1

## Saowanit Lekhavat

### **BASIC INFORMATION**

- Assistant Professor Saowanit Lekhavat, Ph.D., M.Eng, B.Eng (Hons)
- School of Integrated Science, Kesetsart University
- Language: English (Fluent), Thai (Mother's tongue)
- Email: <u>saowanit.l@ku.th</u>

#### **RESEARCH INTERESTS**

• Operational Research, Industrial Engineering, Modelling, Simulation, Optimization, Simulation Optimization, Metaheuristics, Decision Support Systems, Maritime Transport, Logistics and Supply Chain, Social Science Research, Research Philosophy, Lean, Efficiency Improvement

## **EDUCATION**

2014 - 2019	Ph.D. in Operational Research, Brunel University London, UK
2010 - 2012	M. Eng in Industrial and Manufacturing Engineering, Asian Institute of Technology, Thailand
2006 - 2010	B. Eng in Industrial Engineering (1 <sup>st</sup> Class Honors), Kasetsart University, Thailand

# WORK EXPERIENCES

2023 - Present	Lecturer, School of Integrated Science, Kasetsart University, Thailand
2022 - Present	Special Lecturer, Faculty of Management Sciences, Silpakorn University, Thailand
2021 - Present	Special Lecturer, Faculty of Engineering, Sripatum University, Thailand
2018 – 2023	Lecturer, Faculty of Logistics, Burapha University, Thailand
2021 - 2022	Special Lecturer, Department of Business Administration, Faculty of Management Sciences, Prince of Songkla University, Thailand
2019 - 2022	Head of Logistics and Supply Chain Department (Graduate Program), Faculty of Logistics, Burapha University
2018 – 2018	Thai Teacher, Thai Style, Thailand
2017 - 2017	Teaching Assistant, Brunel Business School, Brunel University London, UK
2014 - 2016	Research Assistant, Brunel Business School, Brunel University London, UK
2012 - 2013	Business Development Officer, Business Development Department, CP Retailink Co. Ltd., Thailand
2012 - 2013	Mathematics and Robotic Tutor, Mathnasium, Thailand
2008 - 2010	Teaching Assistant, Faculty of Engineering, Kasetsart University, Thailand
2009	Production Planning Intern, Logistics Department, Aapico Hitech Public Co. Ltd., Thailand

#### HONORS

2019	Top 8 of the table tennis competition at Savitree Cup 2 <sup>nd</sup> , Kasetsart University
2017	Top 8 of the table tennis competition at Samaggi Games, University of East London
2013	Winner of Kaizen (Continuous improvement) competition from CP Retailink Co. Ltd.
2012	Winner of AIT open presentation competition from Asian Institute of Technology
2010	Winner of table tennis competition between Nida – AIT traditional sport, Asian Institute of Technology
2010	Academic excellence from Kasetsart University
2008	2 <sup>nd</sup> rank of the table tennis competition at IE Sampan 9 <sup>th</sup> , King Mongkut's University of Technology Thonburi
2006	Winner of ONET score in Social Science (National test) from Davance
2006	Academic 1 <sup>St</sup> rank of high school study award for 2004-2006 academic years from Sa-Nguan Ying School

#### GRANTS

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2023 - Present	<ul> <li>Agricultural Research Development Agency (Public Organization) (ARDA)</li> <li>The Guidelines on the Use of Smart Farming for Improving Agricultural Productivity: A Case Study of Community Enterprise and Young Smart Farmer, Nakhon Pathom Province</li> </ul>
2023 - Present	Program Management Unit for Competitiveness Funding (PMUC)
	- Development of Smart Waste Collection System for Future Urbanization
2019 - 2020	Faculty of Logistics, Burapha University Funded Project
	- A Decision Support System of Inventory Hedging in Oil Supply Chain
2014 - 2018	Royal Thai Government Scholarship for Doctoral Study
2017 - 2017	Brunel Business School Funding as a Teaching Assistant
	- Business Intelligence Module
2014 - 2016	European Commission Funded Project (Marie Sklodowska-Curie Action) as a
	Research Assistant
	- MINI-CHIP under Grant Number 611693
	- OASIS under Grant Number 297210
	- CLOUD-VAS under Grant Number 674710
2010 - 2012	Royal Thai Government Scholarship for Postgraduate Study
2008 - 2010	Industrial Engineering Department Funding as a Teaching Assistant
	<ul> <li>Probability and Statistics for Engineer Module</li> </ul>

