Dies at PT Ganding Toolsindo
ISM22109	Chengyi Lo	RULA and REBA Risk Assessment System: a Case Study on Filipino Salt Workers
ISM22121	Winda Halim S. T., M. T.	Coffee Shop Re-Design for Low-Vision Baristas and Visitors (Case Study at Café X Bandung)
ISM22118	Raden Roro Christina	Students' Perception of Mental Load in Collaboration Workshop in Pandemic Covid-19 Era (Case Study: Interior Design and Industrial Engineering)
ISM22145	Yen-Chun Huang	A Case Study of Ergonomic Prevention Program in a Machine Manufacture Industry

Track Operations Research

Paper ID	Presenter	Paper Title
ISM22141	Christina Wirawan	Restaurant Quality Improvement (An Indonesian Restaurant Fact)
ISM22140	Ricardo Cabrera Alindayu	A Binary Integer Linear Programming Approach for Risk Minimization of a Multi-Mode Resource-Constrained Project Scheduling Problem with Discrete Time-Cost-Quality-Risk Trade-off
5026	Yu-Chieh Chuang	Building a Smart Factory Prototype – A Case Study of Company X

Saturday, April 23, 2022		
ICISETIM: Day 2 Session 2		
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Breakout Room 2		
Session Chair: Dr. Lina Anatan, S.E., M.Si. & Dr. Anamie R. Selencio		
Track Enterprise Resource Planning		
Paper ID	**Presenter**	**Paper Title**
ISM22129	Dr. Fitriani Tupa R. Silalahi	Industrial Agglomeration Analysis and Enterprise Resource Planning for Local Economic Growth (Case Study Medium-Large Industries at North Sumatera)
Track Management Science		
Paper ID	**Presenter**	**Paper Title**
ISM22105	Tamara Regina Darmawan	Marketing a Webinar: Lesson Learnt from a Real Experiment
ISM22113	Mariana Simanjuntak	The Role of Entrepreneurial Ecosystem Co-Creation in Enhancing Sustainable Business
ISM22133	Davic Carriaga	Application of Linear Model to Determine the Relationship of Team Developmental Performance Metrics in
ISM22128	Budhi Prihartono	Development of Switching Intention Model of Hotel Industry in Bandung
ISM22138	Chung-Cho Chang	Investigating the Strategy of internationalization Architectural Design in Taiwan within the Conceptual Design International Competition
ISM22114	Laurence	Case Study to Improve Mall Patronage Intention in Indonesia

Track:
Big Data

Exploration of Data Scientist's Current Expertise and Qualification Gap in Indonesia (Case Study: Jakarta Metropolitan Area)

Feliks Prasepta Sejahtera Surbakti[1]

[1]Industrial Engineering Department, Atma Jaya Catholic University of Indonesia, Jakarta, Indonesia

Abstract

Data scientists are relatively a new profession and no research shows the capabilities needed as a data scientist in Indonesia. This research aims to determine the skill and capability factors of data scientists, identify the actual skills and capabilities of data scientists in Indonesia, and identify gap skills and capabilities from data scientists in Indonesia. This research was conducted using a mixed-method approach, where interview results were used to design a questionnaire and determine the question indicators. The gap analysis results show that all indicators have a negative value, where data analysis-related training is most needed for a data scientist.

Keywords : data scientist, skills, capabilities, mixed-method, gap analysis

Applying Random Forests and Time Series to Forecast the Hospital's Pharmacy Drug Consumption

Chin-Hui Lai[1]

[1]Chung Yuan Christian University

Abstract

This study uses machine learning techniques to predict the daily drug consumption. This research collects two-year data, from 2018 to 2019, of the case pharmacy to conduct data analysis, data warehousing, and data mining. In this study, taking outpatient drugs as the subject, the daily consumption of drugs are classified into stationary and non-stationary types based on statistical tests. For non-stationary drugs, a random forest prediction model is established by adding weather and environmental factors in order to explore their influence on the daily drug consumption; for stationary drugs, a time series prediction model is established based on the solely daily consumption data. Through training and testing data sets, the average absolute percentage error (MAPE) of the daily drug consumption of the random forest prediction model is less than 10% of the daily drug consumption of the case pharmacy; while the MAPE of the daily drug consumption of the time series prediction model is within 10% to 20% of the daily drug consumption of the case pharmacy. Therefore, this study shows that the random forest prediction model embedded with the weather and environmental factors can provide better daily drug consumption prediction for the non-stationary drug

Keywords : random forest, time series, drug consumption, weather and environmental factors, drug consumption prediction

Applying Data Mining Technique to Improve the Precision of Predicting Patients' Ultrasound Scan Time

Chin-Hui Lia[1]

[1]Chung Yuan Christian University

Abstract

Due to different inspection positions, patients' ages, and radiological technologists' seniority, patients' ultrasound scan time are fluctuated, thereby leading to difficulty of predicting patients' ultrasound scan time precisely. The purpose of this study is to improve the precision of predicting the medical examination time data for the case hospital. This study collects the three-year ultrasound scan data, 2016-2018, from the case radiology center. Then, this study uses the data mining techniques to explore and analyze the data of the patients' ultrasound scan time and radiological technologists. Furthermore, this study selects the mean absolute percentage error (MAPE) as the performance indicator. This study focuses on not only adding categorical variables' features, but also using existing categorical variable transforming techniques, such as one-hot encoding (OHE) and label encoding for improving the MAPE of the patients' ultrasound scan time prediction model. Through different training and testing data sets, this study compares the MAPE of the proposed methods. The useful results will be provided for hospital managers as a reference of scheduling patients' ultrasound scan appointments.

Keywords : ultrasound scan time, data mining, categorical variable transformation, mean absolute percentage error (MAPE), prediction

Case Study to Improve Mall Patronage Intention in Indonesia

Vira Serevina[1], Natalia Hartono[2], Laurence[3]

[1,2,3]Universitas Pelita Harapan

Abstract

The purpose of this study was to increase the customer's mall patronage intention (i.e., the desire to become a loyal customer) toward a mall in Tangerang, Indonesia. The relationships and effects of its variables are examined in light of their mall experience. The model is built based on previous research, and the variables within the model are explored using Partial Least Square Structural Equation Modelling (PLS-SEM), in order to ensure that the model fits the Indonesian context. The questionnaire was distributed to the university's students and recorded using Google Forms. The response rate was 50%, with a total of 54 usable responses. The validity and reliability tests, followed by measurement model assessment, structural model assessment, and statistical significance, were conducted. The model's findings indicate that the entertainment, satisfaction, and aesthetic experience of the mall all have a significant effect on mall patronage intention. Students' purchase behaviour is positively influenced by emotional and perceived value.

