

A Dynamic Business Modelling Approach to Design and Experiment New Successful Business Incubator Model for Indonesia

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Submission date: 08-May-2022 11:53PM (UTC+0700)

Submission ID: 1831220511

File name: 69._sisdin_ieom_singapore.pdf (1.48M)

Word count: 5710

Character count: 33587

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On behalf of the IEOM Society International, we would like to welcome you to the 11th Annual International Conference on Industrial Engineering and Operations Management, March 7-11, 2021. This unique international conference provides a forum for academics, researchers and practitioners from many industries to exchange ideas and share recent developments in the fields of industrial engineering and operations management. This diverse international event provides an opportunity to collaborate and advance the theory and practice of major trends in industrial engineering and operations management. There were more than 1,000 papers/abstracts submitted from 60 countries, and after a thorough peer review process, more than 700 have been accepted for presentation and publication. The program includes many cutting-edge topics of industrial engineering and operations management. The theme of the conference is "Operational Excellence in the era of Industry 4.0".

This conference will address many of the issues concerning continuous improvement for quality and service. Our keynote speakers will address some of these issues:

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The IEOM Society would like to express our deep appreciation to our sponsors, university partners, organization partners, exhibitors, authors, reviewers, keynote speakers, panelists, track chairs, advisors, the local committee and the many volunteers who have given so much of their time and talent to make this unique international conference an overwhelming successful event.

SUSS, conference host, welcome all participants. The IEOM Society Conference Planning Committee hopes you will enjoy Singapore conference. Lastly, our sincere best wishes to you all for a successful conference.

Enjoy the conference!



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ID 103 Structural Equation Modeling of the Relationship of Environmental Pollution, Economic Cost, and Public Health
Digno, Jerico C. and Quevedo, Verusmar C., Industrial Engineering Department, College of Engineering, Adamson University, Manila, Philippines

ID 1020 Livelihood Sustainability
Zaini Munawir, Faculty of Law, Universitas Medan Area, North Sumatera, Indonesia

ID 105 Analysing the risk in the supply chain of apparel industry during an epidemic outbreak
Aninda Wijayanayake, Sanduni Perera and Suran Perera, Department of Industrial Management, University of Kelaniya, Kelaniya, Sri Lanka

10:00 – 11:45 am, SUNDAY**Entrepreneurship and Innovation****Room 3**

Session Chair: Lina Gozali, Universitas Tarumanagara, Jakarta, Indonesia

ID 110 Tech Startup Failure in India: Do Lifecycle Stages Matter?
Ganesanman Kalpanasundaram and M H Bala Subrahmanya, Department of Management Studies, Indian Institute of Science, Bengaluru, India
Srinivas Ramachandran, Bengaluru, India

ID 223 The Aspects of Entrepreneurship and Innovation Development of SMEs
Inessa Rotanova Faculty of Business, Management and Economics, University of Latvia, LV-1506, Raiņa Blvd. 19, Latvia
Inessa Voronova, Faculty of Business, Management and Economics, University of Latvia, LV-1506, Raiņa Blvd. 19, Latvia

ID 519 The Propensity of a tech startup to approach a financial source: An Analysis of its determinants over the lifecycle
Shivaji Singh, Senior Research Fellow, Department of Management Studies, Indian Institute of Science, Bengaluru, India
M H Bala Subrahmanya, Professor, Department of Management Studies, Indian Institute of Science, Bengaluru, India

ID 280 The recession as an effect of the COVID-19 pandemic and the continuity of business in the companies of the Cia. Imbabura S. A. Industrial Park (PISA)
Mec. Oviedo Parroja Winston Germánico; Mec. Sergio Pierpuozin Ramiro; Mec. Clicerio Rukies Marcelo; Mec. Vences Palacios Santiago Marcelo; and Ing. Jarrin Maria Elise, Universidad Técnica del Norte, Ibarra, Ecuador

ID 376 The Significance of Big Data in the Success of SMEs
Lawrence Sseweni, Department of Quality and Operations, University of Johannesburg, Auckland Park, Johannesburg, 2006, South Africa
Charles Moolwa, Department of Quality and Operations, University of Johannesburg, Auckland Park, Johannesburg, 2006, South Africa

ID 531 The use of computer-generated imagery in socialization media of biopore infiltration hole
Saidon Hardianto Situmorang and Tjut Anisya Zulayyah, Computer Science Department, Faculty of Mathematics and Natural Sciences, Universitas Paluan, Indonesia

ID 535 Using a Multimedia as an Effort to Improve Creative Thinking Skills of Elementary Teacher Education College Student
Yudhis Suchyadi, Nurinda Saffri, Enda Subana, Ely Sukmanasa, Nita Karmila, Senta, Rukmini Handayani, Nitha Nurika, and Mira Minawati Elementary Teacher Education, Universitas Paluan, Bogor, Indonesia