## **TEACHING EXPERIENCES**

- Warehouse and Inventory Management
- Operations Management
- Quality Management System in Industrial Logistics
- Demand and Inventory Planning
- Forecasting Analytics
- Basic Programming (makecode microbit) for SIS 3
- Basic Programming (C# language)
- Spreadsheet Modelling
- Design of Experiment
- System Simulation
- Maintenance Engineering

- Business Research MethodologyLogistics Inspiration
- Preparation for Calculus
- Mathematics for SIS 1
- Quantitative Analysis for Logistics and Supply Chain Management (Graduate Level)
- Solving Logistics Problems with Excel VBA (Graduate Level)
- Seminar in Logistics
- Selected Topic in Logistics
- Preparation for Career

### THESIS

- Managerial Rules for Dealing with Disruption in Various Configurations of Liner Shipping. Ph.D. Thesis, Brunel Business School, Brunel University, 2019.
- Allocation Methods for Multi-Commodity Distribution Network Design Problem. Master Thesis, School of Engineering and Technology, Asian Institute of Technology, 2012.
- Estimating Probability Statistics in Transition Matrics of Markov Chain. Undergraduate Thesis, Engineering School, Kasetsart University, 2010.

#### PUBLICATIONS

- Sreyneath, C., Lekhavat, S. and Alghababsheh, M. (20xx) A Multi-Objective Optimization for Green Supply Chain Network Design Problem. International Journal of Industrial and Systems Engineering (Scopus Quartiles 3) (Accepted)
- Naiyagongsiri, J., Lekhavat, S., Sokai, N. and Wongchaisuwat, P. (2024) Factors that have an Impact on the Number of COVID-19 Cases in Thailand. *Journal of Educational Management and Research Innovation*, Vol. 6, No. 1, pp. xx-xx. (TCI 2) (Accepted)
- Lekhavat, S. and Indra-payoong (2023) The Impact of Spot and Future Price in Allocating Jet Fuel: A Case Study of Southeast Asia Route. *The Journal of King Mongkut's University of Technology North Bangkok*, Vol. 37, No. 2, pp. 1-16. (TCI 1, ACI)
- Priyadumkol, J., Chaiworapuek, W. and Lekhavat, S. (2023) Augmentation of Natural Convection of Vertical Plate Using Corona Wind. *RMUTP Research Journal*, Vol. 17, No. 1, pp. 40-51. (TCl 1, ACl)
- Charoenphol, T. and **Lekhavat, S.** (2023) Increasing Efficiency in Data Management Process: A Case Study of Insecticide Company. *Journal of Industrial Technology Ubon Ratchathane Rajabhat University,* Vol. 13, No. 1, pp. 111-124. **(TCI 1)**.
- Onraksa, K., and Lekhavat, S. (2023) Implementing the Economical Ordering Quantity Model for Supplier Selection: A Case Study of Building Store. *Journal of Educational Management and Research Innovation*, Vol. 5, No. 2, pp. 305-314. (TCl 2).
- Patsang, C., Lekhavat, S., Limleamthong, P. (2022) Project Management for Arranging Wedding Ceremony. *Thai Industrial Engineering Network Journal*, Vol. 8, No. 2, pp. 86-96. (TCI 2)
- Jaitiya, C. and Lekhavat, S. (2022) Application of Analytical Hierarchy Process to New Office Location Selection: A Case Study of Maintenance Service Company for Petrochemical Industry. *Thai Journal of Operations Research,* Vol. 10, No. 1, pp. 42-51. (TCI 1)
- Sreyneath, C. and Lekhavat, S. (2022) Multi-Commodity Supply Chain Network Design Problem Considering Production Cost and Inventory Holding Cost. *Journal of Engineering and Innovation*, Vol. 15, No. 2, pp. 11-24 (TCI 1)
- Phaettho, P. and Lekhavat, S. (2021) Mathematical Modelling for Job Shop Scheduling Problem: A Case Study of Automotive Part Factory. *Thai Journal of Operations Research*, Vol. 9, No. 2, pp. 82-92. (TCl 1)