Keywords : loyalty, mall, patronage intention, PLS-SEM

Track:
Industrial Design (Product Design)

Application of Ranked Position Weight and Region Approach Method in Overcoming Bottlenecks in Garment Industry

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Abstract

PT. Batik Delapan Satu is a manufacturing company specializing in the garment field. There is a bottleneck line at the production that can cause production to be hampered. This bottleneck line occurs at the trimming workstation, so imbalanced work flow. Then, we use Line balancing with the Ranked Positional Weight method and the Region Approach method to solve this bottleneck line problem. Using the Ranked Positional Weight method and the Region Approach method will produce line efficiency, balance delay, idle time, and smoothness index. Using the Ranked Positional Weight method and the Region Approach method will increase efficiency line from the condition of the company start 52.02% up to 73.82%. Besides that, it can reduce five-station work, which was seven-station work before, and reduce the level of idle time in the company, they used to take 1057.83 seconds, but now they only take 427.92 seconds.

Keywords : Line Balancing, Bottleneck, Line Efficiency, Balance Delay, Idle Time

Track: Information Technology

Factors that Lead to Adoption and Use of Online Bank Account Opening through e-KYC using UTAUT and its Extensions

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Abstract

Financial Inclusion has been determined as one of the factors affecting national development. Bank account opening provides opportunity to more banking services and as such central banks have been supporting the use of Electronic-Know-Your-Customer (e-KYC) even before COVID-19 pandemic. While the benefits of e-KYC for the banks and its customers are clear, the widespread use of such process for account opening is still in its early adoption stage. This research employed a quantitative method by adopting the Unified Theory of Acceptance and Use of Technology as as theoretical foundation and extension constructs and determined the factors affecting the use and adoption of e-KYC for online bank account opening. As a result, facilitating conditions and perceived security were found to be significant factors affecting the intension to use e-KYC. Through this research, it was able to validate the use of the research model in studying e-KYC adoption and provided management key areas leading to e-KYC use that they may focus on.

Keywords : Financial Inclusion, e-KYC, UTAUT, Perceived Security, Facilitating Conditions

A Study of AGV Collaboration with Internet of Things Concept for Collision Avoidance at Warehouse Intersection

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Abstract

With advance of technology, automated guided vehicle (AGV) will become common daily vehicles, which means collaboration between AGVs are more and more important. This paper suggests that how to make AGV avoid collisions with other AGVs is a practical problem, and it is a common need and should be solved if there are two or more AGVs interacting with others. Therefore, a better system design should be developed and implemented. This paper used a three-layer structure of internet of things (IoT) to design an AGV collaboration system, to avoid collisions with other AGVs in this system, and to decrease path deviation. The concept of IoT was applied for AGV communicating with other AGVs through sending AGV position messages. In such a case, AGV would know other AGV positions and decide which actions to take. This paper used Robot Operating System (ROS) to design an AGV collaboration system, and conducted an experiment to verify the feasibility of this system. The experiment simulated the intersection of warehouse in the real world. According to the results, two AGVs can avoid collisions by knowing positions of each other in every path scenario. When two AGV both followed straight paths, the deviation was the smallest. When one AGV turned left and another turned right, it might have largest deviation.

Keywords : Automated Guided Vehicle, Collision Avoidance, Internet of Things, Robot Operating System

A Study of Design and Development of Cyber-physical Applications

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Abstract

After several industrial revolutions, reducing production costs, improving product quality and production line efficiency in the manufacturing industry has always been the primary goal. In recent years, Industry 4.0 has set off a wave of revolution in the global manufacturing industry. How to effectively integrate intelligent manufacturing knowledges to solve different technical problems to meet manufacturing standards, and dramatically shortening time for development, has become one of the mainstream of research. The main purpose of this paper is to describe the development of a cyber-physical system to put together an interactive 3D industrial application in virtual world in which dynamic simulation in the control schematics in different technologies could be applied at the same time. This approach cannot be only used in simulating, verifying the accuracy of the design of the entire project but the final layout could also be fine-tuned by receiving different feedbacks under different circumstances. One industrial application was introduced in this article that a virtual system created with the Unity 3D virtual engine co-simulate with detailed control schematics of sub-systems in order to test and validate the feasibility of optimizing the simulation parameters, realizing the operation scenarios and assisting the designers to discover possible problems of the equipment in advance.

Keywords : Cyber-physical system, Virtual system, CAD, Digital twins

Track: Ergonomics

RULA and REBA Risk Assessment System: A Case Study on Filipino Salt Workers

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Abstract

This descriptive study focused on the ergonomic risk assessment of salt workers in Occidental Mindoro to determine which work activities posed risks to the farmworkers and assess the relationship between profile variables and the total pain and body parts pain experienced by the salt workers. The Nordic Questionnaire was used to detect symptoms composed of 28 multiple choice questions and structured into two well-differentiated parts; the first part refers to symptoms in nine parts of the body (neck, shoulders, elbows, wrists/hands, upper back, lower back, hip/thighs, knees, and ankles) during the last 12 months. The second part refers to the neck, shoulders, and lower back symptoms throughout the subject's working life/seven days beforehand. Correlation analysis and descriptive statistics were used to interpret data. The study's findings revealed that the salt workers are middle adults, have been working in the salt farms for most of their lives, have heights and weights within the average height and weight for Filipino males. Results further suggest that the work activities that posed risks and caused pain to the salt workers are, transporting salt, collecting salt, and filling the salterns with brine. Moreover, age and years of working are also significantly related to the pain in body parts experienced by the salt workers in doing the activities that pose risks to them. The body parts that are likely to feel pain are the neck, lower and upper back, and knees. Lastly, in knowing the risky work activities of salt farmers, mitigation measures can be proposed.

