

Joyce LOW Mei Wan

Lee Kong Chian School of Business
Singapore Management University (SMU)
50 Stamford Road
Singapore 178899

Email: joycelow@smu.edu.sg
Office Phone: (+65) 68085299



Education

PhD, National University of Singapore, Singapore, 2008
Master of Science, National University of Singapore, Singapore, 2002
Bachelor of Business Administration, National University of Singapore, Singapore, 1999

Academic Appointments

Assistant Professor of Operations Management (Education), Lee Kong Chian School of Business, SMU, Jul 2019 - Present
Senior Lecturer of Operations Management, Lee Kong Chian School of Business, SMU, Aug 2012 - Jun 2019

RESEARCH

Research Interests

Operations Management, Transport Economics, Supply Chain and Logistics Management

Publications

Journal Articles [Refereed]

A two-stage parallel network DEA model for analyzing the operational capability of container terminals, by PARK, J.H., LEE, B.K., LOW, Joyce. M. W. (2020). *Maritime Policy and Management*, <https://doi.org/10.1080/03088839.2020.1859148> (Forthcoming)

Strategic intent of OBOR: Enhancing energy supply resilience, by TANG, Loon Ching; LOW, Joyce M. W.. (2020). *Journal of Shipping and Trade*, 5 1-25. <https://doi.org/10.1186/s41072-020-0058-1> (Published)

A data-driven analysis on the impact of high-speed rails on land prices in Taiwan, by LOW, Joyce. M.W.;

Lee, B.K (2020) Appl. Sci. 2020, 10, 3357; doi:10.3390/app10103357

Understanding the operating landscape of the global airline industry: A DEA integrated alternating conditional expectation approach, by LOW, Joyce M. W.; YANG, Kum Khiong. (2019). *Journal of Airline and Airport Management*, 9 (2), 27-45. <https://doi.org/10.3926/jairm.126> (Published)

An exploratory study on the effects of human, technical and operating factors on aviation safety, by LOW, Joyce M. W.; YANG, Kum Khiong. (2019). *Journal of Transportation Safety and Security*, 11 (6), 595-628. <https://doi.org/10.1080/19439962.2018.1458051> (Published)

On Mx / G(M/H) /1 retrial system with vacation: Service helpline performance measurement, by YEO, Wee Meng; YUAN, Xue Ming; LOW, Joyce M. W.. (2017). *Annals of Operations Research*, 248 (1), 553-578. <https://doi.org/10.1007/s10479-016-2207-3> (Published)

Predicting the performance of queues: A data analytic approach, by YANG, Kum Khiong; TUGBA, Cayirli; LOW, Joyce M. W.. (2016). *Computers and Operations Research*, 76 33-42. <http://doi.org/10.1016/j.cor.2016.06.005> (Published)

Managing emergency department crowding through improved triaging and resource allocation, by YANG, Kum Khiong; LAM, Sean Shao Wei; LOW, Joyce M.W.; ONG, Marcus Eng Hock. (2016). *Operations Research for Health Care*, 10 13-22. <https://doi.org/10.1016/j.orhc.2016.05.001> (Published)

Comparative evaluation of resource cycle strategies on operating and environmental impact in container terminals, by LEE, Byung Kwon; LOW, Joyce M. W.; KIM, Hwan Kap. (2015). *Transportation Research Part D: Transport and Environment*, 41 118-135. <http://doi.org/10.1016/j.trd.2015.09.014> (Published)

Modeling queues with simulation versus M/M/C models, by YANG, Kum Khiong; LOW, Joyce M. W.; TUGBA, Cayirli. (2014). *Journal of Service Science Research*, 6 (1), 173-192. <http://doi.org/10.1007/s12927-014-0007-3> (Published)

Effects of internal resources on airline competitiveness, by LOW, Joyce M. W.; LEE, Byung Kwon. (2014). *Journal of Air Transport Management*, 36 (1), 23-32. <http://doi.org/10.1016/j.jairtraman.2013.12.001> (Published)

Evaluations of port performances from a seaborne cargo supply chain perspective, by LOW, Joyce M. W.; LAM, Shao Wei; TANG, Loon Ching; LAN, Zhang. (2013). *Polish Maritime Research*, 20 (SI), 20-31. <http://doi.org/10.2478/pomr-2013-0024> (Published)