- Arai, N. and Lekhavat, S. (2021) Impact of Various Situations on Production Scheduling: A Case Study of Automotive Company. *Thai Industrial Engineering Network Journal*, Vol. 7, No. 2, pp. 100-110. (TCI 2)
- Sampanmit, S., Somboon, W., Sangsansiri, K., and **Lekhavat, S.** (2021) Fly Glue Trap Demand Forecasting. *Thai Industrial Engineering Network Journal*, Vol. 7, No. 1, pp. 55-67. **(TCI 2)**
- Lekhavat S. and Lee H. (2021) Simulation Optimization for Solving Multi-Objective Stochastic Sustainable Liner Shipping. Advances in Computer, Communication and Computational Sciences. Advances in Intelligent Systems and Computing, Vol. 1158, pp. 409-416, Springer, Singapore. (Scopus Book Series)
- Lekhavat, S. (2021) Lean and Digital Lean, Engineering Management and Process Development, Sukhothai Thammathirat. (Book Chapter)
- Saithong, C. and Lekhavat, S. (2020) Derivation of Closed-Form Expression for Optimal Base Stock Level Considering Partial Backorder, Deterministic Demand, and Stochastic Supply Disruption, *Cogent Engineering*, Vol. 7, No. 1, pp. 1-27. (Scopus Quartiles 2)
- Bandasak, K. and Lekhavat, S. (2020) Computer Program Development for Unloading Containers to the Warehouse, *Sosyal Mucit Academic Review*, Vol. 1, No. 1, pp. 1-17.
- Bumrungmuang, N., Lekhavat, S., Limleamthong, P. and Vanitchakornpong, K (2020) Applying Microsoft Excel Macro for Improving Efficiency in Managing Data: A Case Study of LCL Gateway Import Department, *Journal of Burapha Logistics and Supply Chain Management*, Vol. 2, No. 4, pp. 1-11.
- Juthawong, W. and Lekhavat, S. (2020) Applying Lean Concept for Warehouse Operation, Journal of Burapha Logistics and Supply Chain Management (Accepted)
- Sreyneath, C. and Lekhavat, S. (2019) Systematic Literature Review for Location-Allocation Problem under Economic and Environmental Sustainability, *Kasem Bundit Engineering Journal*, Vol. 9, No. 3, pp. 253-274. (TCI 2)
- Sanitkoon, M. and Lekhavat, S. (2019) 5S for Productivity Improvement: A Case Study of Valeo Siam Thermal Systems Co.Ltd, *Journal of Burapha Logistics and Supply Chain Management*, Vol. 2, No. 2, pp. 1 11.
- Homsin, J. and **Lekhavat, S.** (2019) Productivity Improvement of Import Procedure: A Case Study of Triumph Structure (Thailand). Ltd, *Journal of Burapha Logistics and Supply Chain Management*, Vol. 1, pp. 22-31.
- Lee, H., Aydin, N., Choi, Y., **Lekhavat, S.**, and Irani, Z. (2018) A Decision Support System for Vessel Speed Decision in Maritimes Logistics using Weather Archive Big Data, *Computers & Operations Research*, Vol.98, pp. 330-342. (Scopus Quartiles 1)

## CONFERENCES

- Kenlad, N. and Lekhavat, S. (2022) Economics Order Quantity for A Case Study of Curtain Shop. *In Proceedings of The 12<sup>th</sup> National and the 7<sup>th</sup> International PIM Conference 2022*, Bangkok, Thailand, 7 July 2022, pp. 242 - 251.
- Somchit, T. and Lekhavat, S. (2022) Efficiency Improvement in Working Process: A Case Study of Frozen Croissant Company. In Proceedings of The 12<sup>th</sup> National and the 7<sup>th</sup> International PIM Conference 2022, Bangkok, Thailand, 7 July 2022, pp. 229 - 241.
- Jiamsathit, A. and Lekhavat, S. (2022) Comparison of Forecasting Methods for the Number of Exporting Containers in COVID-19 Situation: A Case Study of Freight Forwarder Company. *In Proceedings of National Operations Research Network 2022 Conference*, Songkhla, Thailand, 16-18 Mar 2022, pp. 99 - 108.
- Boonrawd, N. and Lekhavat, S. (2022) A Study of Satisfaction towards Approved Vendor List Registration: A Case Study Chemicals Company. *In Proceedings of National Operations Research Network 2022 Conference*, Songkhla, Thailand, 16-18 Mar 2022, pp. 50 57.