Keywords : salt farming, body pain score, Nordic questionnaire, correlation analysis

Students' Perception of Mental Load in Collaboration Workshop in Pandemic Covid-19 Era (Case Study: Interior Design and Industrial Engineering)

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Abstract

The Ministry of Education and Culture of Indonesia changed the higher education concept to achieve the world class education equality, considerably at the same time with the outbreak of COVID-19. Therefore a sudden change in learning method change drastically whether it is using synchronous or asynchronous method due to time and capacity availability. Thus, student's mental load arguably enhance in this current situation and therefore it is assumed that the evaluation of the new way of distance learning study never be done especially for collaborative study between department based on different faculty in Indonesia. This study using NASA-TLX paper based as the inventory instrument to evaluate and understand the current learning situation while the collaborative events with problem based assignment takes place. All of the workshop activities were given and reported online with the duration of eight weeks from the beginning to the end. From the result, it was showed that the collaborative workshop implementation did not perform any different perception of the two departments who were originally came from science and social. The participants were equally assumed to participate seriously because they came from the 3rd semester's mandatory subject. Other implication related to academic performance, reduces of team member which not fully cooperated, credit load taken in the current semester and the flexibility in doing individual or team assignment are discussed.

Keywords : collaborative workshop, mental load, multidisciplinary, NASA-TLX, online distance learning

Coffee Shop Re-Design for Low-Vision Baristas and Visitors (Case Study at Café X Bandung)

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Abstract

Café X is a coffee shop managed by 3 low-vision baristas. Visitors to this cafe are also dominated by visitors with visual impairments. Due to the limited visibility of the barista and some cafe visitors, several problems were found that could cause discomfort for workers and cafe visitors. Therefore, it is necessary to adjust the cafe's operating system to support performance and provide security and comfort to the baristas and visitors who come. The data collected are data on raw materials, machinery, and equipment for cafe operational activities, data on physical facilities, layout and actual physical environment of cafes, data on the application of 5S around the cafe area, as well as data on potential accidents that may arise while around the cafe area. Then the data will processed using the method of comparison with anthropometric data and design concepts in improvement for physical facilities and cafe layouts. Standardization comparisons to improve physical environment. Radar maps to determine the application of 5S culture. Fish bones and 5W+1H to describe the causes of potential accidents in the cafe area. The suggestions given are the adjustment of the machines and equipment used, redesign of the physical facilities and layout of the cafe, the proposed design of tools in the form of tactile stickers and the application of guiding blocks as directions, improvement of the physical environment, application of 5S culture to maintain the work area and provide suggestions prevention of accidents in Café area.

Keywords : Blind Sensory Disabilities, Coffee Shop, Work System Adjustment

A Case Study of Ergonomic Prevention Program in a Machine Manufacture Industry

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Abstract

Musculoskeletal Disorders (MSDs) is the most potential risks in human production and economic systems. In this research, ergonomics guidelines and enacted relevant regulations announced by other countries to effectively facilitate ergonomics prevention programs were discussed. A machine manufacture industry as a case study has been ergonomically evaluated by Musculoskeletal Disorders Checklist (MSDs) and Nordic Musculoskeletal Questionnaire (NMQ), which was used to recognize the dominating risk factors. According to the result of observation and preliminary assessment, low back pain related to the high frequency of manual material handling tasks was the critical issue in this case study. The conclusion revealed that the proposed improvement such as engineering redesign, training, health management, and administration, would be implemented into the main axle assembly area, customer service department, and Z-axis assembly area. The further improvement interventions would help organization to carry out the ergonomics prevention program.

Keywords : ergonomic, musculoskeletal disorders (MSDs), evaluation, manual materials handling (MMH)

Track: Management Science

Marketing a Webinar: Lesson Learnt from a Real Experiment

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Abstract

Implementing advertising email content can powerfully and positively affect customers' attitudes about email-based advertisements. However, email marketing efforts may not reach their full potential without evaluating their marketing strategy. This paper discusses the real-world experience of the email marketing strategy of the webinar that we managed by applying email marketing strategy evaluation combined with mathematical diffusion models to increase the number of registrations. After starting with a digital external campaign for our webinar event, we monitor and predict using Bass, von Bertalanffy, Gompertz, and Logistic. While the mathematical diffusion models show that our webinar reached a plateau very early, it could become an alarm for the management team to react and make another internal digital campaign to boost our webinar participants. Interestingly, we also encountered a procrastination phenomenon since this was a free webinar. Finally, using Zoom registration, MySQL database, and R, we analyzed how effective the digital email campaign was in getting registrants daily.

Keywords : email campaign, Bass, von Bertalanffy, Gompertz, Logistic

The Role of Entrepreneurial Ecosystem Co-Creation in Enhancing Sustainable Business

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Abstract

This study focusses on investigating and defining the role of Entrepreneurial Ecosystem Co-Creation in supporting entrepreneurial sustainability and improving marketing performance, especially tourism MSMEs in the face of economic challenges after the covid-19 pandemic. Respondents are entrepreneurs, MSME managers engaged in culinary, entertainment, transportation and accommodation of Toba and Humbang Hasundutan regencies, selected based on Cluster Random Sampling Technique. Data is processed with AMOS SEM. The results showed that the Entrepreneurial Ecosystem Co-Creation (EEC) proved to be strong enough to mediate between Green Entrepreneurial Orientation and Sustainable Entrepreneurial EEC is considered able to improve Marketing Performance (MPF) with a value of P is ,002 ($p < 0.05$). This study shows that EEC as a mediation is proven to be able to increase MPF and Sustainable Entrepreneurial directly. This study provides future directions for the role model of green entrepreneurship, which provides green services so that it can be a reference for entrepreneurs to create shared values and implement a sustainable green ecosystem in sustainable entrepreneurial management and marketing performance. This study provides future directions for the role model of green entrepreneurship, which provides green services so that it can be a reference for entrepreneurs to create shared values and implement a sustainable green ecosystem in sustainable entrepreneurial management and marketing performance.

Keywords : Green Entrepreneurial, Entrepreneurial Ecosystem Co-Creation, Sustainable Entrepreneurial, Marketing Performance

Development of Switching Intention Model of Hotel Industry in Bandung

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Abstract

Switching intention in the hospitality industry is shaped by various factors, including service performance, customer satisfaction, and switching barriers. The hospitality industry itself cannot be separated from the loyalty program as it is one of the most common tools used in managing customer behavior. Therefore, this study will analyze the factor of loyalty program towards switching intention. The switching intention model in this study is formed by main service performance, service encounter performance, customer satisfaction, switching barriers, and loyalty programs. The data analysis performed in this research is multigroup structural equation modeling. The grouping of the samples is divided based on the type of hotel visited by the respondents, which are luxury hotels and medium to low hotels. Luxury hotels consist of 4-5 star hotels, while medium to low hotels consist of 1-3 star hotels. The sample size used is 250 respondents with analysis performed using MPlus. The results confirm that loyalty program, along with main service performance and service encounter performance influences switching intention. Based on the result, it is also found that different group of customers also have different effect on the relationship in the model.