ID 751 A Dynamic Business Modelling Approach to Design and Experiment New Successful Business Incubator Model for Indonesia
Lina Gozali, and Hedy Kurnia Tunjungast, Industrial Engineering Department, Engineering Faculty, Universitas Tarumanagara, Jakarta, Indonesia
Tasika Yuri M. Zagloel, Industrial Engineering Department, Universitas Indonesia, Depok, Indonesia
Dodi Saranelli, Industrial Engineering Department, Universitas Triakti, Indonesia
Senny Tjahjono, Industrial Engineering Department, Coventry University, UK

10:00 – 11:45 am, SUNDAY**Energy****Room 4**

Session Chair: Ouse Solomon, Papua New Guinea University of Technology, Papua New Guinea

ID 100 An Exploratory Analysis of Household Energy Consumption and Conservation
Paula Mae G. Reyes and Verusmar C. Quevedo, Industrial Engineering Department, Adamson University, Manila, Philippines

ID 621 Analysis of the Performance of Thermoelectric Generators for Ambient Energy Generation through ANSYS Software
Saleh, A. U, Faculty of Electrical and Electronics Engineering, Universiti Tun Hussein Onn Malaysia, Johor, Malaysia and Centre for Atmospheric Research, National Space Research and Development Agency, Prince Auda Abubakar University Anyigba, Kogi, Nigeria
S. A. Jumail, Faculty of Electrical and Electronics Engineering, Universiti Tun Hussein Onn Malaysia, Johor, Malaysia
Johar Muhammed Almal & W. A. W. Jamaludin, Faculty of Mechanical and Manufacturing Engineering, Universiti Tun Hussein Onn Malaysia Johor, Malaysia

ID 150 Analyzing Feasible Renewable Energy Policies: UAE Electricity Authorities
Meyyasa Alasmal, Vian Ahmed & Sara Saboor, Department of Industrial Engineering, American University of Sharjah, Sharjah, United Arab Emirates

ID 188 Development of a Cereal Grain Drying System Using Internal Combustion Engine Waste Heat
Moses Jeremiah Barasa Kabwyl and Oluolapo Akanni Olanrewaju, Industrial Engineering Department, Durban University of Technology, Durban South Africa

ID 131 Design and Simulation of a Standalone PV System for a Mosque in NEOM City
Amani Alabhrani, Moshawi A. Rajeh, and Shaima Sarjer, Energy Engineering, College of Engineering, Effat University, Jeddah, 22332, KSA
Tayeb Bshir, Energy and Technology Lab, College of Engineering, Effat University, Jeddah 22332, Saudi Arabia

ID 290 Dual Cycle Cogeneration Plant for an Operating Diesel Powerplant

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IEOM Society International

The 11th Annual International Conference
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Certificate of Presentation

This is to certify that

Lina Gozali, Hetty Karunia Tunjungsari, Teuku Yuri M. Zagloel, Docki Saraswati, Benny Tjahjono, Togar Mangihut Simatupang, Moses Laksono Singgih, Maslin Masrom, Habibah @Norehan Harun, Wahyudi Sutopo
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Delivered an Oral Presentation entitled "A Dynamic Business Modelling Approach to Design and Experiment New Successful Business Incubator Model for Indonesia" at the Eleventh Annual International Industrial Engineering and Operations Management Conference Virtually via Zoom.

Professor Donald M. Reimer
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**A Dynamic Business Modelling Approach to Design and
Experiment New Successful Business Incubator Model for
Indonesia**

Lina Gozali¹, Hetty Karunia Tunjungsari¹, Teuku Yuri M. Zagloel², Docki Saraswati³,
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Abstract

The dynamic systems approach was applied to real business incubators to show practical examples of their use. This proposal illustrates and discusses a strategic design tool based on a combination of conventional Business Model representation schemes and Dynamic Systems modeling. This proposal aims to determine government policy's focus on helping business incubators realize increased business performance and revenue start-up strategies. This research is useful for all stakeholders. It is hoped that this research will produce good government policies to encourage economic growth through the management of business incubators in Indonesia. This research will be intense after measuring the influencing factors. It will be processed and analyzed that policy changes will affect future business incubation models for the Indonesian nation after the Covid 19 pandemic. The method used in this research is a mixture of quantitative and qualitative methodologies. This research took samples from several business incubators at several universities in Indonesia in 2020-2023. Descriptive quantitative and qualitative analysis to reveal each aspect of the assessment: the ability to solve problems, data interpretation results serve to perfect the successful business incubator model's completeness in Indonesia.

Keywords

Dynamics System, Business Incubator, Business Incubator Model, Business Incubator Roadmap.

1. Introduction

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The concept of a Business Model (BM) is an incorporated framework that guides start-up entrepreneurs to develop a shared knowledge of how their business ventures will produce value and share it among internal and external stakeholders (Massa et al., 2016; Morris et al., 2005; Zott et al., 2011; Fiet and Patel, 2008). In particular, a strong need to develop a business model to assist illustrate new firm ideas has been arising since the new economic boom (Reymen et al., 2015; Andries et al., 2013; Perkmann and Spicer, 2010).