A network prototype for integrated production-distribution planning with non-multi-functional plants, by YUAN, Xue Ming; LOW, Joyce M. W.; YEO, Wee Meng. (2012). *International Journal of Production Research*, 50 (4), 1097-1113. <http://doi.org/10.1080/00207543.2010.550640> (Published)

Network effects in the East Asia container ports industry, by LOW, Joyce M. W.; TANG, Loon Ching. (2012). *Maritime Policy and Management*, 39 (4), 369-386. <http://doi.org/10.1080/03088839.2012.689879> (Published)

Analysis of intermodal freight from China to Indian Ocean: A goal programming approach, by YANG, Xuejing; LOW, Joyce M. W.; TANG, Loon Ching. (2011). *Journal of Transport Geography*, 19 (4), 515-527. <http://doi.org/10.1016/j.jtrangeo.2010.05.007> (Published)

Understanding port choice behaviour: A network perspective, by TANG, Loon Ching; LOW, Joyce M. W.; LAM, Shao Wei. (2011). *Networks and Spatial Economics*, 11 (1), 65-82. <http://doi.org/10.1007/s11067-008-9081-8> (Published)

Port performance in Asia: Does economic efficiency imply environmental efficiency, by CHIN, Anthony T. H.; LOW, Joyce M. W.; YEO, Wee Meng. (2010). *Transportation Research Part D: Transport and Environment*, 15 (8), 483-488. <http://doi.org/10.1016/j.trd.2010.06.003> (Published)

Capacity investment and efficiency cost estimations in major East Asian ports, by LOW, Joyce M. W.. (2010). *Maritime Economics and Logistics*, 12 (4), 370-391. <http://doi.org/10.1057/mel.2010.13> (Published)

Roles of the airport and logistics services on the economic outcomes of an air cargo supply chain, by YUAN, Xue Ming; LOW, Joyce M. W.; TANG, Loon Ching. (2010). *International Journal of Production Economics*, 127 (2), 215-255. <http://doi.org/10.1016/j.ijpe.2009.08.005> (Published)

Analysis of cargo service dynamics in East Asian airports, by LOW, Joyce M. W.; TANG, Loon Ching; YUAN, Xue Ming. (2010). *International Journal of Applied Logistics*, 1 (2), 1-22. <http://doi.org/10.4018/jal.2010040101> (Published)

Assessment of hub status among Asian ports from a network perspective, by LOW, Joyce M. W.; LAM, Shao Wei; TANG, Loon Ching. (2009). *Transportation Research Part A: Policy and Practice*, 43 (6), 593-606. <http://doi.org/10.1016/j.tra.2009.04.004> (Published)

Operational efficiencies across Asia Pacific airports, by LAM, Shao Wei; LOW, Joyce M. W.; TANG, Loon Ching. (2009). *Transportation Research Part E: Logistics and Transportation Review*, 45 (4), 654-665. <http://doi.org/10.1016/j.tre.2008.11.003> (Published)

Factor substitution and complementarity in the Asia airports industry, by LOW, Joyce M. W.; TANG, Loon Ching. (2006). *Journal of Air Transport Management*, 12 (5), 261-266. <http://doi.org/10.1016/j.jairtraman.2006.07.003> (Published)

Book Chapters

Analysis of cargo service dynamics in East Asian airports, by LOW, Joyce M. W.; TANG, Loon Ching; YUAN, Xue-Ming. (2012). In LUO Zongwei (Ed.), *Innovations in logistics and supply chain management technologies for dynamic economies* (pp. 83-104) Hershey, PA: IGI Global. <http://doi.org/10.4018/978-1-4666-0267-0.ch006> (Published)

Maritime trade evolutions and port city developments in Asia, by YUAN, Xue Ming; LOW, Joyce M. W.; TANG, Loon Ching. (2011). In Ek Peng CHEW, Loo Hay LEE, and Loon Ching TANG (Ed.), *Advances in maritime logistics and supply chain systems* (pp. 1-54) Singapore: World Scientific. <http://www.worldscientific.com/worldscibooks/10.1142/8013> (Published)

Cargo service dynamics and service oriented architecture in East Asian airports, by LOW, Joyce M. W.; TANG, Loon Ching; YUAN, Xue Ming. (2010). *Service science and logistics informatics: Innovative perspectives* (pp. 230-250) Hershey, PA: IGI Global. <http://doi.org/10.4018/978-1-61520-603-2.ch013> (Published)