Keywords : Service Performance, Customer Satisfaction, Switching Barriers, Loyalty Program, Switching Intention

Application of Linear Model to Determine the Relationship of Team Developmental Performance Metrics in

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Abstract

Technical Support plays a vital role in modern businesses today. as most businesses rely on digital infrastructure, technical support provides solutions to customers' issues and queries. It helps in the retention of customers. this paper aims to measure the performance of technical support through the a BPO company. The results were further analyzed using the principal components analysis. The results show that the technical knowledge contributes to the model as the most significant factor with a value of 1.05. Next to it is the Support citizenship which is at 0.95. Communication was at 0.91 and context awareness at 0.76. At the very least, diagnostic /analysis was at 0.69.

Keywords : technical support, performance, customer effort score

Investigating the Strategy of internationalization Architectural Design in Taiwan within the Conceptual Design International Competition

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Abstract

Internationalization of enterprise is a obvious phenomeno and common strategy for business that want to expand their boundary worldwide. Scholars propose some models that can explain the success well, however, there are no studies on these models applied on the profession of architectural design, even though this profession was internationalized maturely. This study focus on one of the popular mode of architectural competition : Conceptual Design, by the cases in taiwan, and find the Uppsala model is better, followed by the explanatory power of the RBV and OLI.

Keywords : Conceptual Design, internationalization, architectural design, Uppsala RBV OLI

Track: Operations Research

A Binary Integer Linear Programming Approach for Risk Minimization of a Multi-Mode Resource-Constrained Project Scheduling Problem with Discrete Time-Cost-Quality-Risk Trade-off

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Abstract

The multi-mode resource-constrained project scheduling problem (MRCPSP) provides a method for project managers to assign schedules and limited resources to project activities while minimizing total duration. This time objective has been extended to include the trade-offs of cost and quality called the discrete time-cost-quality trade-off problem (DTCQTP) to provide project managers an overview of indicators that can affect project performance. However, the impacts of the COVID-19 pandemic have led project managers and consultants to assess their projects' risks when it comes to scheduling and resource assignment decisions. Hence, this paper aims to extend the MRCPSP and the DTCQTP to include risk at the resource level to highlight the importance of hiring the proper resources in project scheduling. A binary integer linear programming model named the multi-mode resource-constrained project scheduling with discrete time-cost-quality-risk trade-off (MRCPSP-DTCQRT) was developed with risk minimization as the objective function. A case study from prior literature was used as a basis for illustrating the model using the open-sourced Python-MIP package, which uses the branch-and-cut methodology for generating optimal solutions. A set of schedules that either prioritize time, cost, quality, risk, or a balance among the four was generated for use of the project manager to make decisions based on the current situation. Future research may be conducted to further extend the model to include resource skills, to test medium and large-scale case studies, and to use other methodologies such as metaheuristics and machine learning to arrive at optimal solutions within reasonable computing time.

Keywords : project scheduling, project management, integer linear programming, multi-mode resource-constrained project scheduling problem, discrete time-cost-quality-risk trade-off

Restaurant Quality Improvement (An Indonesian Restaurant Fact)

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Abstract

One of the determinants of the success of a service business is the quality of the service itself. A service business that does not satisfy its customers is likely to be abandoned by customers and experience a decrease in revenue. For this reason, the service quality (SERVQUAL) method is suitable to be applied in service companies that experience a decline in revenue, to increase their income. As a case, this study will examine Resto XYZ, a restaurant located in Jakarta, Indonesia which had been experiencing a decline in income. One of the causes of this decline in revenue is the lack of customer satisfaction which is indicated by the number of customer complaints. This study aims to measure customer satisfaction and then provide suggestions to improve Resto XYZ's service quality. For this reason, the SERVQUAL method popularized by Parasuraman was used. We made modifications for gaps measurement from Parasuraman's model. Data collection was carried out by quantitative and qualitative methods. From the results of data processing, it turns out that some variables are declared unsatisfactory by the customer. Mostly the cause of the customers' dissatisfaction is caused by lack of management knowledge about customers' expectations. For this reason, this study provides suggestions for management to keep in relation with customers and create surveys to gain information about customers' expectations. Other suggestions related improve photos in the menu, managing employees' work to shorten the service time, tightening the health protocol, redecorating the dining area, and providing adequate parking space.

Keywords : customer satisfaction, quality gap, quality improvement, SERVQUAL

Building a Smart Factory Prototype – A Case Study of Company X

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Abstract

This research proposes a four-layer smart factory prototype: the first layer is the connection layer where sensors are installed on the equipment to collect data. The second layer is the conversion layer that obtains data from the equipment and converts data into the corresponding database storage format. The third layer is the information layer that stores and uses meaningful information. Here, the information is the fundamental element of building the network layer of an intelligent system (or smart system). The forth layer is the cognitive layer that uses to monitor conditions of the entire factory. In order to verify the feasibility of the smart factory prototype proposed in this study, this study takes the packaging process of the case semiconductor packaging company X as an example. The validation processes of this study contain establishing a testing database, generating an optimal production schedule (or smart production scheduling), simulating shop-floor production (or cyber-physical system), and generating required outputs for a war room of Company X. The results show that the prototype proposed in this study can help the case company increase its digital decision-making capabilities in the smart production scheduling and performance monitoring and control.