Dynamic Systems can recommend a new model and learn about social systems attribute by dynamic problems and uncertainty, this framework to describe and initiate new strategies for management, business systems, and change

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(Forrester, 1961; Sterman, 2000; Davis et al., 2007; Morecroft, 2007; Cosenz and Noto, 2016; Torres et al., 2017). New strategy management based on the business incubator field's an incorporated strategy practical is known by the Dynamic Business Incubator Model (DBIM).

Demi²² and Lecocq (2010) state that "management sustainability leans on anticipating and reacting to all changes that arise, giving the label 'dynamic consistency' to this company's ability to build and maintain its performance changing its business incubator governance. Uncertainty gives a very high price in the experiment. "Besides, as stated by Wrigley and Straker (2016), For this reason, management of business incubators' values to be more ¹⁷ptive and responsive to manage the important adaptations by elaborating in DBIM experiments as the main factor for obtaining a sustainable competitive advantage (Andries et al., 2013).

The dynamic systems approach was then applied to real business incubators to show practical examples of their use. This proposal illustrates and discusses a tactical description scheme based on a combination of conventional BM representation schemes and Dynamic Systems (DS) modeling. This proposal aims to determine government policy on helping business incubators realize to increase their business performance and revenue start-up blueprint.

1.1 Problem Formulation

Business incubators involve many parties such as the government, business people, the community, investors, business incubator managers, academics, etc., because this requires a comprehensive picture of the consequences of changes in government policies on the business climate in Indonesia

1.2. Research Questions

The research question of this proposal consists of: What is the company's strategy from start-up regarding the primary resources, prices, main processes, customer segmentation, and others that support the success of the business incubator; What are the financial results or opinions obtained that will improve the business performance of the overall system formed; What should be the government's main focus to help the development of business incubators in the future.

1.3. Research Objectives

This proposal's research objectives in year one consist of a Literature Study of Business Incubator Dynamic Models; Making a Dynamic Model Business Incubator Questionnaire; Dissemination of a Business Incubator Dynamic Model Questionnaire. In the second year, then the research objectives would be data collection and processing and making a closed-loop diagram of a Business Incubator Dynamic Model. In the third year, the research is finally making Stock Flow Diagram for Business Incubator Dynamic Model, analyzing changes for each factor and existing policies; making the final report and accountability.

1.4. Urgency and Benefits of Research

This research is useful for all stakeholders. It is hoped that this research will produce good government policies to encourage economic growth through the management of business incubators in Indonesia.

2. Literature Review

2.1. Dynamic System for Business Incubators

To solve the problem of insufficient representation of business models, a consistent approach is needed to support DBIM modeling. The combination of DS computer simulation modeling and BM representation to generate DBIM can cover this support. DS methodology captures the dynamic aspects of society and complex management systems (Forrester, 1961; Sterman, 2000). The DS model is suitable for specific management phenomena and is constructed by mapping the structure of the business system to generate and understand the driving behavior process. The quantification of causal interactions produces a set of equations that lay the foundation for simulating possible system behavior over time (Warren, 2008). Specifically, the DS model needs feedback points of the company system and is regarded as a closed boundary. That is, it includes all important variables related to the observed phenomenon. Feedback can be positive (or enhanced) or negative (or balanced). After determining the feedback loop, use DS-based simulation software to convert the main business variables into inventory and flow charts. This diagram permits top management to simulate and observed business system behavior over time (Ghaffar zadegan et al., 2011; Sterman, 2000). Generally, the DS framework is measured by comparing the framework output with numerical data. If there are differences or inconsistencies, please calibrate the framework and attributes with specific data. After developing and measuring whether the simulation framework is appropriate with the factual condition, after the input process to

generate a "what if" analysis of how the short-term and long-term results of the alternative tactics will resolve (Zagonel et al., 2004; Martin et al., 2015). If the factual experiments are too valuable and this condition may be the example launching a new company, simulations become an expensive scheme for developing a complicated business system and where high-value points are assigned (Davis et al., 2007).

Unlike other simulation business model principals (e.g., Agent-Based Modeling), DS leads a comprehensive view of all the consistent fact involved in the strategy development and its contribution. This comprehensive view elaborates on business feedback loops, accumulations, terms delays, and nonlinear interaction to focus on dynamic feedback processes (Stermann, 2000). Some professionals have underlined the reasons to create this comprehensive view to illustrate BM, which consists of an essential concept of BM variables' interaction value (Baden-Fuller and Mangematin, 2013; Casadesus-Masanell and Ricart, 2010; Sanchez and Ricart, 2010). In some cases, Casadesus-Masanell and Ricart (2010) debate that BM can develop a good relationship, namely reinforcing feedback loops to reinforce the incorporated's part in several moments. They elaborate this loop as a critical dimension in successful incorporated performance and, propose that various factors of BI's decision-makers can apply its results.