Conference Proceedings

Understanding the operating landscape of the global airline industry: A DEA integrated alternating conditional expectation approach, by LOW, Joyce M. W.; YANG, Kum Khiong. (2018). *Proceedings of Air Transport Research Society Annual Conference, Seoul, South Korea, 2018 July 2-5*, South Korea: (Published)

Dynamic operations and manpower scheduling for high-mix, low-volume manufacturing, by CHUA, Tay Jin; CAI, Tian Xiang; LOW, Joyce M. W.. (2008). *IEEE International Conference on Emerging Technologies and Factory Automation: ETFA 2008: 15-18 September 2008, Hamburg, Germany*, (pp. 54-57) Piscataway, NJ: IEEE. <http://doi.org/10.1109/ETFA.2008.4638371> (Published)

Conference Papers

Fleet planning of a bulk carrier for demand uncertainty: A scenario tree approach, by LOW, Joyce; YANG, Kum Khiong. (2019). *27th Annual Conference of the International Association of Maritime Economists (IAME)*, Athens, Greece. (Presented)

An empirical analysis on the importance of the availability of bunkering service in the port choice, by LOW, Mei Wan; YANG, Kum Khiong. (2017). *Annual Conference of the International Association of Maritime Economists, Kyoto, Japan, 2017 June 27-30*, Kyoto, Japan. (Presented)

Port inter-connectedness, by LOW, Joyce M. W.; LEE, B. K.. (2013). *11th E-Trade International Forum 2013, December*, Seoul, Korea. (Presented)

Airport pricing and capacity decisions under imperfect competition, by LOW, Joyce M. W.; TANG, Loon Ching; YUAN, Xue Ming. (2011). *Air Transport Research Society Annual Conference 2011, June 29 - July 2*, Sydney, Australia. (Presented)

Effect of credit ratings on airport financing and management, by KATO, Kazusei; TEZUKA, Koichiro; LOW, Joyce M. W.. (2010). *Air Transport Research Society 14th World Conference 2010, July 6-9*, Porto, Portugal. (Presented)

Papers Submitted for Review

Journal Articles [Refereed]

Resource capacity requirement for multi-terminal cooperation in container ports, by LEE, B. K.; LOW, Joyce M. W.. (2020). *Research in Transportation Business and Management*, (Submitted)

A constraint programming approach to load capacity Planning in container vessels, by LEE, B. K.; LOW, Joyce M. W. (2019). *Maritime Economics and Logistics*, (Revised & Resubmitted)

Research Grants

Other Institutions

The Impact of Changing Trade Patterns on the Maritime Industry, MPA fellowship, Maritime Port Authority
PI (Project Level): Joyce LOW Mei Wan, 2019, SGD20,000

TEACHING

Courses Taught

Singapore Management University

Undergraduate Programmes :

- Decision Analysis
- Logistics and Transportation Management
- Port-Focal Logistics and Maritime Operations

Teaching Publications

Cases

Disruption in the air: Surf Air's all-you-can fly business model, by REDDY, Srinivas K.; LOW, Joyce M. W.; WONG, Adina. (2015). SMU-15-0001. <https://www.thecasecentre.org/educators/products/view?id=128965> (Published)

Teaching Notes

Disruption in the air: Surf Air's all-you-can fly business model, by REDDY, Srinivas K.; LOW, Joyce M. W.; WONG, Adina. (2015). SMU-15-0001TN. <https://www.thecasecentre.org/educators/products/view?id=128966> (Published)

OTHER ACADEMIC AND PROFESSIONAL ACTIVITIES

Media Contributions and Citations

The impact of mega ships, Port Technology, 01 Apr 2020

<https://wpassets.porttechnology.org/wp-content/uploads/2020/03/25160834/NATIONAL-UNI-OF-SINGAPORE.pdf>

The rebirth of a maritime nation with a Mega Port set to open, Channel News Asia, 07 Jul 2019

Maritime Silk Road Ports eye opportunities from Chinese economic integration, Ports and Harbour May/June 2019, Vol 64 No 3, pp. 12-16, 01 Jun 2019

UNIVERSITY SERVICE

Singapore Management University

Committee Chair, Maritime Business & Operations Track Committee, Oct 2018 - Present

Committee Member, Senate, Jun 2018 - Present

Other, Group Library Representative, Jul 2017 - Present

EXTERNAL SERVICE – PROFESSIONAL

Committee Member, International Association of Maritime Economist Conference, 2016 - 2017