Keywords : Cyber-Physical System, Industry 4.0, Simulation, Smart factory, Smart production scheduling

Track:
Supply Chain Management

A Process-Based Dead Stock Management Framework for Retail Chain Store Systems

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Abstract

Dead stocks refer to inventories in warehouses sitting for an extended length of time with no demand. All supply chain levels experience the dead stock problem. However, the impact is felt more in the retail level due to the volume and diversity of products handled especially when chain stores are involved. Causes of dead stock accumulation in the retail level of the supply chain include inventory policies, forecast inaccuracy, sudden change in demand, product expiration, product damages, etc. Literature is divided into strategy-based and management-based approaches in handling the dead stock problem. Strategy-based approaches build upon a single strategy to provide better solutions while management-based approaches identify root causes and provide solutions for a specific problem situation. Proactive and reactive strategies were proposed in literature to either prevent the accumulation of dead stocks or manage dead stock accumulation as it happens. This paper examines the causes of dead stocks and the different dead stock management strategies developed through the years to conceptualize a framework for a solution process that can effectively control the accumulation of dead stocks in retail chain store systems. The result is an end-to-end process-based dead stock management framework that starts from problem recognition and ends with selection of strategies in reducing the dead stocks of retail chain stores. The proposed framework minimizes dead stock costs of the retail chain store system through timely recognition of dead stocks and an optimal balance among dead stock warehouse costs, strategy-related costs, and stockout costs across all retain chain stores.

Keywords : dead stock accumulation, retail chain store systems, proactive strategy, process-bsed dead stock management framework, reactive strategy

The Application of U-shaped Line Balancing at Furniture Manufacturing

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Abstract

Setting the number of operators in a production line is very important because it affects the production line's ability to achieve production targets. In the manufacturing industry with make-to-stock (MTS) production with several production lines, operators are often moved from certain production lines to production lines that require more operators. One of the reasons for the need for increasing operators in the production line is the approaching orders due date. This problem was faced by a furniture manufacturing in Indonesia which had imprecise number of operators arrangements and task assignments so that implicated to unachieved production target. This research applied U-shaped line balancing to increase the line efficiency to meet the production target. The research data were collected from direct observation on the actual production line and also from company documents. The methods used in the U-shaped line balancing were maximum ranked positional weight, maximum total number of follower tasks, minimum total number of follower tasks, maximum task time, and minimum task time. The highest line efficiency was obtained by the maximum ranked positional weight method which was 84.08%, increased by 24.37% from the actual one. Besides, the required operators were reduced from 15 to 10 persons with a production capacity of 76,688 units in 12 weeks.

Keywords : heuristic, line efficiency, production target, number of operators, U-shaped line balancing

Analysis of the Factors Affecting the Palm Oil Industry's Supply Chain with Consideration of Circular Economy

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Abstract

The generation of solid waste and liquid waste from Indonesian palm oil processing factories tends to be increased. To overcome the problem, Indonesia must be able to implement a sustainable supply chain with the concept of circular economy, which focuses on reduction, reuse, and recycling areas. However, it is necessary to know in advance the factors that are the keys to the application of the concept. The purpose of this study is to identify the problem's profile of the key factors in the implementation of a circular economy in the Indonesian palm oil industry. The method in this study uses Interpretative Structural Modeling (ISM) to analyze the key factors in the implementation of a circular economy in the palm oil industry. This study will investigate three groups that influence the implementation of circular economy, namely objectives, participator, and problems with their elements. The results are identified that the key factors in implementing a circular economy in the palm oil industry are the factors of competitive advantage, farmer, and infrastructure from each group

Keywords : Circular Economy, ISM, Palm Oil, Supply Chain Management

A Short Note for Vaccine Cold Chain Network Models

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Abstract

Vaccine shortages in current COVID-19 pandemics have highlighted that vaccine production and distribution are resource-intensive processes. In addition to manufacturing new vaccines for emerging epidemics, existing stockpiles must be maintained as well. With limited resources available during this crisis, it is critical to identify efficient ways to utilize the scarce materials. To do so requires a better understanding of how vaccine supply chains are currently operating under normal and scarce circumstances, where supplies can be procured from multiple sources and stored at various locations before distribution to hospitals and clinics. This study seeks to determine what influences these network structures by assessing historical vaccine supply chain networks, including temperature levels, storage temperatures, transport methods, time delays, etc. By summarizing a bibliometric study of the Dimensions and Web of Science databases, the review is intended to enable researchers to identify optimal strategies for developing relevant vaccine production and distribution models.

Keywords : COVID-19, vaccine supply chain, logistics, network models

Track: Knowledge Management

Knowledge Management for Thai SMEs Exporting Thai Local Products from Thailand to China during COVID-19

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Abstract

Nowadays, with the development and growth of internet technology, famous Thai products can be easily purchased in China. Chiang Mai is known as the city of coffee but cannot find out where to buy it on Chinese e-commerce platforms. This research study seeks to provide as comprehensive a description as possible of the Business to the Consumer market and the current logistics of transporting coffee products between China and Thailand, use information collection, and find potential channels. The potential pattern to provide viable solutions for relevant Thai SMEs to enter the Chinese coffee bean market in the "COVID-19" pandemic condition. This research uses intelligence search to determine exported suitable coffee products from Chiang Mai, Thailand to Hangzhou, China. This research use activity-based costing to compare the cost every step and time. Find out which is the suitable logistics pattern.

Keywords : COVID-19, export Thailand product to China, activity-based costing, knowledge management

Empowering Women through Social Media-based Financial-Literacy Education Programme

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Abstract

In 2019 Indonesia's financial literacy index stood at 38.03%, an improvement over time, but still considerably low compared to global standard. This number becomes even more disheartening when gender is taken into account as women in Indonesia have a noticeably lower financial literacy rate than men. This is the problem that we try to solve by presenting an approach for structuring and disseminating financial knowledge with the aim of improving financial literacy in Indonesia. We utilised a framework for social media knowledge management to develop a financial education program while simultaneously approaching the problem in exploratory manner by conducting in-depth interviews to gain understanding on various aspects of financial literacy. Judgement sampling technique was used for practicality purposes via in-depth interviews with 13 women who live in Bandung as the main object of the study. Among the respondents of our study, 76% were deemed well-literate while the rest were considered still literate. While encouraging, examining the data further shows that our respondents' understanding towards financial management is a bit more complicated and nuanced owing to a wide range of behaviour that our respondents exhibit.