2.2. State of The Art

Several studies on business written by several people in Indonesia, such as:

- a. The Role of Higher Education Business Incubators in Improving the Performance of Food UKM Businesses written by sbullah only discusses the Incubator in the Bogor IPB environment.
- b. Performance Measurement of Tenant IBT-Polman Bandung Using the Balanced Scorecard Method written by Sadikin only discusses performance measurement and uses the Balance Scorecard method
- c. Wahid, A. (2018, October). Discusses the Entrepreneurship Training Model on Tenant Performance
- d. Sunarso (2013) wrote about the development of the Science Technology Park.
- e. Lina Gozali (2015-2020) discusses the success model of business incubators in several state universities in Indonesia but uses the PLS method, which only measures influencing factors.

There is no business incubator model design with a dynamic systems method approach in Indonesia from all the literature read and several others. This research will be intense after measuring the influencing factors. It will be processed and analyzed that policy changes will affect future business incubation DS modeling for the Indonesian nation after the Covid 19 pandemic.

3. Research Methodology

The method used in this research is a mixture of quantitative and qualitative methodologies. The quantitative methodology used in this research is the survey method. The survey method is a research method that uses a questionnaire as the main instrument for collecting data. In this research, the questionnaire will be distributed to managers of business incubators in Indonesia. The qualitative methodology used in this research is a grounded theory research design, which is a set of procedures used to compile a theory that explains a process regarding a substantive topic (Egan, 2002). Grounded theory research is suitable for explaining a phenomenon, process, or formulate a general theory about a phenomenon that cannot be explained by existing theories.

The map of this research plan includes: (1) The process of identifying business incubator rhetoric in Indonesia, (2) Tracing previous research on business incubator rhetoric in Indonesia, (3) Creating research concepts, (4) Creating a business incubator model, which called the success model of business incubators in Indonesia, (5) Registering the model as and (6) Making National and International Publications regarding the dynamic system modeling of Nusantara business incubators in Indonesia in developing the success of business incubators in Indonesia.

Business incubator DS representation schemes can be considered as tools to support structural analysis of business (Chesbrough, 2010; Sosna et al., 2010), while simulation-based methodologies such as DS provide information and analysis appropriate for strategy development from a flexible perspective for internal and external change (Morecroft, 2007; Bianchi and

Bivona, 2000). Based on a series of strategic assumptions, designing and experimenting with Business Model through DS modeling's aims to predict the dynamic implications of strategies to determine whether they will produce a future that will be better or worse than it could be without intervention (Cosenz, 2017). Practically speaking, business incubator managers can explore these models and simulate alternative scenarios based on, for example, on alternative investment policies and experimenting with what can happen under different assumptions and across multiple decision choices (Stermann, 2000; Bisbe. and Malague ~ no, 2012). To this end, the business incubator DS Modelling can be

used as a strategy simulation tool to explore how strategies, decisions, and external phenomena interact to produce the long-term behavior of key performance variables and explain why and how outcomes change and potential unintended consequences.

The business incubator structure includes seven building blocks that correspond to the core elements of business incubator DS modeling that can describe how a company operates in achieving its goals. They are (1) Business incubators; (2) Strategic Resources, (3) Value Proposition and Key Performance Indicators, (4) Main Processes, (5) Segment Segments, (6) Cost Structure, and (7) Income Streams. DS modeling highlights the primary cause-and-effect relationships between the BM elements each identified in the building blocks, which provide the readers with a holistic perspective on business strategy and operations. This causal relationship forms a closed feedback loop of reinforcement or balancing that determines the business incubator system's behavior over time.

Subject, Place, and Time of Research from the samples from several business incubators at several universities in Indonesia in 2020-2023. The research Instruments used the research questionnaire and Observation. A questionnaire uses a rubric to reveal problem-solving skills, ability to organize material, high-order thinking soft skills, and the Observation used to measure the ability in product innovation and creativity, and ability in presentation. The Data Analysis was carried out in two ways: descriptive quantitative and qualitative analysis to reveal each aspect of the assessment: the ability to solve problems, data interpretation results serve to perfect the successful business incubator DS Modelling's completeness in Indonesia.

4. Research Roadmap

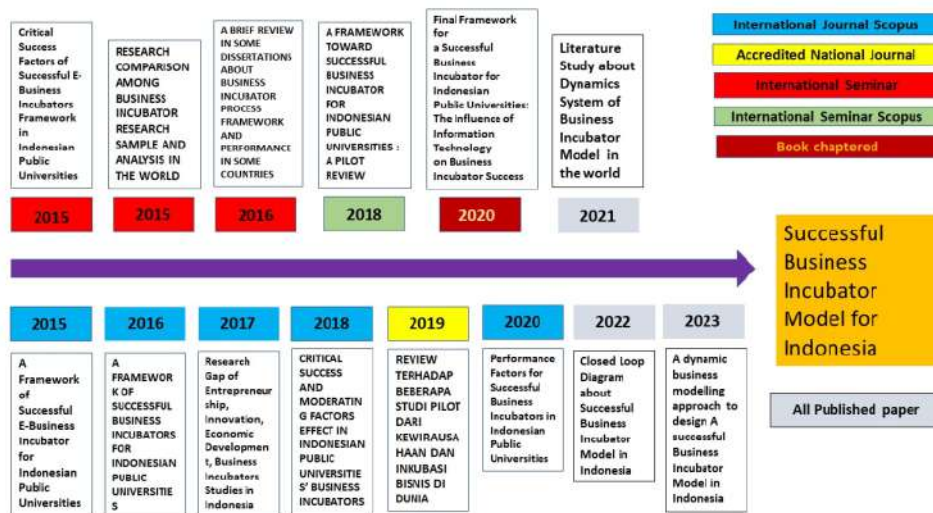


Figure 1. The research roadmap that has been and will be carried out is related to the success of business incubators in Indonesia