- Wichianpradit, K. and **Lekhavat, S.** (2020) Increase Productivity by Applying Lean Manufacturing Concept: A Case Study of Teak Wood Production Company. *In Proceedings of National and International Sripatum University Conference*, Virtual Conference, Thailand, 18 Dec 2020.
- Lekhavat, S. and Lee, H. (2019) Simulation Optimization for Solving Multi-objective Stochastic Sustainable Liner Shipping. *In Proceedings of International Conference on Computer, Communication and Computational Sciences*, Bangkok, Thailand, 11 12 Oct 2019.
- Lekhavat, S. (2018) Allocation Methods for Multi-Commodity Distribution Network Design Problem. In Proceeding of Smart Logistics Conference 2018, pp. 104 - 120, Chonburi, Thailand, 4-5 October 2018.
- Lekhavat, S. (2017) Strategic Rules for Dealing with Disruption in Various Configurations of Liner Shipping. *Doctoral Symposium Conference*, Brunel Business School, London, UK, 4-5 May 2017. Best Paper Award
- Lekhavat, S. (2016) Comparison of Deterministic and Stochastic PSO for Handling Uncertainty in Tactical and Operational Level of Liner Shipping. *Business School Doctoral Symposium*, Brunel Business School, London, UK, 1- 3 Mar 2016.
- Lekhavat, S., Lee, H., Sivarajah, S., and Thuiller, B. (2015) User satisfaction of e-Government services on a cloud platform. *Asia Pacific Management Conference 2015*, Seoul, South Korea, 30 Sep 2 Oct 2015.
- Lekhavat, S., Aydin, N., Bilici, A., and Lee, H. (2015) A Particle Swarm Optimization for Multi-objective Sustainable Maritime Shipping, *Korea-Mongol E-Business Workshop*, Seoul, S Korea, 15 July 2015.
- Lekhavat, S., Aydin, N., Bilici, A. and Lee, H. (2015) Decision Support System for Multi-Objective Sustainable Marine Shipping, *In proceedings of EMCIS 2015*, Athens, Greece, 1-2 June 2015.
- Lee, H., Sivarajah, S., Thuillier, B. and **Lekhavat, S.** (2015) Measuring the User Satisfaction of e-Government Services offered through an Innovative Cloud Platform, *Joint International Conference on Management, Knowledge and Learning, Technology, Innovation and Industrial Management*, Bari, Italy, 27 29 May 2015.

## WORKING PAPERS

• Khamiseh, O. M., Alghababsheh, M., **Lekhavat, S.** and Rahman, M. (20xx) Interorganizational Justice, Supply Chain Risk, and Financial Performance: An Emerging Market Investigation. *Management Decision* (Scopus Quartiles 1) (Under 2<sup>nd</sup> review)

#### **GIVING SEMINARS**

- Statistical Process Control and How to Use Program for the Industry, Sripatum University, Bangkok, Thailand. (Invited)
- Development of Communication Skill for Business English, Metropolitan Waterworks Authority, Bangkok, Thailand (Invited)
- English Trick Talk for Leader of Ministry of Agriculture and Cooperatives, 83<sup>th</sup> 84<sup>th</sup> 85<sup>th</sup> Generation, March – June 2023, Extension and Training Office, Kasetsart University, Bangkok, Thailand (Webinar)
- Meta-heuristics Algorithm for Logistics and Supply Chain Management Problem, 13 December 2022, Faculty of Agro-Industry, Kasetsart University, Bangkok, Thailand
- Project Management, 3 December 2022, Faculty of Engineering, Kasetsart University, Bangkok, Thailand
- Meta-heuristics Algorithm for Logistics and Supply Chain Management Problem, 27 July 2022, School of Integrated Science, Kasetsart University, Bangkok, Thailand

- Project Management, 18 December 2021, Faculty of Engineering, Kasetsart University, Bangkok, Thailand (Webinar)
- Lean and Digital Lean, 19 October 2021, Sukhothai Thammathirat University, Bangkok, Thailand
- Enneagram, 23 November 2020, Faculty of Engineering, Mahidol University, Nakornpratom, Thailand
- Lean (8 Wastes and 7 QC Tools), 18 September 2020, McCormick (Thailand) Ltd, Chonburi, Thailand (Webinar)
- Forecasting Analytics using Time Series, 10 April 2020, Faculty of Engineering, Mahidol University, Nakornpratom, Thailand (Webinar)
- Inspirational Talk on the Topic of Studying Aboard, 2 Feb 2018, Faculty of Engineering, Mahidol University, Nakornpratom, Thailand