Keywords : Financial Literacy, Financial Education, Knowledge Management, Social Media, Economic Empowerment

Track: Sustainability Studies

Worker-Machine Relationship based Strategy for Sustainable Management in a Machine Shop

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Abstract

Nowadays, establishing a sustainable management plan will help organizations use resources effectively and efficiently and help the business to have a competitive advantage in the long term. In a machine shop where the operation cost is high and resources are not effectively used, a worker-machine relationship-based strategy has been introduced. Many studies explored the use of different problem solving tools in different fields, however there is a lack of studies in the application of gang process chart, random and synchronous servicing especially in machine shop. Thus, the purpose of this study was to evaluate the job distribution during service operation, to determine which worker and machine will require reassignment to operate effectively, and lastly propose a sustainable management strategy to optimize the operation and reduce the operation cost. This study used a descriptive research design with an overt observational approach in a well-established machine shop in Oriental Mindoro, Philippines. A total of fifteen operators who were directly involved with the machines have been observed. The study discovered that Operators 1,2,3.4 and 5 are already operating on the ideal number of machines, Operator 6 will require one more additional machine, Operator 7,8 9 and 10 will require one less machine to operate on an ideal number and save operation cost.

Keywords : work study, methods engineering, random servicing, synchronous servicing, sustainable management

Improving Service Quality to Enhance the Sustainability of Higher Education (Case Study: Division of Creativity and Study Consultation, University X)

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Abstract

HE institutions need to continuously improve their quality to be able to compete and maintain their sustainability. The Division of Creativity and Study Consultation (CSC) is a division at University X, which plays a major role in promoting University X. Various complaints from prospective new students and their parents have been received regarding the inaccurate delivery of the information provided. This study aims to determine the satisfaction index of prospective students/parents with the Division of CSC and propose improvements for the Division of CSC based on the expectation of prospective students/parents and the performance of the Division of CSC. Data was collected using a questionnaire based on the SERVQUAL Model. Questionnaires gathered from 100 respondents who meet the purposive sampling requirements, namely prospective students or their parents who have received services (online or offline services) from the Division of CSC from promotion until admissions, have seen the University X website/social media, and have received services from the Division of CSC via telephone or email. Consumers' expectations and performance of the Division of CSC were processed using the Gap Analysis Model, hypothesis testing for 2-paired-means, Consumer Satisfaction Index, and Importance-Performance-Analysis (IPA). A cause-effect diagram consisting of 8 Ps (People, Process, Policies, Procedures, Price, Promotion, Place, Product) is used to find out the root of the problem. The suggestions from this research are training for the Division of CSC staff, making direct and indirect delivery procedures, and developing market research to support service activities.

Keywords : Cause Effect Diagram, Customer Satisfaction Index, Hypothesis Testing, Importance-Performance Analysis, SERVQUAL

Empowering the Community to Design a Household Waste Management System Through Design Thinking

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Abstract

The waste issue caused by a linear economy concept has a serious impact on the environment, society, and economy. The damage of this issue is threatening the community's resilience and well-being today and in the future. For instance, Bandung City had suffered a waste disaster in 2005 which is known as Bandung Lautan Sampah. In line with this, the local government of Bandung City has implemented the Reduce, Separate, and Benefit (KangPisMan) program which targets each region to reduce waste by 30% by 2025. Overall, the waste generation data indicated that Bandung City will not achieve the reduction target. To mitigate the worst scenario, it is necessary to accelerate the adoption of a suitable waste management system in the city, especially in the household area where the majority of waste comes from. Thus, the objective of this research was to design a pilot project that empowers a community to reduce household waste. The community involved in this pilot project for the design of a household waste management system was the residents of RW 005, Cisaranten Kulon Village, Bandung City. Design thinking was applied as the research methodological approach, given that waste is a complex, wicked problem. Through design thinking, we expect to design a waste management system, that is human-centered and sustainable, as a solution to this problem. In this research, together with the community, we have successfully developed a system prototype, which consists of a waste material flow system, an organization structure, a circular business model canvas (CBMC), a Standard Operating Procedure (SOP) for waste transportation, and a door-to-door education program. Furthermore, the prototypes will be implemented and evaluated for prototype improvement.

Keywords : Design thinking, community empowerment, household waste, pilot project, waste management

Track: Technology and Innovation Management

Assessment of Managerial Innovation in a Dairy Company

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Abstract

Company XYZ is an Indonesian dairy company with a significantly large market share. The successes of its product innovation are highly linked with its managerial function, which indicates the existence of innovation in its company management. This research aims to determine the company's level of managerial innovation and its relationship with product innovation accomplishments. The study utilizes two methods in determining managerial innovation levels. The first method is by measuring employees perception of managerial functions through a survey. The second method is through direct observation of executive activities related to managerial functions using a prearranged observation protocol. The final managerial innovationscore will be calculated using the Fuzzy AHP method. The study found that the company's managerial innovation level reached 57%, which is a relatively high level. This result further showed which function should be developed more.

Keywords : managerial innovation, management functions, fuzzy AHP

A Proposal on How to Use Software Reliability Growth Model to Build Confidence in Dashboard Testing

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[1,2,3]Petra Christian University, [4]Microstrategy

Abstract

In this paper we discuss a relatively new yet very simple and very practical proposal that can be used to build confidence to release a software (or an application/dashboard). Instead of contrasting various software reliability growth models (SRGM) and choose which one is the best (among them), we actually make them collaborate to help making decision. We demonstrate our proposal with 18 real life datasets that are publicly available in the literature. We use three very simple SRGMs that are widely used, namely: Bass, Gompertz, and Logistic in our proposal to identify when we can stop testing.

Keywords : SRGM, Bass, Gompertz, Logistic, Practical Stopping Rule

Explanatory Modelling of Factors Influencing Senior Citizen Telehealth Adoption in COVID-19 Pandemic

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Abstract

COVID19 crisis have caused profound changes in our society. A restricted way of living to limit possible widespread contraction has been the new norm. In healthcare, the center of this crisis, the traditional face-to-face consultation is shifting to a technologically backed system of telehealth. The objective of the rollout is to continue to provide basic healthcare service in the convenience and safety of the patients. In the Philippines, this is targeted to prioritize the most vulnerable age group of senior citizen given their needs and implications of quarantine measures. The depth of this transformation, however, is ravaging for senior citizens which are in customary and unfit for this dramatic technology shift. Given this, the objective of the study was to shed light on the significant factor for adoption. To achieve this, the study extended the UTAUT to formulate Health Crisis Technology Adoption Model which incorporates perceived trust and moderated by technological anxiety, resistance to change, and COVID-19 fear. Using Structural Equation Modelling (SEM), the study uncovered that behavioral intention to use telehealth is highly motivated by: low effort needed to use and learn it; support and motivation from important referent; perception of trustworthiness; time reduction and increase in service quality on healthcare as compared to traditional face-to-face checkups; and availability of instructions, trainings, and needed facilities to operate telehealth. The study also determined that COVID-19 fear dampen the conditional barriers or requirements for adoption while technological anxiety and resistance to change amplifies the needed perceived positive benefits from using telehealth.