5. Future Work

The future work will continue the business incubator research in Indonesia in a new method. PLS's previous research describes much about the factors that substantially affect a successful business incubator in Indonesia. Shortly, the research needs to have a forecast or prediction with the changing of every factor, aspect, and situation.

References

- Andries, P., Debackere, K., Van Looy, B., 2013. Simultaneous experimentation as a learning strategy: business model development under uncertainty. *Strat. Entrepreneursh. J.* 7, 288e310.
- Baden-Fuller, C., Mangematin, V., 2013. Business models: a challenging agenda. *Strat. Organ.* 11 (4), 418e427.
- Bianchi, C., Bivona, E., 2000. Commercial and financial policies in family firms: the small business growth management flight simulator. *Simul. Gaming* 31, 197e229.
- Bisbe, J., Malagueño, R., 2012. Using strategic performance measurement systems for strategy formulation: does it work in dynamic environments? *Manag. Account. Res.* 23 (4), 296e311.
- Casadesus-Masancell, R., Ricart, J.E., 2010. From strategy to business models and onto tactics. *Long Range Plan.* 43 (2), 195e215.
- Chesbrough, H., 2010. Business model innovation: opportunities and barriers. *Long Range Plan.* 43 (2), 354e363.
- Cosenz, F., Noto, G., 2016. Applying system dynamics modelling to strategic management: a literature review. *Syst. Res. Behav. Sci.* 33 (6), 703e741.
- Cosenz, F., 2017. Supporting start-up business model design through system dynamics modelling. *Manag. Decis.* 55 (1), 57e80.
- Davis, J.P., Eisenhardt, K.M., Bingham, C.B., 2007. Developing theory through simulation methods. *Acad. Manag. Rev.* 32 (2), 480e499.
- Demil, B., Lecocq, X., 2010. Business model evolution: in search of dynamic consistency. *Long Range Plan.* 43 (2/3), 227e246.
- Fiet, J.O., Patel, P.C., 2008. Forging business models for new ventures. *Entrepreneursh. Theory Pract.* 32, 749e761.
- Forrester, J.W., 1961. *Industrial Dynamics*. MIT Press, Cambridge, MA.
- Ghaffarzadegan, N., Lyneis, J., Richardson, G.P., 2011. How small system dynamics models can help the public policy process. *Syst. Dyn. Rev.* 27 (1), 22e44.
- Gozali, L., Masrom, M., Haron, H. N., & Zagloel, T. Y. M. (2015). A framework of successful E-business incubator for Indonesian public universities. *The Asian Journal of Technology Management* Vol, 8(2), 120-134.
- Gozali, L., Masrom, M., Haron, H. N., & Zagloel, T. Y. M. (2015). RESEARCH COMPARISON AMONG BUSINESS INCUBATOR RESEARCH SAMPLE AND ANALYSIS IN THE WORLD.
- Gozali, L. 2016. A BRIEF REVIEW IN SOME DISSERTATIONS ABOUT BUSINESS INCUBATOR PROCESS FRAMEWORK AND PERFORMANCE IN SOME COUNTRIES.
- Gozali, L., Masrom, M., Zagloel, T. Y. M., & Haron, H. N. (2016). A framework of successful business incubators for Indonesian public universities. *International Journal of Technology*, 7(6), 1086-1096.
- Gozali, L., Masrom, M., Haron, H. N., & Zagloel, T. Y. M. (2017). Research Gap of Entrepreneurship, Innovation, Economic Development, Business Incubators Studies in Indonesia. *International Journal of Economics and Financial Issues*, 7(2), 243.
- Gozali, L., Masrom, M., Zagloel, T. Y. M., Haron, H. N., & Tjahjadi, E. (2018, March). A Framework toward Successful Business Incubator for Indonesian Public Universities: A Pilot Review. In *Proceedings of the International Conference on Industrial Engineering and Operations Management* (pp. 869-883).
- Gozali, L., Masrom, M., Zagloel, Y. M., Norehan Haron, H., Dahlan, D., Jusuf Daywin, F., ... & Susanto, E. H. (2018). Critical Success and Moderating Factors Effect In Indonesia Public Universities' Business Incubators. *International Journal of Technology*, 5(9), 1049-1060.
- Gozali, L., Masrom, M., & Zagloel, Y. T. (2019). REVIEW TERHADAP BEBERAPA STUDI PILOT DARI KEWIRAUSAHAAN DAN INKUBASI BISNIS DI DUNIA. *Jurnal Ilmiah Teknik Industri*, 7(1). Universitas Tarumanagara. Jakarta. Indonesia.
- Gozali, L., Masrom, M., Zagloel, T. Y. M., Haron, H. N., Garza-Reyes, J. A., Tjahjono, B., ... & Harry, K. K. A. (2020). Performance factors for successful business incubators in Indonesian public universities.
- Gozali, L., Masrom, M., Zagloel, T. Y., Haron, H. N., Garza-Reyes, J. A., & Tjahjono, B. (2020). Final Framework for a Successful Business Incubator for Indonesian Public Universities: The Influence of Information Technology on Business Incubator Success. In *Interdisciplinary Approaches to Digital Transformation and Innovation* (pp. 70-98). IGI Global.
- Hasbullah, R., Surahman, M., Yani, A., Almada, D. P., & Faizaty, E. N. (2015). Peran Inkubator Bisnis Perguruan Tinggi dalam Peningkatan Kinerja Usaha UKM Pangan. *Jurnal Ilmu Pertanian Indonesia*, 20(1), 59-65.

- Martin, E.G., MacDonald, R.H., Smith, L.C., Gordon, D.E., Tesoriero, J.M., Laufer, F.N., Leung, S.Y., O'Connell, D.A., 2015. Policy modeling to support administrative decisionmaking on the New York State HIV testing law. *J. Policy Analysis Manag.* 34 (2), 403e423.
- Massa, L., Tucci, C., Afuah, A., 2016. A critical assessment of business model research. *Acad. Manag. Ann.* <http://dx.doi.org/10.5465/annals.2014.0072> *annals. 2014.0072*.
- Morecroft, J., 2007. *Strategic Modelling and Business Dynamics: a Feedback System Approach*. Wiley, Chichester
- Morris, M., Schindehutte, M., Allen, J., 2005. The entrepreneur's business model: toward a unified perspective. *J. Bus. Res.* 58 (6), 726e735.
- Perkmann, M., Spicer, A., 2010. What are business models? Developing a theory of performative representation. In: Lounsbury, M. (Ed.), *Technology and Organization: essays in Honour of Joan Woodward (Research in the Sociology of Organizations, Volume 29: 265e275)*. Emerald Group Publishing Limited. Pisano, P., Pironti, Reymen, I.M.M.J., Andries, P., Berends, H., Mauer, R., Stephan, U., van Burg, E., 2015. Understanding dynamics of strategic decision making in venture creation: a process study of effectuation and causation. *Strat. Entrepreneursh. J.* 9, 351e379
- Sanchez, P., Ricart, J.E., 2010. Business model innovation and sources of value creation in low-income markets. *Eur. Manag. Rev.* 7, 138e154.
- Sadikin, S. (2020). Pengukuran Kinerja Tenant IBT-Polman Bandung Menggunakan Metode Balanced Scorecard. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi)*, 4(3), 48-62.
- Soenarso, W. S., Nugraha, D., & Listyaningrum, E. (2013). Development of science and technology park (stp) in indonesia to support innovation-based regional economy: Concept and early stage development. *World Technopolis Review*, 2(1), 32-42.
- Sosna, M.N., Treviño-Rodríguez, R., Velamuri, S., 2010. Business model innovation through trial-and-error learning. *Long Range Plan.* 43 (2/3), 383e407.
- Sterman, J., 2000. *Business Dynamics: system Thinking and Modelling for a Complex World*. McGraw-Hill, London.
- Torres, J.P., Kunc, M., O'Brien, F., 2017. Supporting strategy using system dynamics. *Eur. J. Oper. Res.* 260, 1081e1094
- Wahid, A. (2018, October). PENGARUH PENGEMBANGAN MODEL DIKLAT KEWIRAUSAHAAN TERHADAP KINERJA TENANT MELALUI PENILAIAN TANGGUH DAN MANDIRI. In *Prosiding Seminar Nasional: Manajemen, Akuntansi, dan Perbankan (Vol. 1, No. 1, pp. 298-327)*.
- Warren, K., 2008. *Strategic Management Dynamics*. Wiley, Chichester
- Wrigley, C., Straker, K., 2016. Designing innovative business models with a framework that promotes experimentation. *Strat. Leadersh.* 44 (1), 11e19.
- Zagonel, A., Rohrbaugh, J., Richardson, G.P., Andersen, D.F., 2004. Using simulation models to address "what if" questions about welfare reform. *J. Policy Anal. Manag.* 23, 890e901.
- Zott, C., Amit, R., Massa, L., 2011. The business model: recent developments and future research. *J. Manag.* 37 (4), 1019e1042.