Keywords : COVID19, Teleheath, Technology Adoption, UTAUT, Structural Equation Modeling

Two-Stage Memory Allocation using AHP & Knapsack at PT Berca Hardayaperkasa

Khanis Satya Nugraha[1], Indriati Njoto Bisono[2], Hanijanto Soewandi[3]

[1,2]Petra Christian University, [3]Microstrategy

Abstract

We propose to manage a (MicroStrategy) Business Intelligence Server in term of RAM allocation for its Intelligent Cubes as a two-stage resource allocation problem in which the first stage is formulated as an multi criteria problem that can be solved using Analytic Hierarchy Process (AHP) and the second stage is multiple (several) 0-1 classic Knapsack problems with the constraints that are obtained using the result from the first stage. This Approach happens to have advantage in term of computational complexity as well, it reduces from O(nM) to O(max{nj}max{Mj}) when calculated in parallel. We illustrate our proposal with a numerical example based on our experience.

Keywords : Business Intelligence Server; Analytic Hierarchy Process; Knapsack problem

A Review of Technology Commercialization Research: Current Research Trend and Directions for Future Research

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Abstract

This study explores academic research on technology commercialization. Technology commercialization is currently a popular research topic. Universities urgently need the topic of commercialization of technology to capitalize on research products. Many universities are having difficulties with this issue, but this is also a moment for them to benefit from innovation and commercialization. The present study offers opportunities, especially regarding the critical success factors affecting technology commercialization. Therefore, the present study discusses both existing and future research related to technology commercialization. By using publish or perish (PoP) 8, the Authors collected 200 papers related to studying future research opportunities. From 200 papers, 127 papers 127 journals for further study. Among them are 53 papers from Q1 (Scopus indexed), 27 papers from Q2, nine papers found from Q3, and five papers from Q4. It was found that current research trends on this topic predominantly come from developed countries such as the USA, UK, and Italy. Many of them used a qualitative approach that focused on prominent and state universities. Future research may focus on the context of emerging market economies. In addition, combining both qualitative and quantitative approaches from different universities may also provide a greater understanding of technology commercialization and academic entrepreneurship as a whole.

Keywords : Technology Commercialization, University, Government, Industry

Track: Entrepreneurship

Entrepreneurship Training of Culinary Business for Micro Small Medium Entrepreneurs in Bojong Soang, Bandung, Indonesia

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Abstract

Business success is determined by many factors, one of which is determined by having the ability or entrepreneurial skills. By looking at government directives that are serious about developing Micro, Small and Medium Enterprises (MSMEs) to improve their entrepreneurial abilities and skills, research is in synergy with the university research roadmap, namely Enhancing competent, professional, and creative Human Resources so that they become entrepreneurs based on the creative economy. There needs to be efforts to improve entrepreneurial skills. The purpose of this research is to map the condition of MSME actors in Bojong Soang, Bandung, West Java, Indonesia, especially those who have culinary businesses. Support the government in terms of alleviating poverty problem through capacity building and skills among MSME entrepreneurs; Assist the government through appropriate training methods to improve Entrepreneurship Training for MSME entrepreneurs with special topic Business Canvas Model; combines expertise from various fields. The research method we use is quantitative research method with descriptive study case format. Collecting data in Bojong Soang, Bandung, West Java, Indonesia on 76 MSME culinary business. The Research founding after entrepreneurship training, give good result that in range 77% -97% MSME know or understand their Business Model. Women MSME have high formal education than man MSME. Mostly MSME need sales and marketing topic to make them business growth.

Keywords : MSMEs, Entrepreneurship Education, Entrepreneurship Training for MSMEs, Culinary Business, Bojong Soang

Impulsivity and Entrepreneurship during and Post-Pandemic Crises

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Abstract

There is little research that examines the consequences of impulsivity on entrepreneurship including entrepreneurial psychological aspects. The objective of this research is to examine the possible relationships between impulsivity and entrepreneurship. We offer entrepreneurial fear of failure and entrepreneurial well-being as constructs that can capture the essence of entrepreneurship related to impulsivity. COVID-19 pandemic and post pandemic crises have caused new realities including how entrepreneurs perceive their entrepreneurial behavior and well-being. We use an integrated review to analyse the relationship and provide some propositions for future research by interpreting previous research and follow them up with new insights. While impulsive behaviors are frequently regarded as irrational and emotional, quick decision making, we will provide a great understanding of this issue.

Keywords : impulsivity, entrepreneurship, entrepreneurial fear of failure, startups, integrated review

The Correlation of Credible Online Reviews of Skincare Products on Social Media on Brand Equity and Its Impact on Purchase Intention

Sugih Arijanto Mukti[1], Vita Niedya Pangesti[2]

[1,2]Institut Teknologi Nasional Bandung

Abstract

On purchasing skincare products, users need credible references as a consideration to suit user needs. In this case, online reviews can be an effective reference to support these needs. These user needs make online reviews affect the brand equity and purchase intention of the product. Referring to the statements and problems that have been described, this research will re-examine the relationship between online review, brand equity, and purchase intention according to the research presented by Chakraborty and Bhat (2017). This research was processed using the Structural Equation Modeling (SEM) method with the help of LISREL 8.8 software. The results of this study indicate that there is an aspect of confirmation of prior belief that can affect a credible online review. Meanwhile, credible online review itself has a positive effect on brand equity. However, there are no aspects of brand equity or credible online reviews that can positively influence purchase intention.

Keywords : Credible Online Review, Brand Equity, Purchase Intention

Track:
Enterprise Resource Planning

Industrial Agglomeration Analysis and Enterprise Resource Planning for Local Economic Growth (Case Study Medium-Large Industries at North Sumatera)

Mariana Simanjuntak[1], Fitriani Tupa R. Silalahi[2], Arnaldo M. Sinaga[3], Rosni R. Lumbantoruan[4], Humasak T. A. Simanjuntak[5]

[1,2,3,4,5]Institut Teknologi Del

Abstract

The ideas for creating share value have been shown to improve economic performance. In this study, we aim to map the Location Quotients of Medium-Large Industries (IBS) agglomeration in North Sumatra and show how industrial agglomeration affects local economic growth and company performance. In this study, we use Location Quotients (LQ) index to measure the agglomeration of Medium-Large Industries (IBS) by district or city. The measurements were carried out in 34 regencies and cities in North Sumatra between 2017 and 2019. The results show that IBS agglomeration increased by 20.59% in 2017 and a steady increase by 23.53% in 2018 to 2019. The added value of this study is the expansion of the dominant logic co-creation concept, with the principle of industrial agglomeration able to assist companies in achieving sustainability and competitive advantage by promoting the creation of shared value, ranging from planning corporate resources to meeting the economic value for all stakeholders.