Biography

Lina Gozali is a lecturer at the Industrial Engineering Department of Universitas Tarumangara since 2006 and a freelance lecturer at Universitas Trisakti since 1995. She graduated with her Bachelor's degree from Trisakti University Jakarta - Indonesia. She got her Master's Degree at STIE IBII, Jakarta – Indonesia, and she recently got her Ph.D. at Universiti Teknologi Malaysia, Kuala Lumpur – Malaysia, in 2018. Her apprentice college experience was in the paper industry at Kertas Bekasi Teguh, the shoe industry at PT Jaya Harapan Barutama, and the automotive chain drive industry at Federal Superior Chain Manufacturing. She teaches Production System and Supply Chain Management Subjects. She researched Indonesian Business Incubator for her Ph.D. She has written almost 70 publications since 2008 in the Industrial Engineering research sector, such as Business incubator, Production Scheduling, Plant Layout, Maintenance, Line Balancing, Supply Chain Management, Production Planning, and inventory control. She had worked at PT. Astra Otoparts Tbk as International Business Development Department for 4 years, Citibank, N.A as customer service for 1 year, PT. Pandrol as assistant marketing manager for 1 year. PT. Texmaco as a merchandiser for 3 years.

Teuku Yuri M Zagloel is currently head of Manufacturing System I¹⁶ Universitas Indonesia. He graduated with his Bachelor's degree and Ph.D. study at Universitas Indonesia and his Master's degree from New South Wales University Australia. His research interest is Manufacturing System, Quality Management and Supply Chain

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Doeki Saraswati is a Lecturer at the Industrial Engineering Department, Universitas Trisakti, Jakarta, Indonesia. She received her Doctorate and BS from Industrial Engineering, Institut Teknologi Bandung (ITB), Bandung, Indonesia, and her Master's degree from the Industrial Engineering Department, University of Toronto, Canada. Her research interests are in production scheduling, inventory control, JIT systems, and remanufacturing management system.

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Johnny Tjahjono is a Professor of Sustainability and Supply Chain Management at Coventry University, UK. His overarching research area includes Sustainable Operations and Supply Chain Management, particularly the exploration of Circular Economic principles in manufacturing and supply chains. He has a vested interest in ensuring the achievement of triple sustainability, 'doing good for people, planet, and profit.' His research track record has been demonstrated by winning and successfully delivering several research grants from EPSRC, ESRC, InnovateUK, European Union, overseas funding agencies, and directly from the UK industry. He has published over 100 papers in refereed academic journals, conference proceedings, books, practitioners' journals, and newspapers.

Togar Mangihut Simatupang is a Professor of Operations and Supply Chain Management at Bandung Institute of Technology, Indonesia. He holds a PhD degree from Massey University in New Zealand. At the School of Business and Management ITB, he teaches Technology and Operations Management, Supply Chain Management, Operations Management, and the Creative Economy. He is well known as an expert in supply chain management and creative industry development. He is recently involved in emerging research: the creative economy in Indonesia such as national creative industry mapping, the roadmap of creative industry in the West Java Province, the creative mapping of Bandung City, and the concept of creative mapping for the Province of Jakarta. He is associated with Indonesia Logistics Association, Bandung Creative City Forum, and the British Council in developing creative industry and creative community. His research interests include supply chain collaboration, inventory models, operations management, service science, and creative economy. His other research focuses on the development and management of collaborative relationships such as how to design and manage supply chain collaboration: how to equalize their risks and rewards, and how to share the benefits of collaboration. The results of his research have been published in a variety of journals, including the International Journal of Logistics Management, Total Quality Management, Management Decision, Business Process Management Journal, Supply Chain Management: An International Journal, Benchmarking: An International Journal, and International Journal of Physical Distribution & Logistics Management. In addition, he has presented his work at national and international conferences. He was a recipient of the Emerald Literati Network Award 2006 for the highly commended paper published in the International Journal of Logistics Management. He was also rewarded Endeavour Award from the Government of Australia for a postdoctoral study at the University of Newcastle in 2008.

Moses Laksono Singgih graduated with his Bachelor's and Master's degree in industrial engineering at Institut Teknologi Bandung (ITB), Bandung, Indonesia. Then he continued his Master of Regional Science (MRegSc) degree at the University of Queensland, Australia. And he also finished his Ph.D. in Industrial Economics at the University of Queensland, Australia. He is a Professor at the Industrial and Systems Engineering Department, Faculty of Industrial Technology at Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia. He shows his leadership by actively worked as a Secretary of Industrial Engineering Department, Head of Postgraduate Program,

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Maslin Masrom is an Associate Professor, UTM Razak School of Engineering and Advanced Technology, Universiti Teknologi Malaysia Kuala Lumpur. She was the Head of Postgraduate Studies from 2010-2012 at UTM Razak School, and currently, she held a post as Head of Management Science and Design. She teaches Information Technology Strategy, Management Information Systems, ICT Ethics and Society, Decision Modelling, and Research Methodology. She has published many technical papers in journals, books, and conferences. Her main research interests are IT/IS Management, Online Social Networking, Women and Technologies, Cloud Computing in Healthcare System, Knowledge Management, Information Security, Ethics in Computing, Operations Research / Decision Modelling, and Structural Equation Modelling.

Habibah @Norehan Haron. She is a Senior Lecturer at the Department of Engineering and Technology, Razak Faculty of Technology and Informatics, UTM Kuala Lumpur. Currently, She joined the IP2G Research Group Head (Industrial Professional Practice Group). She is also an active committee member for the Women Engineers Section of The Institution of Engineers Malaysia (IEM-WE) since 2005. She first joined UTM in 1993 at the Faculty of Mechanical Engineering in Scudai. Transferred to UTM KL Campus in 1998, serving the College of Science and Technology (initially known as Centre for Diploma Studies) until 2011 when She was re-assigned to Razak School during the restructuring practice of UTM KL Campus. Recently restructuring of UTM in 2018 saw the merging of Razak School and two others to become Razak Faculty of Technology and Informatics.

Wahyudi Sutopo is a professor and Head of Industrial Engineering and Techno-Economics (RITE) Research Group, Department of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret (UNS). His educational background is the profession of an engineer (Ir) from the Professional Engineer Program – Universitas Sebelas Maret (UNS) in 2018; Doctor (Dr) in Industrial Engineering & Management from Institut Teknologi Bandung in 2011; Master of Management (M.Si.) from Universitas Indonesia in 2004, and Bachelor of Industrial Engineering (S.T.) from Institut Teknologi Bandung in 1999. He has professional qualifications as an associate professional engineer (P. Eng) since 2016. Since 2020, he has been assigned as Vice Dean for Human Resources, Finance, and Logistics (2020-2023). He was as deputy dean of the general and financial affairs of the faculty of engineering UNS (2019-2020). He was the head of the industrial engineering undergraduate study program (2015-2019); as an asset auditor of the internal supervisory unit (2014-2019); the head of UNS technology innovation center (2014-2016); and the general chair of the Indonesian industrial engineering higher education institution cooperation agency/BKSTI (2017-2020). He is an Assessor of BAN-PT (Noreg. 2017-01215). He had experience working in the electronics industry as an engineer at PT. Panasonic Manufacturing Indonesia from 2000-2003. Wahyudi Sutopo received an IEOM outstanding service award from IEOM Society in 2019 in Bangkok, Thailand. He has also received the best lecturer runner-up at Universitas Sebelas Maret in 2016, and research grantee awards from both Indonesia and abroad institutions. He has been invited as a keynote speaker and given public lectures at symposiums and international conferences in Indonesia and abroad universities. He has involved as chairman/co-chair with many international conferences, including International Conference on International Conference on Electric Vehicular Technology (ICEVT, 2014, 2017, 2018); International Conference on Industrial, Mechanical, Electrical and Chemical Engineering (ICIMECE, 2015; 2016; 2019); The 4th International Conference on Advanced Manufacturing Technology 2015 (ICAMT 2015, Johor Bahru, Malaysia); 3rd International Materials, Industrial, and Manufacturing Engineering Conference 2017 (MIMEC 2017, Miri, Malaysia). He is serving as President of IEOM Indonesia Professional Chapter (since 2020); and conference chair of 1st Asia Pacific Conference on Industrial Engineering and Operations Management 2021 (<http://ieomsociety.org/indonesia2021/>). His research areas of interest are in the areas of logistics & supply chain management, engineering economy & cost analysis, and technology commercialization. Since 2014, he has been the chairman of the industrial engineering and technoeconomic research group (GR RITE), Faculty of Engineering, UNS. He is also a researcher for the university center of excellence for electrical energy storage technology (UCE-EEST); the national center for sustainable transportation technology (NC-STT) for sustainable higher education research alliances (SHERA) project funded

by USAID; and Massachusetts Institute of Technology - Indonesia Research Alliance (39) RA). He has received more than 35 research grants and carried out research projects funded by LPPM - UNS, Ministry of Research and Technology / National Agency for Research and Technology, Indonesia Endowment Fund for Educational (LPDP), MIRA, USAID, PT Pertamina (Persero), PT Toyota Motor Manufacturing Indonesia, and various other companies. He has written 4 textbooks and 7 chapter books and made 5 intellectual property rights (IPR) in the form of copyrights. He has Scopus ID: 42062336300, published over 160 documents, with H-index 9, and partners with 165 co-authors, apart from partnering with univ, (37) also partners with practitioners from non-university. (National Standardization Agency for Indonesia / BSN; Agency for the (30) ssessment and Application of Technology / BPPT, Directorate General of Agro-Industry - Ministry of Industry; PT. Garuda Maintena (31) Facility Aero Asia, Tbk, PT. Mega Andalan Kalasan, PT Batex Energi Mandiri, and StartUp Frogs Indonesia). He is a member of the board of industrial engine (52) ng chapter - the institute of Indonesian engineers (BKI-PII), Indonesian supply chain & logistics Institute (ISLI), industrial engineering and operations management (IEOM) society, and institute of industrial & systems engineers (IISE).

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