Keywords : Industrial Agglomeration, Resource Planning Development, Co-creation, Competence, Economic Performance

Closing Speech – Day 1

It is a great honor for me to close the first day of International Conference on Industrial and System Engineering, Technology, Innovation, and Management (ICISETIM), organized by Bachelor Program in Industrial Engineering Universitas Kristen Maranatha, Indonesia and Research Synergy Foundation (RSF), co hosted by Chung Yuan Christian University, Taiwan, De La Salle University, Philippines, and Universitas Kristen Petra, Indonesia.

I would like to thank the keynote speakers today, Prof Chew Ek Peng from National University of Singapore and Prof Rosemary R Seva from De La Salle University, Philippines that delivered the amazing materials and shared their thoughts.

I would like to thank all moderators, session chairs, presenters and participants who have joined this conference from all over the world and gave their best performance.

I hope that the knowledge and thoughts sharing today, new networks and new friendship would be fruitful to all of us.

Please do not forget that tomorrow we still have the 2nd day conference.
I would like to encourage all of you to participate again tomorrow, because we also still have fabulous agenda on the last day of the conference.

Thank you very much for your attention. See you tomorrow.

Closing Speech – Day 2

It is a great honor for me to close the second day and also the last day of International Conference on Industrial and System Engineering, Technology, Innovation, and Management (ICISETIM), organized by Bachelor Program in Industrial Engineering Universitas Kristen Maranatha, Indonesia and Research Synergy Foundation (RSF), co hosted by Chung Yuan Christian University, Taiwan, De La Salle University, Philippines, and Universitas Kristen Petra, Indonesia.

I would like to thank the keynote speaker today, Dr Christina Wirawan from Universitas Kristen Maranatha, Indonesia that delivered the amazing material and experience, and also Prof Chew Ek Peng from National University of Singapore and Prof Rosemary R Seva from De La Salle University, Philippines that delivered the fabulous materials yesterday.

I also would like to thank all of the Moderators and Session Chairs from various countries:

- Dr. Indah Victoria Sandroto, S.T., M.T. - Universitas Kristen Maranatha, Indonesia
- Ms. Rainisa Maini Heryanto, S.T., M.T. - Universitas Kristen Maranatha, Indonesia
- Dr. Miriam F. Bongo - De La Salle University, Philippines
- Dr. Ng Siew Imm - Universiti Putra Malaysia, Malaysia
- Prof. Dr. Daniel Marco-Stefan Kleber - Modul University Dubai, UAE
- Dr. Rita E. Diloy - Asian Institute of Maritime Studies, Philippines
- Ts. Dr. Ooi Shih Yin - Multimedia University, Malaysia
- Pei-Chia Wang, Ph.D. - Chung Yuan Christian University, Taiwan
- I Gede Agus Widyadana, Ph.D. - Universitas Kristen Petra, Indonesia
- Dr. Reshma V. K., Ph.D. - Hindusthan College of Engineering and Technology, India
- Prof. Zachariah John A. Belmonte - Technological University of the Philippines, Philippines
- Engr. Christopher C. Mira – Polytechnic University of the Philippines
- Dr. Lina Anatan, S.E., M.Si. - Universitas Kristen Maranatha, Indonesia
- Dr. Anamie R. Selencio - Asian Institute of Maritime Studies, Philippines

I also would like to thank all presenters and participants who have joined this conference from all over the world and gave their best performance, and the last but not the least to all of the committee members for their hard work.

I hope that the knowledge and thoughts sharing in this two-day conference, new networks and new friendship would be fruitful to all of us, and could increase our professional development in the future.

See you in our upcoming event.
Keep in touch and thank you very much for your attention.

FUTURE EVENT

7th MASOS

International Conference on Management Studies and Social Science
http://www.masosconference.com/index.php/7th_masos/
Virtual Conference, May 5, 2022

8th JIBUMS

Japan International Conference on Business, Management Studies and Social Science
https://www.jibums.com/8th-jibums/
Virtual Conference, May 31, 2022

4th ICISS

International Conference on Islamic Education Studies and Social Science
http://www.icissconference.com/index.php/4th-iciss/
Virtual Conference, July 14, 2022

3rd MESS

International Conference on Management, Education, and Social Science
https://messconference.com/3rd-mess/
Virtual Conference, July 28, 2022

ICHBS

International Conference on Health and Biomedical Science
https://ichbs.com/
Virtual Conference, August 11, 2022

ICCSP

International Conference on Clean and Sustainable Production
https://ahsiccsp.com/
Virtual Conference, August 22-23, 2022

6th IBEMS

International Conference on Interdisciplinary in Business, Economy, Management, and Social Studies
http://www.ibemsconference.com/index.php/6th-ibems/
Istanbul, Turkey, September 22-23, 2022

8th BEMSS

International Conference on Business, Economy, Management and Social Studies Towards Sustainable Economy
http://www.bemssconference.com/index.php/8th-bemss/

Virtual Conference, August 30, 2022

2nd ICLET

International Conference on Language, Education and Teaching Research
http://www.icletconference.com/index.php/2nd-iclet/
Virtual Conference, June 15, 2022

8th SIMBES

Singapore International Conference on Management, Business, Economic and Social Science
http://simbesconference.com/8th-simbes/
Virtual Conference, October 4, 2022

7th RESBUS

International Conference on Interdisciplinary Research on Education, Economic Studies, Business and Social Science
http://resbusconference.com/7th-resbus/
Virtual Conference, November 8, 2022

ICP-IBS

International Conference on Psychology and Interdisciplinary Behavioral Studies
https://icpibs.com/
Virtual Conference, November 15-16, 2022

8th JIBM

Japan International Business and Management Research Conference
https://jibmconference.com/8th-jibm/
Virtual Conference, December 6, 2022

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